# Year<sub>in</sub> Review

Proceedings from a Multitumor Regional 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 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 peer-reviewed 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 acute leukemias, breast cancer, gastrointestinal cancers, genitourinary cancers, lung cancer, lymphomas and chronic lymphocytic leukemia and ovarian cancer 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, gastrointestinal, genitourinary, ovarian 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, ovarian 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.
- 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 6.75 *AMA PRA Category 1 Credits*<sup>TM</sup>. 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, which includes participation in the evaluation component, enables the participant to earn up to 6.75 Medical Knowledge 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 review the CME information, 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/YIRMultitumor18/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:

#### Al B Benson III, MD

Professor of Medicine Associate Director for Clinical Investigations Robert H Lurie Comprehensive Cancer Center of Northwestern University Chicago, Illinois

Advisory Committee: Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Exelixis Inc, Genentech, Guardant Health, Merck; Contracted Research: Bristol-Myers Squibb Company, Celgene Corporation, Merck Sharp & Dohme Corp, Novartis, Taiho Oncology Inc; Data and Safety Monitoring Board/Committee: Astellas Pharma Global Development Inc, Bristol-Myers Squibb Company, Infinity Pharmaceuticals Inc.

#### Harold J Burstein, MD, PhD

Associate Professor of Medicine Harvard Medical School Breast Oncology Center Dana-Farber Cancer InstituteBoston, Massachusetts

No relevant conflicts of interest to disclose.

#### Don S Dizon, MD

Director, Women's Cancers Founder, Sexual Health First Responders Clinic Lifespan Cancer Institute Director of Medical Oncology, Rhode Island Hospital Associate Professor of Medicine, Alpert Medical School of Brown University Providence, Rhode Island **Contracted Research:** Bristol-Myers Squibb Company; **Data and Safety Monitoring Board/Committee:** AstraZeneca Pharmaceuticals LP, Regeneron Pharmaceuticals Inc.

## Howard S Hochster, MD

Associate Director (Clinical Research) Yale Cancer Center Professor of Medicine Yale School of Medicine New Haven, Connecticut

Advisory Committee and Consulting Agreements: AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Genentech; Data and Safety Monitoring Board/Committee: Genentech, Pfizer Inc.

#### Brad S Kahl, MD

Professor of Medicine Washington University School of Medicine St Louis, Missouri

**Consulting Agreements:** Celgene Corporation, Genentech, Pharmacyclics LLC, an AbbVie Company.

#### Corey J Langer, MD

Director of Thoracic Oncology Abramson Cancer Center Professor of Medicine Perelman School of Medicine University of Pennsylvania Vice Chair, Radiation Therapy Oncology Group Philadelphia, Pennsylvania

Advisory Committee: AbbVie Inc, Ariad Pharmaceuticals Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Genentech, Lilly, Merck, Pfizer Inc, Takeda Oncology; Consulting Agreements: Bayer HealthCare Pharmaceuticals, BeiGene, Genentech, Guardant Health, Lilly, Merck, Novocure; Contracted Research: Advantagene Inc, Inovio Pharmaceuticals Inc, Lilly, Merck, Takeda Oncology; Data and Safety Monitoring Board: Amgen Inc, Incyte Corporation, Lilly, SWOG.

#### Frederick L Locke, MD

Program Co-Leader, Immunology Moffitt Cancer Center Tampa, Florida

Advisory Committee: Gilead Sciences Inc, Kite Pharma Inc, Novartis; Consulting Agreement: Cellular Biomedicine Group Inc.

#### Peter H O'Donnell, MD

Assistant Professor, Department of Medicine Section of Hematology/Oncology Genitourinary Oncology Program The University of Chicago Chicago, Illinois **Contracted Research:** Acerta Pharma — A member of the AstraZeneca Group, AstraZeneca Pharmaceuticals LP/ MedImmune Inc, Boehringer Ingelheim Pharmaceuticals Inc, Genentech, Janssen Biotech Inc, Merck, Seattle Genetics; **Expert Testimony:** Temple Health, Trinity Health; **Honoraria:** Algeta ASA, American Medical Forum, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Genentech, Harrison Consulting, Inovio Pharmaceuticals Inc, Janssen Biotech Inc, Kantar Health, Merck, Novartis, PAREXEL International Corporation, Quintiles, Seattle Genetics, Xcenda; **Stock:** Allergan Inc; **Travel:** Merck.

### David M O'Malley, MD

Professor

Director, Clinical Research, Gynecologic Oncology Co-Director, Gynecologic Oncology Phase I Program ORIEN Physician Liaison for OSUCCC – James The Ohio State University and The James Cancer Center Columbus, Ohio

Advisory Committee: Amgen Inc; Consulting Agreement: AstraZeneca Pharmaceuticals LP.

### Geoffrey R Oxnard, MD

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

**Consulting Agreements:** AstraZeneca Pharmaceuticals LP, DropWorks CEI, GRAIL Inc, Guardant Health, Ignyta Inc, Inivata, Loxo Oncology.

# Hope S Rugo, MD

Professor of Medicine Director, Breast Oncology and Clinical Trials Education University of California, San Francisco Helen Diller Family Comprehensive Cancer Center San Francisco, California

**Contracted Research:** Eisai Inc, Genentech, Lilly, MacroGenics Inc, Merck, Novartis, OBI Pharma Inc, Pfizer Inc, Plexxikon Inc, Roche Laboratories Inc; **Paid Travel:** Lilly, Mylan NV, Puma Biotechnology Inc.

# Guru Sonpavde, MD

Bladder Cancer Director Dana-Farber Cancer Institute Boston, Massachusetts

Advisory Committee: Amgen Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Eisai Inc, EMD Serono Inc, Genentech, Janssen Biotech Inc, Merck, Novartis, Pfizer Inc, Sanofi Genzyme; Contracted Research: AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Janssen Biotech Inc, Merck, Pfizer Inc, Sanofi Genzyme; Data and Safety Monitoring Board/ Committee: Boehringer Ingelheim Pharmaceuticals Inc; Other Remunerated Activities: Author of *UpToDate*.

# Eytan M Stein, MD

Hematologist and Medical Oncologist Assistant Attending Physician Leukemia Service Department of Medicine Memorial Sloan Kettering Cancer Center New York, New York

Advisory Committee: Agios Pharmaceuticals Inc, Celgene Corporation, Daiichi Sankyo Inc, Pfizer Inc.

