

# Challenges in Pulmonary and Critical Care



**NACE**

**LIVE CME CONFERENCE**



## **Interstitial Lung Disease: Incorporating Evolving Data into Practice**

Final Live Outcome Report

Prepared For Genentech Grant ID: G-78569

February 13, 2020

**NACE**

# Executive Summary

- ❖ This activity focused on helping participants improve their ability to diagnosis and manage Interstitial Lung Disease by incorporating evolving clinical data into practice.
- ❖ 917 attendees in multiple professional specialties were reached in this program.
- ❖ Improvement across all learning domains was noted ranging from 12% to 88%.
- ❖ Overall, the program improved the ability of learners to recognize how to diagnosis and manage Interstitial Lung Disease.



## Persistent Educational Gaps

- ❖ Though improvements were observed, learners demonstrated persistent gaps in the several areas including:
  - ❖ Signs and symptoms that should trigger an evaluation for ILD
  - ❖ Diagnostic strategies to evaluate patients suspected of having ILD
  - ❖ Impact of nintedanib and pirfenidone as demonstrated in clinical trials on outcomes for patients with ILD
  - ❖ Appropriate treatment strategies for patients with ILD

The post-test and 4 week follow up scores regarding the diagnosis and management of patients with ILD, signifies a clear gap in knowledge and an unmet need among clinicians. It continues to be an important area for future educational programs.

# Learning Objectives

- 1 Incorporate a diagnostic approach to IPF and other progressive fibrosing-interstitial lung diseases that incorporates current guidelines and evolving modalities.
- 2 Recognize the emerging data, from recent clinical trials, on longer term outcomes for patients with ILD treated with nintedanib/pirfenidone.
- 3 Integrate available data into appropriate initial and long-term treatment strategies for patients with IPF and PF-ILD.

## Course Director

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# Challenges in Pulmonary and Critical Care



## LIVE CME CONFERENCE

The Challenges in Pulmonary and Critical Care: 2019 CME activity was supported through educational grants or donations from the following companies:

- ❖ Novartis Pharmaceuticals Corporation
- ❖ Actelion Pharmaceuticals US, Inc.
- ❖ Shire
- ❖ CSL Behring, LLC.
- ❖ Grifols
- ❖ Genentech
- ❖ Mallinckrodt Pharmaceuticals, LLC

# Levels of Evaluation

Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on Moore's model. This outcome study reaches Level 5.

