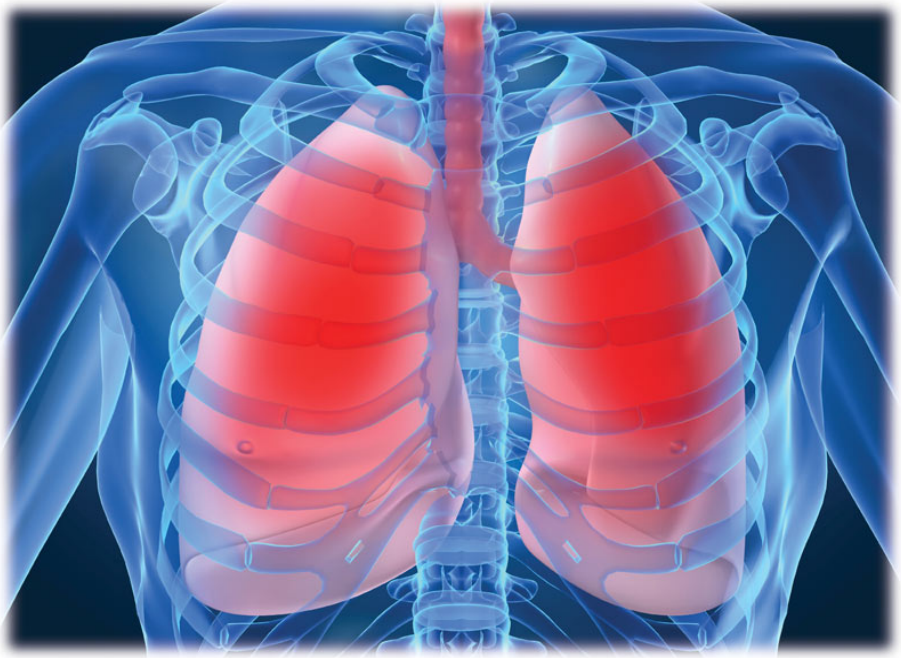
NATIONAL ASSOCIATION FOR CONTINUING EDUCATION



Idiopathic Pulmonary Fibrosis: A New Hope

Final Outcome Report

Challenges in Pulmonary and Critical Care: 2014

Presented at:
Cleveland Clinic Florida
Weston, Florida
December 6, 2014

Report Date: January 14, 2015

Course Director

Franck Rahaghi, MD, **MHS**, **FCCP**
Director, Pulmonary Hypertension Clinic
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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*™. Physicians should only claim the credit commensurate with the extent of their participation in the activity.

National Association for Continuing Education is approved as a provider of nurse practitioner continuing education by the American Association of Nurse Practitioners. AANP Provider Number 121222. This program has been approved for 7.0 contact hours of continuing education (which includes 1.25 pharmacology hours).

Commercial Support

Challenges in Pulmonary and Critical Care: 2014 CME activity was supported through educational grants from the following companies:

Actelion
Boehringer Ingelheim Pharmaceuticals, Inc.
CSL Behring
Grifols
Intermune
VITAS Innovative Hospice Care
United Therapeutics

Agenda

7:00-8:00	Continental Breakfast and Registration
8:00-8:10	Welcome Remarks Franck Rahaghi, MD, MHS, FCCP
8:10-9:10	Pulmonary Hypertension: New Horizons and New Perspectives Robert Schilz, DO, PhD
9:10-10:10	Sleep Apnea: Changes in Practice, Hope for better outcomes Laurence Smolley, MD
10:10- 10.25	Break/Exhibits
10:25-11:25	COPD: New Developments, New Treatment Horizons Anas Hadeh, MD, FCCP
11:25-12:25	Alpha-1 Antitrypsin Deficiency: Evidence for Efficacy Robert A. Sandhaus, MD, PhD
12:25- 1:10	Lunch Break/Exhibits
1:10-2:10	Transition to End of Life Care: The How and Why Nydia Martinez Galvis, MD
2:10-3:10	Idiopathic Pulmonary Fibrosis: A New Hope Franck Rahaghi, MD, MHS, FCCP
3:10-3:25	Break/Exhibits
3:25-4:25	Update in Interventional Bronchoscopy 2014 Eduardo Oliveira, MD, MBA, FCCP
4:25-4:30	Concluding Remarks Franck Rahaghi, MD, MHS, FCCP

