

# Challenges in Pulmonary and Critical Care



**NACE**

**LIVE CME CONFERENCE**



## **Sarcoidosis: Update 2018**

Final Live Outcome Report

Prepared For Mallinckrodt Pharmaceuticals, LLC. Grant ID: 5398

February 17, 2019

**NACE**

# Executive Summary

- ❖ This curriculum focused on recognizing the pathophysiology and epidemiology of Sarcoidosis, using the latest diagnostic algorithms and integrating current treatment strategies incorporating steroids, mineralocorticoid receptor agonists and other treatments for advanced Sarcoidosis.
- ❖ 495 attendees in multiple professional specialties were reached via both live onsite and online formats.
- ❖ Significant improvement was noted in several areas across the activity.
- ❖ Overall, the program improved the ability of learners to incorporate current diagnostic evaluations for Sarcoidosis and recognize the role of various treatment regimens in the management of this condition.



## Persistent Educational Gaps

- ❖ Though improvements were observed, learners demonstrated score slippage on the PCA indicating persistent gaps in the several areas including:
  - ❖ Epidemiology and pathophysiology of Sarcoidosis
  - ❖ Algorithm to accurately diagnose Sarcoidosis
  - ❖ Treatment strategies for Sarcoidosis
  - ❖ Role and timing of mineralocorticoid receptor antagonists and biologic therapy for in the management of advanced Sarcoidosis

The post-test scores, and self reported confidence regarding the management of patients with Sarcoidosis, signifies a clear gap in knowledge and an unmet need among clinicians. It continues to be an important area for future educational programs.

\*These numbers represent the total number of attendees, irrespective of assessment participation

# Learning Objectives

- 1 Describe the pathophysiology and the epidemiology of Sarcoidosis.
- 2 Understand the up-to-date methodology for diagnosis of Sarcoidosis.
- 3 Review our current understanding of the treatments considered, including steroids, mineralocorticoid receptor agonists and treatments for advanced Sarcoidosis.

## Course Director

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

Director of Advanced Lung Disease Clinic  
Director, Pulmonary Hypertension Clinic  
Chairman, Dept. of Pulmonary and Critical Care  
Cleveland Clinic Florida  
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## Activity Planning Committee

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## Faculty

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\*Presented Sarcoidosis lecture

# Challenges in Pulmonary and Critical Care



## LIVE CME CONFERENCE

The Challenges in Pulmonary and Critical Care: 2018 CME activity was supported through educational grants or donations from the following companies:

- ❖ Bayer HealthCare Pharmaceuticals, Inc.
- ❖ Actelion Pharmaceuticals US, Inc.
- ❖ Boehringer Ingelheim Pharmaceuticals, Inc.
- ❖ CSL Behring, LLC.
- ❖ Grifols
- ❖ Insmed
- ❖ 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 and Demographics



