Meet The Professors

Investigators Present Current Cases from Their Practices and Discuss Relevant Recent Data Sets

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 many 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 in peer-reviewed journals. This continual influx of information challenges practicing healthcare professionals to stay up to date and abreast of crucial data applicable in clinical practice. To that end, these proceedings from a daylong symposium deliver the perspectives of 10 renowned investigators on recent presentations and publications, including those unveiled during the 2013 American Society of Hematology (ASH) Annual Meeting and San Antonio Breast Cancer Symposium, to provide insight into the current and future management of breast cancer, myeloid cancers, multiple myeloma and Hodgkin and non-Hodgkin lymphomas, including chronic lymphocytic leukemia.

LEARNING OBJECTIVES

- Apply emerging clinical trial data to the best-practice care of patients with early and advanced breast cancer.
- Appraise recent data on therapeutic advances and changing practice standards in multiple myeloma, and refine or validate existing treatment algorithms based on discussion of this information.
- Integrate existing and recently approved therapeutic strategies into the management of non-Hodgkin and Hodgkin lymphomas.
- Apply the results of emerging research information to the selection of optimal systemic therapy for patients with newly diagnosed and relapsed or refractory chronic lymphocytic leukemia.
- Individualize the treatment of acute leukemias, myeloproliferative disorders and myelodysplastic syndromes, considering patient- and disease-specific factors.
- Assess the ongoing clinical trials evaluating innovative investigational approaches for the aforementioned cancer types, and obtain consent from appropriate patients for study participation.

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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

Adam M Brufsky, MD, PhD

Baselga J et al. **A Phase III, randomized, double-blind, placebo-controlled registration trial to evaluate the efficacy and safety of pertuzumab + trastuzumab + docetaxel vs placebo + trastuzumab + docetaxel in patients with previously untreated HER2-positive metastatic breast cancer (CLEOPATRA).** San Antonio Breast Cancer Symposium 2011;**Abstract S5-5**.

Blackwell KL et al. **Primary results from EMILIA, a phase III study of trastuzumab emtansine (T-DM1) versus capecitabine (X) and lapatinib (L) in HER2-positive locally advanced or metastatic breast cancer (MBC) previously treated with trastuzumab (T) and a taxane.** *Proc ASCO* 2012;**Abstract LBA1**.

Carey LA et al. **Clinical and translational results of CALGB 40601: A neoadjuvant phase III trial of weekly paclitaxel and trastuzumab with or without lapatinib for HER2-positive breast cancer.** *Proc ASCO* 2013;**Abstract 500**.

Dijkers EC et al. **Biodistribution of 89Zr-trastuzumab and PET imaging of HER2-positive lesions in patients with metastatic breast cancer.** *Clin Pharmacol Ther* 2010;87(5):586-92.

Gianni L et al. **Neoadjuvant chemotherapy with trastuzumab followed by adjuvant trastuzumab versus neoadjuvant chemotherapy alone, in patients with HER2-positive locally advanced breast cancer (the NOAH trial): A randomised controlled superiority trial with a parallel HER2-negative cohort.** *Lancet* 2010;375(9712):377-84.

Gonzalez-Angulo AM et al. **High risk of recurrence for patients with breast cancer who have human epidermal growth factor receptor 2-positive, node-negative tumors 1 cm or smaller.** *J Clin Oncol* 2009;27(34):5700-6.

Hurvitz SA et al. **Phase II randomized study of trastuzumab emtansine versus trastuzumab plus docetaxel in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer.** *J Clin Oncol* 2013;31(9):1157-63.

Krop I et al. **Efficacy and safety of trastuzumab emtansine (T-DM1) vs lapatinib plus capecitabine (XL) in patients with human epidermal growth factor receptor 2 (HER2)-positive metastatic breast cancer (MBC) and central nervous system (CNS) metastases: Results from a retrospective exploratory analysis of EMILIA.** San Antonio Breast Cancer Symposium 2013;**Abstract P4-12-27**.

Leyland-Jones B. **Human epidermal growth factor receptor 2-positive breast cancer and central nervous system metastases.** *J Clin Oncol* 2009;27(31):5278-86.