Levels of Evaluation

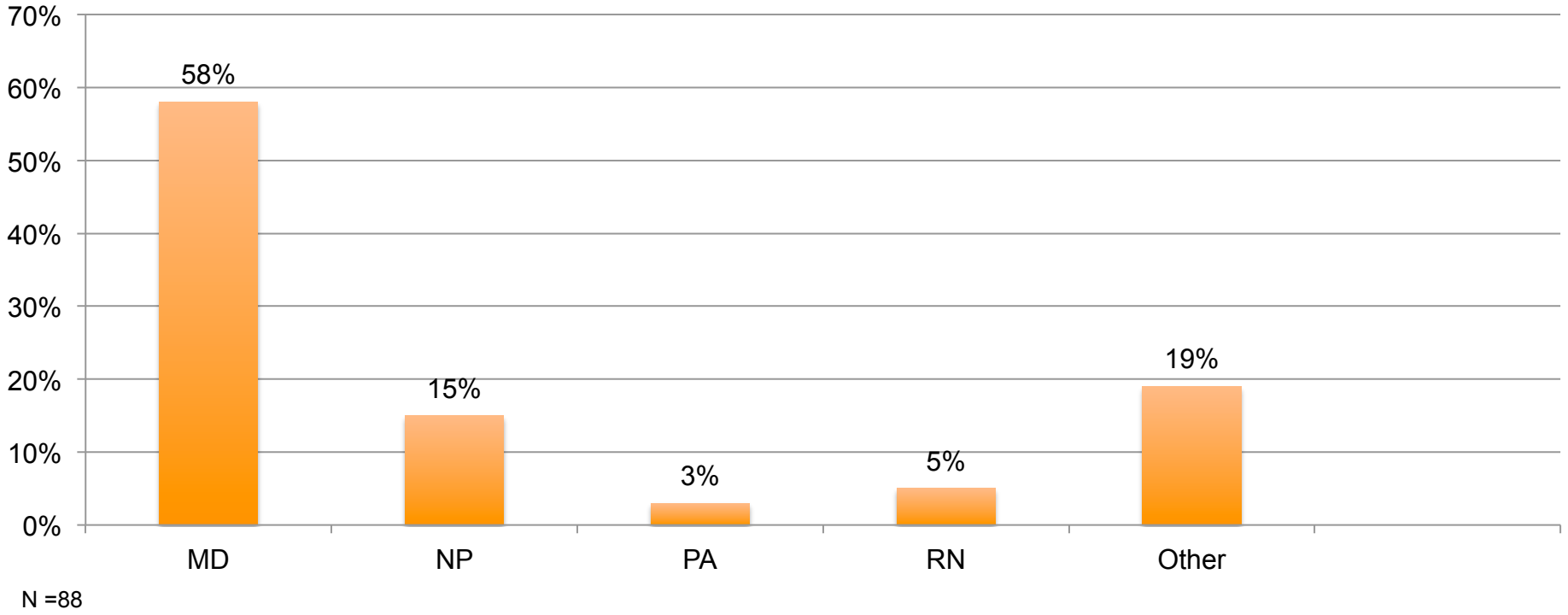
Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on the following model:

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

- 101 attendees
- 58% Physicians; 15% NPs; 3% PAs; 5% RNs; 19% Other
- Over 62% in community-based practice
- 42% PCPs, 35% Pulmonology; 2% Rheumatology; 3% Cardiology; 18% Other or did not respond



N =88

Did we reach the right audience? Yes!

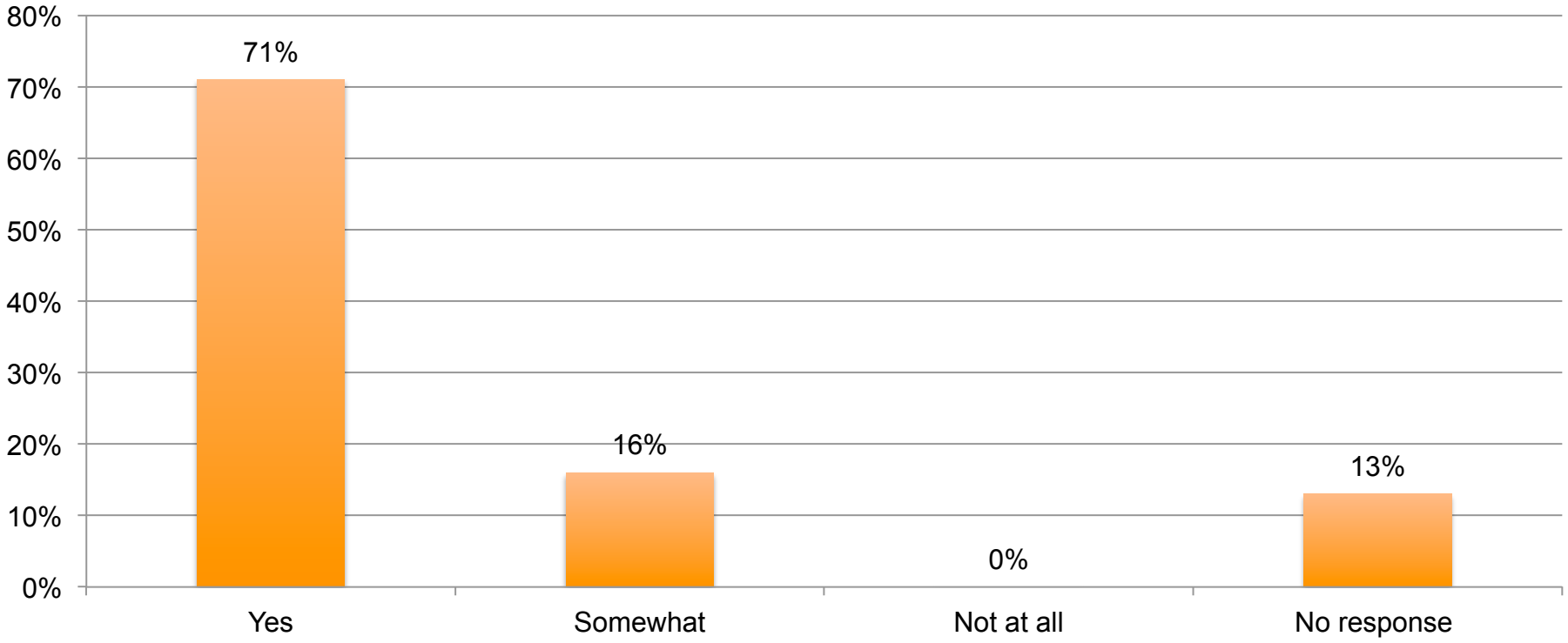
Level 2: Satisfaction

- 100% rated the activity as very good to excellent
- 100% indicated the activity improved their knowledge
- 100% stated that they learned new strategies for patient care
- 82% 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 – Discuss new trials in IPF and future treatments; Describe the accurate diagnosis of IPF and distinguishing it from other Interstitial Lung Diseases; Define prognostic features for individual IPF patients; Recognize the role of available non-pharmacological therapies including pulmonary rehabilitation, oxygen supplementation and lung transplantation in IPF management



Did learners indicate they achieved the learning objectives?