# Level 1: Participation



December 1, 2018 Fort Lauderdale, FL



**90%**  
Provide direct patient care



**495** total attendees



On site: **113** attendees

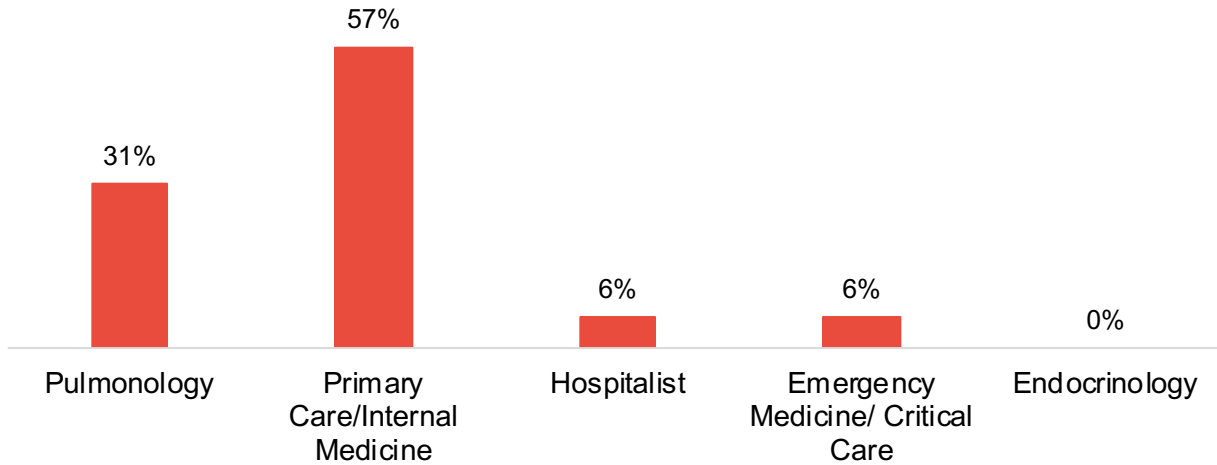


National online simulcast : **382** attendees

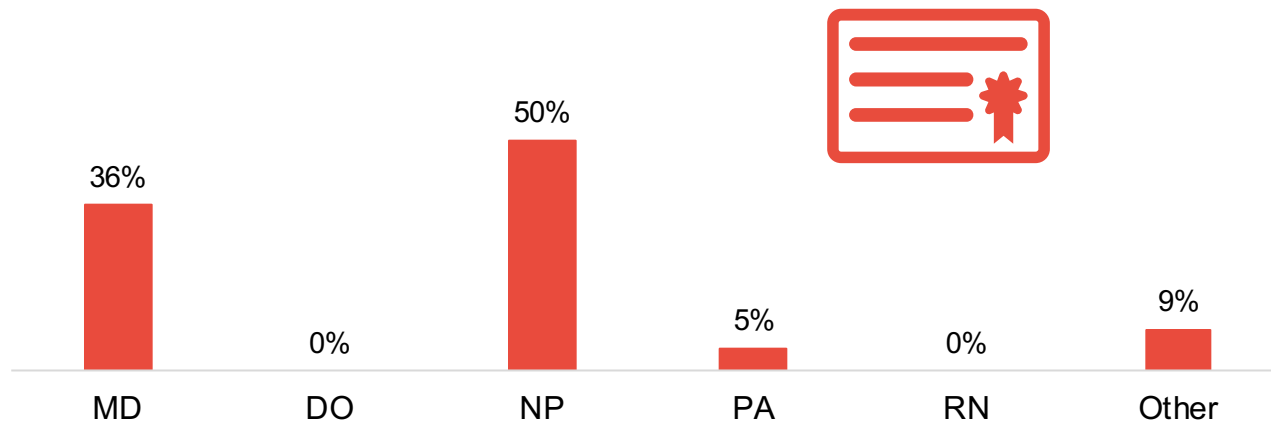


# Level 1: Demographics and Patient Reach

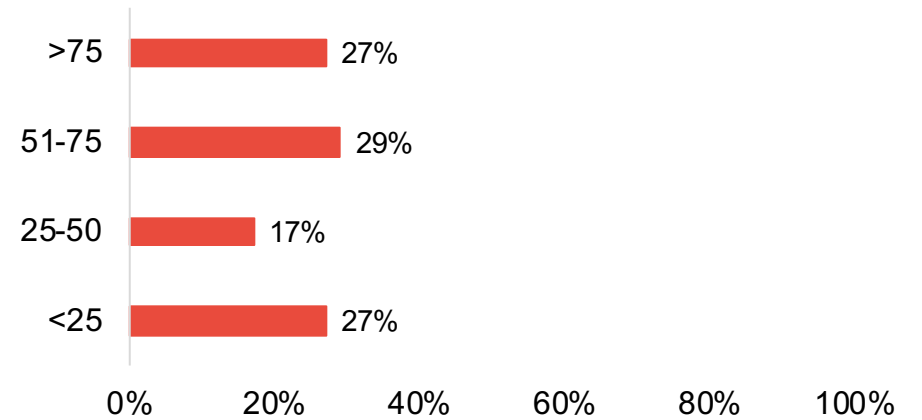
## Specialty



## Profession

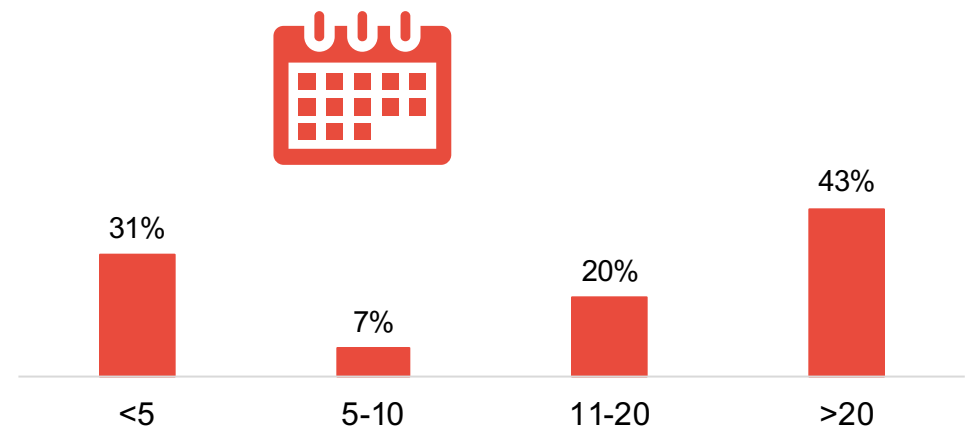


## Patients seen each week, in any clinical setting:



**Patient Care Focus: 90%**

## Years in Practice





**Level 2-5:**  
Outcomes Metrics

