



Outcome Report

Bronchiectasis in Adults



**NATIONAL ASSOCIATION
FOR CONTINUING EDUCATION**

**Challenges in
Pulmonary and
Critical Care:
2010**

**Presented at:
Cleveland Clinic Florida
Weston, Florida
December 4, 2010**

Report Date: 2/18/11

Course Director

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Director, Pulmonary Hypertension Clinic
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Course Accreditation

The National Association for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The National Association for Continuing Education designates this educational activity for a maximum of 4 *AMA PRA Category 1 Credits™*.

The Cleveland Clinic Florida designates this educational activity for a maximum of 2 *AMA PRA Category 1 Credits™*.

* This applies to the full day CME activity entitled Challenges in Pulmonary and Critical Care: 2010.

Commercial Support

Challenges in Pulmonary and Critical Care: 2010 CME activity was supported through educational grants or donations from the following companies:

Actellion
 CSL Behring
 Gilead Sciences
 Talecris Biotherapeutics
 United Therapeutics Corporation

Agenda

7:45-8:15	Continental Breakfast and Registration	12:15- 1:15	Lunch/Exhibits
8:15-8:30	Welcome Remarks Franck Rahaghi, MD,MHS, FCCP	1:15-2:15	Pulmonary Hypertension: Reflections on New Directions Franck Rahaghi, MD, MHS, FCCP
8:30-9:30	Bronchiectasis in Adults Anas Hadeh, MD	2:15-3:15	Alpha-1 Antitrypsin Deficiency: Future of Diagnosis and Treatment Michael Campos, MD
9:30-10:30	Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines Gustavo Ferrer, MD	3:15-3:30	Break/Vendor Area
10:30- 10:50 Cancelled	Keynote Speaker: Representative Debbie Wasserman Schultz, Florida's 20 th District –Health Care in the United States	3:30-4:30	Pulmonary Case Rounds: Interesting Cases in Pulmonary Medicine Franck Rahaghi, MD and Gustavo Ferrer, MD
10:50-11:15	Break/Vendor Area	4:30-4:45	Closing Remarks Franck Rahaghi, MD, MHS, FCCP
11:15-12:15	Interventional Bronchoscopy Update: Valves for Emphysema and Treatments of Asthma Eduardo Oliveira, MD, MBA		

Levels of Evaluation

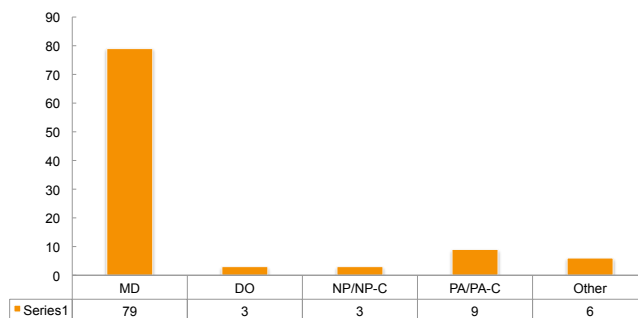
Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on the following model:

1. Participation
2. Satisfaction
3. Learning
 - A. Declarative Knowledge
 - B. Procedural Knowledge
4. Competence
5. Performance
6. Patient Health
7. Community Health

Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *J Contin Educ Health Prof.* 2009 Winter;29(1):1-15.

Level 1: Participation

- 94 attendees
- 70% Physicians; 7% NPs; 11% PAs; 7% RNs; 5% Other
- Over 80% in community-based practice
- 46% PCPs, 2% Endocrinologists; 4% Cardiologists; 19% Pulmonologists; 0% Gastroenterologist; 27% Other or did not respond



Did we reach the right audience? **Yes!**

Level 2: Satisfaction

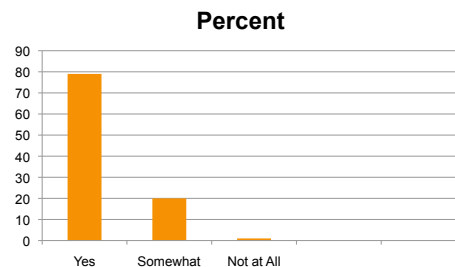
- 98% rated the activity as very good to excellent
- 98% indicated the activity improved their knowledge
- 86% stated that they learned new strategies for patient care
- 77% said they would implement new strategies that they learned in their practice
- 99% said the program was fair-balanced and unbiased

Were our learners satisfied? **Yes!**

Level 2: Satisfaction

Upon completion of this activity, I can now –

Explain the pathophysiology of bronchiectasis; Discuss steps in the diagnosis and assessment of bronchiectasis and cystic fibrosis; Use evidence-based treatments for adult cystic fibrosis



Did learners indicate they achieved the learning objectives?

Yes! 99% believed they did.

