



# **NATIONAL ASSOCIATION FOR CONTINUING EDUCATION**

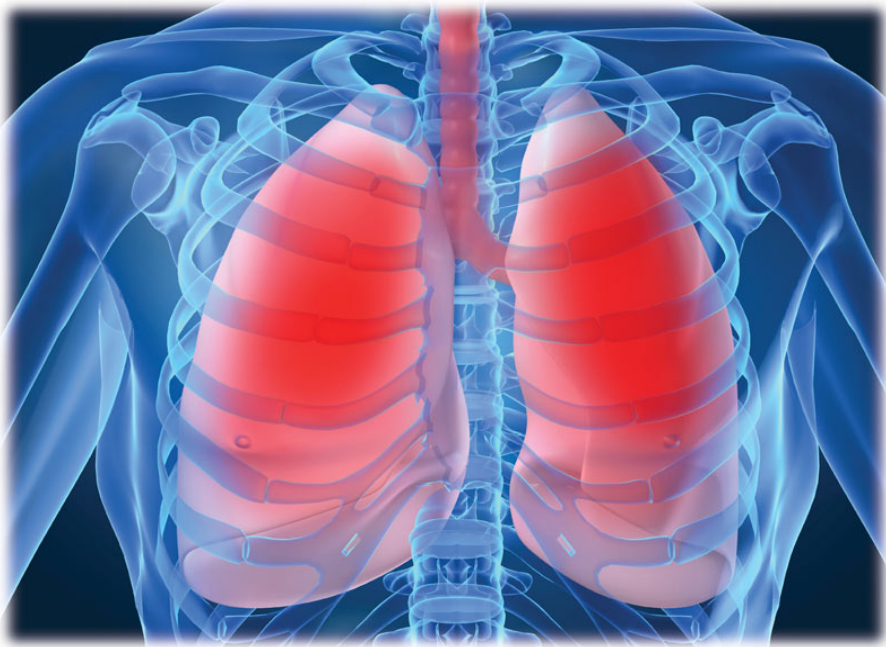
COPD: New Developments, New  
Treatment Horizons

**Final Outcome Report**

## **Challenges in Pulmonary and Critical Care: 2012**

**Presented at:  
Cleveland Clinic Florida  
Weston, Florida  
December 1, 2012**

Report Date: May 2, 2013



## Course Director

**Franck Rahaghi, MD, MHS, FCCP**

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 live activity for a maximum of 7 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should only claim the credit commensurate with the extent of their participation in the activity.

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of University of Massachusetts Medical School and the National Association for Continuing Education. The University of Massachusetts Medical School is accredited by the ACCME to provide continuing medical education for physicians.

The University of Massachusetts Medical School designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## **Commercial Support**

Challenges in Pulmonary and Critical Care: 2012 CME activity was supported through educational grants or donations from the following companies:

Actellion

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Boston Scientific

CSL Behring

Genentech

Grifols

Hospira, Inc.

United Therapeutics Corporation

# Agenda

7:15-7:50	Continental Breakfast and Registration	12:15- 1:00	Lunch Break/Exhibits
7:50-8:00	Welcome Remarks Franck Rahaghi, MD, MHS, FCCP	1:00-2:00	Idiopathic Pulmonary Fibrosis: Updates from IPFNET and New Horizons Robert Kaner, MD
8:00-9:00	Electromagnetic Navigation Bronchoscopy and Bronchial Thermoplasty: Two Techniques That Are Revolutionizing Bronchoscopy Eduardo Oliveira, MD, MBA	2:00-3:00	New Directions in Treatment of Asthma Raed A. Dweik, MD
9:00-10:00	COPD: New Developments, New Treatment Horizons Charlie Strange, MD	3:00-3:15	Break/Exhibits
10:00- 10.15	Break/Exhibits	3:15-4:15	Sedation in the ICU Jinesh Mehta, MD
10:15-11:15	Alpha-1 Antitrypsin Deficiency: How to Change Franck Rahaghi, MD, MHS, FCCP	4:15-5:315	Management of Chronic Cough Gustavo Ferrer, MD
11:15-12:15	Pulmonary Hypertension: A Disease Evolution Ioana Preston, MD	5:15-5:30	Closing Remarks Franck Rahaghi, MD, MHS, FCCP