## Level 2: Satisfaction



**99%** rated the activity as excellent



**99%** indicated the activity improved their knowledge



**97%** stated that they learned new and useful strategies for patient care



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

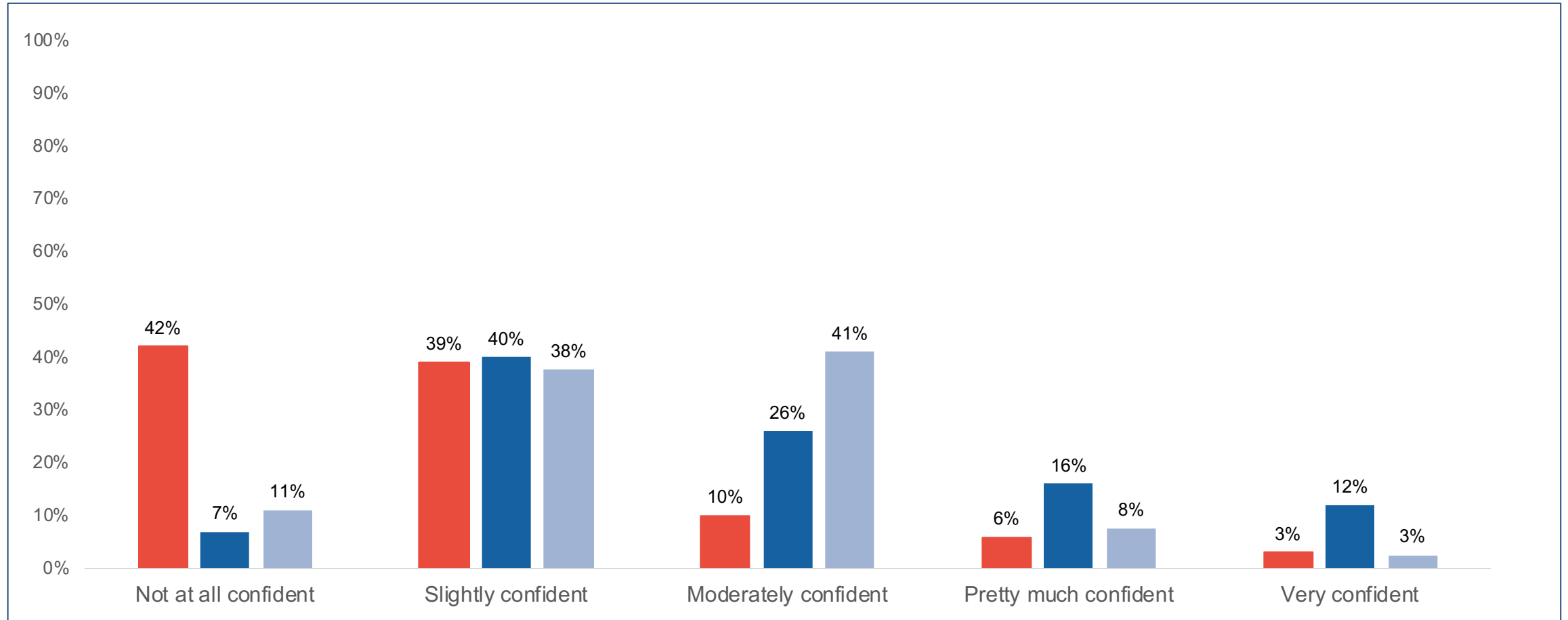


**100%** said the program was fair-balanced and unbiased

## Confidence Assessment

### Please rate your confidence in your ability to manage Sarcoidosis:

(Learning Objective 2,3)

