
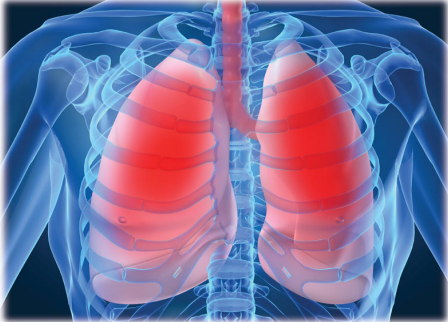


**Outcome Report**  
Update on Idiopathic Pulmonary Fibrosis:  
State of the Art and the New Guidelines



**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**

**Franck Rahaghi, MD, MHS**

Director, Pulmonary Hypertension Clinic  
Director, Pulmonary Education and Rehabilitation  
Chair of Quality  
Cleveland Clinic Florida  
Weston, FL

### **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 <span style="color: red;">Cancelled</span>	Keynote Speaker: Representative Debbie Wasserman Schultz, Florida's 20 <sup>th</sup> 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

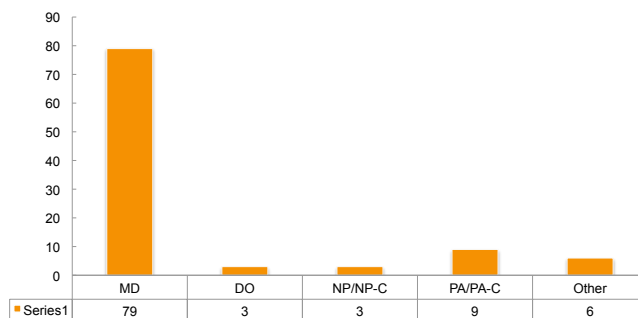
Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on the following model:

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

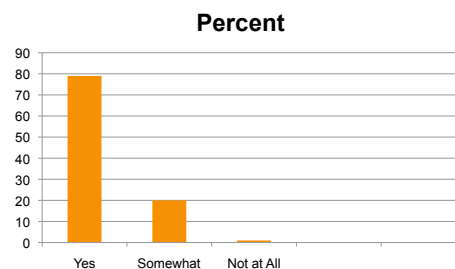
- 98% rated the activity as very good to excellent
- 98% indicated the activity improved their knowledge
- 86% stated that they learned new strategies for patient care
- 77% said they would implement new strategies that they learned in their practice
- 99% said the program was fair-balanced and unbiased

Were our learners satisfied? **Yes!**

## Level 2: Satisfaction

**Upon completion of this activity, I can now –**

Explain the differential diagnosis of interstitial lung diseases; Discuss the new guidelines in the management of IPF; Discuss the future promises in therapy: Pulmonary Hypertension and IPF, new discoveries, anticoagulation



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.<sup>1</sup>
- **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.

### Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines Gustavo Ferrer, MD, FCCP

Faculty

Gustavo Ferrer, MD, FCCP

Chairman, Critical Care Committee

Associate Program Director, Pulmonary Fellowship

Cleveland Clinic Florida

Weston, FL

#### Learning Objectives

- Explain the differential diagnosis of interstitial lung diseases
- Discuss the new guidelines in the management of IPF
- Discuss the future promises in therapy: Pulmonary Hypertension and IPF, new discoveries, anticoagulation

### Key Findings

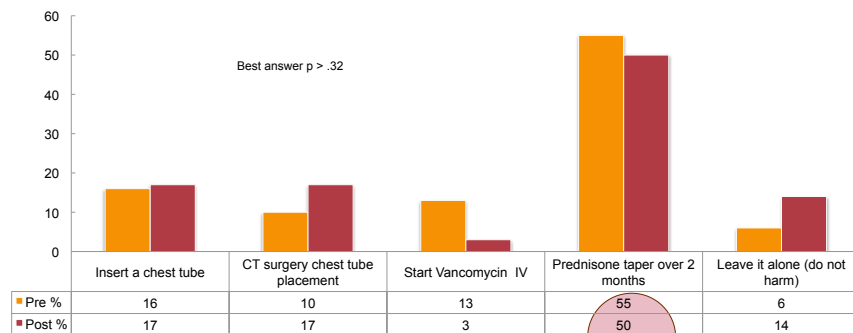
Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