# Levels of Evaluation

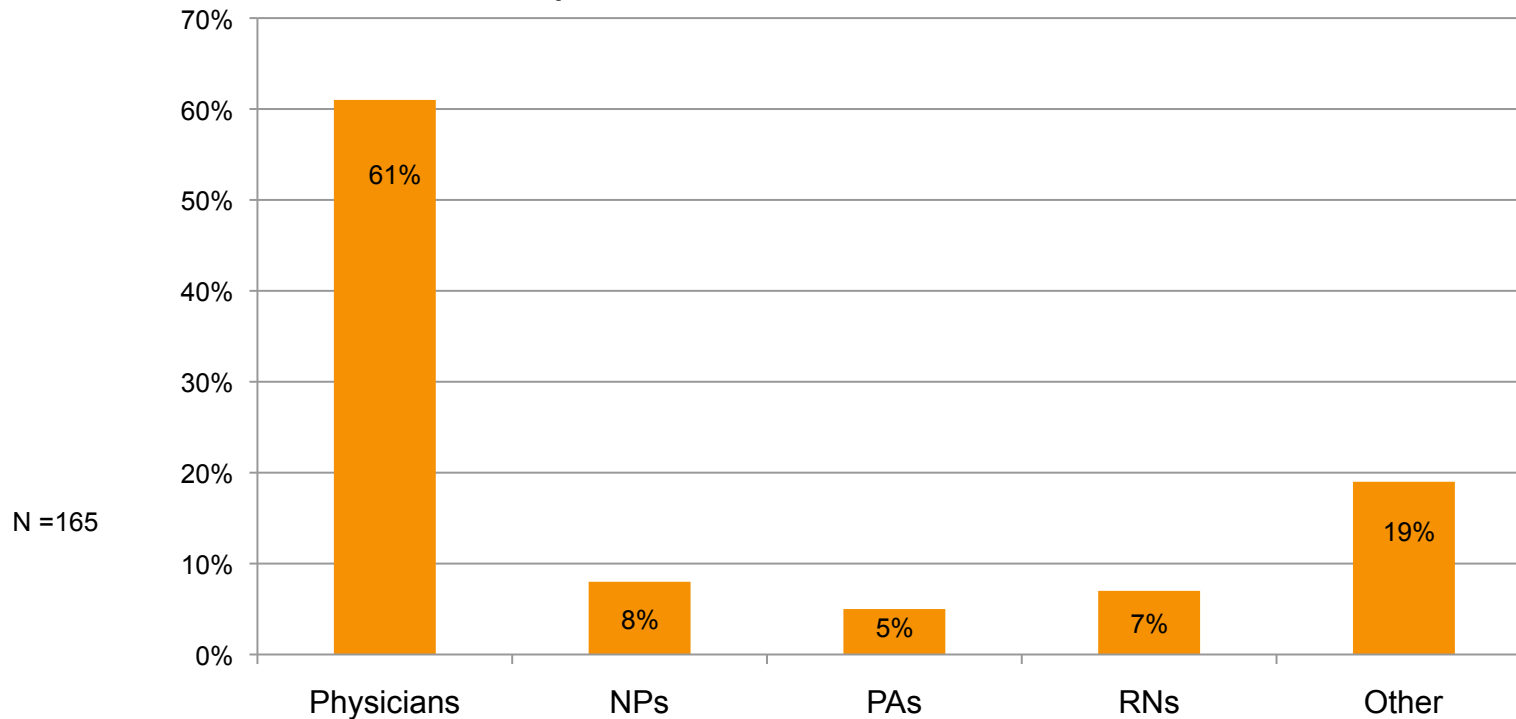
Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on the following model:

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

- 122 attendees
- 61% Physicians; 8% NPs; 5% PAs; 7% RNs; 19% Other
- Over 40% in community-based practice
- 37% PCPs, 40% Pulmonologists; 3% Rheumatology; 3% Cardiologists; 17% Other or did not respond



