

Investigator Perspectives on the Prevalence and Clinical Implications of Inaccurate or Misclassified Lymphoma Diagnoses in Community Oncology Practice

FACULTY INTERVIEWS

Mitchell R Smith, MD, PhD

Fernando Cabanillas, MD

Randy David Gascoyne, MD

EDITOR

Neil Love, MD



 Subscribe to Podcasts at ResearchToPractice.com/Podcasts

 Follow us at Facebook.com/ResearchToPractice  Follow us on Twitter @DrNeilLove

Lymphoma and Chronic Lymphocytic Leukemia™

U P D A T E

Editor	Neil Love, MD
Director, Clinical Content and CPD/CME	Kathryn Ault Ziel, PhD
Scientific Director	Richard Kaderman, PhD
Editorial	Clayton Campbell Marilyn Fernandez, PhD Adam P Hustad Gloria Kelly, PhD Kemi Obajimi, PhD Margaret Peng
Creative Manager	Fernando Rendina
Graphic Designers	Jessica Benitez Tamara Dabney Silvana Izquierdo
Senior Manager, Special Projects	Kirsten Miller
Senior Production Editor	Aura Herrmann
Copy Editors	Rosemary Hulce Pat Morrissey/Havlin Alexis Oneca Kyriaki Tsaganis
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

Copyright © 2018 Research To Practice. All rights reserved.

The compact disc, Internet content and accompanying printed material are protected by copyright. No part of this program may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or utilizing any information storage and retrieval system, without written permission from the copyright owner.

The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors.

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their

own professional development. The information presented in this activity is not meant to serve as a guideline for patient management.

Any procedures, medications or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patients' conditions and possible contraindications or dangers in use, review of any applicable manufacturer's product information and comparison with recommendations of other authorities.

Investigator Perspectives on the Prevalence and Clinical Implications of Inaccurate or Misclassified Lymphoma Diagnoses in Community Oncology Practice — A Continuing Medical Education Audio Activity

OVERVIEW OF ACTIVITY

The misclassification of lymphoma is a common clinical reality that can impede effective therapeutic decision-making and compromise outcomes for patients. A number of factors can lead to misdiagnosis in these cases. However, many may be mitigated through multidisciplinary collaboration and awareness. To this end, this CME activity encourages exchange between medical oncologists and hematopathologists, reviews available information and helps better define strategies to improve diagnostic accuracy.

LEARNING OBJECTIVES

- Recognize common practical impediments (eg, inadequate sample size) to the accurate diagnostic assessment of lymphoid tissue, and use this information to improve internal and external processes and procedures.
- Empower oncologists to more actively assess pathologic reporting to identify factors that could lead to misinterpretation.
- Promote interdisciplinary collaboration between oncologists and pathologists to improve the accuracy of lymphoma subclassification.
- Highlight the importance of immunohistochemistry (IHC) for lymphoma classification, and alert oncologists to the challenges associated with its interpretation.
- Appreciate the specific IHC markers that should be included in a standard lymphoma panel, and discern how the selection and use of these markers differ in lymphoma subclassification.
- Increase awareness of the incidence and relevance of CD30 overexpression in patients with T-cell lymphoma, Hodgkin lymphoma and diffuse large B-cell lymphoma, and develop strategies to appropriately determine CD30 positivity.
- Formulate an evidence-based approach to biomarker analysis (cytogenetics, mutation status, et cetera) for patients with newly diagnosed and relapsed/refractory chronic lymphocytic leukemia, and appreciate the therapeutic implications of relevant findings.

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 3.25 *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 3.25 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](https://www.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/LymphomaMisclassification18/CME](https://www.researchtopractice.com/LymphomaMisclassification18/CME). The corresponding video program is available as an alternative at [ResearchToPractice.com/LymphomaMisclassification18/Video](https://www.researchtopractice.com/LymphomaMisclassification18/Video).

This activity is supported by educational grants from AbbVie Inc and Seattle Genetics.

Release date: February 2018; Expiration date: February 2019

If you would like to discontinue your complimentary subscription to *Lymphoma and Chronic Lymphocytic Leukemia 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.