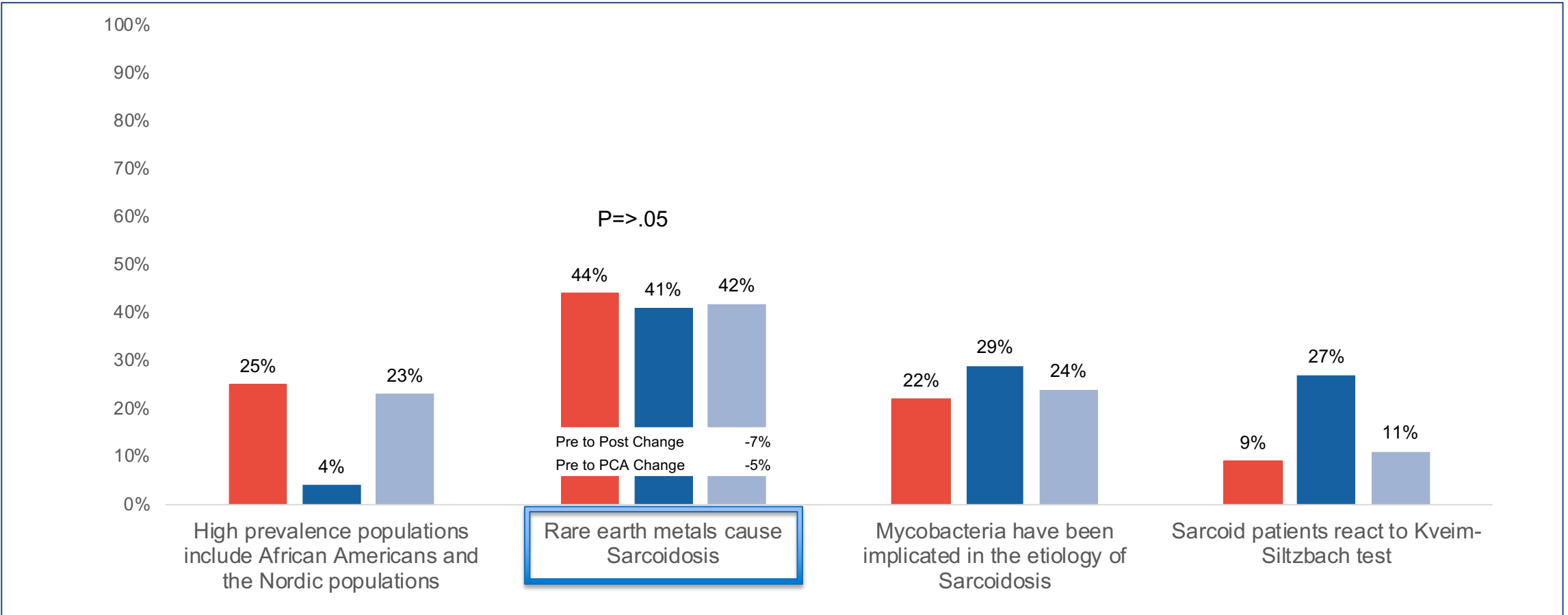


N= Pre: 175

Post: 162

PCA: 117

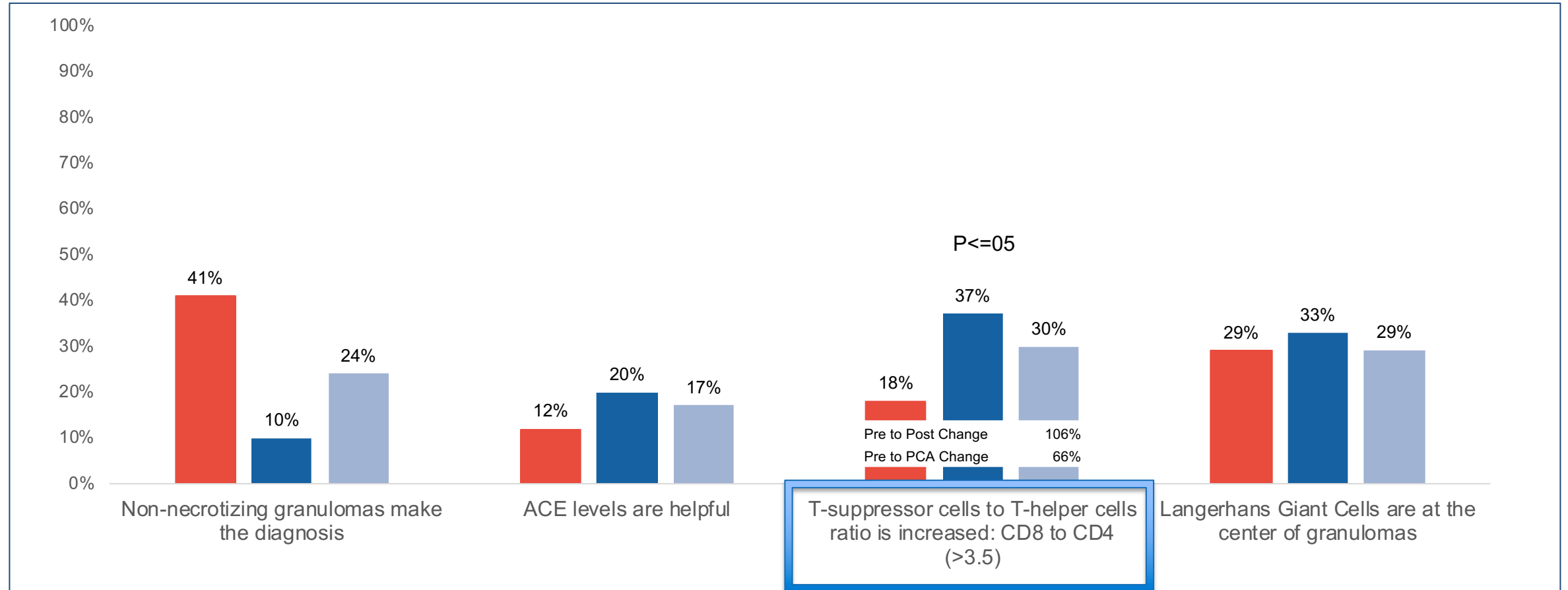
**All of the below are true about Sarcoidosis, EXCEPT:**  
(Learning Objective 1)



