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CNS Cancer™ UPDATE

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

FACULTY INTERVIEWS

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CME Certified

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CNS Cancer Update
A Continuing Medical Education Audio Series

OVERVIEW OF ACTIVITY

Brain tumors are a diverse group of neoplasms arising from different cells within the central nervous system (CNS) or from systemic tumors that have metastasized to the CNS. Primary brain tumors include a number of histologic types with markedly different tumor growth rates and are divided into anaplastic gliomas (anaplastic astrocytoma, anaplastic oligodendroglioma and anaplastic oligoastrocytoma) and glioblastoma multiforme (GBM) based on their histopathologic features. Despite treatment, the median survival for anaplastic oligodendroglioma is 2 to 3 years, and patients with GBM can succumb to their disease within a year of the onset. Thus, clinical education regarding standard and evolving best-practice therapeutic management of these neoplasms is essential to improving patient outcomes. To bridge the gap between research and patient care, this issue of *CNS Cancer Update* features one-on-one discussions with leading neurooncologists and neurosurgeons. By providing information on the latest research developments in the context of expert perspectives, this activity assists medical oncologists with the formulation of state-of-the-art clinical management strategies, which in turn facilitates optimal patient care.

LEARNING OBJECTIVES

- Utilize case-based learning to facilitate the development of evidence-based and individualized management strategies for newly diagnosed and recurrent primary CNS cancer.
- Identify strategies to distinguish between true disease progression and radiographic pseudoprogression in patients with malignant glioma who have undergone chemoradiation therapy.
- Evaluate the prognostic and/or predictive role of molecular profiling (eg, MGMT methylation status) in primary CNS cancers.
- Develop evidence-based clinical management strategies for recurrent or progressive GBM, including the use of anti-angiogenic therapy.
- Incorporate key recent clinical trial data into treatment planning for patients with primary CNS lymphomas.
- Anticipate future protocol and nonprotocol treatment options for patients based on investigational strategies using novel targets, agents and biomarkers in CNS cancers.

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HOW TO USE THIS CME ACTIVITY

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CME INFORMATION

CNS Cancer™ UPDATE

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FACULTY — The following faculty (and their spouses/partners) reported real or apparent conflicts of interest, which have been resolved through a conflict of interest resolution process: **Dr Chamberlain** — Advisory Committee: Genentech BioOncology, Lilly USA LLC, Mundipharma International Limited, Sigma-Tau Pharmaceuticals Inc; Paid Research: Exelixis Inc, MedImmune Inc, Myrexis Inc; Speakers Bureau: Genentech BioOncology, Schering-Plough Corporation, Sigma-Tau Pharmaceuticals Inc. **Dr Cloughesy** — Advisory Committee: Amgen Inc, Genentech BioOncology, Lilly USA LLC, Novartis Pharmaceuticals Corporation; Consulting Agreement: Roche Laboratories Inc; Speakers Bureau: Schering-Plough Corporation.

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QUESTIONS (PLEASE CIRCLE ANSWER):

1. **The BRAIN noncomparative study demonstrated a similar overall survival for bevacizumab monotherapy and bevacizumab/irinotecan in patients with recurrent glioblastoma.**
   a. True
   b. False

2. **Symptomatic intratumoral hemorrhage is commonly observed in patients with recurrent GBM treated with bevacizumab.**
   a. True
   b. False

3. **Epileptic seizures occur in approximately 20% to 30% of patients with GBM.**
   a. True
   b. False

4. **MGMT methylation status in GBM appears to be _____.**
   a. Prognostic
   b. Predictive
   c. Both a and b

5. **Which of the following is generally true regarding pseudoprogression in GBM?**
   a. Mimics early disease progression
   b. Occurs in 20% to 30% of patients with apparent radiographic progression after chemoradiation therapy
   c. May be differentiated from true progression via magnetic resonance perfusion imaging
   d. All of the above

6. **Which of the following is/are correlated with IDH1 mutations in gliomas?**
   a. Lower grade
   b. Oligodendroglial-like features
   c. More favorable natural history
   d. All of the above

7. **The AVAglio and RTOG-0825 Phase III studies are evaluating the addition of _____ to standard radiation therapy with temozolomide (TMZ) for patients with newly diagnosed GBM.**
   a. Irinotecan
   b. Cediranib
   c. Bevacizumab

8. **Which of the following was observed in the Phase III RTOG-0525 study of standard adjuvant TMZ versus dose-dense TMZ in patients with newly diagnosed GBM?**
   a. Dose-dense TMZ resulted in an improvement in median overall and progression-free survival compared to standard TMZ
   b. Dose-dense and standard TMZ were equivalent with regard to median overall and progression-free survival
   c. MGMT methylation status was not prognostic

9. **Prospective, randomized studies have demonstrated improvements in overall survival with erlotinib or gefitinib among patients with GBM and EGFRvIII mutations.**
   a. True
   b. False

10. **In a randomized, Phase III study the NovoTTF-100A medical device resulted in no difference in time to disease progression or overall survival compared to standard chemotherapy in patients with recurrent GBM.**
    a. True
    b. False

EDUCATIONAL ASSESSMENT AND CREDIT FORM

CNS Cancer Update — Issue 2, 2011

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
BELOB Phase II study of bevacizumab, lomustine or the combination for recurrent GBM after chemoradiation therapy with TMZ	4 3 2 1	4 3 2 1
Results of RTOG 0525: A Phase III trial of standard adjuvant TMZ versus a dose-dense schedule in newly diagnosed GBM	4 3 2 1	4 3 2 1
Phase III studies (AVAglio and RTOG-0825) incorporating bevacizumab into standard radiation therapy/TMZ in newly diagnosed GBM	4 3 2 1	4 3 2 1
Emerging data with the prognostic biomarker IDH1 in glioma	4 3 2 1	4 3 2 1

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; no changes will be made
☐ 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:

- Utilize case-based learning to facilitate the development of evidence-based and individualized management strategies for newly diagnosed and recurrent primary CNS cancer..... 4 3 2 1 N/M N/A
- Identify strategies to distinguish between true disease progression and radiographic pseudoprogression in patients with malignant glioma who have undergone chemoradiation therapy..... 4 3 2 1 N/M N/A
- Evaluate the prognostic and/or predictive role of molecular profiling (eg, MGMT methylation status) in primary CNS cancers..... 4 3 2 1 N/M N/A
- Develop evidence-based clinical management strategies for recurrent or progressive GBM, including the use of anti-angiogenic therapy..... 4 3 2 1 N/M N/A
- Incorporate key recent clinical trial data into treatment planning for patients with primary CNS lymphomas..... 4 3 2 1 N/M N/A
- Anticipate future protocol and nonprotocol treatment options for patients based on investigational strategies using novel targets, agents and biomarkers in CNS cancers..... 4 3 2 1 N/M N/A

EDUCATIONAL ASSESSMENT AND CREDIT FORM (continued)

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:.....

Additional comments about this activity:

.....

As part of our ongoing, continuous quality-improvement effort, we conduct postactivity follow-up surveys to assess the impact of our educational interventions on professional practice. Please indicate your willingness to participate in such a survey.

☐ Yes, I am willing to participate in a follow-up survey.
☐ No, I am not willing to participate in a follow-up survey.

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
Marc Chamberlain, MD	4 3 2 1	4 3 2 1
Timothy F Cloughesy, 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

Please recommend additional faculty for future activities:

.....

Other comments about the faculty and editor for this activity:

.....

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

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

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UPDATE

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