Oncology Grand Rounds

Nurse and Physician Investigators Discuss New Agents, Novel Therapies and Actual Cases from Practice

Part 2: Hodgkin and Non-Hodgkin Lymphomas

CNE Information

TARGET AUDIENCE

This activity has been designed to meet the educational needs of oncology nurses, nurse practitioners and clinical nurse specialists involved in the treatment of lymphomas.

OVERVIEW OF ACTIVITY

Lymphomas are a heterogeneous group of tumors arising in the reticuloendothelial and lymphatic systems. The biologic heterogeneity among the lymphomas gives rise to marked differences with respect to epidemiology, pathologic characteristics, clinical presentation and optimal management. The two major types are Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL). In the United States, an estimated 82,310 new cases of HL and NHL will be diagnosed in 2019, with 20,970 deaths attributed to these diseases. Although HL can often be cured, the prognosis for NHL depends on the specific subtype. The past several years represent a period of substantial progress in the development and evaluation of novel agents across many lymphoma subtypes. Also, mature clinical trial results have illustrated the efficacy of several new investigational therapies, a number of which have entered the clinic, thereby altering the therapeutic algorithms for HL and various NHL subtypes. The extensive list of available therapeutic options for patients with lymphoma poses a challenge to the practicing clinician who must maintain up-to-date knowledge of appropriate clinical management strategies across a vast spectrum of liquid and solid tumors.

Although many of the educational needs related to the care of patients with lymphoma are relevant specifically to the practicing medical oncologists and hematologists directly responsible for therapeutic decision-making, prospective and retrospective patient-level research has shown that oncology nurses play an integral role in the successful delivery of systemic anticancer therapy and in the preservation of the physical and psychosocial well-being of patients. These video proceedings from the second part of a 6-part integrated CNE curriculum originally held at the 2019 ONS Annual Congress feature discussions with leading HL/NHL investigators and their nursing counterparts regarding actual patient cases and recent clinical research findings affecting the optimal therapeutic and supportive care for patients with HL, follicular lymphoma (FL), mantle cell lymphoma (MCL) and diffuse large B-cell lymphoma (DLBCL).

PURPOSE STATEMENT

By providing information on the latest research developments in the context of expert perspectives, this CNE activity will assist oncology nurses, nurse practitioners and clinical nurse specialists with the formulation of state-of-the-art clinical management strategies to facilitate optimal care of patients with lymphomas.

LEARNING OBJECTIVES

- Review recent therapeutic advances and related FDA authorizations for newly diagnosed and relapsed/refractory (R/R) FL, MCL, DLBCL and HL, and use this information to enhance decision-making for patients diagnosed with these diseases.
- Design and implement a plan of care to recognize and manage side effects and toxicities associated with the use of existing and recently approved systemic therapies for FL, MCL, DLBCL and HL to support quality of life and continuation of therapy.
- Recall the biologic rationale for, available research data with and ongoing research efforts evaluating the use of chemotherapy-free combinations in the management of newly diagnosed and progressive FL and MCL, and use this information to guide protocol and off-protocol care for these patients.
- Develop an understanding of the biologic rationale for and appreciate available efficacy and safety data with chimeric antigen receptor T-cell therapy, and identify patients with R/R DLBCL and other lymphomas for whom this approach may be appropriate.
- Describe available and emerging data with other investigational agents and immunotherapeutic strategies currently under evaluation for FL, MCL, DLBCL and HL, and, where applicable, refer eligible patients for trial participation.

ACCREDITATION STATEMENT

Research To Practice (RTP) is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

CREDIT DESIGNATION STATEMENTS

This educational activity for 2.1 contact hours is provided by RTP during the period of June 2019 through June 2020.

This activity is awarded 2.1 ANCC pharmacotherapeutic contact hours.

ONCC/ILNA CERTIFICATION INFORMATION

The program content has been reviewed by the Oncology Nursing Certification Corporation (ONCC) and is acceptable for recertification points. To review certification qualifications please visit **ResearchToPractice.com/ONS2019/ILNA**.

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FOR SUCCESSFUL COMPLETION

This is a video CNE program. To receive credit, participants should read the learning objectives and faculty disclosures, 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/ONSLymphomas2019/CNE**.