Outcome Study Methodology

Goal

To determine the effect this CME activity had on learners with respect to competence to apply critical knowledge, confidence in treating patients with diseases or conditions discussed, and change in practice behavior.

Dependent Variables

- **Level 3: Competence to Apply Critical Knowledge**
Case-based vignettes and pre- and post-test knowledge questions were asked with each session in the CME activity. Responses can demonstrate learning and competence in applying critical knowledge. The use of case vignettes for this purpose has considerable predictive value. Vignettes, or written case simulations, have been widely used as indicators of actual practice behavior.¹
- **Practitioner Confidence**
Confidence with the information relates directly to the likeliness of actively using knowledge. Practitioner confidence in his/her ability to diagnose and treat a disease or condition can affect practice behavior patterns.
- **Level 4: Self-Reported Change in Practice Behavior**
Intent to change and change four weeks after CME activity.

1. Peabody, J.W., J. Luck, P. Glassman, S. Jain, J. Hansen, M. Spell and M. Lee (2004). *Measuring the quality of physician practice by using clinical vignettes: a prospective validation study.* Ann Intern Med 14(10): 771-80.

Bronchiectasis in Adults Anas Hadeh, MD

Faculty

Anas Hadeh, MD

Director, Cystic Fibrosis Clinic

Cleveland Clinic Florida, Weston, FL

Adjunct Assistant Professor, Drexel University

Philadelphia, PA

Learning Objectives

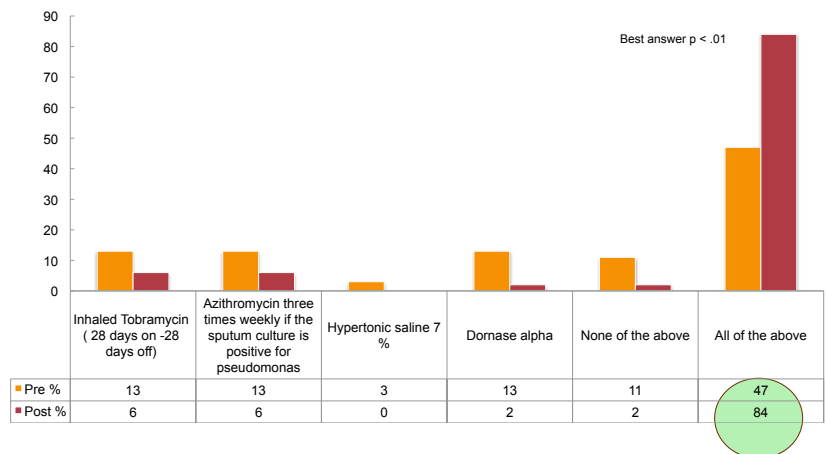
- Explain the pathophysiology of bronchiectasis;
- Discuss steps in the diagnosis and assessment of bronchiectasis and cystic fibrosis
- Use evidence-based treatments for adult cystic fibrosis

Key Findings Bronchiectasis in Adults

Knowledge/Competence	Learners demonstrated significant improvement in their answers from pre to post-testing on one of the two knowledge questions asked regarding methods to diagnose and treat Bronchiectasis in adults.
Confidence	There was a shift in confidence of treating Bronchiectasis in adults following the presentation.
Intent to Perform	Learners stated that they were very likely (57%) to somewhat likely (33%) to implement strategies learned at this session in their practice.
Change of Practice Behavior	On a follow-up survey completed 4 weeks after the activity 82% of learners who responded reported that they strongly agree or agree that they have implemented changes in their practice based on the information they learned in the CME activity with respect to Bronchiectasis.

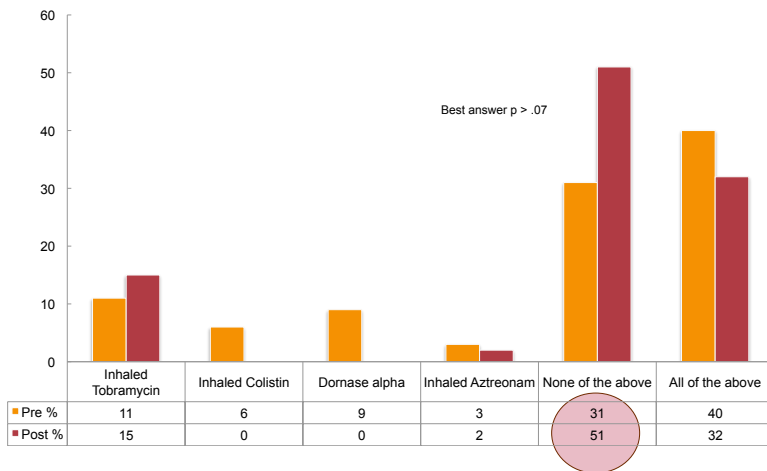
Responses to Critical Knowledge and Case-Based Questions Bronchiectasis in Adults

Which of the following therapies are used in the treatment of Cystic Fibrosis lung disease?



