

Thyroid Cancer™

U P D A T E

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

FACULTY INTERVIEWS

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Marcia S Brose, MD, PhD

EDITOR

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Thyroid Cancer Update

A Continuing Medical Education Audio Series

OVERVIEW OF ACTIVITY

Emerging clinical trial data on the management of differentiated and medullary thyroid cancer have been sparse during the past few decades. However, recent breakthroughs in the understanding of the pathogenesis of this type of cancer have led to the development of a number of innovative clinical protocols and ongoing clinical trials. It is hoped that recent and anticipated results from these trials will lead to the emergence and approval of new therapeutic agents and changes in the indications for existing treatments. 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, *Thyroid Cancer Update* uses one-on-one conversations with leading oncology investigators discussing the interdisciplinary management of thyroid cancer. By providing access to the latest research developments and expert perspectives on the disease, this CME program assists medical oncologists in the formulation of up-to-date clinical management strategies.

LEARNING OBJECTIVES

- Apply the results of emerging research to effectively integrate novel tyrosine kinase inhibitors (TKIs) into the management of well-differentiated thyroid carcinoma.
- Evaluate the implications of clinical data on thyroid cancer recently presented at the 2010 ASCO Annual Meeting, and incorporate these data into management strategies in the metastatic and relapsed settings.
- Describe the ongoing trials investigating the safety and efficacy of multikinase inhibitor therapy for patients with advanced, well-differentiated thyroid carcinoma or medullary carcinoma of the thyroid.
- Recall the prognostic significance of RET gene mutations in medullary carcinoma of the thyroid.
- Recognize the adverse events associated with a longer duration of TKI therapy in thyroid carcinoma.
- Counsel appropriately selected patients with thyroid cancer about the availability of ongoing clinical trials.

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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 Cohen — Consulting Agreements: Amgen Inc, Boehringer Ingelheim Pharmaceuticals Inc, Lilly USA LLC; Speakers Bureau: Bristol-Myers Squibb Company. **Dr Brose** — Advisory Committee: AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company; Consulting Agreements: Bayer HealthCare Pharmaceuticals, Onyx Pharmaceuticals Inc; Paid Research: Bayer HealthCare Pharmaceuticals, Novartis Pharmaceuticals Corporation, Onyx Pharmaceuticals Inc.

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QUESTIONS (PLEASE CIRCLE ANSWER):

- RET gene mutations do not have prognostic significance in sporadic medullary carcinoma of the thyroid.**
 - True
 - False
- What is the likely mechanism of action of vandetanib in thyroid carcinoma?**
 - RET inhibition
 - VEGF inhibition
 - Both a and b
 - None of the above
- Sorafenib is active in both B-raf wild-type and B-raf mutant subgroups of well-differentiated thyroid carcinoma.**
 - True
 - False
- Which of the following adverse events is associated with sorafenib in thyroid carcinoma?**
 - Rash
 - Muscle wasting
 - Hand-foot syndrome
 - All of the above
- The frequency of rash with vandetanib in medullary carcinoma of the thyroid is about _____.**
 - 10 percent
 - 45 percent
 - 90 percent
- In a large, international randomized study (ZETA) for patients with locally advanced or metastatic medullary thyroid carcinoma presented at ASCO 2010, vandetanib resulted in a significant improvement in progression-free survival compared to placebo.**
 - True
 - False
- Which of the following agents has shown activity in well-differentiated carcinoma of the thyroid in a Phase II study presented at ASCO 2010?**
 - Sorafenib
 - Pazopanib
 - Irinotecan
- In Phase II studies, what proportion of patients with advanced follicular or papillary thyroid carcinoma experience stable disease with sorafenib?**
 - 10 to 20 percent
 - 40 to 60 percent
 - More than 80 percent
- Which of the following thyroid cancer types is considered the most aggressive?**
 - Anaplastic thyroid cancer
 - Medullary thyroid cancer
 - Papillary thyroid cancer
 - Follicular thyroid cancer
- Which of the following thyroid stimulating hormone (TSH) levels is a treatment goal for patients with thyroid carcinoma who are receiving tyrosine kinase inhibitors such as sorafenib or sunitinib?**
 - High TSH level
 - Normal TSH level
 - Low TSH level
- The pattern and type of adverse events with oral VEGF tyrosine kinase inhibitors are _____ in renal cell cancer and thyroid cancer.**
 - Similar
 - Different

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
Phase II study of sorafenib in well-differentiated thyroid carcinoma	4 3 2 1	4 3 2 1
RET gene mutations in medullary carcinoma of the thyroid	4 3 2 1	4 3 2 1
Randomized, placebo-controlled trial of vandetanib in medullary carcinoma of the thyroid	4 3 2 1	4 3 2 1
Etiology of diarrhea in patients who have received vandetanib for medullary carcinoma of the thyroid	4 3 2 1	4 3 2 1
Recognition of change in the pattern of hand-foot syndrome with a longer duration of sorafenib for thyroid carcinoma	4 3 2 1	4 3 2 1
Muscle wasting as an adverse event with a longer duration of sorafenib for thyroid carcinoma	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:

Will this activity help you improve patient care?

Yes No Not applicable

If no, please explain:

Did the activity meet your educational needs and expectations?

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:

- Apply the results of emerging research to effectively integrate novel tyrosine kinase inhibitors (TKIs) into the management of well-differentiated thyroid carcinoma. 4 3 2 1 N/M N/A
- Evaluate the implications of clinical data on thyroid cancer recently presented at the 2010 ASCO Annual Meeting, and incorporate these data into management strategies in the metastatic and relapsed settings. 4 3 2 1 N/M N/A
- Describe the ongoing trials investigating the safety and efficacy of multikinase inhibitor therapy for patients with advanced, well-differentiated thyroid carcinoma or medullary carcinoma of the thyroid. 4 3 2 1 N/M N/A
- Recall the prognostic significance of RET gene mutations in medullary carcinoma of the thyroid. 4 3 2 1 N/M N/A
- Recognize the adverse events associated with a longer duration of TKI therapy in thyroid carcinoma. 4 3 2 1 N/M N/A
- Counsel appropriately selected patients with thyroid cancer about the availability of ongoing clinical trials. 4 3 2 1 N/M N/A

EDUCATIONAL ASSESSMENT AND CREDIT FORM (continued)

What other practice changes will you make or consider making as a result of this activity?

What additional information or training do you need on the activity topics or other oncology-related topics?

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		4 = Excellent	3 = Good	2 = Adequate	1 = Suboptimal
Faculty	Knowledge of subject matter					Effectiveness as an educator			
Ezra EW Cohen, MD	4	3	2	1		4	3	2	1
Marcia S Brose, MD, PhD	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:

TCU110

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