

Year in Review

Proceedings from a Multitumor CME Symposium Focused on Key Clinical Presentations and Papers in Oncology

CME Information

TARGET AUDIENCE

This activity is intended for 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 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 15 renowned investigators with a review of key recent presentations and publications across breast cancer, gastrointestinal cancers, genitourinary cancers, multiple myeloma, non-small cell lung cancer and Hodgkin and non-Hodgkin lymphoma, including chronic lymphocytic leukemia, to assist medical oncologists and hematologists 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, dermatologic and select hematologic cancers.
- Compare and contrast 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.

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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 70% or better and fill out the Educational Assessment and Credit Form located at ResearchToPractice.com/YIRMultitumor14/CME.

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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

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Select Publications

Breast Cancer

- Coleman R et al. **Effects of bisphosphonate treatment on recurrence and cause-specific mortality in women with early breast cancer: A meta-analysis of individual patient data from randomized trials.** San Antonio Breast Cancer Symposium 2013;Abstract S4-07.
- Dieras V et al. **Trastuzumab emtansine in human epidermal growth factor receptor 2-positive metastatic breast cancer: An integrated safety analysis.** *J Clin Oncol* 2014;[Epub ahead of print].
- Giordano SH et al. **Systemic therapy for patients with advanced human epidermal growth factor receptor 2-positive breast cancer: American Society of Clinical Oncology clinical practice guideline.** *J Clin Oncol* 2014;32(19):2078-99.
- Kaufman P et al. **Assessing the discordance rate between local and central HER2 testing in women with locally determined HER2-negative breast cancer.** *Cancer* 2014;120(17):2657-64.
- Lange CA, Yee D. **Killing the second messenger: Targeting loss of cell cycle control in endocrine-resistant breast cancer.** *Endocr Relat Cancer* 2011;18(4):C19-24.
- Pagani O et al; International Breast Cancer Study Group. **Adjuvant exemestane with ovarian suppression in premenopausal breast cancer.** *N Engl J Med* 2014;371(2):107-18.
- Perez E et al. **Disease-free survival (DFS) in the lapatinib alone arm and expanded results of the phase III ALTTO trial (BIG 2-06; NCCTG (Alliance) N063D) in the adjuvant treatment of HER2-positive early breast cancer (EBC).** *Proc ESMO* 2014;Abstract LBA7.
- Ramakrishna N et al. **Recommendations on disease management for patients with advanced human epidermal growth factor receptor 2-positive breast cancer and brain metastases: American Society of Clinical Oncology clinical practice guideline.** *J Clin Oncol* 2014;32(19):2100-8.
- Swain S et al. **Final overall survival (OS) analysis from the CLEOPATRA study of first-line (1L) pertuzumab (ptz), trastuzumab (T), and docetaxel (D) in patients (pts) with HER2-positive metastatic breast cancer (MBC).** *Proc ESMO* 2014; Abstract 3500_PR.
- Tolaney SM et al. **A phase II study of adjuvant paclitaxel (T) and trastuzumab (H) (APT trial) for node-negative, HER2-positive breast cancer (BC).** San Antonio Breast Cancer Symposium 2013;Abstract S1-04.