## Stacey Stein, MD

Assistant Professor of Medicine (Medical Oncology) Yale Cancer Center New Haven, Connecticut

Advisory Committee: Eisai Inc, Genentech, Merck.

### **Richard M Stone, MD**

Director, Adult Leukemia Program Dana-Farber Cancer Institute Professor of Medicine Harvard Medical School Boston, Massachusetts

**Consulting Agreements:** AbbVie Inc, Actinium Pharmaceuticals Inc, Agios Pharmaceuticals Inc, Amgen Inc, Argenx, Arog Pharmaceuticals Inc, Astellas Pharma Global Development Inc, Celator Pharmaceuticals Inc, Celgene Corporation, FUJIFILM Pharmaceuticals USA Inc, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Juno Therapeutics, Karyopharm Therapeutics, Merck, Novartis, Orsenix, Otsuka America Pharmaceutical Inc, Pfizer Inc, Rafael Pharmaceuticals Inc, Roche Laboratories Inc, Seattle Genetics; **Contracted Research:** Novartis.

# 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, Novartis, TG Therapeutics Inc.

**MODERATOR** — **Dr Love** is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma - A member of the AstraZeneca Group, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech, Genomic Health Inc, Gilead Sciences Inc, Guardant Health, Halozyme Inc, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite Pharma Inc, Lexicon Pharmaceuticals Inc, Lilly, Loxo Oncology, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seattle Genetics, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals 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 — A member of the AstraZeneca Group, Adaptive Biotechnologies, Amgen Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Boston Biomedical Pharma Inc, Celgene Corporation, Clovis Oncology, Eisai Inc, Exelixis Inc, Genentech, Genomic Health Inc, Guardant Health, ImmunoGen Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Lilly, Loxo Oncology, Merck, Novartis, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Seattle Genetics, Taiho Oncology Inc and Tesaro Inc.

# Hardware/Software Requirements:

A high-speed Internet connection A monitor set to 1280 x 1024 pixels or more Internet Explorer 11 or later, Firefox 56 or later, Chrome 61 or later, Safari 11 or later, Opera 48 or later Adobe Flash Player 27 plug-in or later Adobe Acrobat Reader (Optional) Sound card and speakers for audio **Last review date:** December 2018

Expiration date: December 2019

# LUNG CANCER

Antonia SJ et al; PACIFIC Investigators. **Overall survival with durvalumab after chemoradiotherapy in stage III NSCLC.** *N Engl J Med* 2018; [Epub ahead of print].

Antonia SJ et al; PACIFIC Investigators. **Durvalumab after chemoradiotherapy in stage III non-small-cell lung cancer.** *N Engl J Med* 2017;377(20):1919-29.

Borghaei H et al. Nivolumab (Nivo) + platinum-doublet chemotherapy (Chemo) vs chemo as first-line (1L) treatment (Tx) for advanced non-small cell lung cancer (NSCLC) with <1% tumor PD-L1 expression: Results from CheckMate 227. *Proc ASCO* 2018; Abstract 9001.

Boutros C et al. Safety profiles of anti-CTLA-4 and anti-PD-1 antibodies alone and in combination. *Nat Rev Clin Oncol* 2016;13(8):473-86.

Camidge DR et al. Brigatinib versus crizotinib in ALK-positive non-small-cell lung cancer. N Engl J Med 2018;[Epub ahead of print].

Cappuzzo F et al. IMpower130: Progression-free survival (PFS) and safety analysis from a randomised phase 3 study of carboplatin + *nab*-paclitaxel (CnP) with or without atezolizumab (atezo) as first-line (1L) therapy in advanced non-squamous NSCLC. *Proc ESMO* 2018; Abstract LBA53.

Carbone DP et al. Efficacy and safety of rovalpituzumab tesirine in patients with DLL3-expressing,  $\geq$  3<sup>rd</sup> line small cell lung cancer: Results from the phase 2 TRINITY study. *Proc ASCO* 2018; Abstract 8507.

Faivre-Finn C et al. Efficacy and safety evaluation based on time from completion of radiotherapy to randomization with durvalumab or placebo in pts from PACIFIC. *Proc ESMO* 2018; Abstract 13630.

Forde PM et al. Neoadjuvant PD-1 blockade in resectable lung cancer. N Engl J Med 2018;378(21):1976-86.

Gandhi L et al; KEYNOTE-189 Investigators. **Pembrolizumab plus chemotherapy in metastatic non-small-cell lung cancer**. *N Engl J Med* 2018;378(22):2078-92.

Hellmann MD et al. **Nivolumab plus ipilimumab in lung cancer with a high tumor mutational burden.** *N Engl J Med* 2018;378(22):2093-104.

Horn L et al; IMpower133 Study Group. First-line atezolizumab plus chemotherapy in extensive-stage small-cell lung cancer. *N Engl J Med* 2018;[Epub ahead of print].

Jotte RM et al. IMpower131: Primary PFS and safety analysis of a randomized phase III study of atezolizumab + carboplatin + paclitaxel or *nab*-paclitaxel vs carboplatin + *nab*-paclitaxel as 1L therapy in advanced squamous NSCLC. *Proc ASCO* 2018; Abstract LBA9000.

Lopes G et al. Pembrolizumab (pembro) versus platinum-based chemotherapy (chemo) as first-line therapy for advanced/ metastatic NSCLC with a PD-L1 tumor proportion score (TPS)  $\geq$  1%: Open-label, phase 3 KEYNOTE-042 study. *Proc ASCO* 2018; Abstract LBA4.

Odegaard JI et al. Validation of a plasma-based comprehensive cancer genotyping assay utilizing orthogonal tissue- and plasma-based methodologies. *Clin Cancer Res* 2018;24(15):3539-49.

Paz-Ares LG et al. **Pembrolizumab plus chemotherapy for squamous non-small-cell lung cancer.** *N Engl J Med* 2018;[Epub ahead of print].

Peters S et al. Alectinib versus crizotinib in untreated ALK-positive non-small-cell lung cancer. N Engl J Med 2017;377(9):829-38.