Yes! 87% 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. [1]

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 Med14(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.

Prochaska, et al (1988). *Journal of Consulting and Clinical Psyhcology*., 56, 520-528.

Idiopathic Pulmonary Fibrosis: A New Hope

Faculty

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Learning Objectives

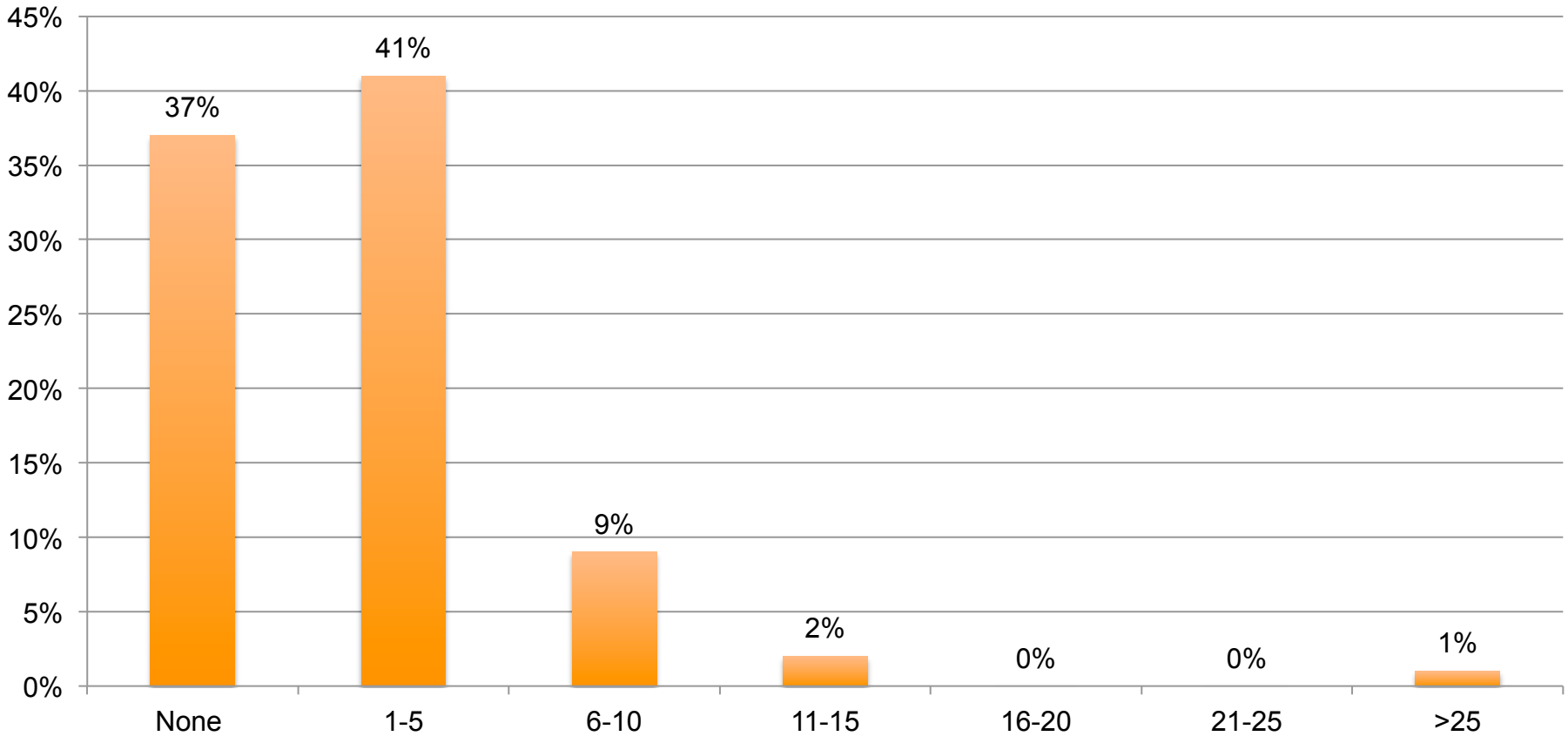
- Discuss new trials in IPF and future treatments
- Describe the accurate diagnosis of IPF and distinguishing it from other Interstitial Lung Diseases
- Define prognostic features for individual IPF patients
- Recognize the role of available non-pharmacological therapies including pulmonary rehabilitation, oxygen supplementation and lung transplantation in IPF management

Key Findings

Idiopathic Pulmonary Fibrosis: A New Hope

Knowledge/Competence	Learners demonstrated significant improvement in their answers from pre to post-testing on one of the four case-based questions regarding Idiopathic Pulmonary Fibrosis.
Confidence	Whereas the majority of learners rated themselves as having very low to slight confidence in their understanding of treating regarding Idiopathic Pulmonary Fibrosis before the education most of the learners showed gains in confidence after the program.
Intent to Perform	As a result of this program, 12% of learners who did not manage regarding Idiopathic Pulmonary Fibrosis before are considering doing so, while 50% indicated that they will change their treatment methods.
Change of Practice Behavior N=27	93% 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.

