VOL 2 | ISSUE 1

Acute Leukemias™ UPDATE

Conversations with Oncology Investigators
Bridging the Gap between Research and Patient Care

FACULTY INTERVIEWS

Daniel Pollyea, MD, MS

Jorge E Cortes, MD

EDITOR

Neil Love, MD

ABIM CME MOC ACCREDITED

CME Certified

Acute Leukemias™ UPDATE

Editor	Neil Love, MD
Director, Clinical Content and CPD/CME	Kathryn Ault Ziel, PhD
Scientific Director	Richard Kaderman, PhD
Editorial	Clayton Campbell Felix M Chinea, MD Marilyn Fernandez, PhD Adam P Hustad Gloria Kelly, PhD Kemi Obajimi, PhD
Creative Manager	Fernando Rendina
Graphic Designers	Jessica Benitez Tamara Dabney Silvana Izquierdo
Senior Manager, Special Projects	Kirsten Miller
Senior Production Editor	Aura Herrmann
Editorial Managers	Ellen Bohnstengel Kyriaki Tsaganis
Copy Editors	Megan Bailey Rosemary Hulce Pat Morrissey/Havlin Alexis Oneca
Production Manager	Tracy Potter
Audio Production	Frank Cesarano
Web Master	John Ribeiro
Faculty Relations Manager	Stephanie Bodanyi, CMP
Continuing Education Administrator for Nursing	Karen Gabel Speroni, BSN, MHSA, PhD, RN
Contact Information	Neil Love, MD Research To Practice One Biscayne Tower 2 South Biscayne Boulevard, Suite 3600 Miami, FL 33131 Fax: (305) 377-9998 Email: DrNeilLove@ResearchToPractice.com
For CME/CNE Information	Email: CE@ResearchToPractice.com

Acute Leukemias Update

A Continuing Medical Education Audio Series

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 2.5 *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, which includes participation in the evaluation component, enables the participant to earn up to 2.5 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.** 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 for more information.**

HOW TO USE THIS CME ACTIVITY

This CME activity contains an audio component. To receive credit, the participant should review the CME information, listen to the audio tracks, complete the Post-test with a score of 80% or better and fill out the Educational Assessment and Credit Form located in the back of this booklet or on our website at **ResearchToPractice.com/AcuteLeukemiasUpdate118/CME**. The corresponding video program is available as an alternative at **ResearchToPractice.com/AcuteLeukemiasUpdate118/Video**.

This activity is supported by educational grants from AbbVie Inc, Amgen Inc, Astellas Pharma Global Development Inc, Celgene Corporation, Daiichi Sankyo Inc, Genentech, Novartis and Takeda Oncology.

Release date: December 2018; Expiration date: December 2019

CME INFORMATION

FACULTY AFFILIATIONS

Daniel A Pollyea, MD, MS
Associate Professor of Medicine
Clinical Director of Leukemia Services
Division of Hematology
University of Colorado School of Medicine
Aurora, Colorado

Jorge E Cortes, MD
Jane and John Justin Distinguished Chair in Leukemia Research
Chief, CML and AML Sections
Deputy Chair, Department of Leukemia
The University of Texas MD Anderson Cancer Center
Houston, Texas

EDITOR

Neil Love, MD
Research To Practice
Miami, Florida

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: **Dr Pollyea** — Advisory Committee: AbbVie Inc, Agios Pharmaceuticals Inc, argenx, Astellas Pharma Global Development Inc, Celgene Corporation, Celyad, Gilead Sciences Inc, Pfizer Inc; Contracted Research: AbbVie Inc; Data and Safety Monitoring Board: GlycoMimetics Inc, Tolero Pharmaceuticals. **Dr Cortes** — Advisory Committee: Astellas Pharma Global Development Inc, Daiichi Sankyo Inc, Pfizer Inc; Contracted Research: Amphivena Therapeutics Inc, Arog Pharmaceuticals Inc, Astellas Pharma Global Development Inc, Celgene Corporation, Daiichi Sankyo Inc, ImmunoGen Inc, Jazz Pharmaceuticals Inc, Pfizer Inc.

EDITOR — **Dr Love** is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech, Genomic Health Inc, Gilead Sciences Inc, Guardant Health, Halozyme Inc, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite Pharma Inc, Lexicon Pharmaceuticals Inc, Lilly, Loxo Oncology, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seattle Genetics, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals Inc.

RESEARCH TO PRACTICE CME PLANNING COMMITTEE MEMBERS, STAFF AND REVIEWERS — Planners, scientific staff and independent 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.