CONTENT VALIDATION AND DISCLOSURES

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 CNE 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 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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Consulting Agreements: AbbVie Inc, Bayer HealthCare Pharmaceuticals, Denovo Biopharma, Gilead Sciences Inc, Janssen Biotech Inc, Karyopharm Therapeutics, OptumRx Inc, Pharmacyclics LLC, an AbbVie Company, Spectrum Pharmaceuticals Inc; **Contracted Research:** AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Burroughs Wellcome Fund, Celgene Corporation, Eastern Cooperative Oncology Group, Genentech, Gilead Sciences Inc, Janssen Biotech Inc, National Cancer Institute, Roche Laboratories Inc, Takeda Oncology, TG Therapeutics Inc, V Foundation for Cancer Research; **Uncompensated Consulting:** Celgene Corporation, Genentech, Roche Laboratories Inc.

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No relevant conflicts of interest to disclose.

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No relevant conflicts of interest to disclose.

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RTP CNE PLANNING COMMITTEE MEMBERS, STAFF AND REVIEWERS — Planners, scientific staff and independent reviewers for RTP have no relevant conflicts of interest to disclose.

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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: June 2019

Expiration date: June 2020

Select Publications

Alduaij W et al. **Novel type II anti-CD20 monoclonal antibody (GA101) evokes homotypic adhesion and actin-dependent, lysosome-mediated cell death in B-cell malignancies.** *Blood* 2011;117(17):4519-29.

Armand P et al. **Nivolumab for relapsed/refractory classic Hodgkin lymphoma after failure of autologous hematopoietic cell transplantation: Extended follow-up of the multicohort single-arm phase II CheckMate 205 trial.** *J Clin Oncol* 2018;36(14):1428-39.

Barf T et al. **Acalabrutinib (ACP-196): A covalent Bruton tyrosine kinase inhibitor with a differentiated selectivity and in vivo potency profile.** *J Pharmacol Exp Ther* 2017;363(2):240-52.

Castellino A et al. **High efficacy of lenalidomide plus R-CHOP (R2CHOP) combination in first line treatment of activated B-cell (ABC) DLBCL defined using gene-expression prophyling: A combined analysis from two phase 2 trials.** *Proc ASH* 2018;**Abstract 2962**.

Castellino A et al. **Lenalidomide plus R-CHOP21 in newly diagnosed diffuse large B-cell lymphoma (DLBCL): Long-term follow-up results from a combined analysis from two phase 2 trials.** *Blood Cancer J* 2018;8(11):108.

Chen R et al. **Phase II study of the efficacy and safety of pembrolizumab for relapsed/refractory classic Hodgkin lymphoma.** *J Clin Oncol* 2017;35(19):2125-32.

Connors JM et al. **Brentuximab vedotin with chemotherapy for stage III or IV Hodgkin's lymphoma.** *N Engl J Med* 2018;378(4):331-44.

Davids MS et al. **Long-term follow-up of patients with mantle cell lymphoma treated with venetoclax monotherapy.** *Proc ASH* 2018;**Abstract 2883**.

Davids MS et al. **Revised dose ramp-up to mitigate the risk of tumor lysis syndrome when initiating venetoclax in patients with mantle cell lymphoma.** *J Clin Oncol* 2018;36(35):3525-7.

Davids MS, Letai A. **ABT-199: Taking dead aim at BCL-2.** *Cancer Cell* 2013;23(2):139-41.

Davies A et al. **Efficacy and safety of subcutaneous rituximab versus intravenous rituximab for first-line treatment of follicular lymphoma (SABRINA): A randomised, open-label, phase 3 trial.** *Lancet Oncol* 2017;4(6):e272-e82.

Dreyling M et al. **Phosphatidylinositol 3-kinase inhibition by copanlisib in relapsed or refractory indolent lymphoma.** *J Clin Oncol* 2017;35(35):3898-905.

Flinn IW et al. **DYNAMO: A phase II study of duvelisib (IPI-145) in patients with refractory indolent non-Hodgkin lymphoma.** *J Clin Oncol* 2019;37(11):912-22.

Gopal AK et al. **PI3Kδ inhibition by idelalisib in patients with relapsed indolent lymphoma.** *N Engl J Med* 2014;370(11):1008-18.

Jain P et al. **Four-year follow-up of a single arm, phase II clinical trial of ibrutinib with rituximab (IR) in patients with relapsed/refractory mantle cell lymphoma (MCL).** *Br J Haematol* 2018;182(3):404-11.

Lampson BL, Brown JR. **PI3Kδ-selective and PI3Kα/δ-combinatorial inhibitors in clinical development for B-cell non-Hodgkin lymphoma.** *Expert Opin Investig Drugs* 2017;26(11):1267-79.