Indicate the number of patients you see each week in a clinical setting regarding each therapeutic area listed: IPF:

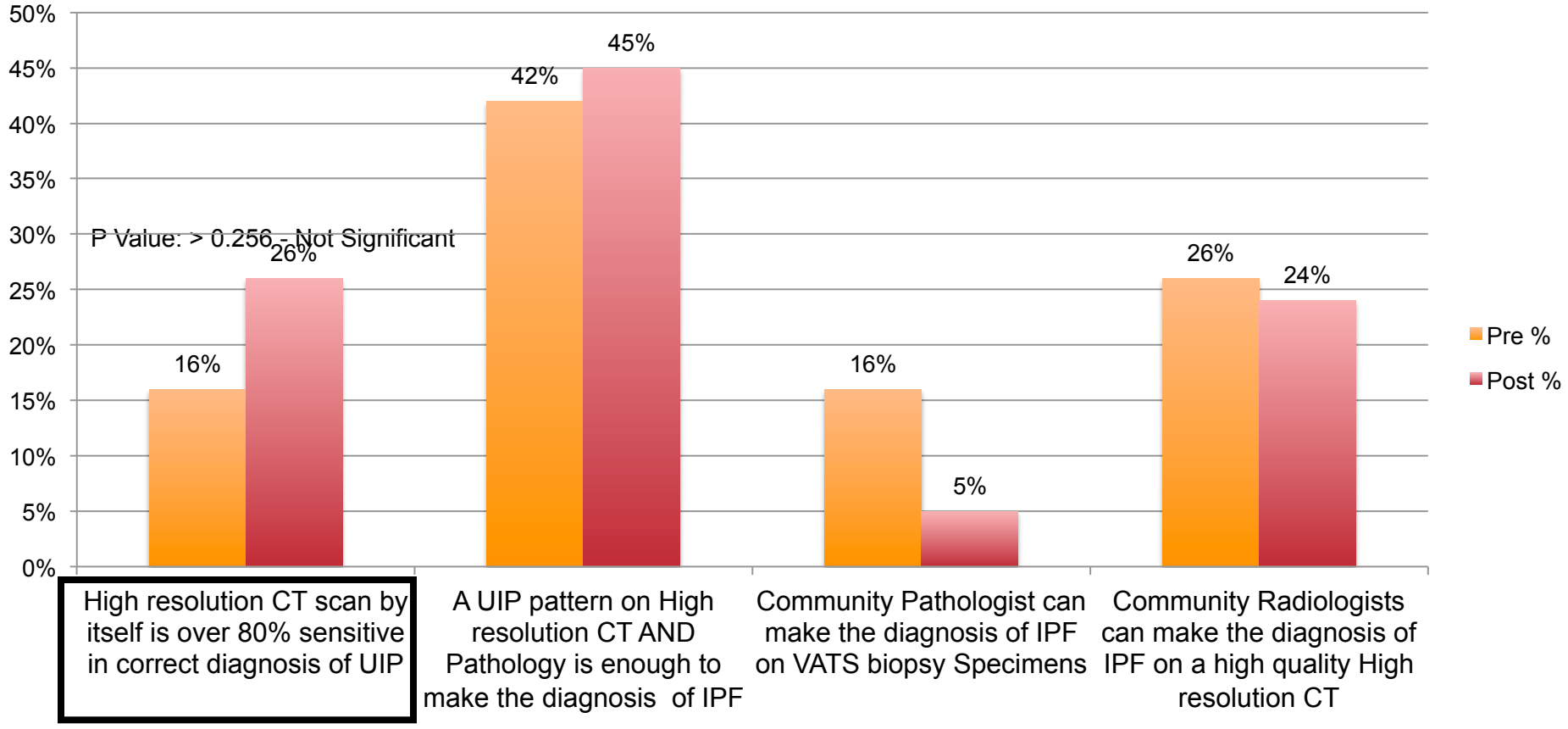


Sample Size: N = approximately 101

Case Vignette Knowledge and Competence Assessment Questions

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

Which statement is Correct?