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

## Level 2: Satisfaction

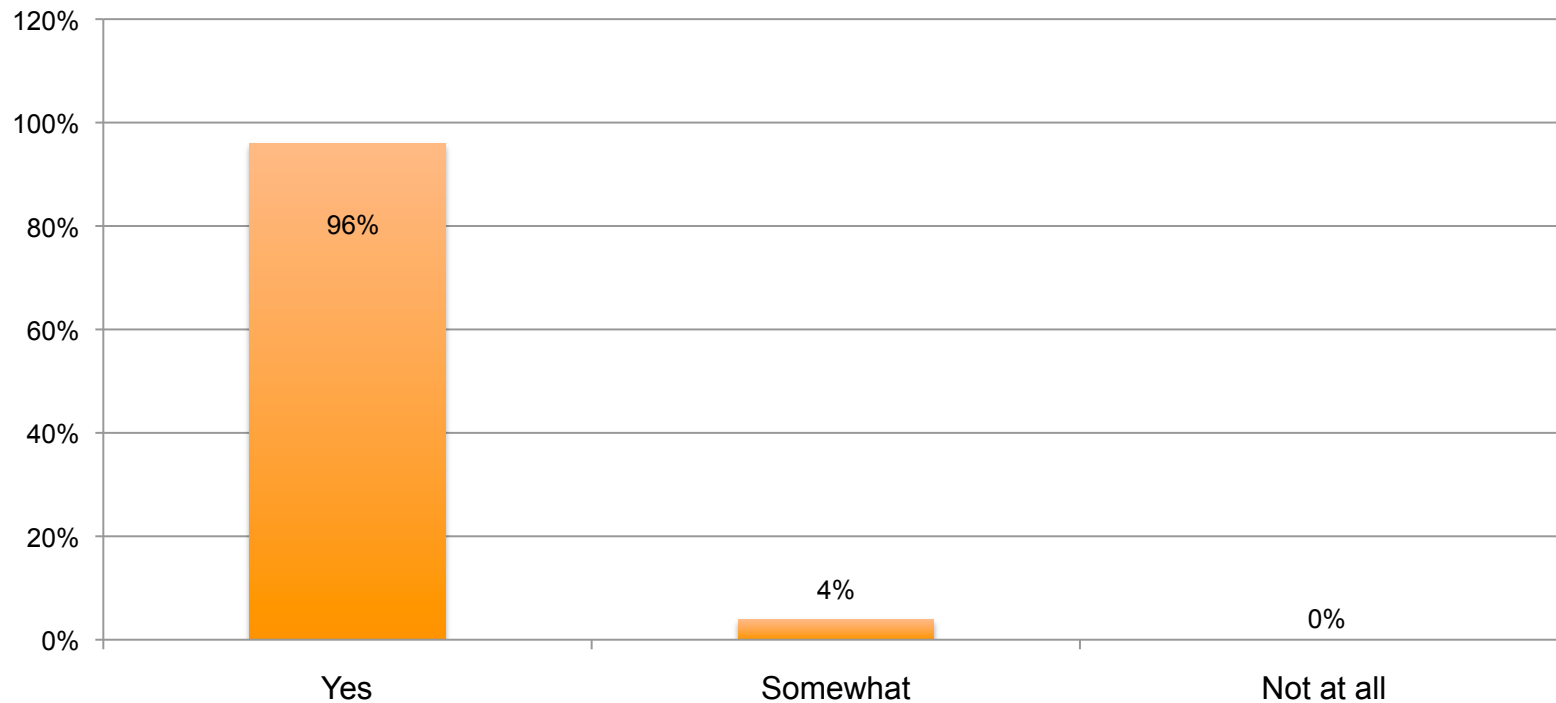
- 100% rated the activity as very good to excellent
- 98% indicated the activity improved their knowledge
- 98% stated that they learned new strategies for patient care
- 85% said they would implement new strategies that they learned in their practice
- 100% said the program was fair-balanced and unbiased

Were our learners satisfied? **Yes!**

# Level 2: Satisfaction

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

Explain the pathogenesis and diagnosis of COPD; Discuss findings of recent trials and evidence-based treatment options for COPD; Discuss new GOLD guidelines; Explore new and evolving treatments for COPD:



Did learners indicate they achieved the learning objectives?

**Yes! 100% 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

### 1. Level 3-5: Knowledge, Competence, and Performance

Case-based vignettes and pre- and post-test knowledge questions were asked with each session in the CME activity. Identical questions were also asked to a sample of attendees 4 weeks after the program to assess retention of knowledge. 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>

### 2. 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.

### 3. Level 5: Self-Reported Change in Practice Behavior

Four weeks after CME activity, practitioners are asked if they changed practice behavior.

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.

# Outcome Study Methodology (Cont.)

## 4. Readiness to Change Behavior (Prochaska and DeClemente Model)

CME activities can motivate providers to move through different stages of change which can ultimately lead them to take action and modify their practice behavior in accordance with the objectives of the education. Movement through these stages of change is an important dependent variable to consider in evaluating the impact of CME. Participants were asked to evaluate their stage of change with respect to specific topics being presented.

- **Pre-contemplation stage:** I do not manage (XXX illness), nor do I plan to this year.
- **Contemplation stage:** I did not manage (XXX illness) before this course, but as a result of attending this course I'm thinking of managing it now.
- **Pre-contemplation/confirmation stage:** I do manage patients with (XXX illness) and this course confirmed that I do **not** need to change my treatment methods.
- **Preparation for action stage:** I do manage patients with (XXX illness) and this course helped me change my treatment methods.