Ramalingam SS et al. Mechanisms of acquired resistance to first-line osimertinib: Preliminary data from the phase III FLAURA study. *Proc ESMO* 2018; Abstract LBA50.

Ramalingam SS et al. Tumor mutational burden (TMB) as a biomarker for clinical benefit from dual immune checkpoint blockade with nivolumab (nivo) + ipilimumab (ipi) in first-line (1L) non-small cell lung cancer (NSCLC): Identification of TMB cutoff from CheckMate 568. *Proc AACR* 2018;Abstract CT078.

Reungwetwattana T et al. CNS response to osimertinib versus standard epidermal growth factor receptor tyrosine kinase inhibitors in patients with untreated EGFR-mutated advanced non-small-cell lung cancer. *J Clin Oncol* 2018;[Epub ahead of print].

Socinski MA et al; IMpower150 Study Group. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. N Engl J Med 2018;378(24):2288-301.

Soria JC et al; FLAURA Investigators. Osimertinib in untreated EGFR-mutated advanced non-small-cell lung cancer. N Engl J Med 2018;378(2):113-25.

Wu YL et al. CNS efficacy of osimertinib in patients with T790M-positive advanced non-small-cell lung cancer: Data from a randomized phase III trial (AURA3). *J Clin Oncol* 2018;36(26):2702-9.

Zhong W et al. Erlotinib versus gemcitabine plus cisplatin as neoadjuvant treatment for stage IIIA-N2 EGFR-mutation non-small-cell lung cancer (EMERGING-CTONG 1103): Multicenter phase 2 randomized study. *Proc ESMO* 2018;Abstract LBA48\_PR.

# **ACUTE LEUKEMIAS**

Borthakur G et al. Phase II study of CPX-351 (cytarabine: daunorubicin) liposome injection in patients (pts) with newly diagnosed acute myeloid leukemia (AML) at high risk for induction mortality. *Proc ASH* 2017; Abstract 892.

Cortes JE et al. Glasdegib in combination with cytarabine and daunorubicin in patients with AML or high-risk MDS: Phase 2 study results. *Am J Hematol* 2018;93(11):1301-10.

Cortes JE et al. Phase 3, randomized, placebo-controlled trials evaluating glasdegib in combination with intensive or nonintensive chemotherapy in patients with untreated acute myeloid leukemia. *Proc ASCO* 2018; Abstract TPS7073.

Cortes J et al. Quizartinib, an FLT3 inhibitor, as monotherapy in patients with relapsed or refractory acute myeloid leukaemia: An open-label, multicentre, single-arm, phase 2 trial. *Lancet Oncol* 2018;19(7):889-903.

Cortes J et al. Quizartinib significantly prolongs overall survival in patients with FLT3-internal tandem duplication-mutated (mut) relapsed/refractory AML in the phase 3, randomized, controlled QuANTUM-R trial. *Proc EHA* 2018;Abstract LB2600.

DiNardo CD et al. Durable remissions with ivosidenib in IDH1-mutated relapsed or refractory AML. *N Engl J Med* 2018;378(25):2386-98.

DiNardo CD et al. Durable response with venetoclax in combination with decitabine or azacitadine in elderly patients with acute myeloid leukemia (AML). *Proc ASCO* 2018; Abstract 7010.

DiNardo CD et al. Mutant IDH (mIDH) inhibitors, ivosidenib or enasidenib, with azacitidine (AZA) in patients with acute myeloid leukemia (AML). *Proc ASCO* 2018; Abstract 7042.

Gökbuget N et al. Blinatumomab for minimal residual disease in adults with B-cell precursor acute lymphoblastic leukemia. *Blood* 2018;131(14):1522-31.

Jabbour E et al. Impact of minimal residual disease (MRD) status in clinical outcomes of patients with relapsed/refractory (R/R) acute lymphoblastic leukemia (ALL) treated with inotuzumab ozogamicin (InO) in the phase 3 INO-VATE trial. *Proc ASCO* 2018; Abstract 7013.

Jongen-Lavrencic M et al. Molecular minimal residual disease in acute myeloid leukemia. *N Engl J Med* 2018;378(13): 1189-99.

Kantarjian H et al. Inotuzumab ozogamicin in combination with low-intensity chemotherapy for older patients with Philadelphia chromosome-negative acute lymphoblastic leukaemia: A single-arm, phase 2 study. *Lancet Oncol* 2018;19(2):240-8.

Kantarjian H et al. Blinatumomab versus chemotherapy for advanced acute lymphoblastic leukemia. *N Engl J Med* 2017;376(9):836-47.

Lambert J et al. Gemtuzumab ozogamicin for de novo acute myeloid leukemia: Final efficacy and safety updates from the open-label, phase 3 ALFA-0701 trial. *Haematologica* 2018;[Epub ahead of print].

Lancet JE et al. CPX-351 (cytarabine and daunorubicin) liposome for injection versus conventional cytarabine plus daunorubicin in older patients with newly diagnosed secondary acute myeloid leukemia. *J Clin Oncol* 2018;36(26):2684-92.

Larson RA et al. An analysis of maintenance therapy and post-midostaurin outcomes in the international prospective randomized, placebo-controlled, double-blind trial (CALGB 10603/RATIFY [Alliance]) for newly diagnosed acute myeloid leukemia (AML) patients with *FLT3* mutations. *Proc ASH* 2017;Abstract 145.

Maude SL et al. Tisagenlecleucel in children and young adults with B-cell lymphoblastic leukemia. *N Engl J Med* 2018;378(5):439-48.

Medeiros BC et al. Big data analysis of treatment patterns and outcomes among elderly acute myeloid leukemia patients in the United States. *Ann Hematol* 2015;94(7):1127-38.

Perl AE et al. Selective inhibition of FLT3 by gilteritinib in relapsed or refractory acute myeloid leukaemia: A multicentre, firstin-human, open-label, phase 1-2 study. *Lancet Oncol* 2017;18(8):1061-75.

Platzbecker U et al. Minimal-residual disease guided treatment with azacitidine in MDS/AML patients at imminent risk of relapse: Results of the prospective RELAZA2 trial. *Proc ASH* 2017; Abstract 565.