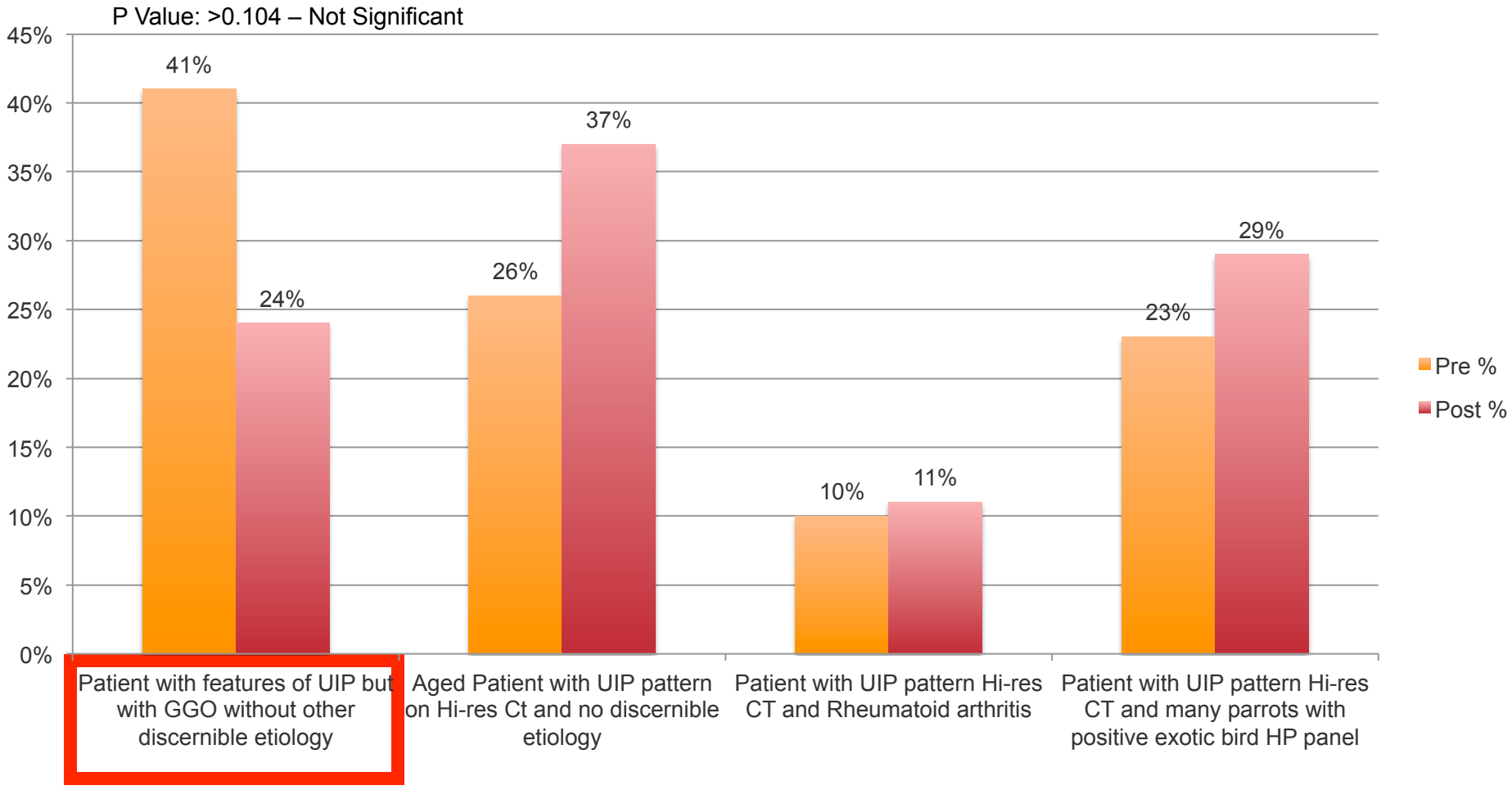
Pre N =38
Post N = 42

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.)

VATS Biopsy in indicated in the following case?



Pre N =39
Post N = 38

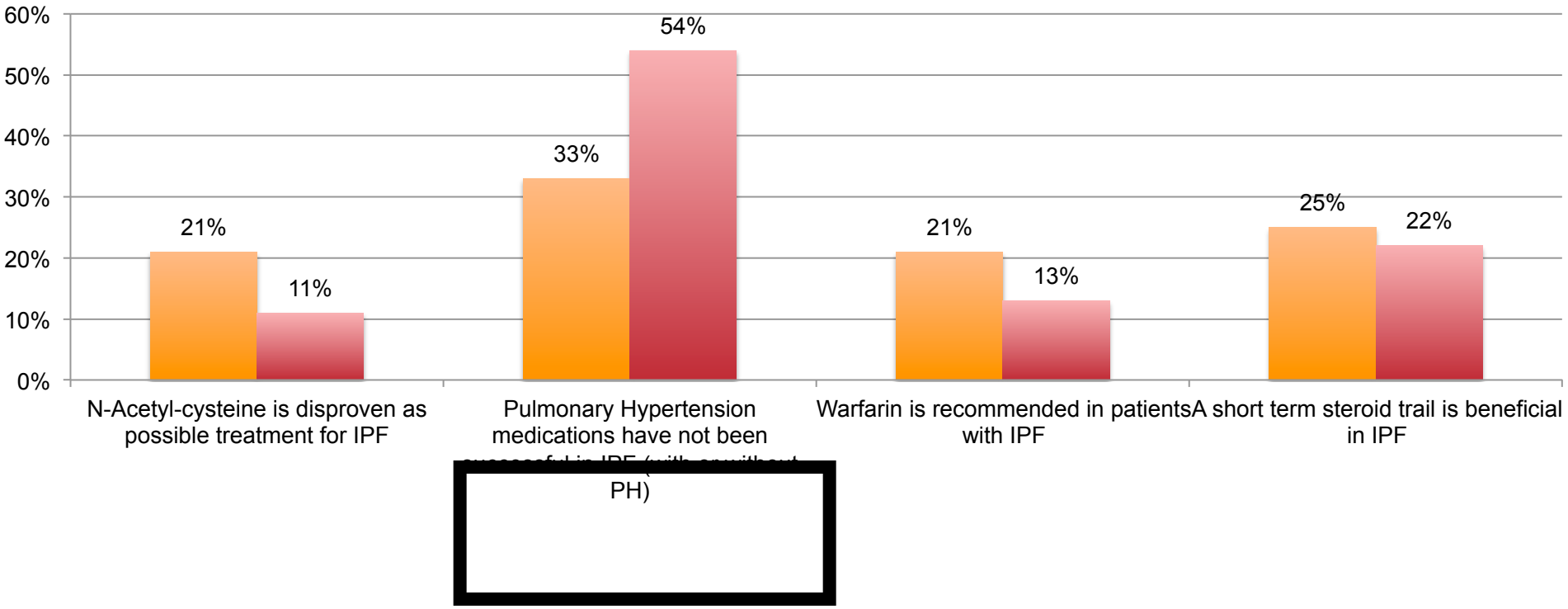
Red highlight indicates no significant difference between pre and post testing

Case Vignette Knowledge and Competence Assessment Questions

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

Which statement is correct regarding treatment?