# COPD: New Developments, New Treatment Horizons

## **Faculty**

Charlie Strange, MD  
Professor of Pulmonary and Critical Care Medicine  
Medical University of South Carolina  
Charleston, SC

## **Learning Objectives**

- Explain the pathogenesis and diagnosis of COPD
- Discuss findings of recent trials and evidence-based treatment options for COPD
- Discuss new GOLD guidelines; Explore new and evolving treatments for COPD

# Key Findings

## COPD: New Developments, New Treatment Horizons

Knowledge/Competence	Learners demonstrated improvements in their answers from pre to post-testing on two of the three case-based questions regarding COPD.
Confidence	Whereas the majority of learners rated themselves as having moderate confidence in their understanding of treating COPD before the education most of the learners showed very high gains in confidence after the program.
Intent to Perform	As a result of this program, 6% of learners who did not manage COPD before are considering doing so, while 58% indicated that they will change their treatment methods.
Change of Practice Behavior	100% of learners who responded to our four week survey indicated that they had changed their practice behavior to implement the learning objectives of this program within four weeks after they attended the activity.

N=57

# Case Vignette Knowledge and Competence Assessment Questions

(Presented before and after lecture. Boxed answer is correct.)

JW is a 60 year old female who had asthma throughout her childhood years. She ran track in college but noted that after her first pregnancy she had a slowly progressive cough that never completely left her. She smoked for only a few years after college. Her cough gets worse with colds and airway irritants when she has heard wheezing. It gets a little better with an albuterol inhaler before exercise that she rarely does anymore.

Which is a true statement about JW?

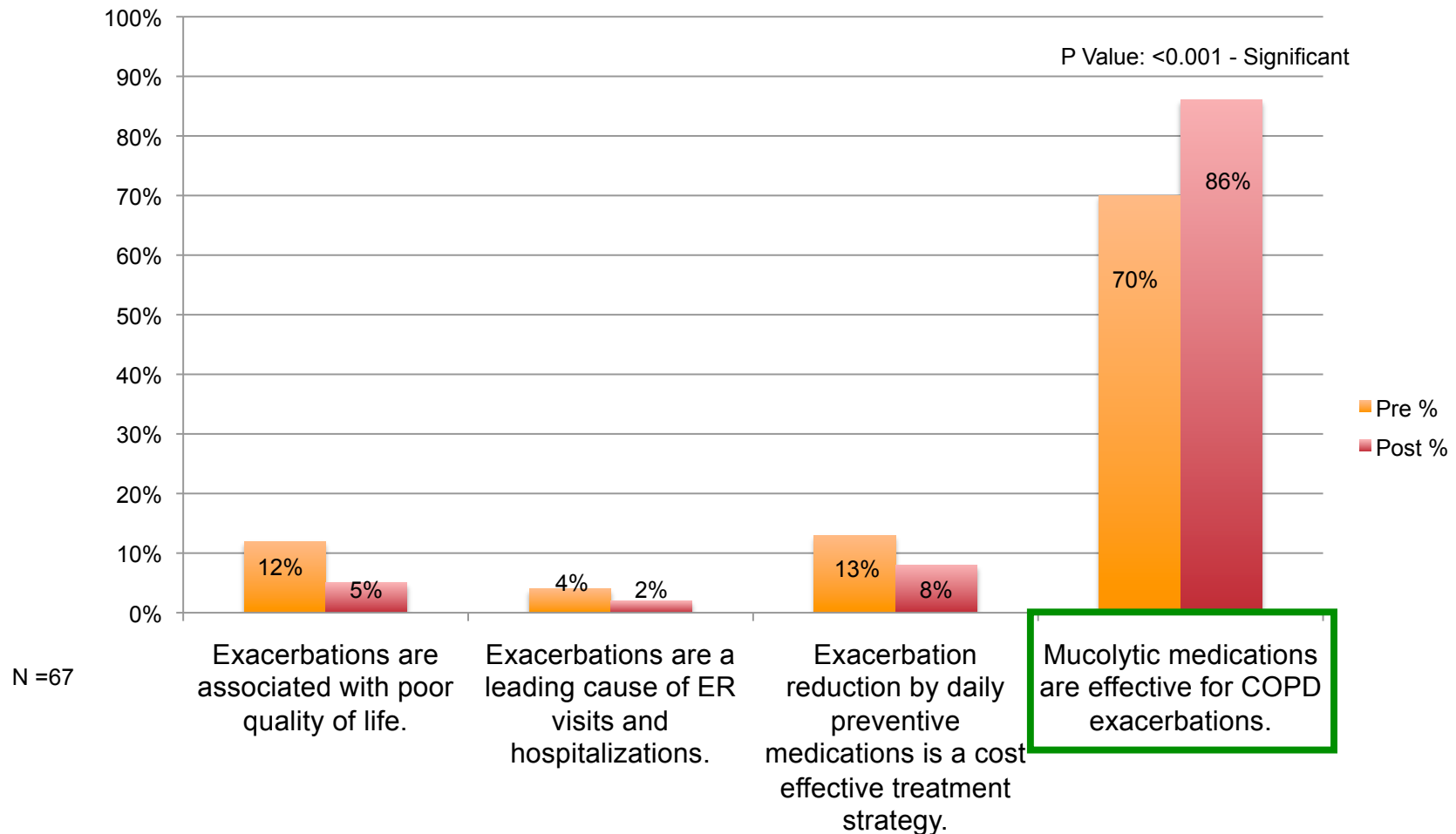


Red highlight indicates no significant difference between pre and post testing.

