Acute Leukemias Update

Issue 2, 2017 (Video Program)

CME Information

TARGET AUDIENCE

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

OVERVIEW OF ACTIVITY

The treatment of acute leukemias 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 requires careful consideration of patient-specific characteristics, physician expertise and available health-system resources. Published results from ongoing trials continually lead to the emergence of new therapeutic targets and regimens, thereby altering existing management algorithms. In order to offer optimal patient care, including the option of clinical trial participation, the practicing medical oncologist must be well informed of these advances. To bridge the gap between research and patient care, this issue of *Acute Leukemias 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 CME activity assists medical oncologists, hematologists and hematology-oncology fellows with the formulation of evidence-based and current therapeutic strategies.

LEARNING OBJECTIVES

- Appraise current data on recent therapeutic advances and changing practice standards, including FDA approvals, in acute forms of leukemia, and integrate this information into current clinical care.
- Recognize the clinical and prognostic significance of specific cytogenetic and molecular abnormalities, and use this information in treatment decision-making for patients with acute forms of leukemia.
- Consider age, performance status and other disease-related factors in the identification of patients with acute lymphoblastic leukemia who are appropriate for targeted agents or chemotherapy.
- Counsel patients regarding the incidence and manifestation of side effects and toxicities associated with newly approved and investigational agents and regimens in the treatment of acute forms of leukemia.
- Identify the proposed mechanisms of action of and recall new data with investigational agents demonstrating promising activity in acute forms of leukemia, and refer appropriate patients for participation in ongoing trials evaluating these approaches.

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 2.75 *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, which includes participation in the evaluation component, enables the participant to earn up to 2.75 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**.

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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/AcuteLeukemiasUpdate217/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/AcuteLeukemiasUpdate217**.

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:

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Advisory Committee: Amgen Inc, Pfizer Inc; **Contracted Research:** Celgene Corporation, Gilead Sciences Inc.

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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: January 2018

Expiration date: January 2019

Select Publications

A master protocol for biomarker-based treatment of AML (the Beat AML trial). NCT03013998

Altman JK et al. **Deep molecular response to gilteritinib to improve survival in FLT3 mutation-positive relapsed/refractory acute myeloid leukemia.** *Proc ASCO* 2017;**Abstract 7003**.

Amadori S et al. **Gemtuzumab ozogamicin versus best supportive care in older patients with newly diagnosed acute myeloid leukemia unsuitable for intensive chemotherapy: Results of the randomized phase III EORTC-GIMEMA AML-19 trial.** *J Clin Oncol* 2016;34(9):972-9.

Amatangelo MD et al. **Enasidenib induces acute myeloid leukemia cell differentiation to promote clinical response.** *Blood* 2017;130(6):732-41.

Chen Y et al. **Acute promyelocytic leukemia: A population-based study on incidence and survival in the United States, 1975-2008.** *Cancer* 2012;118(23):5811-8.

Cortes J et al. **A phase 2 randomized study of low dose ara-c with or without glasdegib (PF-04449913) in untreated patients with acute myeloid leukemia or high-risk myelodysplastic syndrome.** *Proc ASH* 2016;**Abstract 99**.

Jillella A et al. **Decreasing early deaths in acute promyelocytic leukemia (APL) by using a simplified treatment algorithm and establishing a network with academic and community centres.** *Proc ASH* 2015;**Abstract 3779**.

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

Kantarjian HM et al. **Inotuzumab ozogamicin versus standard therapy for acute lymphoblastic leukemia.** *N Engl J Med* 2016;375(8):740-53.

Kolitz JE et al. **Efficacy by consolidation administration site: Subgroup analysis of a phase III study of CPX-351 versus 7+3 in older adults with newly diagnosed, high-risk acute myeloid leukemia (AML).** *Proc ASCO* 2017;**Abstract 7036**.

Konopleva M et al. **Efficacy and biological correlates of response in a phase II study of venetoclax monotherapy in patients with acute myelogenous leukemia.** *Cancer Discov* 2016;6(10):1106-17.

Lancet JE et al. **Overall survival (OS) with CPX-351 versus 7+3 in older adults with newly diagnosed, therapy-related acute myeloid leukemia (tAML): Subgroup analysis of a phase III study.** *Proc ASCO* 2017;**Abstract 7035**.

Lancet JE et al. **Survival following allogeneic hematopoietic cell transplantation in older high-risk acute myeloid leukemia patients initially treated with CPX-351 liposome injection versus standard cytarabine and daunorubicin: Subgroup analysis of a large phase III trial.** *Proc ASH* 2016;**Abstract 906**.

Lo-Coco F et al. **Retinoic acid and arsenic trioxide for acute promyelocytic leukemia.** *N Engl J Med* 2013;369(2):111-21.

Martinelli G et al. **Complete hematologic and molecular response in adult patients with relapsed/refractory Philadelphia chromosome-positive B-precursor acute lymphoblastic leukemia following treatment with blinatumomab: Results from a phase II, single-arm, multicenter study.** *J Clin Oncol* 2017;35(16):1795-802.

Medeiros BC et al. **Analysis of efficacy by age for patients aged 60-75 with untreated secondary acute myeloid leukemia (AML) treated with CPX-351 liposome injection versus conventional cytarabine and daunorubicin in a phase III trial.** *Proc ASH* 2016;**Abstract 902**.

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

Platzbecker U et al. **Improved outcomes with retinoic acid and arsenic trioxide compared with retinoic acid and chemotherapy in non-high-risk acute promyelocytic leukemia: Final results of the randomized Italian-German APL0406 trial.** *J Clin Oncol* 2017;35(6):605-12.

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

Stone RM et al. **Midostaurin plus chemotherapy for acute myeloid leukemia with a FLT3 mutation.** *N Engl J Med* 2017;377(5):454-64.

Wheeler S et al. **ATRA availability on formulary for the treatment of APL across hospitals in the state of Georgia.** *Proc ASH* 2015;**Abstract 4924**.