Olsen AH et al. **Overdiagnosis, sojourn time, and sensitivity in the Copenhagen mammography screening program.** *The Breast* 2012;338–342.

Olson EM et al. **Incidence and risk of central nervous system metastases as site of first recurrence in patients with HER2-positive breast cancer treated with adjuvant trastuzumab.** *Ann Oncol* 2013;24(6):1526-33.

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Swain SM et al. **Pertuzumab, trastuzumab, and docetaxel for HER2-positive metastatic breast cancer (CLEOPATRA study): Overall survival results from a randomised, double-blind, placebo-controlled, phase 3 study.** *Lancet Oncol* 2013;14(6):461-71.

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**.

Verma S et al. **Trastuzumab emtansine for HER2-positive advanced breast cancer.** *N Engl J Med* 2012;367(19):1783-91.

Joyce O'Shaughnessy, MD

Aebi S et al. **Chemotherapy prolongs survival for isolated local or regional recurrence of breast cancer: The CALOR trial (Chemotherapy as Adjuvant for Locally Recurrent Breast Cancer; IBCSG 27-02, NSABP B-37, BIG 1-02).** San Antonio Breast Cancer Symposium 2012;**Abstract S3-2**.

Balko JM et al. **JAK2 amplifications are enriched in triple negative breast cancers (TNBCs) after neoadjuvant chemotherapy and predict poor prognosis.** San Antonio Breast Cancer Symposium 2013;**Abstract S6-01**.

Blackwell KL et al. **Exome sequencing reveals clinically actionable mutations in the pathogenesis and metastasis of triple negative breast cancer.** San Antonio Breast Cancer Symposium 2013;**Abstract S4-03**.

Cuzick J et al. **Effect of anastrozole and tamoxifen as adjuvant treatment for early-stage breast cancer: 10-year analysis of the ATAC trial.** *Lancet Oncol* 2010;11(12):1135-41.

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Ingle JN et al. **Duration of letrozole treatment and outcomes in the placebo-controlled NCIC CTG MA.17 extended adjuvant therapy trial.** *Breast Cancer Res Treat* 2006;99(3):295-300.

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Seah DSE et al. **Use and duration of chemotherapy in patients with metastatic breast cancer according to tumor subtype and line of therapy.** *J Natl Compr Canc New* 2014;12:71-80.

Sgroi DC et al. **Prediction of late distant recurrence in patients with oestrogen-receptor-positive breast cancer: A prospective comparison of the breast-cancer index (BCI) assay, 21-gene Recurrence Score, and IHC4 in the TransATAC study population.** *Lancet Oncol* 2013;14(11):1067-76.

Sikov WM et al. **Impact of the addition of carboplatin (Cb) and/or bevacizumab (B) to neoadjuvant weekly paclitaxel (P) followed by dose-dense AC on pathologic complete response (pCR) rates in triple-negative breast cancer (TNBC): CALGB 40603 (Alliance).** San Antonio Breast Cancer Symposium 2013;**Abstract S5-01**.

Myeloid Cancers

Moshe Talpaz, MD

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Guglielmelli P et al. **Impact of prognostically detrimental mutations (ASXL1, EZH2, SRSF2, IDH1/2) on outcomes in patients with myelofibrosis treated with ruxolitinib in COMFORT-II.** *Proc ASH* 2013;**Abstract 107**.

Harrison C et al. **JAK inhibition with ruxolitinib versus best available therapy for myelofibrosis.** *N Engl J Med* 2012;366(9):787-98.

Klampfl T et al. **Somatic mutations of calreticulin in myeloproliferative neoplasms.** *N Engl J Med* 2013;369(25):2379-90.

Koppikar P et al. **Heterodimeric JAK-STAT activation as a mechanism of persistence to JAK2 inhibitor therapy.** *Nature* 2012;489(7414):155-9.

Mascarenhas J et al. **An open-label, phase II study of the JAK1 inhibitor INCB039110 in patients with myelofibrosis.** *Blood* 2013;122(21);663.

Nangalia J et al. **Somatic CALR mutations in myeloproliferative neoplasms with nonmutated JAK2.** *N Engl J Med* 2013;369(25):2391-405.