# Case Vignette Knowledge and Competence Assessment Questions

(Presented before and after lecture. Boxed answer is correct.)

ATS/ERS recommend Alpha-1 Testing In Chronic Obstructive Pulmonary Disease (COPD)

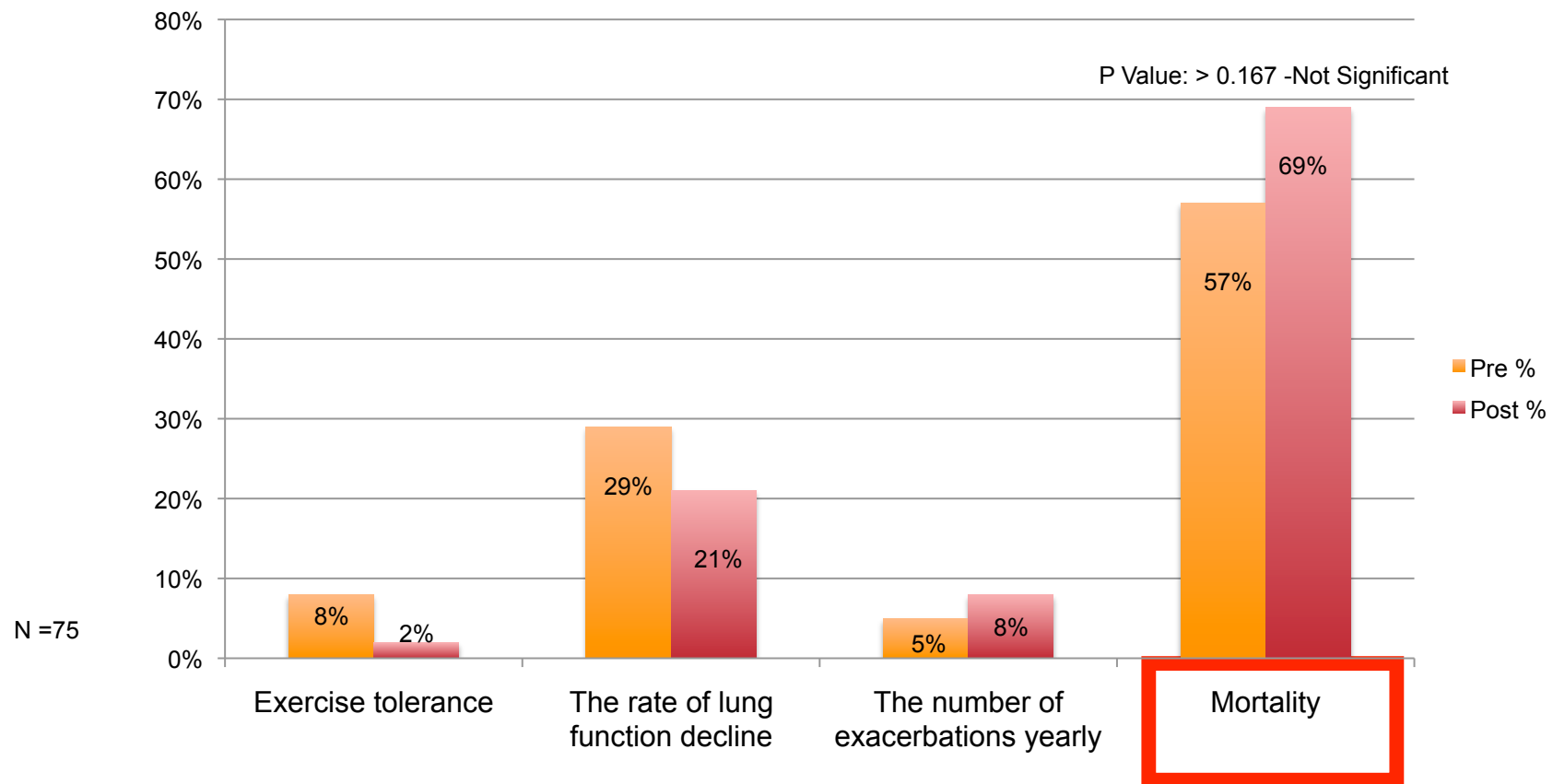


Green highlight indicates significant difference between pre and post testing.