P Value: <0.100 – Not Significant



Pre N =42
Post N = 41

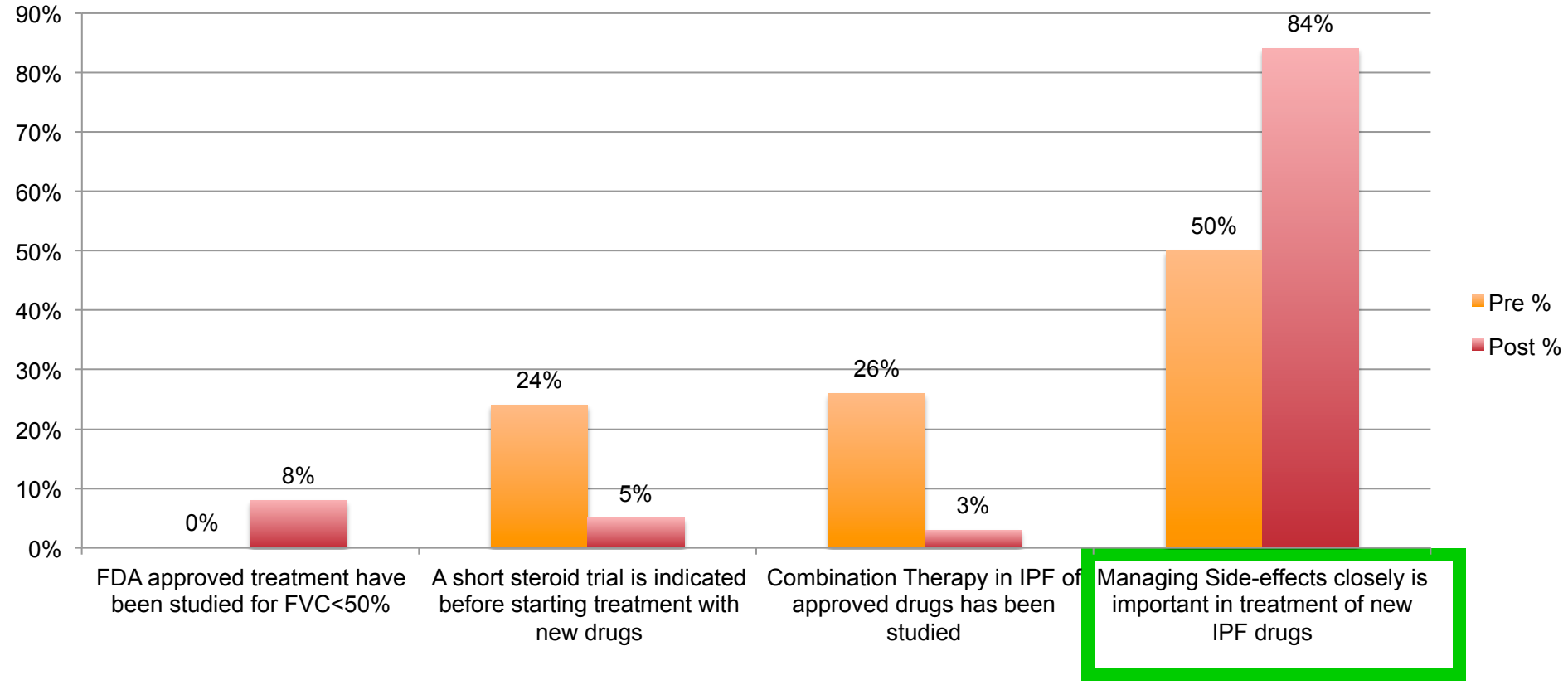
Red highlight indicates no significant difference between pre and post testing

Case Vignette Knowledge and Competence Assessment Questions

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

Which Statement is Correct Regarding IPF Treatment Modalities?