Colorectal, Gastric and Pancreatic Cancer

- A study of trastuzumab emtansine versus taxane in patients with advanced gastric cancer. NCT01641939**
- Arnold D et al. **Maintenance strategy with fluoropyrimidines (FP) plus bevacizumab (bev), bev alone, or no treatment, following a standard combination of FP, oxaliplatin (ox), and bev as first-line treatment for patients with metastatic colorectal cancer (mCRC): A phase III non-inferiority trial (AIO KRK 0207).** *Proc ASCO* 2014;Abstract 3503.
- Burriss H et al. **Improvements in survival and clinical benefit with gemcitabine as first-line therapy for patients with advanced pancreas cancer: A randomized trial.** *J Clin Oncol* 1997;15(6):2403-13.
- Cervantes F et al. **Three-year efficacy, safety, and survival findings from COMFORT-II, a phase 3 study comparing ruxolitinib with best available therapy for myelofibrosis.** *Blood* 2013;122(25):4047-53.
- Chibaudel B et al. **Bevacizumab-erlotinib as maintenance therapy in metastatic colorectal cancer. Final results of the GERCOR DREAM study.** *Proc ESMO* 2014;Abstract 4970.
- Ford H et al. **Cougar-02: A randomized phase III study of docetaxel versus active symptom control in advanced esophagogastric adenocarcinoma.** Gastrointestinal Cancers Symposium 2013;Abstract LBA4.
- Fuchs CS et al. **Ramucirumab monotherapy for previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (REGARD): An international, randomised, multicentre, placebo-controlled, phase 3 trial.** *Lancet* 2014;383(9911):31-9.
- Garon E et al. **Safety and clinical activity of MK-3475 in previously treated patients (pts) with non-small cell lung cancer (NSCLC).** *Proc ASCO* 2014;Abstract 8020.
- Goldstein D et al. **Updated survival from a randomized phase III trial (MPACT) of nab-paclitaxel plus gemcitabine versus gemcitabine alone for patients with metastatic adenocarcinoma of the pancreas.** Gastrointestinal Cancers Symposium 2014;Abstract 178.
- Harrison C et al. **JAK inhibition with ruxolitinib versus best available therapy for myelofibrosis.** *N Engl J Med* 2012;366(9):787-98.