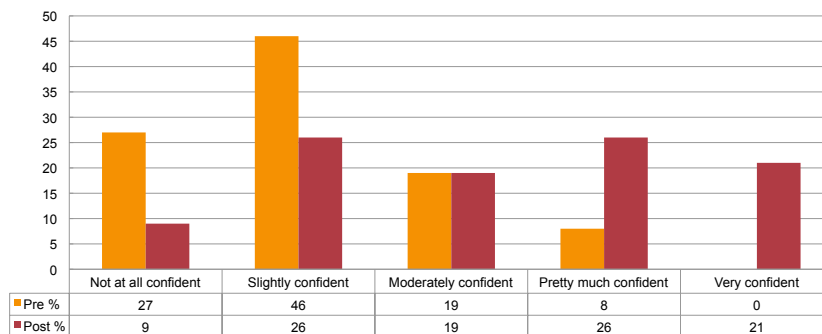
Responses to Critical Knowledge and Case-Based Questions Bronchiectasis in Adults

Which of the following therapies are FDA approved for Non CF Bronchiectasis?



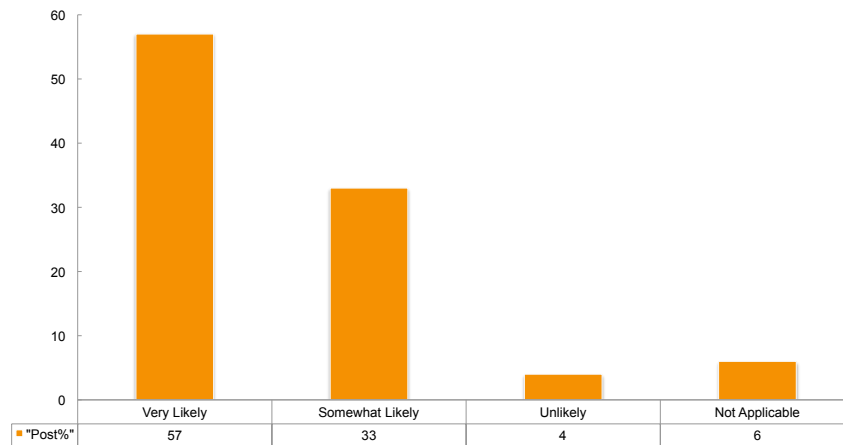
Changes in Confidence from Pre to Post-Testing Bronchiectasis in Adults

On a scale of 1 to 5 please rate how confident you would be in treating patients with this condition.



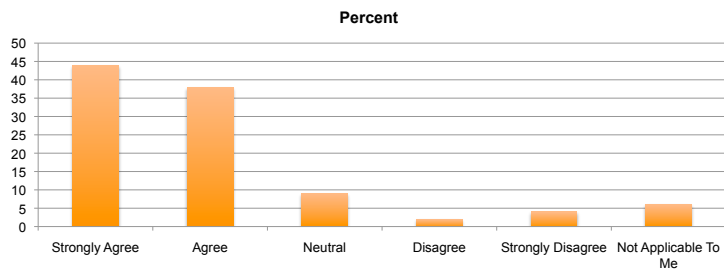
Intention to Change Practice Behavior and Implement Learning Bronchiectasis in Adults

How likely are you to implement strategies learned from this presentation in your practice?



Self-Reported Changes in Practice Behavior Four Weeks After the Activity Bronchiectasis in Adults

Percent of Learners Who Agreed That They Changed Their Actual Practice Behavior for the Learning Objectives Listed Below Four Weeks After the CME Activity



N=32

Learning Objectives: Explain the pathophysiology of bronchiectasis; Discuss steps in the diagnosis and assessment of bronchiectasis and cystic fibrosis; Use evidence-based treatments for adult cystic fibrosis.

Discussion and Implications

Bronchiectasis in Adults

The need for continued education in the evaluation and treatment of Bronchiectasis in adults was demonstrated based on literature reviews and surveys completed prior to the conference series.

Dr. Anas Hadeh, the NACE faculty for this program, received high ratings on her effectiveness in delivering this material. Attendee knowledge was assessed using pre and post-testing with results indicating a statistically significant improvement in the post testing in one of two questions asked. Furthermore, participants reported that they are better able as a result of this lecture to: explain the pathophysiology of Bronchiectasis, discuss steps in the diagnosis and assessment of Bronchiectasis and cystic fibrosis, and use evidence-based treatments.

Approximately 80% reported on a 1 month follow up survey to have implemented the learning objectives of this activity

Bronchiectasis in adults continues to be an important area for future educational programs. Additional programming should continue to educate clinicians on testing methodology and treatment of this condition.