P Value: >0.001 – Significant



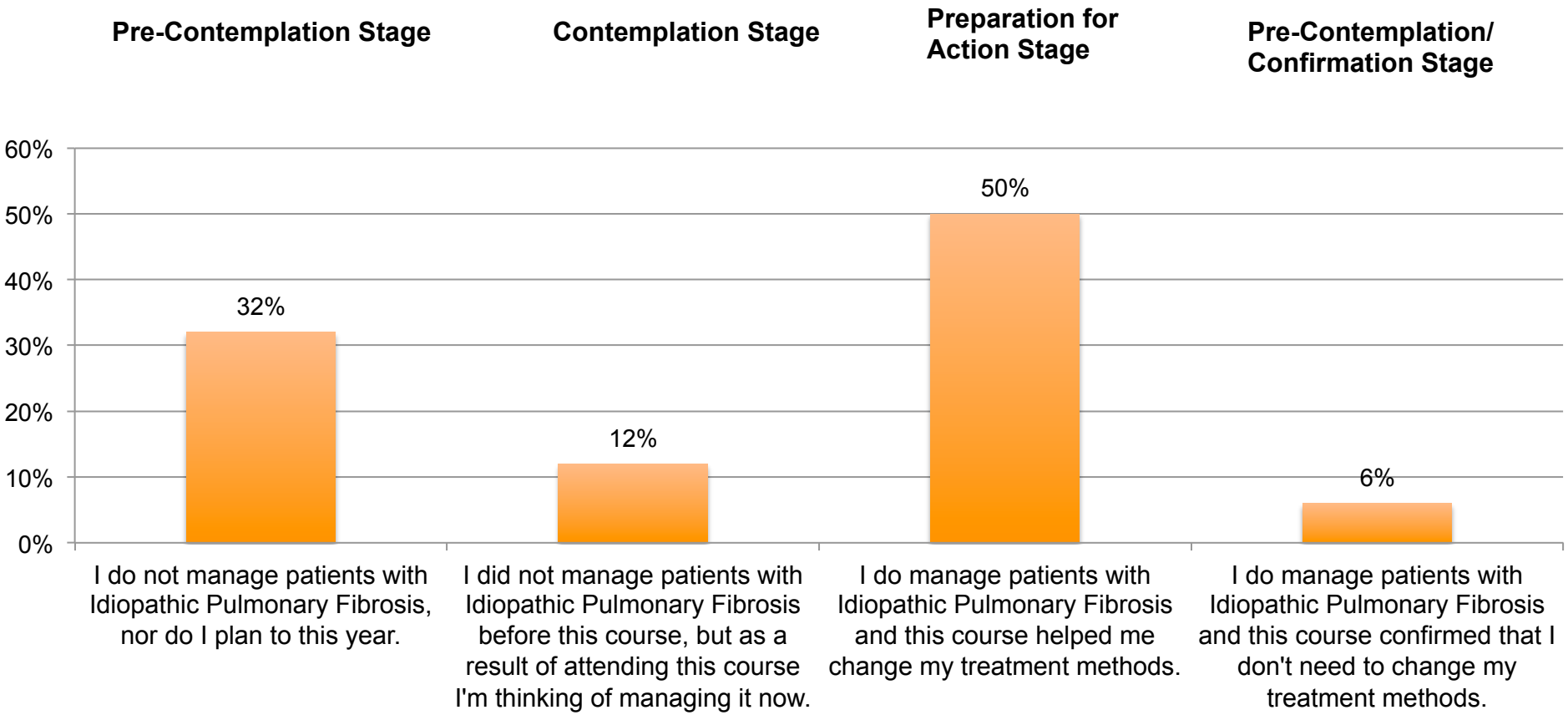
Pre N =38
Post N = 38

Green highlight indicates significant difference between pre and post testing.

Change in Practice Behavior Question

Presented after lecture.

Which of the statements below describes your approach to diagnosing and treating patients with Idiopathic Pulmonary Fibrosis?

