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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 its 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 neuro-oncologists 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 cancers.
- 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.
- Recall the rationale for and activity of novel targeted agents under investigation for the treatment of CNS cancers.
- Adhere to guideline-based approaches for the use of prophylactic anticonvulsant therapy for patients with primary CNS cancer or brain metastases who have no history of seizures.
- Incorporate key recent clinical trial data into treatment planning for patients with primary CNS lymphomas.
- Counsel appropriately selected patients with CNS cancer about participation in ongoing clinical trials.

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CME INFORMATION

CNS Cancer™ UPDATE

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QUESTIONS (PLEASE CIRCLE ANSWER):

1. **Up to 40% of patients with MGMT-methylated GBM have been observed to develop recurrence outside of the original tumor site.**
   a. True
   b. False

2. **Which of the following is generally true about pseudoprogression in GBM?**
   a. Occurs more frequently in MGMT-methylated tumors
   b. Tends to occur within 3 months of finishing temozolomide (TMZ) and radiation therapy (RT)
   c. Tends to occur within the radiation field
   d. All of the above

3. **Which of the following was demonstrated in a French randomized trial of 1 course of RT with best supportive care (BSC) versus BSC alone for elderly patients with GBM?**
   a. RT improved overall survival
   b. RT resulted in a clinically significant decline in cognitive functioning
   c. RT resulted in decrements in quality of life

4. **A randomized study with patients with primary CNS lymphoma demonstrated an improvement in radiographic response with the addition of cytarabine to methotrexate compared to methotrexate alone.**
   a. True
   b. False

5. **In an NCI-sponsored pilot trial, no patients with relapsed primary CNS lymphoma experienced objective radiographic response to rituximab monotherapy.**
   a. True
   b. False

6. **Which of the following was observed in the Phase III RTOG-0525 study of standard adjuvant TMZ versus dose-dense TMZ for patients with newly diagnosed GBM?**
   a. Dose-dense TMZ resulted in an improvement in median overall survival and progression-free survival compared to standard TMZ
   b. Dose-dense and standard TMZ were equivalent with regard to median overall survival
   c. MGMT methylation status was strongly prognostic
   d. Both a and c
   e. Both b and c

7. **In patients with GBM whose disease progresses on bevacizumab, the use of fractionated stereotactic radiation therapy may result in increased responsiveness to subsequent bevacizumab/chemotherapy.**
   a. True
   b. False

8. **A highly infiltrative pattern of disease recurrence will emerge among a proportion of patients with GBM who receive bevacizumab.**
   a. True
   b. False

9. **Studies have demonstrated that VEGF tyrosine kinase inhibitors result in similar efficacy to bevacizumab in recurrent GBM.**
   a. True
   b. False

10. **In an uncontrolled, retrospective study, the development of hypertension and proteinuria in patients with recurrent GBM treated with bevacizumab was associated with _____.**
    a. Increased overall survival
    b. Decreased overall survival
    c. No effect on overall survival

EDUCATIONAL ASSESSMENT AND CREDIT FORM

CNS Cancer Update — Issue 1, 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 ONE — 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
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
Timing and characteristics of pseudoprogression after RT and TMZ	4 3 2 1	4 3 2 1
Effect of bevacizumab on edema and mass effect in second- and later-line treatment of recurrent GBM	4 3 2 1	4 3 2 1
Salvage fractionated stereotactic RT for GBM that progresses on bevacizumab	4 3 2 1	4 3 2 1
Prognosis and treatment advances for primary and secondary CNS lymphomas	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 cancers. . . . . 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
- Recall the rationale for and activity of novel targeted agents under investigation for the treatment of CNS cancers. . . . . 4 3 2 1 N/M N/A
- Adhere to guideline-based approaches for the use of prophylactic anticonvulsant therapy for patients with primary CNS cancer or brain metastases who have no history of seizures . . . . . 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
- Counsel appropriately selected patients with CNS cancer about participation in ongoing clinical trials. . . . . 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:.....

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 TWO — 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
Tracy Batchelor, MD, MPH	4 3 2 1	4 3 2 1
Tom Mikkelsen, 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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Professional Designation:

☐ MD ☐ DO ☐ PharmD ☐ NP ☐ RN ☐ PA ☐ Other .....

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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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