Knowledge/Competence	Learners did not demonstrate significant improvement in their answers from pre to post-testing on four of the five case-based questions regarding Idiopathic Pulmonary Fibrosis.
Confidence	Participants reported higher confidence levels in providing care to patients with this condition following the education.
Intent to Perform	Learners stated that they were very likely (48%) to somewhat likely (40%) 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.

### Responses to Critical Knowledge and Case-Based Questions

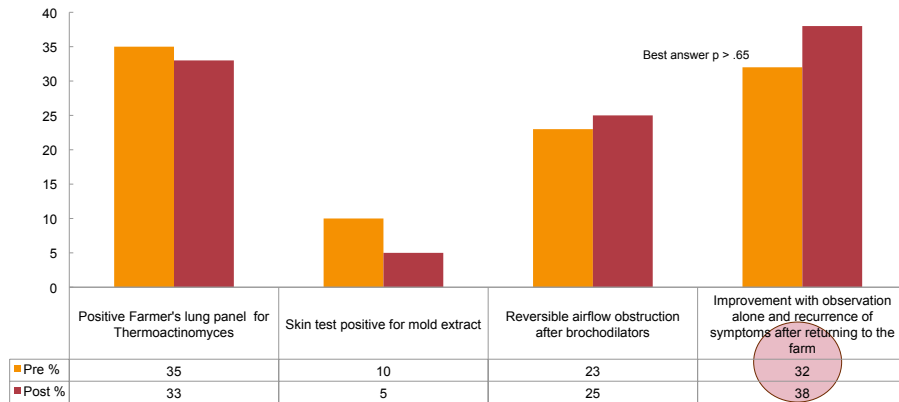
Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

54 yo woman presents to your ER with 1 month of SOB on exertion. Two weeks ago she developed pleuritic chest pain and subjective fever. ROS: + morning stiffness, + Joints pain and swelling. PE: T: 101F Erythema and tenderness in PIP's, hand and wrist deformities with erythema and swelling of left wrist Lung: Percussion + Left effusion labs:+RF Pleural Fluid WBC: 1 Protein: PF5 S3 LDH:300 Glucose: 30 mg/dl Negative cytology and Cx The next step is?



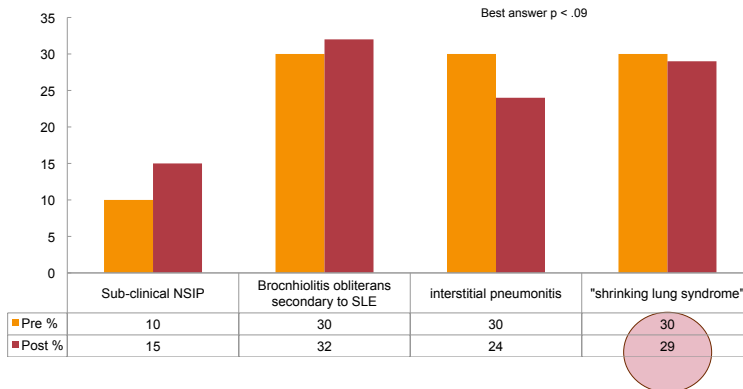
### Responses to Critical Knowledge and Case-Based Questions Bronchiectasis in Adults

25 year old man presents with 6 hrs of dry cough and SOB after spending a day moving stored hay. He reports similar episodes the past two summers each time he was hospitalized with atypical pneumonia. He had a quit recovery with antibiotics and inhaled steroids. PE: T 101F RR:25 BP:140/68 WBC: 14 000 What additional information would support the diagnosis?