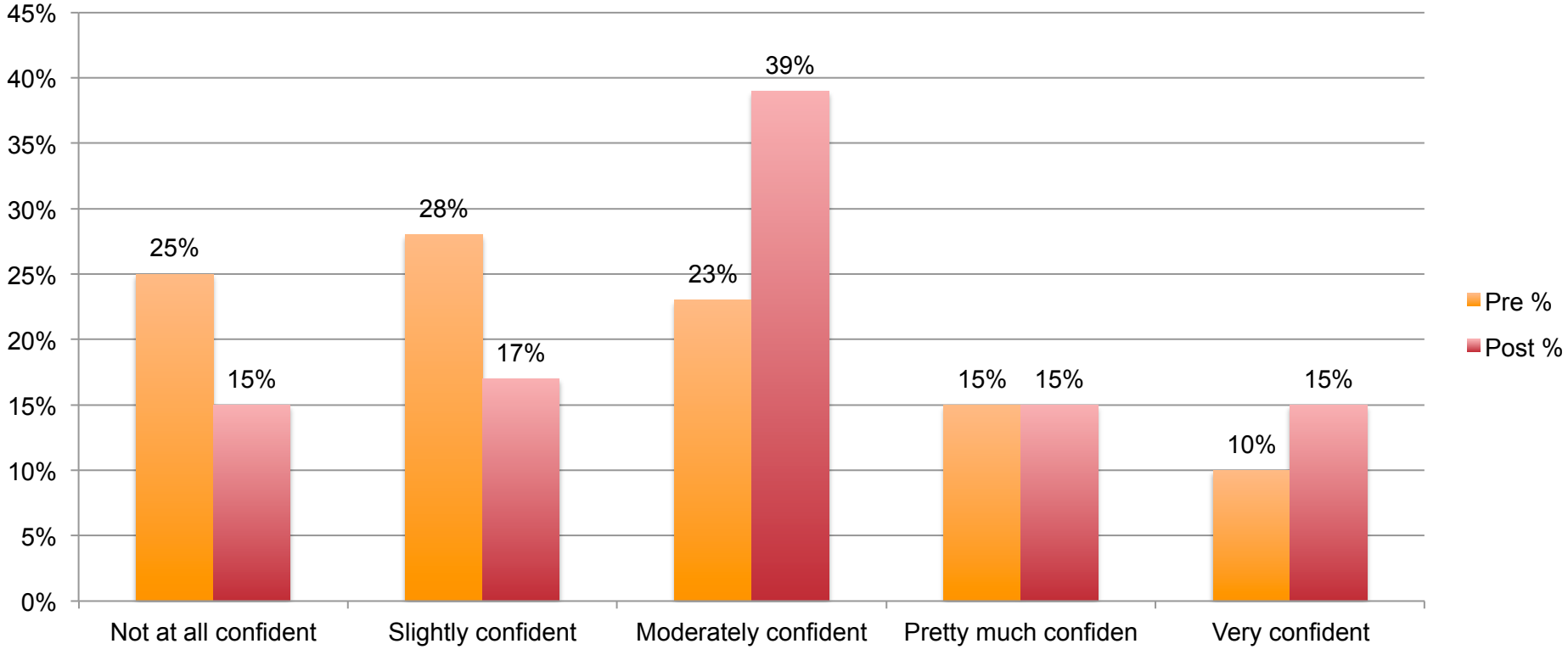


N = 34

Changes in Confidence from Pre to Post-Testing

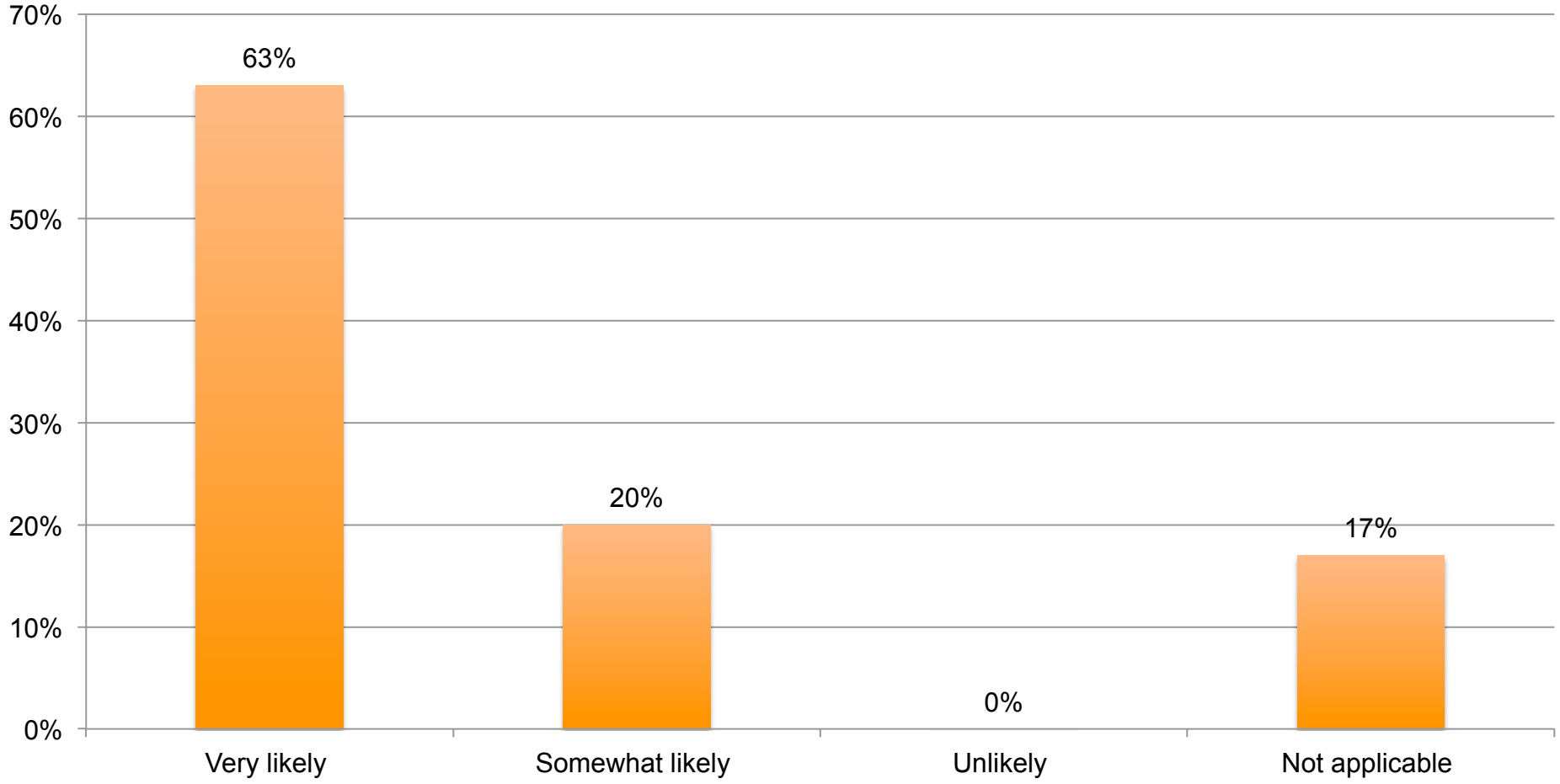
Idiopathic Pulmonary Fibrosis: A New Hope

On a scale of 1 to 5: Please rate how confident you would be treating a patient with Idiopathic Pulmonary Fibrosis:



Pre N =40
Post N = 41

Intention to Change Practice Behavior and Implement Learning



N =89

Discussion and Implications

Idiopathic Pulmonary Fibrosis: A New Hope

Idiopathic pulmonary fibrosis (IPF) is a chronic, progressive fibrosing interstitial pneumonia of unknown cause, occurring primarily in older adults, limited to the lungs, and associated with the histopathologic and/or radiologic pattern of usual interstitial pneumonia. Early diagnosis of IPF is desirable because it allows for new treatments, avoidance of inappropriate drugs, and access to clinical trials. However, diagnosis is a challenge, and there is often considerable delay in making a diagnosis. The objective of this activity was to enable learners to describe procedures used to diagnosis IPF, identify prognostic features of the condition, apply appropriate pharmacological and supportive therapies,.

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 above. The results indicated improvement in knowledge in three out of four questions (one with statistical significance)

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

Confidence: Forty Eight percent of learners had above a moderate level of confidence prior to the activity. After the activity confidence of attendees improved to 69% to moderate and above (somewhat and very confident).

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

Summary: Eighty three percent of attendees suggested they were likely or very likely to change their practice patterns as a result of this event. Based on the data collected at this educational activity, there appears to be a need for further education on this topic.