Le Gouill S et al. **Rituximab after autologous stem-cell transplantation in mantle-cell lymphoma.** *N Engl J Med* 2017;377(13):1250-60.

Leonard JP et al. **De-cell-eration in therapy for diffuse large B-cell lymphoma.** *J Clin Oncol* 2019;[Epub ahead of print].

Marcus R et al. **Obinutuzumab for the first-line treatment of follicular lymphoma.** *N Engl J Med* 2017;377(14):1331-44.

Morschhauser F et al. **Rituximab plus lenalidomide in advanced untreated follicular lymphoma.** *N Engl J Med* 2018;379(10):934-47.

Morschhauser F et al. **Preliminary results of a phase II randomized study (ROMULUS) of polatuzumab vedotin (PoV) or pinatuzumab vedotin (PiV) plus rituximab (RTX) in patients with relapsed/refractory non-Hodgkin lymphoma.** *Proc ASCO* 2014;**Abstract 8519**.

Moskowitz CH et al. **Five-year PFS from the AETHERA trial of brentuximab vedotin for Hodgkin lymphoma at high risk of progression or relapse.** *Blood* 2018;132(25):2639-42.

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.

Select Publications

Mössner E et al. **Increasing the efficacy of CD20 antibody therapy through the engineering of a new type II anti-CD20 antibody with enhanced direct and immune effector cell-mediated B-cell cytotoxicity.** *Blood* 2010;115(22):4393-402.

Neelapu SS et al. **Chimeric antigen receptor T-cell therapy — Assessment and management of toxicities.** *Nat Rev Clin Oncol* 2018;15(1):47-62.

Niederfellner G et al. **Epitope characterization and crystal structure of GA101 provide insights into the molecular basis for type I/II distinction of CD20 antibodies.** *Blood* 2011;118(2):358-67.

Ramchandren R et al. **Brentuximab vedotin plus chemotherapy in North American subjects with newly diagnosed stage III or IV Hodgkin lymphoma.** *Clin Cancer Res* 2019;25(6):1718-26.

Roemer MGM et al. **PD-L1 and PD-L2 genetic alterations define classical Hodgkin lymphoma and predict outcome.** *J Clin Oncol* 2016;34(23):2690-7.

Ruan J et al. **Five-year follow-up of lenalidomide plus rituximab as initial treatment of mantle cell lymphoma.** *Blood* 2018;132(19):2016-25.

Sehn LH et al. **Polatuzumab vedotin (Pola) plus bendamustine (B) with rituximab (R) or obinutuzumab (G) in relapsed/refractory (R/R) diffuse large B-cell lymphoma (DLBCL): Updated results of a phase (Ph) Ib/II study.** *Proc ASH* 2018;**Abstract 1683**.

Sehn LH et al. **Randomized phase 2 trial of polatuzumab vedotin (pola) with bendamustine and rituximab (BR) in relapsed/refractory (r/r) FL and DLBCL.** *Proc ASCO* 2018;**Abstract 7507**.

Sweetenham J et al. **Updated efficacy and safety data from the AETHERA trial of consolidation with brentuximab vedotin after autologous stem cell transplant (ASCT) in Hodgkin lymphoma patients at high risk of relapse.** *Proc ASH* 2015;**Abstract 3172**.

Townsend W et al. **Obinutuzumab-based immunochemotherapy prolongs progression-free survival and time to next anti-lymphoma treatment in patients with previously untreated follicular lymphoma: Four-year results from the phase III GALLIUM study.** *Proc ASH* 2018;**Abstract 1597**.

Trněný M et al. **Lenalidomide versus investigator's choice in relapsed or refractory mantle cell lymphoma (MCL-002; SPRINT): A phase 2, randomised, multicentre trial.** *Lancet Oncol* 2016;17(3):319-31.

Villasboas JC, Ansell SA. **Checkpoint inhibition: Programmed cell death 1 and programmed cell death 1 ligand inhibitors in Hodgkin lymphoma.** *Cancer J* 2016;22(1):17-22.

Wang M et al. **Acalabrutinib in relapsed or refractory mantle cell lymphoma (ACE-LY-004): A single-arm, multicentre, phase 2 trial.** *Lancet* 2018;391(10121):659-67.

Woyach JA et al. **The B-cell receptor signaling pathway as a therapeutic target in CLL.** *Blood* 2012;120(6):1175-84.