Select Publications

- Hegewisch-Becker S et al. **Maintenance strategy with fluoropyrimidines (FP) plus bevacizumab (bev), bev alone or no treatment, following a 24-week first-line induction with FP, oxaliplatin (ox) and bev for patients with metastatic colorectal cancer: Mature data and subgroup analysis of the AIO KRK 0207 phase III study.** *Proc ESMO 2014*;Abstract 4980.
- Heinemann V et al. **Randomized comparison of FOLFIRI plus cetuximab versus FOLFIRI plus bevacizumab as first-line treatment of KRAS wild-type metastatic colorectal cancer: German AIO study KRK-0306 (FIRE-3).** *Proc ASCO 2013*;Abstract LBA3506.
- Hurwitz H et al. **A randomized double-blind phase 2 study of ruxolitinib (RUX) or placebo (PBO) with capecitabine (CAPE) as second-line therapy in patients (pts) with metastatic pancreatic cancer (mPC).** *Proc ASCO 2014*;Abstract 4000.
- Kang JH et al. **Salvage chemotherapy for pretreated gastric cancer: A randomized phase III trial comparing chemotherapy plus best supportive care with best supportive care alone.** *J Clin Oncol 2012*;30(13):1513-8.
- Kang Y et al. **A phase IIa dose-finding and safety study of first-line pertuzumab in combination with trastuzumab, capecitabine and cisplatin in patients with HER2-positive advanced gastric cancer.** *Br J Cancer 2014*;111(4):660-6.
- Keir M et al. **PD-1 and its ligands in tolerance and immunity.** *Annu Rev Immunol 2008*;26:677-704.
- Kim T et al. **CONCUR: A randomized, placebo-controlled phase 3 study of regorafenib (REG) monotherapy in Asian patients with previously treated metastatic colorectal cancer (mCRC).** *Proc ESMO 2014*;Abstract 5000.
- Koopman M et al. **Final results and subgroup analyses of the phase 3 CAIRO3 study: Maintenance treatment with capecitabine + bevacizumab versus observation after induction treatment with chemotherapy + bevacizumab in metastatic colorectal cancer (mCRC).** *Proc ASCO 2014*;Abstract 3504.
- Li J et al. **CONCUR: A randomized, double-blind, placebo-controlled phase 3 study of regorafenib monotherapy in Asian patients with previously treated metastatic colorectal cancer (mCRC).** *Proc ESMO 2014*;Abstract O-0023.
- Muro K et al. **A phase 1b study of pembrolizumab (pembro; MK-3475) in patients (Pts) with advanced gastric cancer.** *Proc ESMO 2014*;Abstract LBA15.
- Pardoll DM. **The blockade of immune checkpoints in cancer immunotherapy.** *Nat Rev Cancer 2012*;12(4):252-64.
- Plimack E et al. **A phase 1b study of pembrolizumab (pembro; MK-3475) in patients (pts) with advanced urothelial tract cancer.** *Proc ESMO 2014*;Abstract LBA23.
- Ribas A et al. **Efficacy and safety of the anti-PD-1 monoclonal antibody MK-3475 in 411 patients (pts) with melanoma (MEL).** *J Clin Oncol 2014*;32(5).
- Rizvi N et al. **Safety and clinical activity of MK-3475 as initial therapy in patients with advanced non-small cell lung cancer (NSCLC).** *Proc ASCO 2014*;Abstract 8007.
- Seiwert T et al. **A phase 1b study of MK-3475 in patients with human papillomavirus (HPV)-associated and non-HPV-associated head and neck (H/N) cancer.** *Proc ASCO 2014*;Abstract 6011.
- Tabernero J et al. **Genomic medicine frontier in human solid tumors: Prospects and challenges.** *J Clin Oncol 2013*;31(15):1874-84.
- Tabernero J et al. **VE-BASKET, a Simon 2-stage adaptive design, phase II, histology-independent study in nonmelanoma solid tumors harboring BRAF V600 mutations (V600m): Activity of vemurafenib (VEM) with or without cetuximab (CTX) in colorectal cancer (CRC).** *Proc ASCO 2014*;Abstract 3518.
- Thuss-Patience PC et al. **Survival advantage for irinotecan versus best supportive care as second-line chemotherapy in gastric cancer — A randomised phase III study of the Arbeitsgemeinschaft Internistische Onkologie (AIO).** *Eur J Cancer 2011*;47(15):2306-14.
- Van Cutsem E et al. **Phase III RECURSE trial of TAS-102 vs placebo, with best supportive care (BSC), in patients (pts) with metastatic colorectal cancer (mCRC) refractory to standard therapies.** *Proc ESMO 2014*;Abstract LBA13.
- Venook A et al. **CALGB/SWOG 80405: Phase III trial of irinotecan/5-FU/leucovorin (FOLFIRI) or oxaliplatin/5-FU/leucovorin (mFOLFOX6) with bevacizumab (BV) or cetuximab (CET) for patients (pts) with KRAS wild-type (wt) untreated metastatic adenocarcinoma of the colon or rectum (MCRC).** *Proc ASCO 2014*;Abstract LBA3.
- Verstovsek S et al. **A double-blind, placebo-controlled trial of ruxolitinib for myelofibrosis.** *N Engl J Med 2012*;366(9):799-807.
- Wilke H et al. **Ramucirumab plus paclitaxel versus placebo plus paclitaxel in patients with previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (RAINBOW): A double-blind, randomised phase 3 trial.** *Lancet Oncol 2014*;15(11):1224-35.

Select Publications

Yoshino T et al. **Results of a multicenter, randomized, double-blind, phase III study of TAS-102 vs placebo, with best supportive care (bsc), in patients (pts) with metastatic colorectal cancer (mCRC) refractory to standard therapies (RECOURSE).** *Proc ESMO 2014;Abstract O-0022.*

Lymphoma/CLL

Anderlini P et al. **Reduced-intensity conditioning (RIC) and allogeneic stem cell transplantation (allo-SCT) for relapsed/refractory Hodgkin lymphoma (HL) in the brentuximab vedotin era: Favorable overall and progression-free survival (OS/PFS) with low transplant-related mortality (TRM).** *Proc ASH 2013;Abstract 410.*

Bartlett NL et al. **A Phase 2 study of brentuximab vedotin in patients with relapsed or refractory CD30-positive non-Hodgkin lymphomas: Interim results in patients with DLBCL and other B-cell lymphomas.** *Proc ASH 2013;Abstract 848.*

Bittenbring J et al. **Vitamin D deficiency impairs rituximab-mediated cellular cytotoxicity and outcome of patients with diffuse large B-cell lymphoma treated with but not without rituximab.** *J Clin Oncol 2014;32(29):3242-8.*