N= Pre: 175 Post: 162 PCA: 117

# Which one is correct regarding the diagnosis of Sarcoidosis?

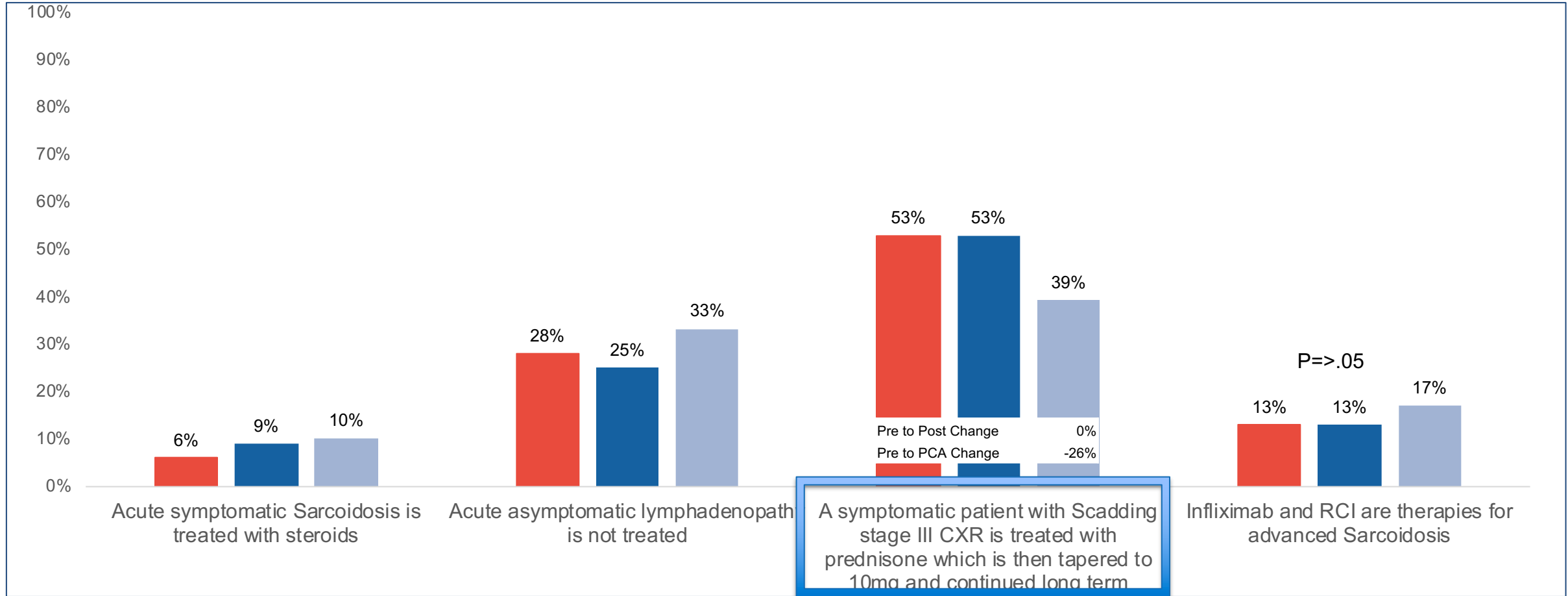
(Learning Objective 2)