# Case Vignette Knowledge and Competence Assessment Questions

(Presented before and after lecture. Boxed answer is correct.)

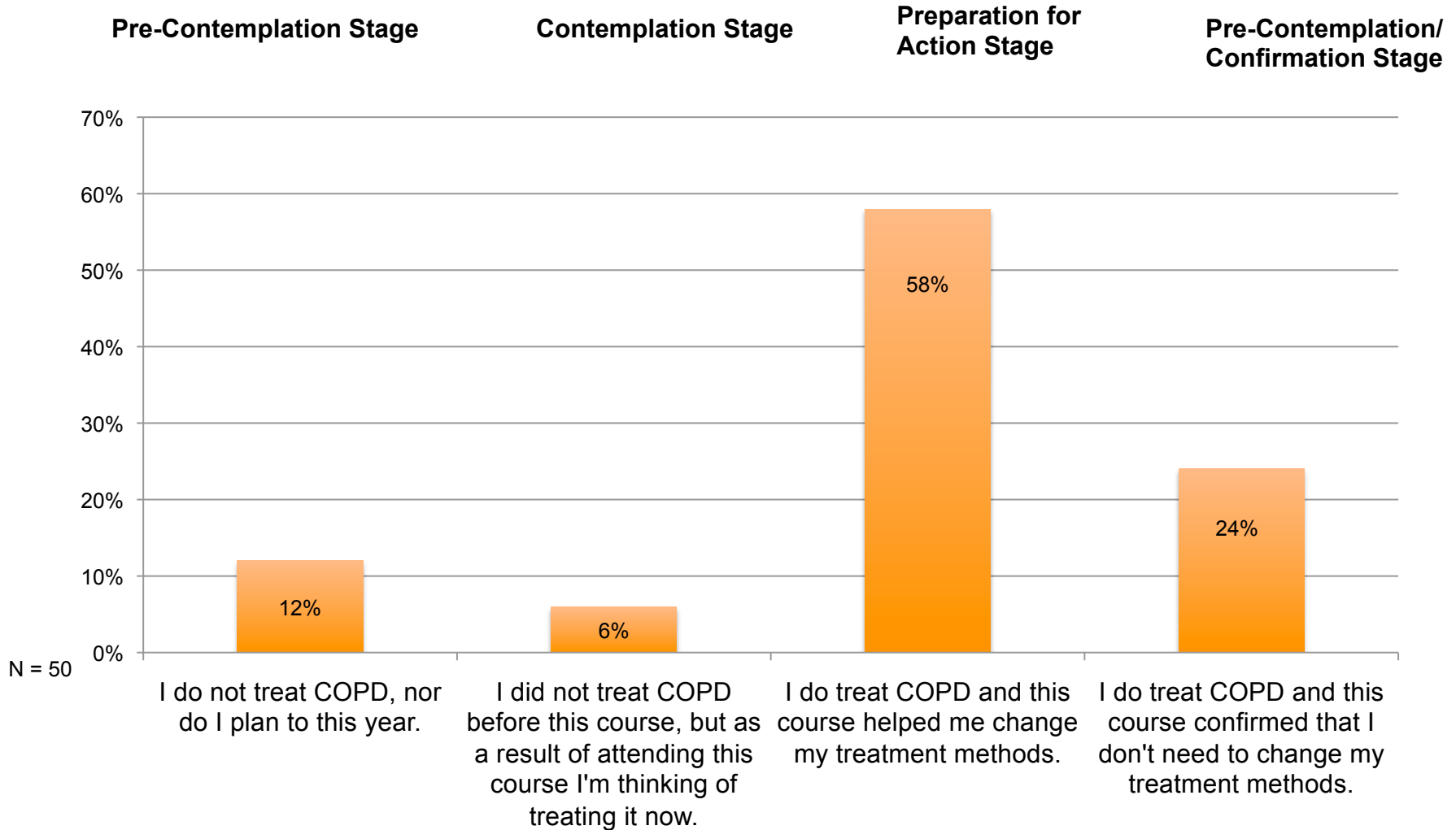
JJ is a 65 yo. and has smoked for 40 yrs -FVC 70% -FEV1 40% no BR -Ratio 0.57 No point in testing him since as a smoker, even if he is positive, he would not get replacement therapy



Red highlight indicates no significant difference between pre and post testing.