**Level 1: Participation**

**Level 2: Satisfaction**

**Level 3: Declarative and Procedural Knowledge**

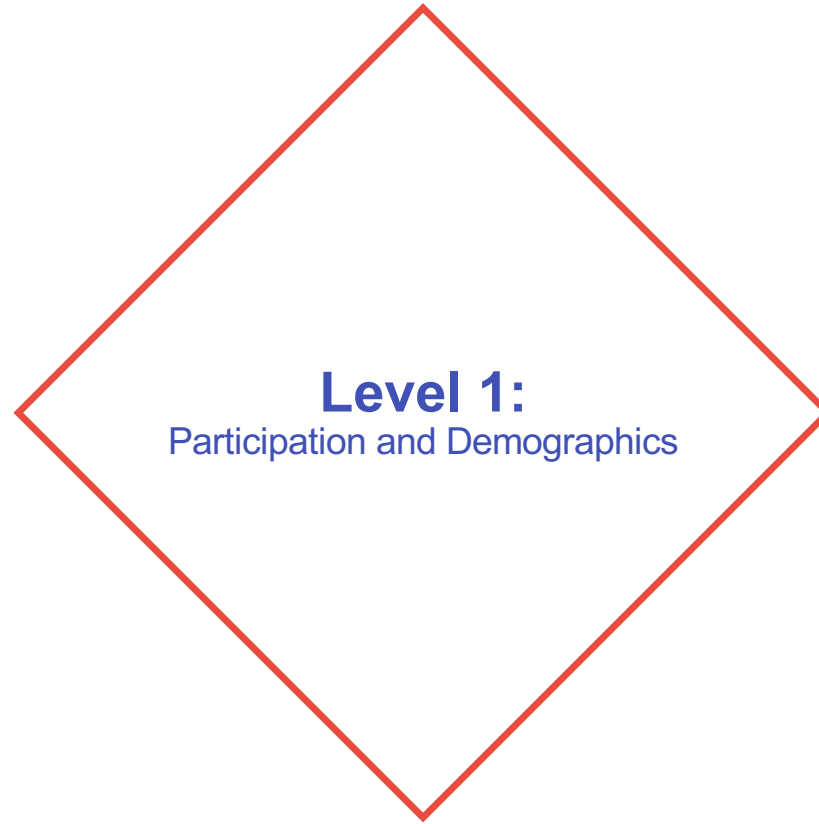
**Level 4: Competence**

**Level 5: Performance**

**Level 6: Patient Health**

**Level 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



November 23, 2019 Coral Springs, FL



**90%**  
Provide direct  
patient care



**917** total attendees



On site: **97** attendees

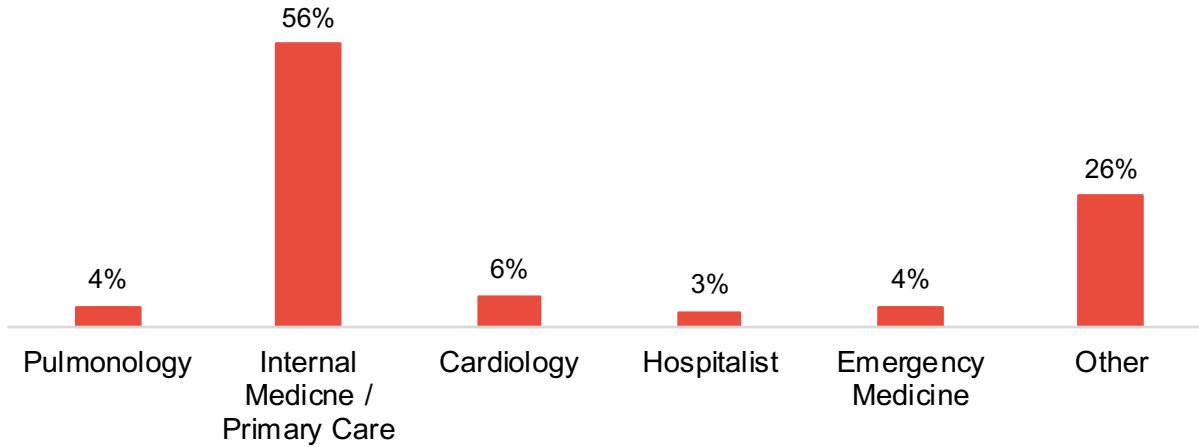