If you would like to discontinue your complimentary subscription to *Acute Leukemias Update,* please email us at **Info@ResearchToPractice.com**, call us at (800) 648-8654 or fax us at (305) 377-9998. Please include your full name and address, and we will remove you from the mailing list.

Interview with Daniel Pollyea, MD, MS

Tracks 1-23

Track 1 Overview of acute myeloid leukemia (AML) in older patients

Track 2 Are older patients with AML receiving treatment?

Track 3 **Case:** An 83-year-old woman with AML receives azacitidine with venetoclax on a clinical trial

Track 4 Durable responses to venetoclax in combination with azacitidine or decitabine in elderly patients with AML

Track 5 Efficacy of venetoclax alone and in combination with hypomethylating agents (HMAs) for AML

Track 6 Management of treatment-associated tumor lysis syndrome (TLS)

Track 7 Biologic synergy of venetoclax and an HMA in AML

Track 8 Mechanism of action of venetoclax in AML

Track 9 Therapeutic targeting of AML stem cells

Track 10 Activity and tolerability of azacitidine/venetoclax in AML

Track 11 Quality of life with venetoclax

Track 12 Liposomal cytarabine/daunorubicin (CPX-351) for secondary AML

Track 13 Incidence of FLT3 mutations in AML; outcomes with approved and investigational FLT3 inhibitors

Track 14 Similarities and differences among midostaurin, quizartinib and gilteritinib

Track 15 Recently FDA-approved IDH1/2 inhibitors enasidenib and ivosidenib for patients with AML

Track 16 Recognition and management of differentiation syndromes in patients with AML treated with IDH or FLT3 inhibitors

Track 17 Clinical experience with enasidenib in patients with AML and IDH2 mutations

Track 18 **Case:** A 48-year-old man with relapsed/refractory AML and an IDH1 mutation receives ivosidenib

Track 19 **Case:** A 28-year-old man with Philadelphia chromosome-negative B-cell acute lymphoblastic leukemia (ALL) receives the bispecific T-cell engaging antibody blinatumomab

Track 20 Challenges in using pediatric-inspired induction chemotherapy for adults with high-risk Philadelphia chromosome-negative ALL

Track 21 Mechanism of action and side effects of blinatumomab

Track 22 Current role of chimeric antigen receptor (CAR) T-cell therapy in ALL

Track 23 **Case:** A 38-year-old woman with acute promyelocytic leukemia receives all-trans retinoic acid and arsenic trioxide

Interview with Jorge E Cortes, MD

Tracks 1-20

Track 1 Potential undertreatment of AML in elderly patients

Track 2 Safety and preliminary efficacy of venetoclax in combination with an HMA for elderly patients with previously untreated AML

Track 3 Management of venetoclax-associated TLS and myelosuppression

Track 4 Use of venetoclax/decitabine as salvage therapy for younger patients with relapsed/refractory AML

Track 5 **Case:** A 68-year-old man with a history of previously treated Hodgkin lymphoma presents with secondary AML and an IDH1 mutation

Track 6 Activity and tolerability of liposomal cytarabine/daunorubicin in patients with secondary AML

Track 7 **Case:** A 47-year-old man with relapsed/refractory AML and an IDH2 mutation receives enasidenib on a clinical trial

Track 8 Incidence of IDH1/2 mutations in AML; integration of enasidenib and ivosidenib into clinical practice

Interview with Dr Cortes (continued)

Track 9 **Case:** A 65-year-old man with previously untreated AML and a FLT3-ITD mutation experiences a complete remission with midostaurin and chemotherapy

Track 10 Similarities and differences among approved and investigational FLT3 inhibitors

Track 11 Activity and tolerability of FLT3 inhibitors alone or in combination with HMAs

Track 12 Choosing between gilteritinib and quizartinib

Track 13 Voluntary market withdrawal of the antibody-drug conjugate gemtuzumab ozogamicin and recent FDA reapproval for AML

Track 14 Clinical use of gemtuzumab for patients with low- to intermediate-risk AML and no adverse cytogenetics

Track 15 Activity and unique side-effect profile of the investigational hedgehog inhibitor glasdegib in AML

Track 16 Treatment selection for younger and older patients with ALL

Track 17 Activity and side effects of asparaginase preparations for ALL

Track 18 Responses and tolerability with the antibody-drug conjugate inotuzumab ozogamicin in patients with ALL

Track 19 FDA-approved indications for blinatumomab in ALL and management of immune-related side effects

Track 20 Effectiveness of CAR T-cell therapies for ALL

Video Program

View the corresponding video interviews with (from left) Drs Pollyea and Cortes by Dr Love at www.ResearchToPractice.com/AcuteLeukemiasUpdate118/Video

Have Questions or Cases You Would Like Us to Pose to the Faculty?