Pardanani A et al. **Results of a randomized, double-blind, placebo-controlled phase III study (JAKARTA) of the JAK2-selective inhibitor fedratinib (SAR302503) in patients with myelofibrosis (MF).** *Proc ASH* 2013;**Abstract 393**.

Pardanani A et al. **Update on the long-term efficacy and safety of momelotinib, a JAK1 and JAK2 inhibitor, for the treatment of myelofibrosis.** *Proc ASH* 2013;**Abstract 108**.

Talpaz M et al. **Efficacy, hematologic effects, and dose of ruxolitinib in myelofibrosis patients with low starting platelet counts (50-100 x 109/L): A comparison to patients with normal or high starting platelet counts.** *Proc ASH* 2012;**Abstract 176**.

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B Douglas Smith, MD

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Cortes JE et al. **Final analysis of the efficacy and tolerability of subcutaneous omacetaxine mepesuccinate, ≥24 months after first dose, in patients with chronic phase (CP) or accelerated phase (AP) chronic myeloid leukemia (CML).** *Proc ASH* 2013;**Abstract 2743**.

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Cortes JE et al. **Ponatinib in refractory Philadelphia chromosome-positive leukemias.** *N Engl J Med* 2012;367(22):2075-88.

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Ross DM et al. **Safety and efficacy of imatinib cessation for CML patients with stable undetectable minimal residual disease: Results from the TWISTER study.** *Blood* 2013;122(4):515-22.

Saglio G et al. **ENESTnd update: Nilotinib (NIL) vs imatinib (IM) in patients (pts) with newly diagnosed chronic myeloid leukemia in chronic phase (CML-CP) and the impact of early molecular response (EMR) and Sokal risk at diagnosis on long-term outcomes.** *Proc ASH* 2013;**Abstract 92**.

Saglio G et al. **Nilotinib versus imatinib for newly diagnosed chronic myeloid leukemia.** *N Engl J Med* 2010;362(24):2251-9.

Hagop M Kantarjian, MD

Borthakur G et al. **Treatment of core-binding-factor in acute myelogenous leukemia with fludarabine, cytarabine, and granulocyte colony-stimulating factor results in improved event-free survival.** *Cancer* 2008;113(11):3181-5.

Burnett AK et al. **Optimization of chemotherapy for younger patients with acute myeloid leukemia: Results of the medical research council AML15 trial.** *J Clin Oncol* 2013;31(27):3360-8.

Fernandez HF et al. **Anthracycline dose intensification in acute myeloid leukemia.** *N Engl J Med* 2009;361(13):1249-59.

Hills RK et al. **The addition of gemtuzumab ozogamicin (GO) to induction chemotherapy reduces relapse and improves survival in patients without adverse risk karyotype: Results of an individual patient meta-analysis of the five randomised trials.** *Proc ASH* 2013;**Abstract 356**.

Jabbour E et al. **Outcome of patients (pts) with low and intermediate-1 risk myelodysplastic syndrome (MDS) after hypomethylating agent (HMA) failure.** *Blood* 2013;122(21):388;**Abstract 388**.

Jabbour E et al. **Outcome of patients with myelodysplastic syndrome after failure of decitabine therapy.** *Cancer* 2010;116(16):3830-4.

Kantarjian HM et al. **Multicenter, randomized, open-label, phase III trial of decitabine versus patient choice, with physician advice, of either supportive care or low-dose cytarabine for the treatment of older patients with newly diagnosed acute myeloid leukemia.** *J Clin Oncol* 2012;30(21):2670-7.

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SGI-110, a novel low volume stable subcutaneous (SQ) second generation hypomethylating agent (HMA) in patients with relapsed/refractory MDS and AML. *Proc ASH* 2012;**Abstract 414**.

Kantarjian H et al. **Results of intensive chemotherapy in 998 patients age 65 years or older with acute myeloid leukemia or high-risk myelodysplastic syndrome: Predictive prognostic models for outcome.** *Cancer* 2006;106(5):1090-8.