CME INFORMATION

FACULTY AFFILIATIONS



Mitchell R Smith, MD, PhD

Professor of Medicine
Associate Center Director
for Clinical Investigations
Division of Hematology
and Oncology
George Washington
Cancer Center
Washington, DC



Randy David Gascoyne, MD

Hematopathologist
Clinical Professor of Pathology
University of British Columbia
Research Director
Centre for Lymphoid Cancer
Department Head
Lymphoid Cancer Research
British Columbia Cancer Agency
Medical Director, Provincial Lymphoma
Pathology Program
Distinguished Scientist, British
Columbia Cancer Research Centre
Vancouver, British Columbia, Canada



Fernando Cabanillas, MD

Clinical Professor of Medicine
The University of Texas
MD Anderson Cancer Center
Houston, Texas
Medical Director
Auxilio Mutuo Cancer Center
San Juan, Puerto Rico

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 — **Dr Gascoyne** has no relevant conflicts of interest to disclose. The following faculty (and their spouses/partners) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process: **Dr Smith** — Advisory Committee: Genentech BioOncology, Seattle Genetics; Contracted Research: Celgene Corporation, Takeda Oncology; Educational Presentation: AstraZeneca Pharmaceuticals LP. **Dr Cabanillas** — Advisory Committee: Lilly, Merck, Pfizer Inc; Consulting Agreement: Bristol-Myers Squibb Company; Contracted Research: Abbott Laboratories, Celgene Corporation.

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, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Baxalta Inc, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheragnostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, CTI BioPharma Corp, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, 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, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals 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.

Interview with Mitchell R Smith, MD, PhD

Tracks 1-21

Track 1	Key components of correctly identifying and grading follicular lymphoma (FL)	Track 14	Communication between oncologists and pathologists
Track 2	Diagnostic algorithm for mantle cell lymphoma (MCL)	Track 15	Use of brentuximab vedotin for CD30-negative DLBCL
Track 3	Stepwise process in the diagnosis of diffuse large B-cell lymphoma (DLBCL) and its subtypes	Track 16	Case: A 62-year-old man with ibrutinib-refractory del(17p) CLL achieves a near-complete response with venetoclax
Track 4	Key pathologic features in identifying Hodgkin lymphoma (HL) and incidence of intraobserver variation	Track 17	Approach for patients at intermediate to high risk for tumor lysis syndrome (TLS) who are initiating venetoclax treatment
Track 5	FISH testing for cytogenetic abnormalities in chronic lymphocytic leukemia (CLL)	Track 18	Complementary activity of venetoclax and ibrutinib in CLL and investigational strategies evaluating the combination
Track 6	Incidence of 17p deletion at diagnosis of CLL and after relapse	Track 19	Case: A 70-year-old man who initially underwent treatment for marginal zone lymphoma is diagnosed with Waldenström macroglobulinemia
Track 7	Blood versus bone marrow samples for cytogenetic testing for CLL	Track 20	Case: A 68-year-old man who initially underwent treatment for DLBCL for whom repeat pathology now indicates nodular lymphocyte-predominant HL
Track 8	Minimal residual disease (MRD) assessment in CLL and lymphomas and its application in clinical practice	Track 21	Case: A 35-year-old man about to undergo intensive chemotherapy for Grade IIIb DLBCL for whom a pathologic review reclassifies his disease as an indolent pediatric-type FL
Track 9	Rates of MRD negativity in patients with CLL treated with venetoclax and/or ibrutinib		
Track 10	Challenges in correctly diagnosing T-cell lymphomas (TCLs)		
Track 11	CD30 testing in lymphomas		
Track 12	Activity and tolerability of brentuximab vedotin in DLBCL and TCLs		
Track 13	Phase III ECHELON-1 trial results with front-line brentuximab vedotin for previously untreated Stage III to IV HL		

Interview with Fernando Cabanillas, MD

Tracks 1-15

Track 1	Key issues affecting diagnostic accuracy and frequency of lymphoma misclassification	Track 5	Detection of 17p deletion
Track 2	Changes in WHO diagnostic criteria for lymphomas	Track 6	Management of venetoclax-associated TLS
Track 3	Case: A 63-year-old man with newly diagnosed CLL who initially underwent treatment with FCR (fludarabine/cyclophosphamide/rituximab) develops a 17p deletion	Track 7	Case: A 76-year-old woman with differential diagnoses of CLL with Richter's transformation versus DLBCL
Track 4	Incidence of 17p deletion at diagnosis versus relapse	Track 8	Case: A 33-year-old woman initially diagnosed with CD30-positive DLBCL, which is revised to HL with nodular sclerosis

Interview with Dr Cabanillas (continued)