Pratz K et al. Preliminary results from a phase 1 study of gilteritinib in combination with induction and consolidation chemotherapy in subjects with newly diagnosed acute myeloid leukemia (AML). *Proc ASH* 2017; Abstract 722.

Stein EM et al. Enasidenib in mutant IDH2 relapsed or refractory acute myeloid leukemia. Blood 2017;130(6):722-31.

Stein EM et al. Ivosidenib or enasidenib combined with standard induction chemotherapy is well tolerated and active in patients with newly diagnosed AML with an IDH1 or IDH2 mutation: Initial results from a phase 1 trial. *Proc ASH* 2017; Abstract 726.

Stone RM et al. The addition of midostaurin to standard chemotherapy decreases cumulative incidence of relapse (CIR) in the international prospective randomized, placebo-controlled, double-blind trial (CALGB 10603 / RATIFY [Alliance]) for newly diagnosed acute myeloid leukemia (AML) patients with *FLT3* mutations. *Proc ASH* 2017;Abstract 2580.

Wei A et al. Phase 1/2 study of venetoclax with low-dose cytarabine in treatment-naive, elderly patients with acute myeloid leukemia unfit for intensive chemotherapy: 1-year outcomes. *Proc ASH* 2017; Abstract 890.

#### **GASTROINTESTINAL CANCERS**

A phase III, randomised, double blind, placebo controlled, multicentre study of maintenance olaparib monotherapy in patients with gBRCA mutated metastatic pancreatic cancer whose disease has not progressed on first line platinum based chemo-therapy. NCT02184195

Abou-Alfa GK et al. **Cabozantinib in patients with advanced and progressing hepatocellular carcinoma.** *N Engl J Med* 2018;379(1):54-63.

Bekaii-Saab TS et al. Phase 1b/2 trial of cancer stemness inhibitor napabucasin (NAPA) + *nab*-paclitaxel (nPTX) and gemcitabine (Gem) in metastatic pancreatic adenocarcinoma (mPDAC). *Proc ASCO* 2018; Abstract 4110.

Bekaii-Saab TS et al. Regorafenib dose optimization study (ReDOS): Randomized phase II trial to evaluate escalating dosing strategy and pre-emptive topical steroids for regorafenib in refractory metastatic colorectal cancer (mCRC) — An ACCRU Network study. *Proc ESMO World Congress on Gastrointestinal Cancer* 2018;Abstract 0-014.

Bekaii-Saab TS et al. Regorafenib dose optimization study (ReDOS): Randomized phase II trial to evaluate dosing strategies for regorafenib in refractory metastatic colorectal cancer (mCRC) — An ACCRU Network study. Gastrointestinal Cancers Symposium 2018;Abstract 611.

Conroy T et al. Unicancer GI PRODIGE 24/CCTG PA.6 trial: A multicenter international randomized phase III trial of adjuvant mFOLFIRINOX versus gemcitabine (gem) in patients with resected pancreatic ductal adenocarcinomas. *Proc ASCO* 2018;Abstract LBA4001.

Finn RS et al. Outcomes of sequential treatment with sorafenib followed by regorafenib for HCC: Additional analyses from the phase III RESORCE trial. *J Hepatol* 2018;69(2):353-8.

Fuchs CS et al. RAINFALL: A randomized, double-blind, placebo-controlled phase III study of cisplatin (Cis) plus capecitabine (Cape) or 5FU with or without ramucirumab (RAM) as first-line therapy in patients with metastatic gastric or gastroesophageal junction (G-GEJ) adenocarcinoma. Gastrointestinal Cancers Symposium 2018;Abstract 5.

Fuchs CS et al. Safety and efficacy of pembrolizumab monotherapy in patients with previously treated advanced gastric and gastroesophageal junction cancer: Phase 2 clinical KEYNOTE-059 trial. *JAMA Oncol* 2018;4(5):e180013.

Golan T et al. Phase II study of olaparib for BRCAness phenotype in pancreatic cancer. Gastrointestinal Cancers Symposium 2018; Abstract 297.

Hainsworth JD et al. Targeted therapy for advanced solid tumors on the basis of molecular profiles: Results from MyPathway, an open-label, phase IIa multiple basket study. *J Clin Oncol* 2018;36(6):536-42.

Hammel P et al. Phase II LAPACT trial of *nab*-paclitaxel (*nab*-P) plus gemcitabine (G) for patients with locally advanced pancreatic cancer (LAPC). Gastrointestinal Cancers Symposium 2018; Abstract 204.

Kang YK et al. Nivolumab in patients with advanced gastric or gastro-oesophageal junction cancer refractory to, or intolerant of, at least two previous chemotherapy regimens (ONO-4538-12, ATTRACTION-2): A randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet* 2017;390(10111):2461-71.

Kudo M et al. Lenvatinib versus sorafenib in first-line treatment of patients with unresectable hepatocellular carcinoma: A randomised phase 3 non-inferiority trial. *Lancet* 2018;391(10126):1163-73.

Overman MJ et al. Durable clinical benefit with nivolumab plus ipilimumab in DNA mismatch repair-deficient/microsatellite instability-high metastatic colorectal cancer. *J Clin Oncol* 2018;36(8):773-9.

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.

Shitara K et al; KEYNOTE-061 Investigators. **Pembrolizumab versus paclitaxel for previously treated, advanced gastric or gastro-oesophageal junction cancer (KEYNOTE-061): A randomised, open-label, controlled, phase 3 trial.** *Lancet* 2018;392(10142):123-33.

Shitara K et al. **REVERCE: Randomized phase II study of regorafenib followed by cetuximab versus the reverse sequence for metastatic colorectal cancer patients previously treated with fluoropyrimidine, oxaliplatin, and irinotecan.** Gastrointestinal Cancers Symposium 2018; Abstract 557.

Shitara K et al. Trifluridine/tipiracil versus placebo in patients with heavily pretreated metastatic gastric cancer (TAGS): A randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Oncol* 2018;[Epub ahead of print].

Siravegna G et al. Plasma *HER2* (*ERBB2*) copy number to predict response to HER2-targeted therapy in metastatic colorectal cancer. *Proc ASCO* 2018; Abstract 3506.

Strosberg JR et al. First update on overall survival, progression-free survival, and health-related time-to-deterioration quality of life from the NETTER-1 study: 177Lu-Dotatate vs high dose octreotide in progressive midgut neuroendocrine tumors. *Proc* ASCO 2018; Abstract 4099.