Brown JR et al. **Safety and efficacy of obinutuzumab (GA101) with fludarabine/cyclophosphamide (G-FC) or bendamustine (G-B) in the initial therapy of patients with chronic lymphocytic leukemia (CLL): Results from the Phase 1b Galton trial (GAO4779g).** *Proc ASH 2013;Abstract 523.*

Byrd J et al. **Ibrutinib versus ofatumumab in previously treated chronic lymphoid leukemia.** *N Engl J Med 2014;371(3):213-23.*

Byrd J et al. **Randomized comparison of ibrutinib versus ofatumumab in relapsed or refractory (R/R) chronic lymphocytic leukemia/small lymphocytic lymphoma: Results from the phase III RESONATE trial.** *Proc ASCO 2014;Abstract LBA7008.*

Cavalli F et al. **Randomized Phase 3 study of rituximab, cyclophosphamide, doxorubicin, and prednisone plus vincristine (R-CHOP) or bortezomib (VR-CAP) in newly diagnosed mantle cell lymphoma (MCL) patients (pts) ineligible for bone marrow transplantation (BMT).** *Proc ASCO 2014;Abstract 8500.*

Coutre S et al. **Second interim analysis of a phase 3 study evaluating idelalisib and rituximab for relapsed CLL.** *Proc ASCO 2014;Abstract 7012.*

Davies A et al. **Obinutuzumab (GA101) plus CHOP or FC in relapsed/refractory follicular lymphoma: Final data from the maintenance phase of the Phase 1b GAUDI study (BO21000).** *Proc ASH 2013;Abstract 1814.*

Eichhorst B et al. **Chemoimmunotherapy with fludarabine (F), cyclophosphamide (C), and rituximab (R) (FCR) versus bendamustine and rituximab (BR) in previously untreated and physically fit patients (pts) with advanced chronic lymphocytic leukemia (CLL): Results of a planned interim analysis of the CLL10 trial, an international, randomized study of the German CLL Study Group (GCLLSG).** *Proc ASH 2013;Abstract 526.*

Flinn I et al. **Randomized trial of bendamustine-rituximab or R-CHOP/R-CVP in first-line treatment of indolent NHL or MCL: The BRIGHT study.** *Blood 2014;23(19):2944-52.*

Furman RR et al. **Idelalisib and rituximab in relapsed chronic lymphocytic leukemia.** *N Engl J Med 2014;370(11):997-1007.*

Gandhi M et al. **Pancreatitis in patients treated with brentuximab vedotin: A previously unrecognized serious adverse event.** *Blood 2014;123(18):2895-7.*

Goede V et al. **Head-to-head comparison of obinutuzumab (GA101) plus chlorambucil (Clb) versus rituximab plus Clb in patients with chronic lymphocytic leukemia (CLL) and co-existing medical conditions (comorbidities): Final Stage 2 results of the CLL11 trial.** *Proc ASH 2013;Abstract 6.*

Goede V et al. **Obinutuzumab plus chlorambucil in patients with CLL and coexisting conditions.** *N Engl J Med 2014;370(12):1101-10.*

Gopal A et al. **Three-year follow-up data and characterization of long-term remissions from an ongoing Phase 2 study of brentuximab vedotin in patients with relapsed or refractory Hodgkin lymphoma.** *Proc ASH 2013;Abstract 4382.*

Gopal AK et al. **PI3K δ inhibition by idelalisib in patients with relapsed indolent lymphoma.** *N Engl J Med 2014;370(11):1008-18.*

Martin P et al. **CALGB 50803 (Alliance): A phase II trial of lenalidomide plus rituximab in patients with previously untreated follicular lymphoma.** *Proc ASCO 2014;Abstract 8521.*

Moskowitz A et al. **FDG-PET adapted sequential therapy with brentuximab vedotin and augmented ICE followed by autologous stem cell transplant for relapsed and refractory Hodgkin lymphoma.** *Proc ASH 2013;Abstract 2099.*