## Change in Practice Behavior Question Presented after lecture.

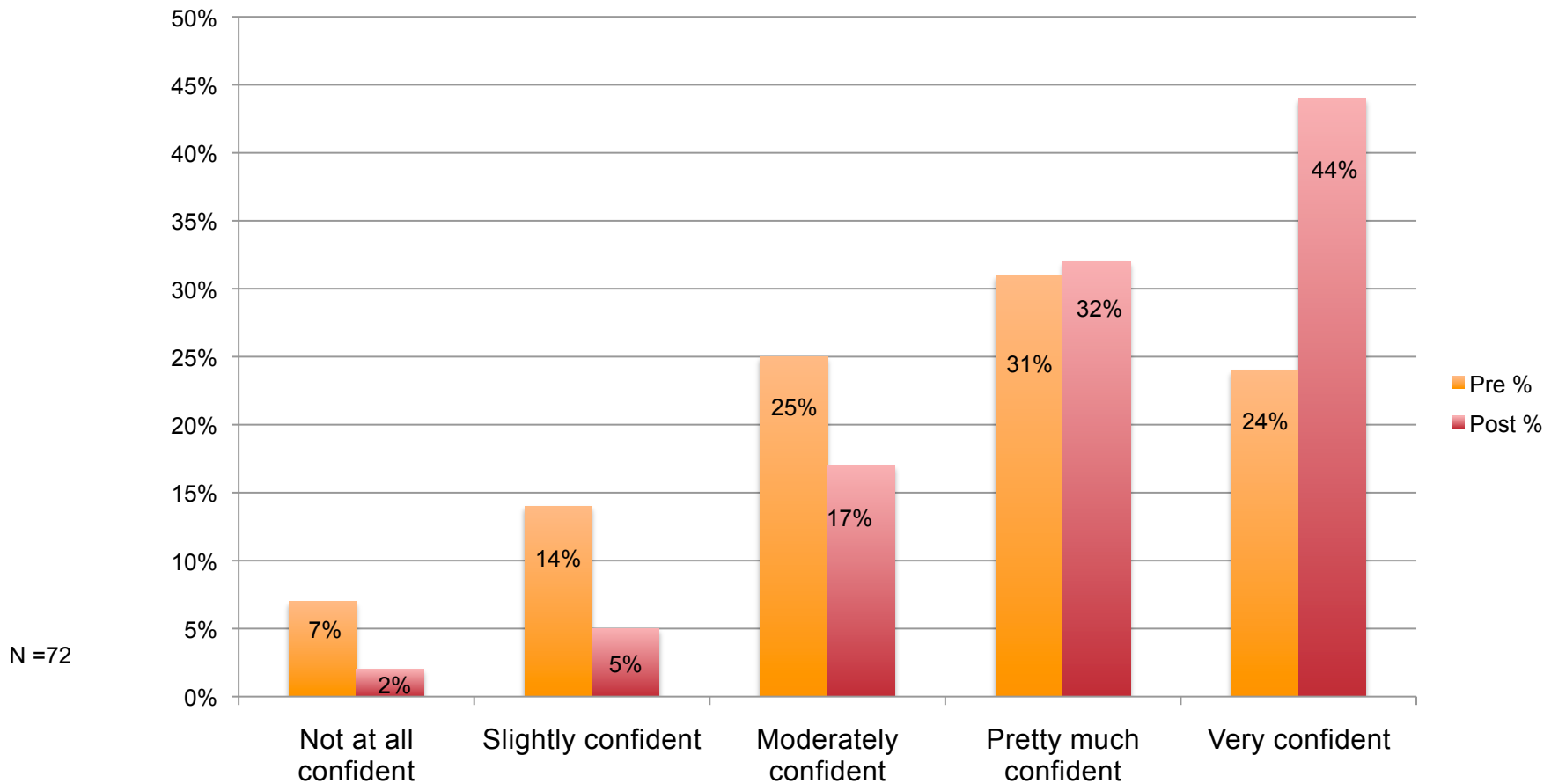
Which of the statements below describes your approach to anticoagulation of patients with COPD?



