

Hematologic Oncology Update

Issue 1, 2016 (Video Program)

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, hematologists, hematology-oncology fellows and other healthcare providers involved in the treatment of hematologic cancers.

OVERVIEW OF ACTIVITY

The treatment of hematologic cancer remains a challenge for many healthcare professionals and patients despite recent gains made in the management of this group of diseases. Determining which treatment approach is most appropriate for a given patient requires careful consideration of patient-specific characteristics, physician expertise and available health system resources. To bridge the gap between research and patient care, this issue of *Hematologic Oncology Update* features one-on-one discussions with leading hematology-oncology investigators. By providing information on the latest clinical developments in the context of expert perspectives, this activity will assist medical oncologists, hematologists and hematology-oncology fellows with the formulation of evidence-based and current therapeutic strategies, which in turn facilitates optimal patient care.

LEARNING OBJECTIVES

- Incorporate new therapeutic strategies into the best-practice management of newly diagnosed and relapsed/refractory Hodgkin lymphoma.
- Reevaluate current treatment approaches for patients with myeloproliferative disorders and acute and chronic leukemias in light of newly emerging clinical data.
- Recognize the recent FDA approvals of daratumumab, elotuzumab, ixazomib and panobinostat, and identify where and how these agents should be integrated into the clinical management of relapsed or refractory multiple myeloma.
- Assess approved and investigational treatment options for patients with mantle-cell lymphoma.
- Appreciate the recent FDA approval of venetoclax as treatment for patients with relapsed/refractory chronic lymphocytic leukemia and deletion 17p, and discern how this therapy can be appropriately integrated into the clinical management of this disease.

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 1.5 *AMA PRA Category 1 Credits™*. 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 1.5 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](https://www.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/HOU116/Video/CME](https://www.researchtopractice.com/HOU116/Video/CME).

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-the-art 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:

Anas Younes, MD

Chief, Lymphoma Service
Memorial Sloan Kettering Cancer Center
New York, New York

Contracted Research: Curis Inc, Johnson & Johnson Pharmaceuticals, Novartis Pharmaceuticals Corporation; **Honoraria:** Incyte Corporation, Janssen Biotech Inc; **Other Remunerated Activities:** Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Celgene Corporation, Merck, Takeda Oncology.

B Douglas Smith, MD

Professor of Oncology
Division of Hematologic Malignancies
The Sidney Kimmel Comprehensive Cancer
Center at Johns Hopkins
Baltimore, Maryland

Consulting Agreements: Bristol-Myers Squibb Company, Celgene Corporation, Novartis Pharmaceuticals Corporation, Pfizer Inc.

Rafael Fonseca, MD

Getz Family Professor of Cancer
Chair, Department of Internal Medicine
Mayo Clinic Arizona
Scottsdale, Arizona

Advisory Committee: Applied Bioscience, Bristol-Myers Squibb Company; **Consulting Agreements:** Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Novartis Pharmaceuticals Corporation, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacyclics LLC, an AbbVie Company, Sanofi; **Contracted Research:** Amgen Inc, Celgene Corporation, Onyx Pharmaceuticals, an Amgen subsidiary, Sanofi.

John P Leonard, MD

Richard T Silver Distinguished Professor of
Hematology and Medical Oncology
Associate Dean for Clinical Research
Weill Cornell Medical College
New York, New York

Consulting Agreements: Bayer HealthCare Pharmaceuticals, Celgene Corporation, Cephalon Inc.

EDITOR — **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, 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, 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, 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, Amgen Inc, Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Celgene Corporation, Genentech BioOncology, Incyte Corporation, Janssen Biotech Inc, Novartis Pharmaceuticals Corporation, Pharmacyclics LLC, an AbbVie Company, Seattle Genetics 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: August 2016