National online simulcast : **820** attendees

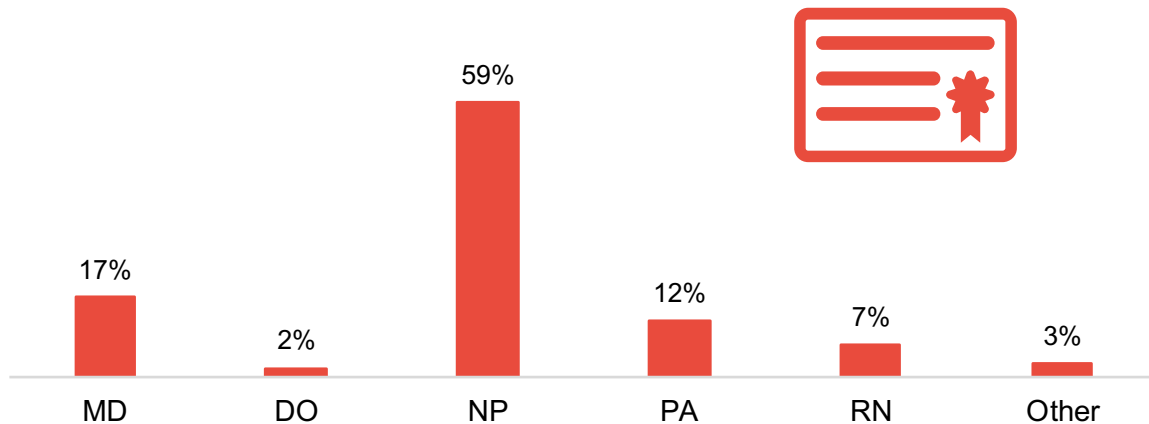


# Level 1: Demographics and Patient Reach

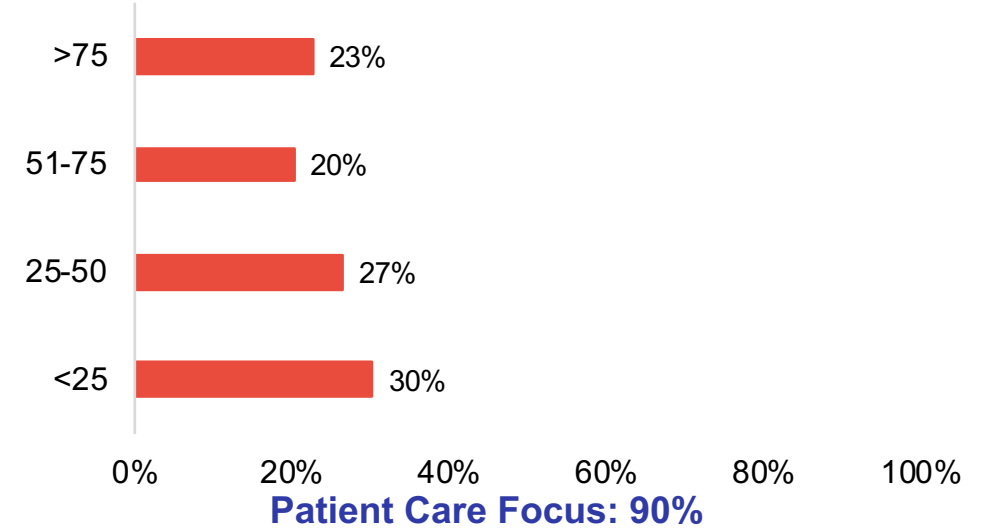
## Specialty



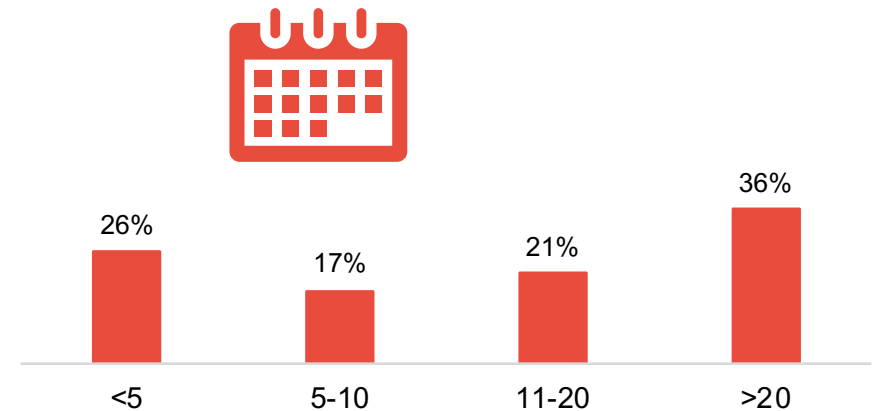
## Profession



## Patients seen each week, in any clinical setting:



## Years in Practice





**Level 2-5:**  
Outcomes Metrics