Track 9	Testing for and frequency of CD30 positivity in lymphomas	Track 13	Beyond histology in diagnosing lymphomas: Characterizing relevant biological features
Track 10	Brentuximab vedotin in patients with CD30-negative DLBCL	Track 14	Indolent lymphomas that present with clinically aggressive features
Track 11	Case: A 51-year-old woman diagnosed with SOX11-negative MCL	Track 15	Clinical approach to patients with clinically discordant low-grade lymphomas
Track 12	Common challenges in the diagnosis of TCLs		

Interview with Randy David Gascoyne, MD

Tracks 1-27

Track 1	Critical role of pathologist experience in diagnosing lymphomas	Track 15	Changes in CD30 expression in response to treatment with brentuximab vedotin
Track 2	Importance of obtaining adequate tumor specimens for diagnosis	Track 16	Case: A 47-year-old man initially misdiagnosed with PTCL, which is revised to T-cell and histiocyte-rich B-cell lymphoma
Track 3	Technical issues with core needle biopsies	Track 17	Importance of correctly determining DLBCL subtype
Track 4	Conditions commonly misdiagnosed as cancer	Track 18	Diagnosis and treatment of “double-hit” DLBCL
Track 5	Role of assays beyond standard histopathology in diagnosing lymphomas	Track 19	Case: A 63-year-old woman initially misdiagnosed with DLBCL, which is revised to angioimmunoblastic-type TCL
Track 6	Pitfalls and mistakes with IHC: Failure to order, inadequate staining and misinterpretation	Track 20	Case: A 22-year-old man initially misdiagnosed with lymphocyte-rich classical HL, which is revised to nodular lymphocyte-predominant HL
Track 7	Common IHC panels employed by community pathologists	Track 21	Case: A 65-year-old woman initially misdiagnosed with CLL, which is revised to MCL
Track 8	Quality and interpretation of CD30 testing	Track 22	Emergence of del(17p) during CLL evolution
Track 9	FISH testing for cytogenetic abnormalities in CLL and common misdiagnoses	Track 23	Case: A 52-year-old man initially misdiagnosed with DLBCL, which is revised to “double-hit” lymphoma
Track 10	Expert second-opinion pathology review of lymphoma in the era of the WHO classification	Track 24	Misdiagnosis of Burkitt lymphoma
Track 11	Revision of lymphoma diagnosis at an academic center	Track 25	Extramedullary presentations of acute myeloid leukemia mistakenly interpreted as aggressive lymphoma
Track 12	Intraobserver variation in the grading of FL	Track 26	High-grade plasmablastic cancers misinterpreted as nonhematopoietic tumors
Track 13	Case: A 32-year-old patient initially misdiagnosed with peripheral TCL (PTCL), which is revised to ALK-negative anaplastic large cell lymphoma	Track 27	Importance of expert review of diagnostic biopsy
Track 14	Temporal and tumoral heterogeneity of CD30 expression		