Van Tienhoven G et al. Preoperative chemoradiotherapy versus immediate surgery for resectable and borderline resectable pancreatic cancer (PREOPANC-1): A randomized, controlled, multicenter phase III trial. *Proc ASCO* 2018; Abstract LBA4002.

Wang-Gillam A et al. Dose modifications of liposomal irinotecan (nal-IRI) + 5-fluorouracil/leucovorin (5-FU/LV) in NAPOLI-1: Impact on efficacy. Gastrointestinal Cancers Symposium 2018; Abstract 388.

Zhu AX et al; KEYNOTE-224 Investigators. **Pembrolizumab in patients with advanced hepatocellular carcinoma previously treated with sorafenib (KEYNOTE-224): A non-randomised, open-label phase 2 trial.** *Lancet Oncol* 2018;19(7):940-52.

Zhu AX et al. **REACH-2: A randomized, double-blind, placebo-controlled phase 3 study of ramucirumab versus placebo as second-line treatment in patients with advanced hepatocellular carcinoma (HCC) and elevated baseline alpha-fetoprotein (AFP) following first-line sorafenib.** *Proc ASCO* **2018; Abstract 4003.** 

#### **GENITOURINARY CANCERS**

A multinational, randomised, double-blind, placebo-controlled, phase III efficacy and safety study of darolutamide (ODM-201) in men with high-risk non-metastatic castration-resistant prostate cancer. NCT02200614

Abida W et al. Preliminary results from TRITON2: A phase 2 study of rucaparib in patients (pts) with metastatic castrationresistant prostate cancer (mCRPC) associated with homologous recombination repair (HRR) gene alterations. *Proc ESMO* 2018; Abstract 793PD.

Armstrong AJ et al. The PROPHECY trial: Multicenter prospective trial of circulating tumor cell (CTC) AR-V7 detection in men with mCRPC receiving abiraterone (A) or enzalutamide (E). *Proc ASCO* 2018; Abstract 5004.

Atkins MB et al. Axitinib in combination with pembrolizumab in patients with advanced renal cell cancer: A non-randomised, open-label, dose-finding, and dose-expansion phase 1b trial. *Lancet Oncol* 2018;19(3):281-3.

Balar AV et al. Atezolizumab (atezo) in first-line cisplatin-ineligible or platinum-treated locally advanced or metastatic urothelial cancer (mUC): Long-term efficacy from phase 2 study IMvigor210. *Proc ASCO* 2018; Abstract 4523.

Choueiri TK et al. Preliminary results for avelumab plus axitinib as first-line therapy in patients with advanced clear-cell renal-cell carcinoma (JAVELIN Renal 100): An open-label, dose-finding and dose-expansion, phase 1b trial. *Lancet Oncol* 2018;19(4):451-60.

Clarke N et al. Olaparib combined with abiraterone in patients with metastatic castration-resistant prostate cancer: A randomised, double-blind, placebo-controlled, phase 2 trial. *Lancet Oncol* 2018;19(7):975-86.

de Bono JS et al. Antitumour activity and safety of enzalutamide in patients with metastatic castration-resistant prostate cancer previously treated with abiraterone acetate plus prednisone for  $\geq$ 24 weeks in Europe. *Eur Urol* 2018;[Epub ahead of print].

Guillaumier S et al. A multicentre study of 5-year outcomes following focal therapy in treating clinically significant nonmetastatic prostate cancer. *Eur Urol* 2018;74(4):422-9.

Hussain M et al. Enzalutamide in men with nonmetastatic, castration-resistant prostate cancer. *N Engl J Med* 2018;378(26):2465-74.

Hussain M et al. Targeting androgen receptor and DNA repair in metastatic castration-resistant prostate cancer: Results from NCI 9012. *J Clin Oncol* 2018;36(10):991-9.

Kiss B et al. Stenting prior to cystectomy is an independent risk factor for upper urinary tract recurrence. *J Urol* 2017;198(6):1263-8.

Lee CH et al. Lenvatinib + pembrolizumab in patients with renal cell carcinoma: Updated results. *Proc ASCO* 2018; Abstract 4560.

Loeb S et al. Systematic review of complications of prostate biopsy. Eur Urol 2013;64(6):876-92.

Mateo J et al. Managing nonmetastatic castration-resistant prostate cancer. Eur Urol 2018; [Epub ahead of print].

McDermott DF et al. Pembrolizumab monotherapy as first-line therapy in advanced clear cell renal cell carcinoma (accRCC): Results from cohort A of KEYNOTE-427. *Proc ASCO* 2018; Abstract 4500.

Méjean A et al. Sunitinib alone or after nephrectomy in metastatic renal-cell carcinoma. N Engl J Med 2018;379(5):417-27.

Motzer RJ et al. IMmotion151: A randomized phase III study of atezolizumab plus bevacizumab vs sunitinib in untreated metastatic renal cell carcinoma (mRCC). Genitourinary Cancers Symposium 2018; Abstract 578.

Motzer RJ et al. JAVELIN renal 101: A randomized, phase 3 study of avelumab + axitinib vs sunitinib as first-line treatment of advanced renal cell carcinoma (aRCC). *Proc ESMO* 2018; Abstract LBA6\_PR.

Motzer RJ et al. Long-term follow-up of overall survival for cabozantinib versus everolimus in advanced renal cell carcinoma. *Br J Cancer* 2018;118(9):1176-8.

Motzer RJ et al; CheckMate 214 Investigators. **Nivolumab plus ipilimumab versus sunitinib in advanced renal-cell carcinoma.** *N Engl J Med* 2018;378(14):1277-90.

Nabid A et al. Duration of androgen deprivation therapy in high-risk prostate cancer: A randomized phase III trial. *Eur Urol* 2018;74(4):432-41.

Necchi A et al. Preoperative pembrolizumab (pembro) before radical cystectomy (RC) for muscle-invasive urothelial bladder carcinoma (MIUC): Interim clinical and biomarker findings from the phase 2 PURE-01 study. *Proc ASCO* 2018; Abstract 4507.

Nuhn P et al. Update on systemic prostate cancer therapies: Management of metastatic castration-resistant prostate cancer in the era of precision oncology. *Eur Urol* 2018; [Epub ahead of print].