## Level 2: Satisfaction



**88%** rated the activity as excellent



**89%** indicated the activity improved their knowledge



**88%** stated that they learned new and useful strategies for patient care

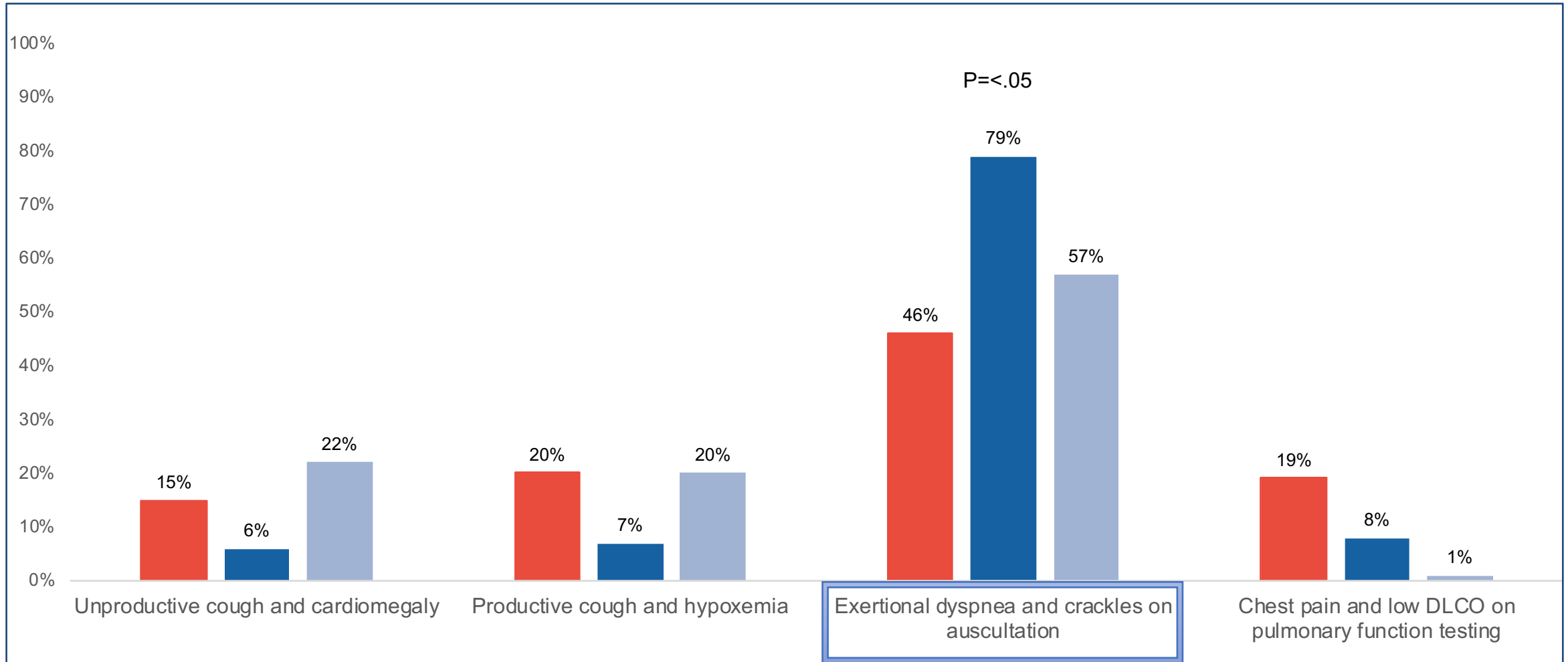


**91%** said they would implement new strategies that they learned



**98%** said the program was fair-balanced and unbiased

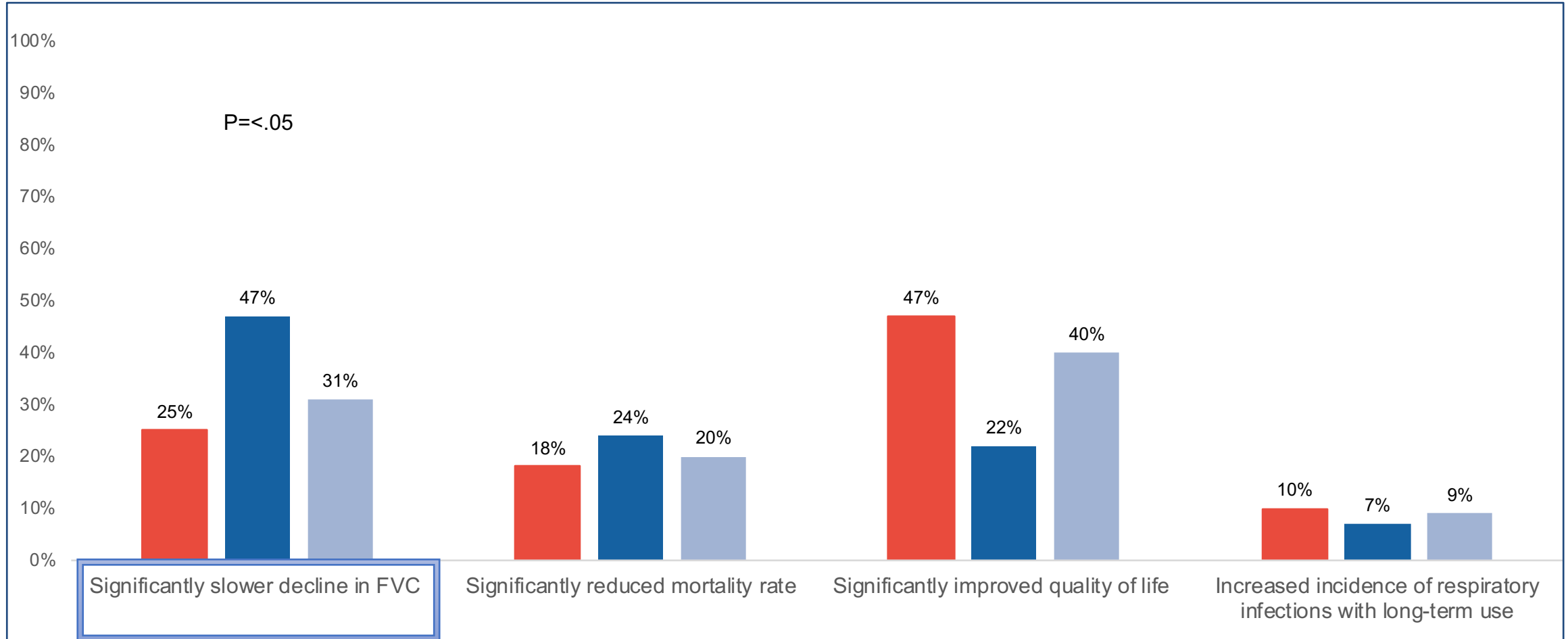
# Which pair of symptoms and findings should trigger a workup for ILD? (Learning Objective 1)