SELECT PUBLICATIONS

- Bartlett NL et al. **Brentuximab vedotin activity in diffuse large B-cell lymphoma with CD30 undetectable by visual assessment of conventional immunohistochemistry.** *Leuk Lymphoma* 2017;58(7):1607-16.
- Bowen JM et al. **Lymphoma diagnosis at an academic centre: Rate of revision and impact on patient care.** *Br J Haematol* 2014;166(2):202-8.
- Cabanillas F, Rivera N. **Check this checkpoint inhibitor in lymphoma.** *Blood* 2017;130(3):234-5.
- Cabanillas F et al. **Indolent lymphomas that present with clinically aggressive features: A subset of low-grade lymphomas with a behavior inconsistent with the histologic diagnosis.** *Clin Lymphoma Myeloma Leuk* 2016;16(10):550-7.
- Connors JM et al. **Brentuximab vedotin plus doxorubicin, vinblastine, dacarbazine (A + AVD) as frontline therapy demonstrates superior modified progression-free survival versus ABVD in patients with previously untreated stage III or IV Hodgkin lymphoma (HL): The phase 3 Echelon-1 study.** *Proc ASH* 2017;**Abstract 6**.
- Federico M et al. **CD30+ expression in peripheral T-cell lymphomas (PTCLs): A subset analysis from the international, prospective T-Cell Project.** *Proc ASCO* 2015;**Abstract 8552**.
- Gong Q-X et al. **Prevalence and clinicopathologic features of CD30-positive de novo diffuse large B-cell lymphoma in Chinese patients: A retrospective study of 232 cases.** *Int J Clin Exp Pathol* 2015;8(12):15825-35.
- Herrera AF et al. **Comparison of referring and final pathology for patients with T-cell lymphoma in the National Comprehensive Cancer Network.** *Cancer* 2014;120(13):1993-9.
- Hillmen P et al. **Initial results of ibrutinib plus venetoclax in relapsed, refractory CLL (Bloodwise TAP CLARITY study): High rates of overall response, complete remission and MRD eradication after 6 months of combination therapy.** *Proc ASH* 2017;**Abstract 428**.
- Hillmen P et al. **The initial report of the Bloodwise TAP CLARITY study combining ibrutinib and venetoclax in relapsed, refractory CLL shows acceptable safety and promising early indications of efficacy.** *Proc EHA* 2017;**Abstract S770**.
- Hsi ED et al. **Analysis of peripheral T-cell lymphoma diagnostic workup in the United States.** *Clin Lymphoma Myeloma Leuk* 2017;17(4):193-200.
- Hu S et al. **CD30 expression defines a novel subgroup of diffuse large B-cell lymphoma with favorable prognosis and distinct gene expression signature: A report from the International DLBCL Rituximab-CHOP Consortium Program Study.** *Blood* 2013;121(14):2715-24.
- Jain N et al. **Combined venetoclax and ibrutinib for patients with previously untreated high-risk CLL, and relapsed/refractory CLL: A phase II trial.** *Proc ASH* 2017;**Abstract 429**.
- Jain N et al. **Ibrutinib, fludarabine, cyclophosphamide, and obinutuzumab (GA101) (iFCG) for previously untreated patients with chronic lymphocytic leukemia (CLL) with mutated IGHV and non-del (17p).** *Proc ASCO* 2017;**Abstract 7522**.
- Laurent C et al. **Impact of expert pathologic review of lymphoma diagnosis: Study of patients from the French Lymphopath Network.** *J Clin Oncol* 2017;35(18):2008-17.
- Leonard JP et al. **Practical implications of the 2016 revision of the World Health Organization classification of lymphoid and myeloid neoplasms and acute leukemia.** *J Clin Oncol* 2017;35(23):2708-15.
- Levak R, Slack G. **Pathologist survey reveals inadequate awareness of the importance of high quality CD30 staining in accurate diagnosis of T-cell lymphoma.** *Am J Clin Pathol* 2015;144:A196.
- Matasar MJ et al. **Expert second-opinion pathology review of lymphoma in the era of the World Health Organization classification.** *Ann Oncol* 2012;23(1):159-66.
- Sabattini E et al. **CD30 expression in peripheral T-cell lymphomas.** *Hematologica* 2013;98(8):e81-2.
- Seymour J et al. **Venetoclax plus rituximab is superior to bendamustine plus rituximab in patients with relapsed/refractory chronic lymphocytic leukemia — Results from pre-planned interim analysis of the randomized phase 3 Murano study.** *Proc ASH* 2017;**Abstract LBA-2**.
- Swerdlow SH et al. **The 2016 revision of the World Health Organization classification of lymphoid neoplasms.** *Blood* 2016;127(20):2375-90.
- Wierda W et al. **Venetoclax in relapsed/refractory chronic lymphocytic leukemia (CLL) with 17p deletion: Outcome and minimal residual disease (MRD) from the full population of the pivotal M13-982 trial.** *Proc SOHO* 2017;**Abstract CLL-102**.
- Zinzani PL et al. **Safety and tolerability of pembrolizumab in patients with relapsed/refractory primary mediastinal large B-cell lymphoma.** *Blood* 2017;130(3):267-70.

Investigator Perspectives on the Prevalence and Clinical Implications of Inaccurate or Misclassified Lymphoma Diagnoses in Community Oncology Practice

QUESTIONS (PLEASE CIRCLE ANSWER):

