Acute Leukemias Update

Issue 1, 2018 (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 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 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 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 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 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 each of these CME activities, which includes participation in the evaluation component, enables the participant to earn up to 2.5 (audio) and 2.75 (video) 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 each 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/AcuteLeukemiasUpdate118/Video/CME**. The corresponding audio program is available as an alternative at **ResearchToPractice.com/AcuteLeukemiasUpdate118**.

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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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

Select Publications

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.

Boddu PC et al. **Characteristics and outcomes of older patients with secondary acute myeloid leukemia according to treatment approach.** *Cancer* 2017;123(16):3050-60.

Cogle CR et al. **Factors influencing first-line therapy of acute myeloid leukemia (AML) patients (pts) in the Connect MDS/AML Disease Registry.** *Proc ASCO* 2018;**Abstract 7037**.

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 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**.

Davids MS et al. **Mitigation of tumor lysis syndrome (TLS) complications with venetoclax (VEN) in CLL.** *Proc ASCO* 2018;**Abstract 7526**.

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. **Safety and preliminary efficacy of venetoclax with decitabine or azacitidine in elderly patients with previously untreated acute myeloid leukaemia: A non-randomised, open-label, phase 1b study.** *Lancet Oncol* 2018;19(2):216-28.

Jabbour E et al. **Salvage chemoimmunotherapy with inotuzumab ozogamicin combined with mini-hyper-CVD for patients with relapsed or refractory Philadelphia chromosome-negative acute lymphoblastic leukemia: A phase 2 clinical trial.** *JAMA Oncol* 2018;4(2):230-4.

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

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.

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.

Pollyea DA, Jordan CT. **Therapeutic targeting of acute myeloid leukemia stem cells.** *Blood* 2017;129(12):1627-35.

Shah BD et al. **Outcomes of patients treated with prior blinatumomab in ZUMA-3: A study of KTE-C19, an anti-CD19 chimeric antigen receptor (CAR) T cell therapy, in adult patients with R/R ALL.** *Proc ASCO* 2018;**Abstract 7006**.

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**.

Stevens BM et al. **Characterization and targeting of malignant stem cells in patients with advanced myelodysplastic syndromes.** *Nat Commun* 2018;9(1):3694.

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

Zhu HH et al. **Oral arsenic plus retinoic acid versus intravenous arsenic plus retinoic acid for non-high-risk acute promyelocytic leukaemia: A non-inferiority, randomised phase 3 trial.** *Lancet Oncol* 2018;19(7):871-9.