N= Pre: 303 Post: 291 PCA:161

Pre to Post Change	72%
Pre to PCA Change	24%

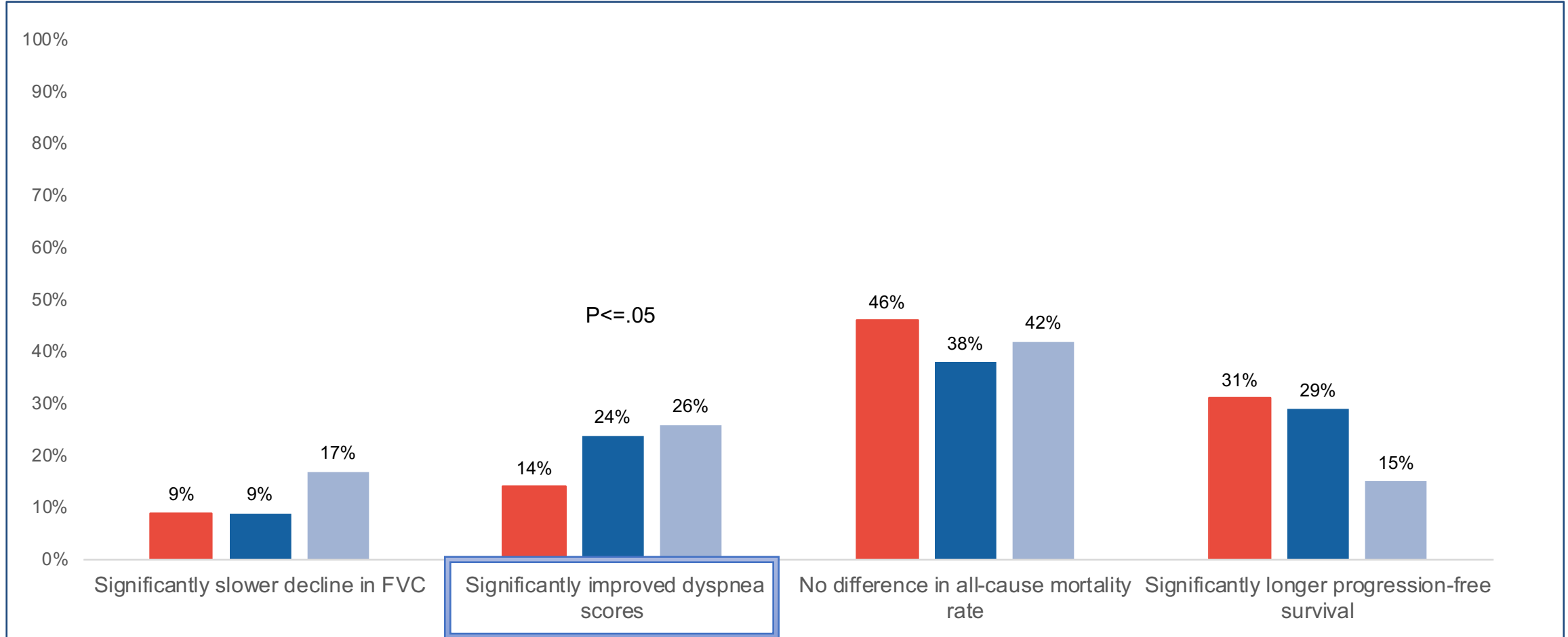
# The INPULSIS study reported which of the following outcomes with nintedanib compared to placebo over 52 weeks? (Learning Objective 2,3)



N= Pre: 309 Post: 297 PCA: 161

Pre to Post Change	88%
Pre to PCA Change	24%

The ASCEND study reported ALL of the following outcomes with pirfenidone compared to placebo over 52 weeks, EXCEPT: (Learning Objective 2,3)