1. The majority of patients with del(17p) CLL _____.
 a. Present up front with the 17p deletion
 b. Acquire the 17p deletion over the course of their disease
2. Which of the following categories reflects the mechanism of action of venetoclax?
 a. Antibody-drug conjugate
 b. Anti-PD-1/PD-L1 antibody
 c. Bcl-2 inhibitor
 d. PI3K inhibitor
3. Treatment with _____ for patients with CLL can result in high rates of MRD negativity, which typically correlates with longer progression-free survival, time to next treatment and longer durations of remission.
 a. Ibrutinib
 b. Venetoclax
 c. Both a and b
 d. Neither a nor b
4. The Phase III ECHELON-1 trial evaluating brentuximab vedotin with doxorubicin, vinblastine and dacarbazine versus bleomycin with doxorubicin, vinblastine and dacarbazine as front-line therapy for patients with previously untreated Stage III or IV HL demonstrated superior _____ for patients who received the brentuximab vedotin-based combination.
 a. Progression-free survival
 b. Overall survival
 c. Both a and b
 d. Neither a nor b
5. Hospitalization for the purpose of monitoring for TLS is required for all patients starting therapy with venetoclax.
 a. True
 b. False
6. A study published by Bartlett and colleagues evaluating brentuximab vedotin monotherapy in patients with DLBCL reported response rates of 30% to 40% for patients with CD30-undetectable disease.
 a. True
 b. False
7. Venetoclax is active in patients with _____.
 a. CLL with 17p deletion
 b. CLL without 17p deletion
 c. Both a and b
 d. Neither a nor b
8. A publication by Zinzani and colleagues in *Blood* stated that pembrolizumab monotherapy demonstrated activity in patients with primary mediastinal large B-cell lymphoma.
 a. True
 b. False
9. Technical issues with core needle biopsies that can lead to inaccurate diagnosis include _____.
 a. Crush artifact
 b. Edge effect
 c. Limited amount of tissue
 d. All of the above
 e. Both a and b
 f. Both a and c
10. Which of the following lymphomas exhibits constant expression of the CD30 antigen?
 a. Anaplastic large cell lymphoma
 b. DLBCL
 c. HL
 d. PTCL

EDUCATIONAL ASSESSMENT AND CREDIT FORM

Investigator Perspectives on the Prevalence and Clinical Implications of Inaccurate or Misclassified Lymphoma Diagnoses in Community Oncology Practice

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
Changes in WHO diagnostic criteria for lymphomas	4 3 2 1	4 3 2 1
Results of the Phase III ECHELON-1 trial: Progression-free survival improvement with front-line brentuximab vedotin-based therapy for previously untreated Stage III and IV HL	4 3 2 1	4 3 2 1
MRD assessment in CLL and lymphomas and its application in clinical practice	4 3 2 1	4 3 2 1
Testing for cytogenetic abnormalities in CLL	4 3 2 1	4 3 2 1
CD30 testing and interpretation in lymphomas	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?

Anaplastic large cell lymphoma CLL..... DLBCL..... FL..... HL..... MCL TCL/PTCL.....

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:

- Recognize common practical impediments (eg, inadequate sample size) to the accurate diagnostic assessment of lymphoid tissue, and use this information to improve internal and external processes and procedures. 4 3 2 1 N/M N/A
- Empower oncologists to more actively assess pathologic reporting to identify factors that could lead to misinterpretation. 4 3 2 1 N/M N/A
- Promote interdisciplinary collaboration between oncologists and pathologists to improve the accuracy of lymphoma subclassification. 4 3 2 1 N/M N/A
- Highlight the importance of immunohistochemistry (IHC) for lymphoma classification, and alert oncologists to the challenges associated with its interpretation. 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:

- Appreciate the specific IHC markers that should be included in a standard lymphoma panel, and discern how the selection and use of these markers differ in lymphoma subclassification. 4 3 2 1 N/M N/A
- Increase awareness of the incidence and relevance of CD30 overexpression in patients with T-cell lymphoma, Hodgkin lymphoma and diffuse large B-cell lymphoma, and develop strategies to appropriately determine CD30 positivity. 4 3 2 1 N/M N/A
- Formulate an evidence-based approach to biomarker analysis (cytogenetics, mutation status, et cetera) for patients with newly diagnosed and relapsed/refractory chronic lymphocytic leukemia, and appreciate the therapeutic implications of relevant findings. 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			
Mitchell R Smith, MD, PhD		4	3	2	1	4	3	2	1
Fernando Cabanillas, MD		4	3	2	1	4	3	2	1
Randy David Gascoyne, 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 3.25 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/online/findcand.aspx>.

The expiration date for this activity is February 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/LymphomaMisclassification18/CME.

Lymphoma and Chronic Lymphocytic Leukemia™

U P D A T E

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

Copyright © 2018 Research To Practice.
This activity is supported by educational grants from AbbVie Inc
and Seattle Genetics.

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: February 2018
Expiration date: February 2019
Estimated time to complete: 3.25 hours

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