Kern W, Estev EH. **High-dose cytosine arabinoside in the treatment of acute myeloid leukemia: Review of three randomized trials.** *Cancer* 2006;107(1):116-24.

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Willemze R et al. **High-dose cytarabine in induction treatment improves the outcome of adult patients younger than age 46 years with acute myeloid leukemia: Results of the EORTC-GIMEMA AML-12 trial.** *J Clin Oncol* 2014;32(3):219-28.

Multiple Myeloma

Andrzej J Jakubowiak, MD, PhD

Attal M et al. **Lenalidomide maintenance after stem-cell transplantation for multiple myeloma: Follow-up analysis of the IFM 2005-02 trial.** *Proc ASH* 2013;**Abstract 406**.

Cavo M et al. **Bortezomib with thalidomide plus dexamethasone compared with thalidomide plus dexamethasone as induction therapy before, and consolidation therapy after, double autologous stem-cell transplantation in newly diagnosed multiple myeloma: A randomised phase 3 study.** *Lancet* 2010;376(9758):2075-85.

Facon T et al. **Initial phase 3 results of the First (frontline investigation of lenalidomide + dexamethasone versus standard thalidomide) trial (MM-020/IFM 07 01) in newly diagnosed multiple myeloma (NDMM) patients (pts) ineligible for stem cell transplantation.** *Proc ASH* 2013;**Abstract 2**.

Harousseau JL et al. **Bortezomib plus dexamethasone is superior to vincristine plus doxorubicin plus dexamethasone as induction treatment prior to autologous stem-cell transplantation in newly diagnosed multiple myeloma: Results of the IFM 2005-01 phase III trial.** *J Clin Oncol* 2010;28(30):4621-9.

Hideshima T et al. **Mechanism of action of proteasome inhibitors and deacetylase inhibitors and the biological basis of synergy in multiple myeloma.** *Mol Cancer Ther* 2011;10(11):2034-42.

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Kelly KR et al. **Indatuximab ravtansine (BT062) in combination with lenalidomide and low-dose dexamethasone in patients with relapsed and/or refractory multiple myeloma: Clinical activity in len/dex refractory patients.** *Proc ASH* 2013;122(21):**Abstract 758**.

Korde N et al. **Phase II clinical and correlative study of carfilzomib, lenalidomide, and dexamethasone followed by lenalidomide extended dosing (CRD-R) induces high rates of MRD negativity in newly diagnosed multiple myeloma (MM) patients.** *Proc ASH* 2013;**Abstract 538**.

Kumar SK et al. **A phase 1/2 study of weekly MLN9708, an investigational oral proteasome inhibitor, in combination with lenalidomide and dexamethasone in patients with previously untreated multiple myeloma (MM).** *Proc ASH* 2012;**Abstract 332**.

Leleu X et al. **Consolidation with VTd significantly improves the complete remission rate and time to progression following VTd induction and single autologous stem cell transplantation in multiple myeloma.** *Leukemia* 2013;27(11):2242-4.

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Sharma M et al. **Multiple myeloma (MM) in older (>70 year) patients — Similar benefit from autologous hematopoietic cell transplantation (AHCT) compared with younger patients.** *Proc ASCO* 2013;**Abstract 416**.

Singh PP et al. **Lenalidomide maintenance therapy in multiple myeloma: A meta-analysis of randomized trials.** *Proc ASCO* 2013;**Abstract 407**.

Sonneveld P et al. **Bortezomib induction and maintenance treatment improves survival in patients with newly diagnosed multiple myeloma: Extended follow-up of the HOVON-65/GMMG-HD4 trial.** *Proc ASH* 2013;**Abstract 404**.

Sonneveld P et al. **Dose escalation phase 2 trial of carfilzomib combined with thalidomide and low-dose dexamethasone in newly diagnosed, transplant eligible patients with multiple myeloma. A trial of the European Myeloma Network.** *Proc ASH* 2013;**Abstract 688**.

Joseph Mikhael, MD, MEd

Avet-Loiseau H et al. **Bortezomib plus dexamethasone induction improves outcome of patients with t(4;14) myeloma but not outcome of patients with del(17p).** *J Clin Oncol* 2010;28(30):4630-4.

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