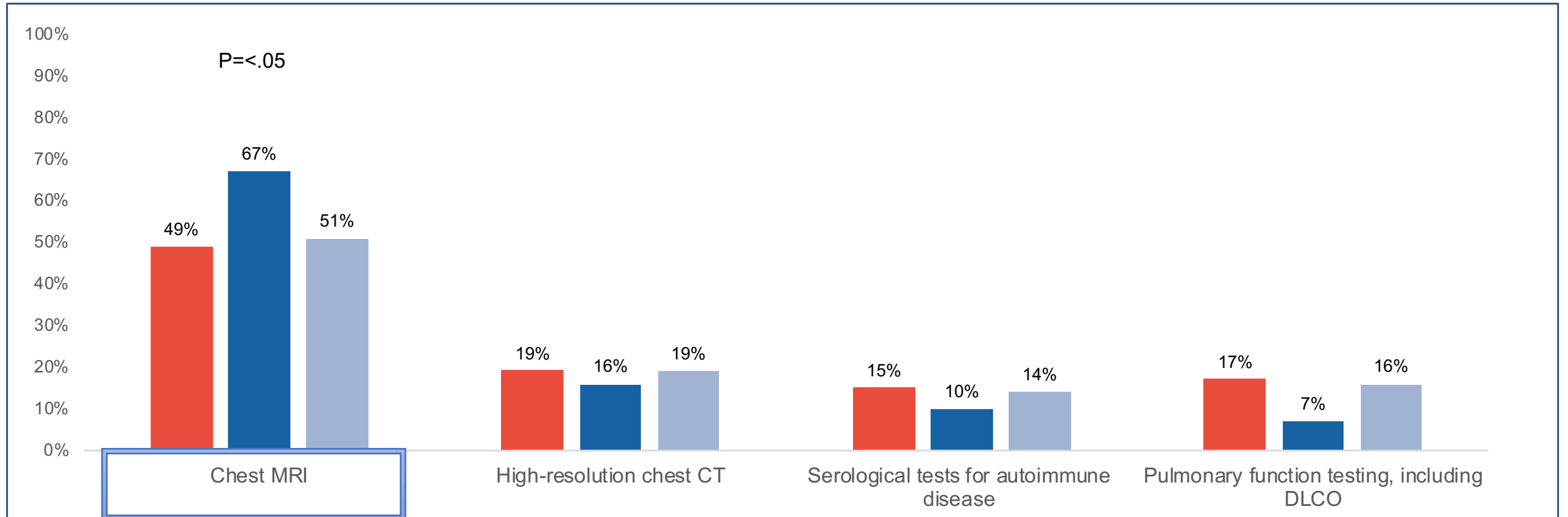


N= Pre: 305 Post: 284 PCA: 161

Pre to Post Change	71%
Pre to PCA Change	86%

## Competence Assessment

**69-y/o man p/w with 10-year history of hypertension and 1-year history of progressive dry cough and exertional dyspnea; Exam: BP 134/78, HR 68 bpm, bilateral basilar crackles, cardiac exam WNL, no edema; O2Sat: 92% at rest on room air; Chest X-ray: Unremarkable; Meds: Hydrochlorothiazide 25 mg qd**  
**Based on this presentation, ALL of the following tests should be considered, EXCEPT:**  
**(Learning Objective 1)**



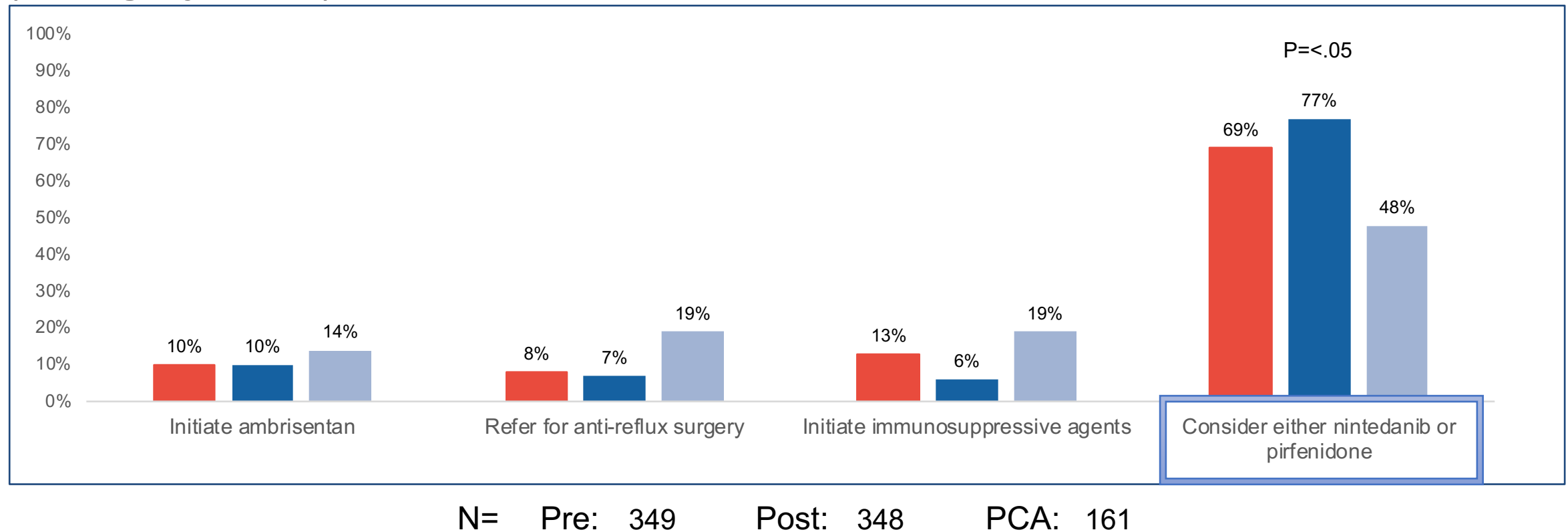
N= Pre: 311 Post: 294 PCA: 161

Pre to Post Change	37%
Pre to PCA Change	4%

**71-y/o woman p/w 2-year history of progressive dyspnea on exertion, dry cough and GERD; Normal cardiac workup; Bilateral basilar crackles; Desaturation on exertion; Reduced DLCO on pulmonary function testing; Imaging and biopsy: Probable UIP pattern with moderate traction bronchiectasis; Autoimmune serologies WNL.**

**What might be an appropriate next step for this patient?**

(Learning Objective 2,3)