Submit them to us via Facebook or Twitter and we will do our best to get them answered for you

Facebook.com/ResearchToPractice or Twitter @DrNeilLove

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.

QUESTIONS (PLEASE CIRCLE ANSWER):

1. **An analysis of real-world outcomes for elderly patients with AML in the United States demonstrated that it is common for these patients not to receive any specific anticancer treatment.**
   a. True
   b. False

2. **A single-arm Phase I study evaluating venetoclax in combination with an HMA for elderly patients with previously untreated AML demonstrated _____.**
   a. Response rates of 70% to 80%
   b. Durable responses
   c. Substantial toxicity
   d. All of the above
   e. Both a and b
   f. Both a and c

3. **Which of the following strategies is typically employed to help mitigate venetoclax-associated TLS?**
   a. Dose escalation during the initial days of venetoclax treatment
   b. Frequent monitoring and hydration
   c. Administration of prophylactic allopurinol
   d. All of the above
   e. Both a and b
   f. Both b and c

4. **Blinatumomab is currently FDA approved for adults and children in which of the following subpopulations of patients with ALL?**
   a. Minimal residual disease-positive
   b. Relapsed/refractory B-cell precursor
   c. Treatment-naïve B-cell precursor
   d. All of the above
   e. Both a and b

5. **_____ is an investigational tyrosine kinase inhibitor that targets both FLT3-ITD mutations and the DA35 point mutation.**
   a. Gilteritinib
   b. Quizartinib
   c. Both a and b

6. **Which of the following statements is true regarding IDH mutations in AML?**
   a. The incidence of IDH1 mutations is much higher than the incidence of IDH2 mutations
   b. The overall response rate with IDH inhibitors is about 40% for patients with IDH mutations
   c. Both enasidenib and ivosidenib are active in patients with IDH1 mutations and in those with IDH2 mutations

7. **Which of the following categories reflects the mechanism of action of blinatumomab?**
   a. Anti-PD-1/PD-L1 antibody
   b. Bispecific T-cell engager
   c. CAR T-cell therapy
   d. IDH1/2 antibody

8. **Results of a Phase III study evaluating a liposomal encapsulation of cytarabine and daunorubicin (CPX-351) versus the conventional cytarabine/daunorubicin chemotherapy (7 + 3 regimen) demonstrated a statistically significant improvement in overall survival with CPX-351 for older patients with _____.**
   a. Primary AML
   b. Secondary AML
   c. AML with an NPM1 mutation
   d. Both a and b
   e. All of the above

9. **The mechanism of action of inotuzumab ozogamicin involves _____.**
   a. Binding to FLT3
   b. Binding to CD22
   c. Inhibiting IDH2

10. **The cytokine release syndrome and neurotoxicity associated with blinatumomab and CAR T-cell therapy in patients with ALL can typically be managed with corticosteroids.**
    a. True
    b. False

EDUCATIONAL ASSESSMENT AND CREDIT FORM

Acute Leukemias Update — Volume 2, Issue 1

Research To Practice is committed to providing valuable continuing education for oncology clinicians, and your input is critical to helping us achieve this important goal. Please take the time to assess the activity you just completed, with the assurance that your answers and suggestions are strictly confidential.

PART 1 — Please tell us about your experience with this educational activity

How would you characterize your level of knowledge on the following topics?

4 = Excellent 3 = Good 2 = Adequate 1 = Suboptimal

	BEFORE	AFTER
Safety and preliminary efficacy of venetoclax in combination with an HMA for elderly patients with previously untreated AML	4 3 2 1	4 3 2 1
Management of venetoclax-associated TLS and myelosuppression in patients with AML	4 3 2 1	4 3 2 1
Similarities and differences among approved and investigational FLT3 inhibitors for AML	4 3 2 1	4 3 2 1
Activity of the FDA-approved IDH1/2 inhibitors enasidenib and ivosidenib for patients with AML; management of differentiation syndrome and other side effects	4 3 2 1	4 3 2 1
Activity and tolerability of liposomal cytarabine/daunorubicin in patients with secondary AML	4 3 2 1	4 3 2 1
Effectiveness and durability of responses with CAR T-cell therapy in ALL; identification and management of cytokine release syndrome and other common side effects	4 3 2 1	4 3 2 1

Practice Setting:

☐ Academic center/medical school ☐ Community cancer center/hospital ☐ Group practice
☐ Solo practice ☐ Government (eg, VA) ☐ Other (please specify).....