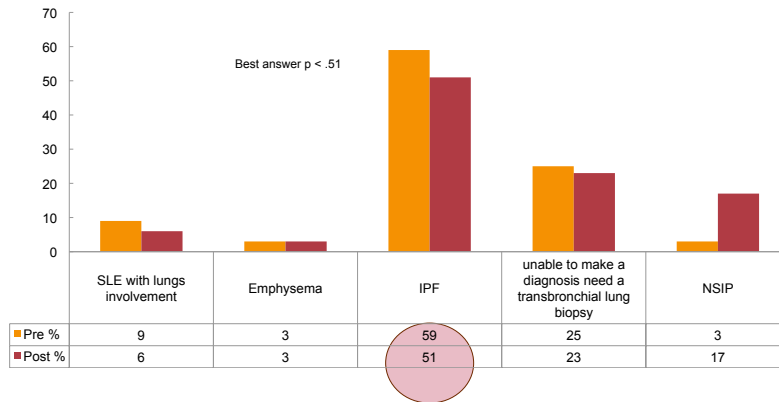
### Responses to Critical Knowledge and Case-Based Questions (cont) Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

54 year old woman with SLE comes complaining of 4 months of SOB on exertion. No associated symptoms. ROS: arthralgias PE: Normal CXR: Low Lung volumes and basilar atelectasis. Chest CT scan: Minimal atelectasis in bases. No Fibrosis PFT's: FVC: 73% FEV1: 75% FEV1/FVC: 90% TLC: 72% DLco: 85% The diagnosis of lung restriction is:



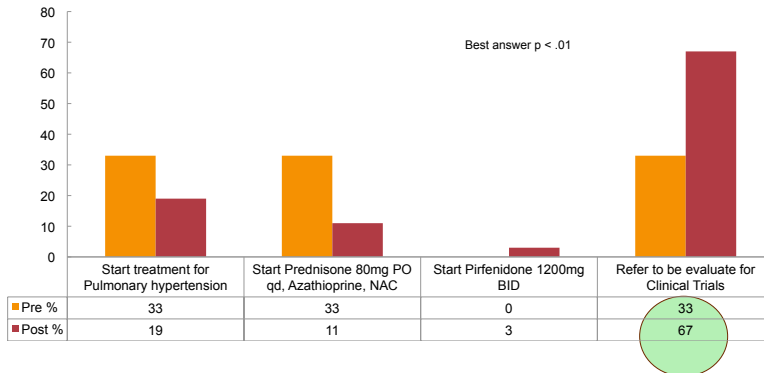
**Responses to Critical Knowledge and Case-Based Questions (cont)**  
 Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

61 year old man comes with 14 months of progressive SOB on exertion associated with persistent dry cough. He smoked 1 ppd for 30 years but quit 5 years ago. ROS: +Arthralgia PE: + Crackles in bases + Clubbing SpO2 decreases to 82% on exertion CXR: Bilateral interstitial marking in bases PFT's: FEV1: 84% FVC: 82% DLco: 35% ANA: +1:160 The diagnosis is:



**Responses to Critical Knowledge and Case-Based Questions (cont)**  
 Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

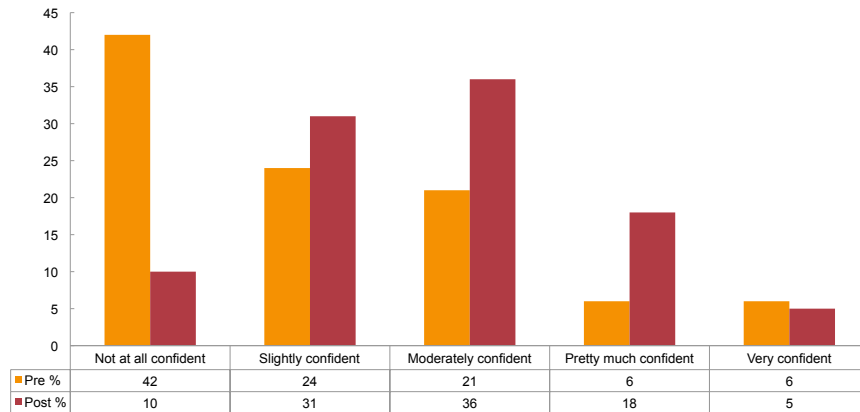
65 year old woman without significant past medical history comes complaining of 9 month of SOB on exertion. She states that dyspnea is gradually getting worse. Associated dry cough. No connective tissue disease was found on extensive work up. She comes to you for a second opinion regarding starting treatment. SpO2: 90% in RA PFT's: DLco 35% 2DECHO: RVSP: 45 mmHg What is the next step?