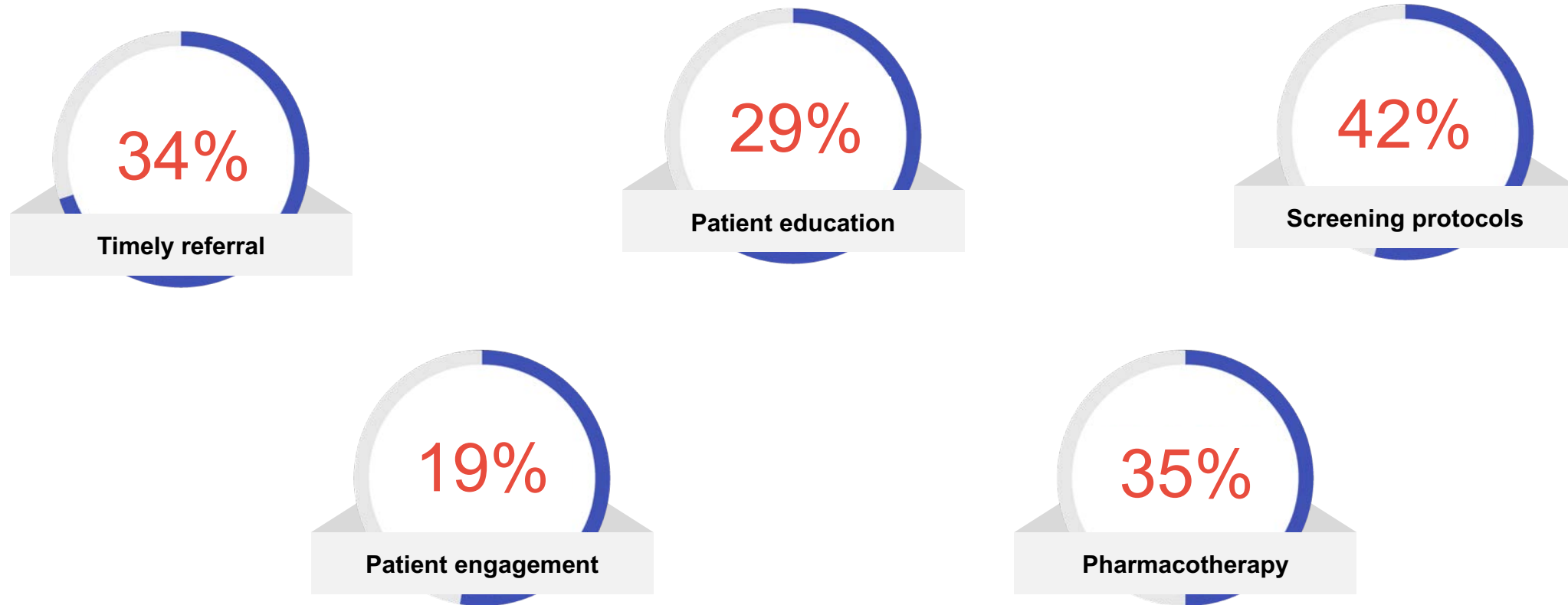
Pre to Post Change	12%
Pre to PCA Change	-30%



(4-week Post Assessment)

**Please select the specific areas of *skills, or practice behaviors*, you have improved regarding the screening, diagnosis and treatment of Interstitial Lung Disease since this CME activity. (Select all that apply.)**