Parker CC et al; Systemic Therapy for Advanced or Metastatic Prostate Cancer: Evaluation of Drug Efficacy (STAMPEDE) Investigators. Radiotherapy to the primary tumour for newly diagnosed, metastatic prostate cancer (STAMPEDE): A randomised controlled phase 3 trial. Lancet 2018; [Epub ahead of print].

Powles T et al. A phase II study investigating the safety and efficacy of neoadjuvant atezolizumab in muscle invasive bladder cancer (ABACUS). *Proc ASCO* 2018; Abstract 4506.

Rosenberg JE et al. Nivolumab (N) alone or in combination with ipilimumab (I) in patients (pts) with platinum-pretreated metastatic urothelial carcinoma (mUC), including the nivolumab 1 mg/kg + ipilimumab 3 mg/kg expansion from CheckMate 032. *Proc ESMO* 2018;Abstract LBA32.

Rosenberg JE et al. Updated results from the enfortumab vedotin phase 1 (EV-101) study in patients with metastatic urothelial cancer (mUC). *Proc ASCO* 2018; Abstract 4504.

Scher HI et al. Assessment of the validity of nuclear-localized androgen receptor splice variant 7 in circulating tumor cells as a predictive biomarker for castration-resistant prostate cancer. *JAMA Oncol* 2018;4(9):1179-86.

Siefker-Radtke AO et al. First results from the primary analysis population of the phase 2 study of erdafitinib (ERDA; JNJ-42756493) in patients (pts) with metastatic or unresectable urothelial carcinoma (mUC) and *FGFR* alterations (FGFRalt). *Proc ASCO* 2018; Abstract 4503.

Smith MR et al. ERA 223: A phase 3 trial of radium-223 (Ra-223) in combination with abiraterone acetate and prednisone/ prednisolone for the treatment of asymptomatic or mildly symptomatic chemotherapy-naïve patients (pts) with bone-predominant metastatic castration-resistant prostate cancer (mCRPC). *Proc ESMO* 2018;Abstract LBA30.

Smith MR et al; SPARTAN Investigators. Apalutamide treatment and metastasis-free survival in prostate cancer. N Engl J Med 2018;378(15):1408-18.

Sternberg CN et al. A randomized phase 2 study investigating 3 dosing regimens of radium-223 dichloride (Ra-223) in bone metastatic castration-resistant prostate cancer (mCRPC). *Proc ASCO* 2018; Abstract 5008.

Vuky J et al. Updated efficacy and safety of KEYNOTE-052: A single-arm phase 2 study investigating first-line pembrolizumab (pembro) in cisplatin-ineligible advanced urothelial cancer (UC). *Proc ASCO* 2018; Abstract 4524.

Wallis CJD et al. Surgery versus radiotherapy for clinically-localized prostate cancer: A systematic review and meta-analysis. *Eur Urol* 2016;70(1):21-30.

# LYMPHOMAS AND CHRONIC LYMPHOCYTIC LEUKEMIA

Abramson JS et al. Updated safety and long term clinical outcomes in TRANSCEND NHL 001, pivotal trial of lisocabtagene maraleucel (JCAR017) in R/R aggressive NHL. *Proc ASCO* 2018; Abstract 7505.

Armand P et al. Nivolumab for relapsed/refractory classic Hodgkin lymphoma after failure of autologous hematopoietic cell transplantation: Extended follow-up of the multicohort single-arm phase II CheckMate 205 trial. *J Clin Oncol* 2018;36(14):1428-39.

Borchmann P et al. An updated analysis of JULIET, a global pivotal phase 2 trial of tisagenlecleucel in adult patients with relapsed or refractory (R/R) diffuse large B-cell lymphoma (DLBCL). *Proc EHA* 2018; Abstract S799.

Byrd JC et al. Acalabrutinib monotherapy in patients with relapsed/refractory chronic lymphocytic leukemia: Updated results from the phase 1/2 ACE-CL-001 study. *Proc ASH* 2017; Abstract 498.

Connors JM et al; ECHELON-1 Study Group. Brentuximab vedotin with chemotherapy for stage III or IV Hodgkin's lymphoma. *N Engl J Med* 2018;378(4):331-44.

Davids MS et al. A multicenter, phase II study of ibrutinib plus FCR (iFCR) as frontline therapy for younger CLL patients. *Proc* ASH 2017; Abstract 496.

Dreyling M et al. **Phosphatidylinositol 3-kinase inhibition by copanlisib in relapsed or refractory indolent lymphoma.** *J Clin Oncol* 2017;35(35):3898-905.

Evens AM et al. Multicenter phase II study of sequential brentuximab vedotin and doxorubicin, vinblastine, and dacarbazine chemotherapy for older patients with untreated classical Hodgkin lymphoma. *J Clin Oncol* 2018;[Epub ahead of print].

Eyre T et al. Efficacy of venetoclax monotherapy in patients with relapsed, refractory mantle cell lymphoma post BTK inhibition therapy. *Proc EHA* 2018; Abstract S855.

Friedberg JW et al. Frontline brentuximab vedotin in combination with dacarbazine or bendamustine in patients aged  $\geq$ 60 years with HL. *Blood* 2017;130(26):2829-37.

Goede V et al. Overall survival benefit of obinutuzumab over rituximab when combined with chlorambucil in patients with chronic lymphocytic leukemia and comorbidities: Final survival analysis of the CLL11 study. *Proc EHA* 2018; Abstract S151.

Herrera AF et al. Interim results of brentuximab vedotin in combination with nivolumab in patients with relapsed or refractory Hodgkin lymphoma. *Blood* 2018;131(11):1183-94.

Hillmen P et al. High, durable minimal residual disease (MRD) negativity with venetoclax + rituximab in relapsed/refractory CLL: MRD kinetics and responses in cytogenetic risk groups in patients from phase 3 MURANO study. *Proc EHA* 2018;Abstract S805.

Jain N et al. Combined VEN and IBR for patients with previously untreated high-risk CLL, and relapsed/refractory (R/R) CLL: A phase II trial. *Proc ASH* 2017; Abstract 429.