Expiration date: August 2017

Select Publications

- Ansell S et al. **Nivolumab in patients (pts) with relapsed or refractory classical Hodgkin lymphoma (R/R cHL): Clinical outcomes from extended follow-up of a phase 1 study (CA209-039).** *Proc ASH* 2015;Abstract 583.
- Berdeja JG et al. **Phase I/II study of the combination of panobinostat and carfilzomib in patients with relapsed/refractory multiple myeloma.** *Haematologica* 2015;100(5):670-6.
- Chen R et al. **Pre-transplant R-bendamustine induces high rates of minimal residual disease in MCL patients: Updated results of S1106: US Intergroup study of a randomized phase II trial of R-HCVAD vs R-bendamustine followed by autologous stem cell transplants for patients with mantle cell lymphoma.** *Proc ASH* 2015;Abstract 518.
- Chiron D et al. **Cell-cycle reprogramming for PI3K inhibition overrides a relapse-specific C481S BTK mutation revealed by longitudinal functional genomics in mantle cell lymphoma.** *Cancer Discov* 2014;4(9):1022-35.
- Connors JM et al. **Brentuximab vedotin combined with ABVD or AVD for patients with newly diagnosed advanced stage Hodgkin lymphoma: Long-term outcomes.** *Proc ASH* 2014;Abstract 292.
- 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.
- Harrison CN et al. **Long-term findings from COMFORT-II, a phase 3 study of ruxolitinib vs best available therapy for myelofibrosis.** *Leukemia* 2016;[Epub ahead of print].
- Heine A et al. **Ruxolitinib is a potent immunosuppressive compound: Is it time for anti-infective prophylaxis?** *Blood* 2013;122(23):3843-4.
- Hochhaus A et al. **Long-term benefits and risks of frontline nilotinib vs imatinib for chronic myeloid leukemia in chronic phase: 5-year update of the randomized ENESTnd trial.** *Leukemia* 2016;30(5):1044-54.
- Kalmanti L et al. **Safety and efficacy of imatinib in CML over a period of 10 years: Data from the randomized CML-study IV.** *Leukemia* 2015;29(5):1123-32.
- Kantarjian H et al. **Dasatinib versus imatinib in newly diagnosed chronic-phase chronic myeloid leukemia.** *N Engl J Med* 2010;362(24):2260-70.
- Levis MJ et al. **Results of a first-in-human, phase I/II trial of ASP2215, a selective, potent inhibitor of FLT3/Axl in patients with relapsed or refractory (R/R) acute myeloid leukemia (AML).** *Proc ASCO* 2015;Abstract 7003.
- Lokhorst HM et al. **Targeting CD38 with daratumumab monotherapy in multiple myeloma.** *N Engl J Med* 2015;373(13):1207-19.
- Lonial S et al. **Daratumumab monotherapy in patients with treatment-refractory multiple myeloma (SIRIUS): An open-label, randomised, phase 2 trial.** *Lancet* 2016;387(10027):1551-60.
- Lonial S et al. **Elotuzumab therapy for relapsed or refractory multiple myeloma.** *N Engl J Med* 2015;373(7):621-31.
- Moreau P et al. **Oral ixazomib, lenalidomide, and dexamethasone for multiple myeloma.** *N Engl J Med* 2016;374(17):1621-34.
- Moskowitz CH et al. **Brentuximab vedotin as consolidation therapy after autologous stem-cell transplantation in patients with Hodgkin's lymphoma at risk of relapse or progression (AETHERA): A randomised, double-blind, placebo-controlled, phase 3 trial.** *Lancet* 2015;385(9980):1853-62.
- Ruan J et al. **Lenalidomide plus rituximab as initial treatment for mantle-cell lymphoma.** *N Engl J Med* 2015;373(19):1835-44.
- San-Miguel JF et al. **Panobinostat plus bortezomib and dexamethasone versus placebo plus bortezomib and dexamethasone in patients with relapsed or relapsed and refractory multiple myeloma: A multicentre, randomised, double-blind phase 3 trial.** *Lancet Oncol* 2014;15(11):1195-206.
- Santini V et al. **Efficacy and safety of lenalidomide versus placebo in RBC-transfusion dependent patients with IPSS low/intermediate-risk myelodysplastic syndromes without del(5q) and unresponsive or refractory to erythropoiesis-stimulating agents: Results from a randomized phase 3 study (CC-5013-MDS-005).** *Proc ASH* 2014;Abstract 409.
- Smith BD et al. **Treatment patterns, overall survival, healthcare resource use and costs in elderly Medicare beneficiaries with chronic myeloid leukemia using second-generation tyrosine kinase inhibitors as second-line therapy.** *Curr Med Res Opin* 2016;32(5):817-27.

Stone RM et al. **The multi-kinase inhibitor midostaurin prolongs survival compared with placebo in combination with daunorubicin (D)/cytarabine (C) induction (ind), high-dose C consolidation (consul), and as maintenance therapy in newly diagnosed acute myeloid leukemia (AML) patients age 18-60 with *FLT3* mutations (mut): An international prospective randomized (rand) P-controlled double-blind trial (CALGB 10603/RATIFY [Alliance]).** *Proc ASH* 2015;Abstract 6.

Usmani SZ et al. **Clinical efficacy of daratumumab monotherapy in patients with heavily pretreated relapsed or refractory multiple myeloma.** *Blood* 2016;128(1):37-44.

Wang ML et al. **Targeting BTK with ibrutinib in relapsed or refractory mantle-cell lymphoma.** *N Engl J Med* 2013;369(6):507-16.

Younes A et al. **CheckMate 205: Nivolumab (nivo) in classical Hodgkin lymphoma (cHL) after autologous stem cell transplant (ASCT) and brentuximab vedotin (BV) — A phase 2 study.** *Proc ASCO* 2016;Abstract 7535.