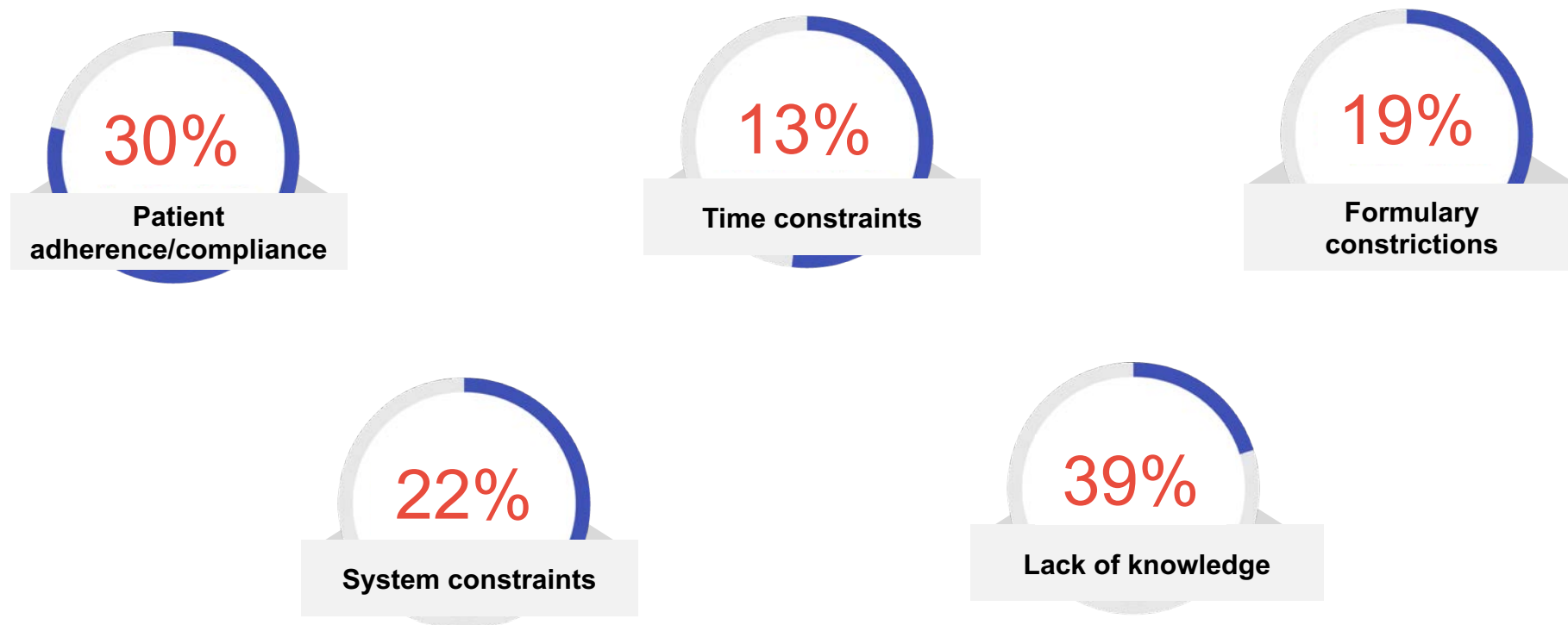
N=161



(4-week Post Assessment)

**What specific *barriers* have you encountered that may have prevented you from successfully implementing screening, diagnosis and treatment of Interstitial Lung Disease since this CME activity? (Select all that apply)**

N=161



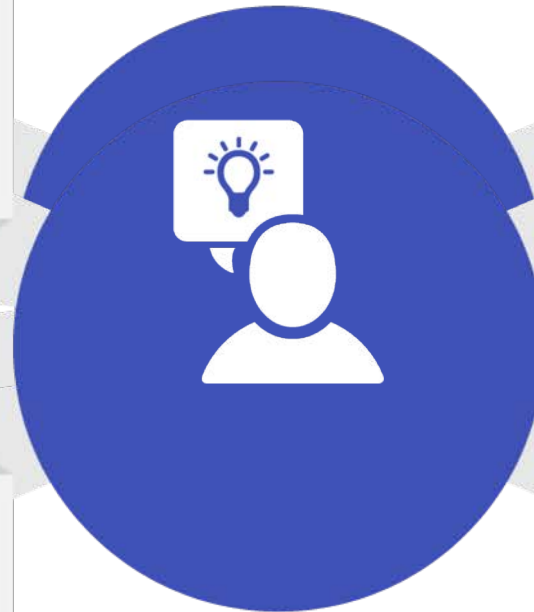
# Participant Educational Gains

72% improved recognition of the symptoms and findings that should trigger a work up of interstitial lung disease

88% increased awareness of the impact of nintedanib on FVC decline compared to placebo as demonstrated in the INPULSIS study

71% increased awareness of the benefits demonstrated with pirfenidone compared to placebo as demonstrated in the ASCEND study

37% increased competence in ordering appropriate diagnostic evaluation for a patient suspected of having interstitial lung disease



# Persistent Educational Gaps After 4 Weeks

Signs and symptoms that should trigger an evaluation for ILD

Diagnostic strategies to evaluate patients suspected of having ILD

Impact of nintedanib and pirfenidone as demonstrated in clinical trials on outcomes for patients with ILD

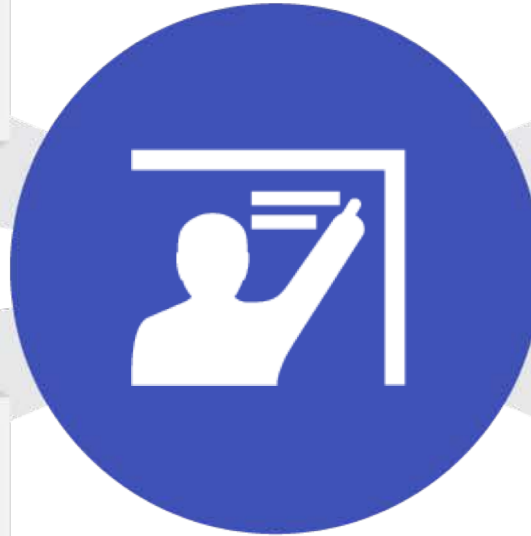
Appropriate treatment strategies for patients with ILD



# Key Take-home Points

After 4 weeks, participants reported improved skills regarding screening, diagnosis and treatment of ILD: 42% screening protocols, disease state awareness, 35% pharmacotherapy, and 34% timely referral

After 4 weeks, participants reported barriers regarding screening, diagnosis and treatment of ILD: 42% lack of knowledge, 39% lack of knowledge, 30% patient adherence/compliance, 22% system constraints



90% of learners are engaged in direct patient care and 91% reported that they will implement new strategies they learned

Score slippage 4 weeks after the program indicates a continued need for further education across these learning objectives