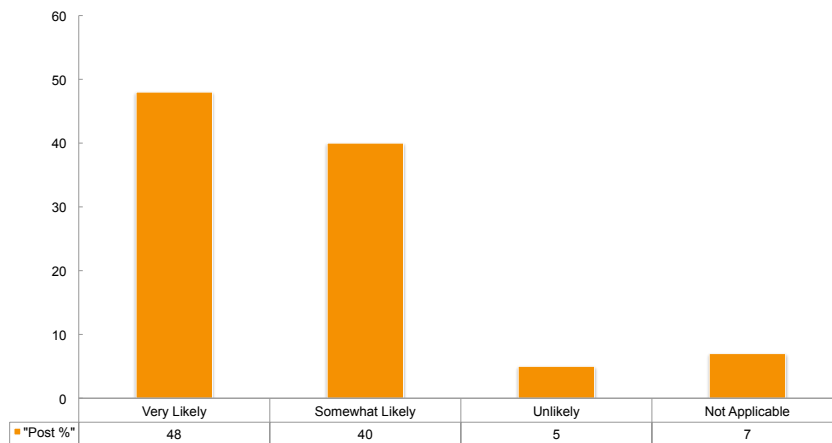
### Changes in Confidence from Pre to Post-Testing Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

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



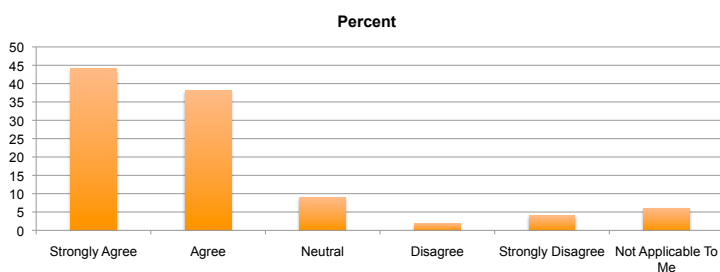
### Intention to Change Practice Behavior and Implement Learning Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

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 Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

#### 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 differential diagnosis of interstitial lung diseases; Discuss the new guidelines in the management of IPF; Discuss the future promises in therapy: Pulmonary Hypertension and IPF, new discoveries, anticoagulation

## Discussion and Implications

### Update on Idiopathic Pulmonary Fibrosis: State of the Art and the New Guidelines

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

Dr. Gustavo Ferrer, MD, the NACE faculty for this program, received high ratings on his effectiveness in delivering this material. Attendee knowledge was assessed using the case vignettes listed above with results indicating a statistically significant improvement in the post testing in nearly all areas. Furthermore, participants stated that they are better able as a result of this lecture to: explain the differential diagnosis of interstitial lung diseases, discuss the new guidelines in the management of IPF, and discuss the future promises in therapy: Pulmonary Hypertension and IPF, new discoveries, anticoagulation.

Participants self-reported improved confidence in treating patients with Idiopathic Pulmonary Fibrosis following this program.

A majority of the participants reported on a 1 month follow up survey to have implemented the learning objectives of this activity

The notable changes in post-test scores signify a clear gap in knowledge and an unmet need amongst clinicians in the area of Idiopathic Pulmonary Fibrosis. It continues to be an important area for future educational programs.