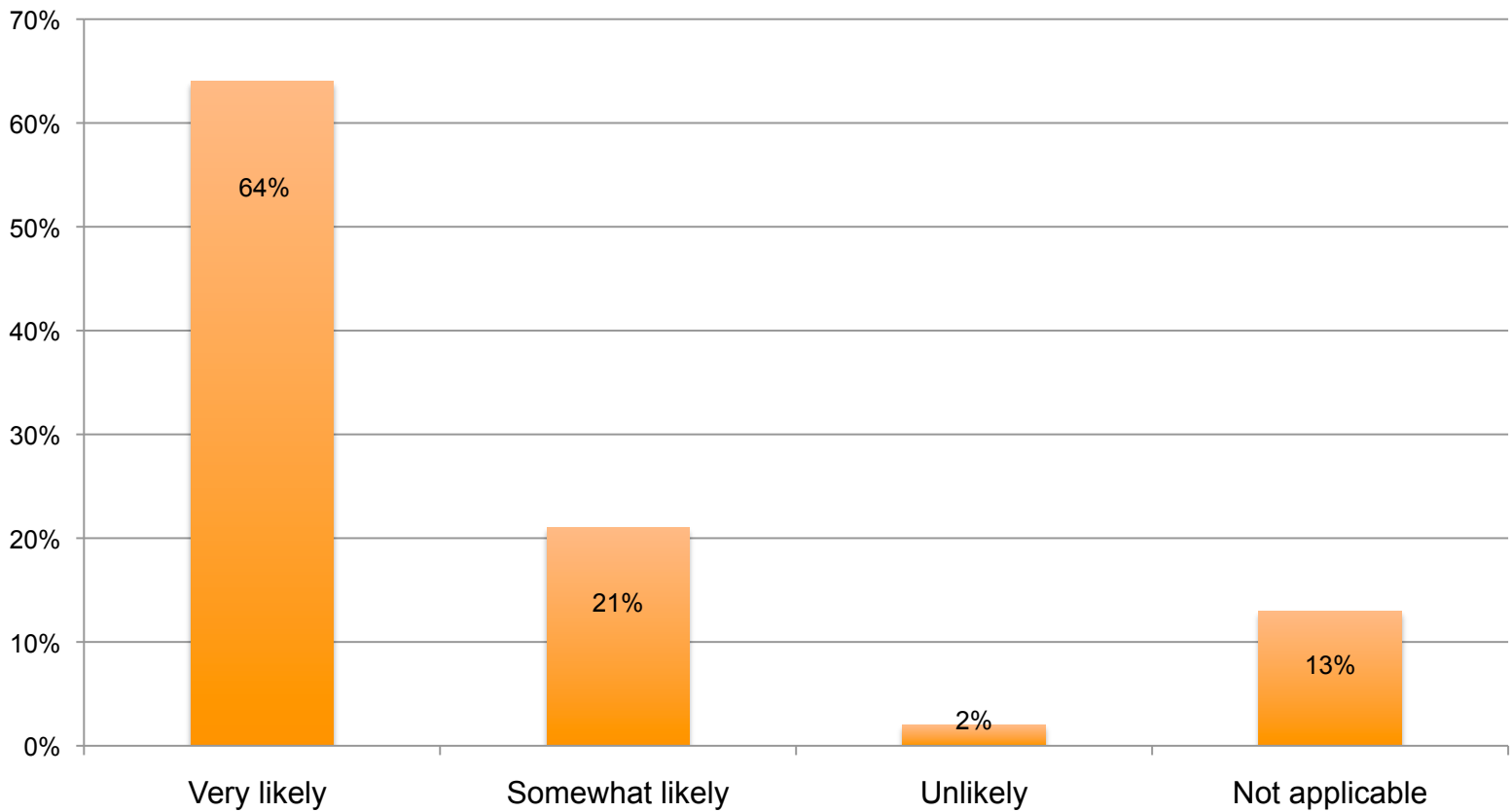


## Changes in Confidence from Pre to Post-Testing COPD: New Developments, New Treatment Horizons

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



N = 165

# Discussion and Implications

## COPD: New Developments, New Treatment Horizons

Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity, mortality, and disability. COPD is underdiagnosed and its management is suboptimal. The need for continued education in the area of COPD was stated in a comprehensive needs assessment and gap analysis completed prior to the activity. Planners sought to help primary care providers and pulmonologists attending this activity better explain the pathogenesis and diagnosis of COPD, discuss findings of recent trials and evidence-based treatment options for COPD, discuss new GOLD guidelines, and explore new and evolving treatments for COPD.

**Knowledge/Competence:** Attendee knowledge was assessed at two points for this activity: prior to the activity and immediately following the activity using the case vignettes and knowledge questions listed earlier. The results indicated improvement in knowledge as measured by positive changes in pre to post-test scores on two of the three questions asked.

**Readiness to Change:** Fifty-eight percent of attendees noted that they currently treat patients with COPD and that this activity provided information that would lead to further changes in their care of patients with COPD. Only six percent indicated that they did not treat patients with COPD prior to this activity, but would consider doing so after having been exposed to the information taught.

**Confidence:** Participants indicated a strong overall increase in self-reported confidence levels in treating patients with COPD. Attendees who reported that they felt very confident rose from 24% to 44% by the end of the program.

**Intention for Change in Practice Behavior:** Sixty-four percent of participants reported that they were very likely to utilize information learned from this activity in their practice.

**Summary:** This activity was successful in the goal of improving understanding of COPD to attendees and had a positive impact in terms of self-reported likelihood of practice change. Based on the data collected at this educational activity, there appears to be a need for further education on this topic.