Kreitman RJ et al. Moxetumomab pasudotox in relapsed/refractory hairy cell leukemia. Leukemia 2018;32(8):1768-77.

Locke FL et al. Axicabtagene ciloleucel (axi-cel) in patients with refractory large B-cell lymphoma: Outcomes by prior lines of therapy in ZUMA-1. *Proc EHA* 2018; Abstract S801.

Locke FL et al. Durability of response in ZUMA-1, the pivotal phase 2 study of axicabtagene ciloleucel (axi-cel) in patients (Pts) with refractory large B-cell lymphoma. *Proc ASCO* 2018; Abstract 3003.

Marcus R et al. Obinutuzumab for the first-line treatment of follicular lymphoma. N Engl J Med 2017;377(14):1331-44.

Morschhauser F et al; RELEVANCE Trial Investigators. **Rituximab plus lenalidomide in advanced untreated follicular lymphoma.** *N Engl J Med* 2018;379(10):934-47.

Neelapu SS et al. Axicabtagene ciloleucel CAR T-cell therapy in refractory large B-cell lymphoma. N Engl J Med 2017;377(26):2531-44.

Ramchandren R et al. CHECKMATE 205 cohort D: A phase 2 trial of nivolumab for newly diagnosed advanced-stage classical Hodgkin lymphoma. *Proc EHA* 2018; Abstract S114.

Ruan J et al. Five-year follow-up of lenalidomide plus rituximab as initial treatment for mantle cell lymphoma. *Blood* 2018;[Epub ahead of print].

Schuster SJ et al. Chimeric antigen receptor T cells in refractory B-cell lymphomas. N Engl J Med 2017;377(26):2545-54.

Sehn LH et al. Randomized phase 2 trial of polatuzumab vedotin (pola) with bendamustine and rituximab (BR) in relapsed/ refractory (R/R) FL and DLBCL. *Proc ASCO* 2018; Abstract 7507.

Seymour JF et al. Venetoclax-rituximab in relapsed or refractory chronic lymphocytic leukemia. *N Engl J Med* 2018;378(12):1107-20.

Tam CS et al. Ibrutinib plus venetoclax for the treatment of mantle-cell lymphoma. N Engl J Med 2018;378(13):1211-23.

Wang M et al. Acalabrutinib in relapsed or refractory mantle cell lymphoma (ACE-LY-004): A single-arm, multicentre, phase 2 trial. *Lancet* 2018;391(10121):659-67.

Westin JR et al. Lenalidomide and obinutuzumab with CHOP for newly diagnosed diffuse large B-cell lymphoma: Final phase I/II results. *Proc ASH* 2017; Abstract 189.

Wierda WG et al. Phase 2 CAPTIVATE results of ibrutinib (ibr) plus venetoclax (ven) in first-line chronic lymphocytic leukemia (CLL). *Proc ASCO* 2018; Abstract 7502.

Younes A et al. Atezolizumab plus R-CHOP shows encouraging activity and acceptable toxicity in previously untreated patients with diffuse large B-cell lymphoma (DLBCL): An interim analysis of a phase I/II study. *Proc EHA* 2018; Abstract S803.

Zinzani PL et al. Copanlisib monotherapy activity in relapsed or refractory indolent B-cell lymphoma: Combined analysis from phase I and II studies. *Proc ESMO* 2018; Abstract 10060.

Zinzani PL et al. DYNAMO: A phase 2 study demonstrating the clinical activity of duvelisib in patients with double-refractory follicular lymphoma. *Proc EHA* 2017; Abstract S777.

#### **OVARIAN CANCER**

Aghajanian C et al. Evaluation of rucaparib in platinum-sensitive recurrent ovarian carcinoma (rOC) in patients (pts) with or without residual bulky disease at baseline in the ARIEL3 study. *Proc ASCO* 2018; Abstract 5537.

Berek JS et al. Safety and dose modification for patients receiving niraparib. Ann Oncol 2018;29(8):1784-92.

Coleman RL et al. Rucaparib maintenance treatment for recurrent ovarian carcinoma after response to platinum therapy (ARIEL3): A randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet* 2017;390(10106):1949-61.

Friedlander M et al. Health-related quality of life and patient-centred outcomes with olaparib maintenance after chemotherapy in patients with platinum-sensitive, relapsed ovarian cancer and a BRCA1/2 mutation (SOLO2/ENGOT Ov-21): A placebocontrolled, phase 3 randomised trial. *Lancet Oncol* 2018;19(8):1126-34.

Konstantinopoulos PA et al. TOPACIO/Keynote-162 (NCT02657889): A phase 1/2 study of niraparib + pembrolizumab in patients (pts) with advanced triple-negative breast cancer or recurrent ovarian cancer (ROC) — Results from ROC cohort. *Proc* ASCO 2018; Abstract 106.

Lord R et al. Safety and dose modification for patients with low body weight receiving niraparib in the ENGOT-OV16/NOVA phase III trial. *Proc SGO* 2018; Abstract 20.

Matulonis UA et al. Antitumor activity and safety of pembrolizumab in patients with advanced recurrent ovarian cancer: Interim results from the phase 2 KEYNOTE-100 study. *Proc ASCO* 2018; Abstract 5511.

Matulonis UA et al. Initial safety and activity findings from a phase IB escalation study of mirvetuximab soravtansine, a folate receptor alpha-targeting antibody-drug conjugate (ADC), with pembrolizumab in platinum-resistant epithelial ovarian cancer (EOC) patients. *Proc SGO* 2018; Abstract 74.

Matulonis UA et al. Phase II study of pembrolizumab (Pembro) combined with pegylated liposomal doxorubicin (PLD) for recurrent platinum-resistant ovarian, fallopian tube or peritoneal cancer. *Proc SGO* 2018; Abstract 48.

Mirza MR et al. Niraparib maintenance therapy in platinum-sensitive, recurrent ovarian cancer. *N Engl J Med* 2016;375(22):2154-64.

Moore KN et al. FORWARD I: A phase III study of mirvetuximab soravtansine versus chemotherapy in platinum-resistant ovarian cancer. *Future Oncol* 2018;14(17):1669-78.

Moore KN et al. Maintenance olaparib in patients with newly diagnosed advanced ovarian cancer. N Engl J Med 2018;[Epub ahead of print].