Select Publications

- Nowakowski G et al. **Lenalidomide combined with R-CHOP overcomes negative prognostic impact of non-germinal center B-cell phenotype in newly diagnosed diffuse large B-cell lymphoma: A Phase II study.** *J Clin Oncol* 2014;[Epub ahead of print].
- O'Brien S et al. **Independent evaluation of ibrutinib efficacy 3 years post-initiation of monotherapy in patients with chronic lymphocytic leukemia/small lymphocytic leukemia including deletion 17p disease.** *Proc ASCO* 2014;Abstract 7014.
- Pasqualucci L et al. **Analysis of the coding genome of diffuse large B-cell lymphoma.** *Nat Genet* 2011;43(9):830-7.
- Porter DL et al. **Randomized, Phase II dose optimization study of chimeric antigen receptor modified T cells directed against CD19 (CTL019) in patients with relapsed, refractory CLL.** *Proc ASH* 2013;Abstract 873.
- Raemaekers J et al. **Omitting radiotherapy in early positron emission tomography-negative stage I/II Hodgkin lymphoma is associated with an increased risk of early relapse: Clinical results of the preplanned interim analysis of the randomized EORTC/LYSA/FIL H10 trial.** *J Clin Oncol* 2014;32(12):1188-94.
- Ruan J et al. **Combination biologic therapy without chemotherapy as initial treatment for mantle cell lymphoma: Multi-center Phase II study of lenalidomide plus rituximab.** *Proc ASH* 2013;Abstract 247.
- Rummel MJ et al. **Bendamustine plus rituximab versus CHOP plus rituximab as first-line treatment for patients with indolent and mantle-cell lymphomas: An open-label, multicentre, randomised, phase 3 non-inferiority trial.** *Lancet Oncol* 2013;381(9873):1203-10.
- Seymour JF et al. **ABT-199 (GDC-0199) in relapsed/refractory (R/R) chronic lymphocytic leukemia (CLL) and small lymphocytic lymphoma (SLL): High complete-response rate and durable disease control.** *Proc ASCO* 2014;Abstract 7015.
- Seymour JF et al. **Bcl-2 inhibitor ABT-199 (GDC-0199) monotherapy shows anti-tumor activity including complete remissions in high-risk relapsed/refractory (R/R) chronic lymphocytic leukemia (CLL) and small lymphocytic lymphoma (SLL).** *Proc ASH* 2013;Abstract 872.
- Wang ML et al. **Targeting BTK with ibrutinib in relapsed or refractory mantle-cell lymphoma.** *N Engl J Med* 2013;369(6):507-16.
- Yamshon S et al. **Correlative analysis and clinical update of a Phase II study using lenalidomide and rituximab in patients with indolent non-Hodgkin lymphoma.** *Proc ASH* 2013;Abstract 249.
- Yasenchak C et al. **A Phase 2 study of single-agent brentuximab vedotin for front-line therapy of Hodgkin lymphoma in patients age 60 years and above: Interim results.** *Proc ASH* 2013;Abstract 4389.
- Younes A et al. **Combination of ibrutinib with rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone (R-CHOP) for treatment-naïve patients with CD20-positive B-cell non-Hodgkin lymphoma: A non-randomised, phase 1b study.** *Lancet Oncol* 2014;15(9):1019-26.

Non-Small Cell Lung Cancer

- Garon E et al. **Ramucirumab plus docetaxel versus placebo plus docetaxel for second-line treatment of stage IV non-small-cell lung cancer after disease progression on platinum-based therapy (REVEL): A multicentre, double-blind, randomised phase 3 trial.** *Lancet* 2014;384(9944):665-73.
- Gettinger S et al. **First-line nivolumab (anti-PD-1; BMS-936558, ONO-4538) monotherapy in advanced NSCLC: Safety, efficacy, and correlation of outcomes with PD-L1 status.** *Proc ASCO* 2014;Abstract 8024.
- Janjigian Y et al. **Dual inhibition of EGFR with afatinib and cetuximab in kinase inhibitor-resistant EGFR-mutant lung cancer with and without T790M mutations.** *Cancer Discov* 2014;4(9):1036-45.
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