Approximately how many new patients with the following do you see per year?

ALL..... AML..... Acute promyelocytic leukemia .....

Was the activity evidence based, fair, balanced and free from commercial bias?

☐ Yes ☐ No If no, please explain: .....

Please identify how you will change your practice as a result of completing this activity (select all that apply).

☐ This activity validated my current practice
☐ Create/revise protocols, policies and/or procedures
☐ Change the management and/or treatment of my patients
☐ Other (please explain): .....

If you intend to implement any changes in your practice, please provide 1 or more examples:

.....

.....

The content of this activity matched my current (or potential) scope of practice.

☐ Yes ☐ No If no, please explain: .....

Please respond to the following learning objectives (LOs) by circling the appropriate selection:

4 = Yes 3 = Will consider 2 = No 1 = Already doing N/M = LO not met N/A = Not applicable

As a result of this activity, I will be able to:

- 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. ..... 4 3 2 1 N/M N/A
- 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. ..... 4 3 2 1 N/M N/A

EDUCATIONAL ASSESSMENT AND CREDIT FORM (continued)

As a result of this activity, I will be able to:

- 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. . . . . 4 3 2 1 N/M N/A
- 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. . . . . 4 3 2 1 N/M N/A
- 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. . . . . 4 3 2 1 N/M N/A

Please describe any clinical situations that you find difficult to manage or resolve that you would like to see addressed in future educational activities:

. . . . . .

Would you recommend this activity to a colleague?

☐ Yes ☐ No

If no, please explain: . . . . . .

PART 2 — Please tell us about the faculty and editor for this educational activity

4 = Excellent 3 = Good 2 = Adequate 1 = Suboptimal

Faculty	Knowledge of subject matter	Effectiveness as an educator
Daniel Pollyea, MD, MS	4 3 2 1	4 3 2 1
Jorge E Cortes, MD	4 3 2 1	4 3 2 1
Editor	**Knowledge of subject matter**	**Effectiveness as an educator**
Neil Love, MD	4 3 2 1	4 3 2 1

REQUEST FOR CREDIT — Please print clearly

Name: . . . . . Specialty: . . . . . .

Professional Designation:
☐ MD ☐ DO ☐ PharmD ☐ NP ☐ RN ☐ PA ☐ Other: . . . . . .

Street Address: . . . . . Box/Suite: . . . . . .

City, State, Zip: . . . . . .

Telephone: . . . . . Fax: . . . . . .

Email: . . . . . .

Research To Practice designates this enduring material for a maximum of 2.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

I certify my actual time spent to complete this educational activity to be _____ hour(s).

Signature: . . . . . Date: . . . . . .

☐ **I would like Research To Practice to submit my CME credits to the ABIM to count toward my MOC points. I understand that because I am requesting MOC credit, Research To Practice will be required to share personally identifiable information with the ACCME and ABIM.**

Additional information for MOC credit (required):

Date of Birth (Month and Day Only): __ __ / __ __ ABIM 6-Digit ID Number: . . . . . .

If you are not sure of your ABIM ID, please visit http://www.abim.org/verify-physician.aspx.

The expiration date for this activity is December 2019. To obtain a certificate of completion and receive credit for this activity, please complete the Post-test, fill out the Educational Assessment and Credit Form and fax both to (800) 447-4310, or mail both to Research To Practice, One Biscayne Tower, 2 South Biscayne Boulevard, Suite 3600, Miami, FL 33131. You may also complete the Post-test and Educational Assessment online at www.ResearchToPractice.com/AcuteLeukemiasUpdate118/CME.

QID 2133

Acute Leukemias™ UPDATE

PRSRT STD
U.S. POSTAGE
PAID
MIAMI, FL
PERMIT #1317

Neil Love, MD
Research To Practice
One Biscayne Tower
2 South Biscayne Boulevard, Suite 3600
Miami, FL 33131

This activity is supported by educational grants from AbbVie Inc, Amgen Inc, Astellas Pharma Global Development Inc, Celgene Corporation, Daiichi Sankyo Inc, Genentech, Novartis and Takeda Oncology.

Research
To Practice®

Research To Practice is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Release date: December 2018
Expiration date: December 2019
Estimated time to complete: 2.5 hours