Moore KN et al. QUADRA: A phase 2, open-label, single-arm study to evaluate niraparib in patients (Pts) with relapsed ovarian cancer (ROC) who have received  $\geq$ 3 prior chemotherapy regimens. *Proc ASCO* 2018; Abstract 5514.

O'Malley DM et al. Mirvetuximab soravtansine, a folate receptor alpha (FRα)-targeting antibody-drug conjugate (ADC), in combination with bevacizumab in patients (pts) with platinum-resistant ovarian cancer: Maturing safety and activity profile from the FORWARD II phase 1b study. *Proc ASCO* 2018;Abstract 5549.

Oza AM et al. Quality of life in patients with recurrent ovarian cancer treated with niraparib versus placebo (ENGOT-OV16/ NOVA): Results from a double-blind, phase 3, randomised controlled trial. *Lancet Oncol* 2018;19(8):1117-25.

Pujade-Lauraine E et al. Olaparib tablets as maintenance therapy in patients with platinum-sensitive, relapsed ovarian cancer and a BRCA1/2 mutation (SOLO2/ENGOT-Ov21): A double-blind, randomised, placebo-controlled, phase 3 trial. *Lancet Oncol* 2017;18(9):1274-84.

#### BREAST CANCER

André F et al. Alpelisib (ALP) + fulvestrant (FUL) for advanced breast cancer (ABC): Results of the phase 3 SOLAR-1 trial. *Proc ESMO* 2018; Abstract LBA3\_PR.

Borges VF et al. Tucatinib combined with ado-trastuzumab emtansine in advanced ERBB2/HER2-positive metastatic breast cancer: A phase 1b clinical trial. *JAMA Oncol* 2018;4(9):1214-20.

Earl HM et al. PERSEPHONE: 6 versus 12 months (m) of adjuvant trastuzumab in patients (pts) with HER2 positive (+) early breast cancer (EBC): Randomised phase 3 non-inferiority trial with definitive 4-year (yr) disease-free survival (DFS) results. *Proc ASCO* 2018; Abstract 506.

Eiermann W et al. Analysis of germline *BRCA1/2* mutated (gBRCA<sup>mut</sup>) hormone receptor-positive (HR+) and triple negative breast cancer (TNBC) treated with talazoparib (TALA). *Proc ASCO* 2018; Abstract 1070.

Gnant M et al. Duration of extended adjuvant therapy with neratinib in early-stage HER2+ breast cancer after trastuzumabbased therapy: Exploratory analyses from the phase III ExteNET trial. *Proc ASCO* 2018; Abstract 524.

Goetz MP et al. MONARCH 3: Abemaciclib as initial therapy for patients with HR+, HER2- advanced breast cancer — Results from the preplanned final PFS analysis. *Proc AACR* 2018; Abstract CT040.

lwata H et al. Trastuzumab deruxtecan (DS-8201a) in subjects with HER2-expressing solid tumors: Long-term results of a large phase 1 study with multiple expansion cohorts. *Proc ASCO* 2018; Abstract 2501.

Joensuu H et al. Effect of adjuvant trastuzumab for a duration of 9 weeks vs 1 year with concomitant chemotherapy for early human epidermal growth factor receptor 2-positive breast cancer: The SOLD randomized clinical trial. *JAMA Oncol* 2018;4(9):1199-206.

Kornblum N et al. Randomized phase II trial of fulvestrant plus everolimus or placebo in postmenopausal women with hormone receptor-positive, human epidermal growth factor receptor 2-negative metastatic breast cancer resistant to aromatase inhibitor therapy: Results of PrE0102. *J Clin Oncol* 2018;36(16):1556-63.

Litton K et al. Talazoparib in patients with advanced breast cancer and a germline BRCA mutation. *N Engl J Med* 2018;379(8):753-63.

Martin M et al; ExteNET Study Group. Neratinib after trastuzumab-based adjuvant therapy in HER2-positive breast cancer (ExteNET): 5-year analysis of a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet Oncol* 2017;18(12): 1688-700.

Murthy R et al. Tucatinib with capecitabine and trastuzumab in advanced HER2-positive metastatic breast cancer with and without brain metastases: A non-randomised, open-label, phase 1b study. *Lancet Oncol* 2018;19(7):880-88.

Neven P et al. Abemaciclib for pre/perimenopausal women with HR+, HER2- advanced breast cancer. *Proc ASCO* 2018; Abstract 1002.

Rimawi M et al; PERTAIN Study Group. First-line trastuzumab plus an aromatase inhibitor, with or without pertuzumab, in human epidermal growth factor receptor 2-positive and hormone receptor-positive metastatic or locally advanced breast cancer (PERTAIN): A randomized, open-label phase II trial. *J Clin Oncol* 2018;36(28):2826-35.

Robson ME et al. OlympiAD final overall survival: Olaparib versus chemotherapy treatment of physician's choice (TPC) in patients with HER2-negative metastatic breast cancer (mBC) and a germline BRCA mutation (gBRCAm). *Proc AACR* 2018; Abstract CT038.

Schmid P et al. Atezolizumab and *nab*-paclitaxel in advanced triple-negative breast cancer. *N Engl J Med* 2018;[Epub ahead of print].

Singh H et al. A US Food and Drug Administration pooled analysis of outcomes of older women with hormone-receptor positive metastatic breast cancer treated with a CDK4/6 inhibitor as initial endocrine based therapy. San Antonio Breast Cancer Symposium 2017;Abstract GS5-06.

Slamon DJ et al. Phase III randomized study of ribociclib and fulvestrant in hormone receptor-positive, human epidermal growth factor receptor 2-negative advanced breast cancer: MONALEESA-3. *J Clin Oncol* 2018;36(24):2465-72.

Sparano JA et al. Adjuvant chemotherapy guided by a 21-gene expression assay in breast cancer. *N Engl J Med* 2018;379(2):111-21.

Tripathy D et al. Ribociclib plus endocrine therapy for premenopausal women with hormone-receptor-positive, advanced breast cancer (MONALEESA-7): A randomised phase 3 trial. *Lancet Oncol* 2018;19(7):904-15.

Turner NC et al. **Overall survival with palbociclib and fulvestrant in advanced breast cancer.** *N Engl J Med* 2018;[Epub ahead of print].