N= Pre: 175 Post: 162 PCA: 117



**Regarding treatment of Sarcoidosis all are true EXCEPT:**  
**(Learning Objective 3)**

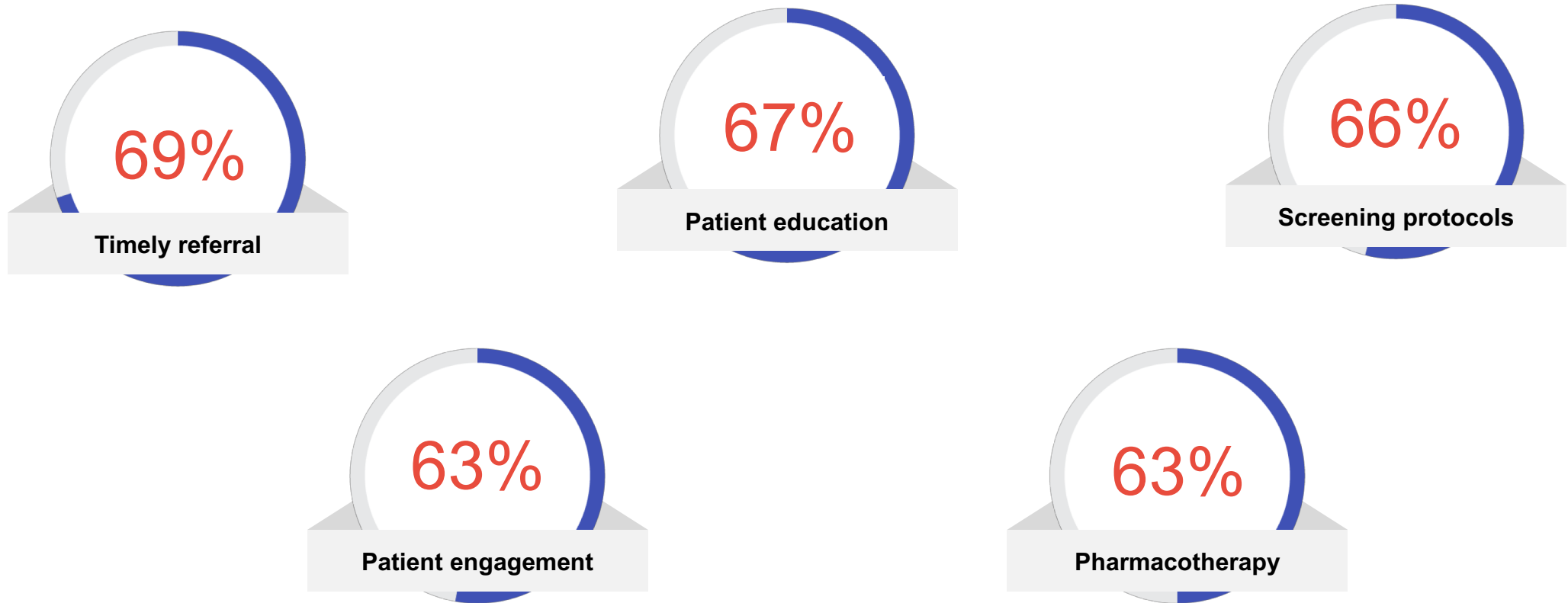


N= Pre: 175 Post: 162 PCA: 117

(4-week Post Assessment)

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

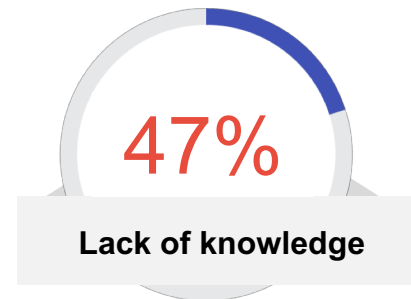
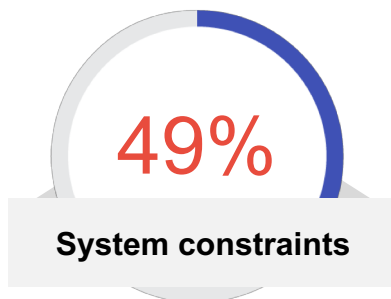
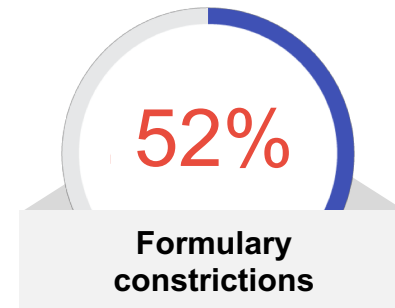
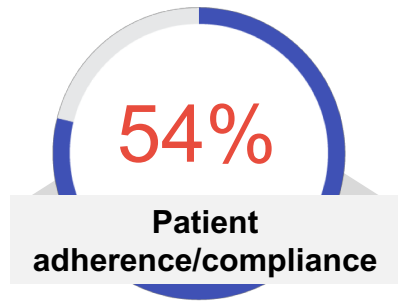
N=117



(4-week Post Assessment)

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

N=117



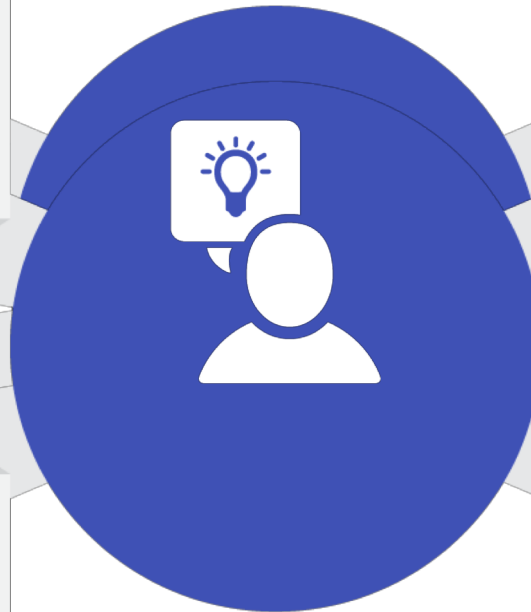
# Participant Educational Gains

Significant improvement in confidence in ability to manage Sarcoidosis

106% increased awareness that in Sarcoidosis, the ratio of T-Helper to T-Suppressor cells is increased

310% increase in recognition that non-necrotizing granulomas do not make the diagnosis of Sarcoidosis

525% increased recognition that African American and Nordic populations are at high risk for Sarcoidosis



# Persistent Educational Gaps After 4 Weeks

Epidemiology and pathophysiology of Sarcoidosis

Algorithm to accurately diagnose Sarcoidosis

Treatment strategies for Sarcoidosis

Role and timing of mineralocorticoid receptor antagonists and biologic therapy for in the management of advanced Sarcoidosis



# Key Take-home Points

90% of clinicians provide direct patient care

91% of clinicians indicated that they would implement new strategies that they learned



After 4 weeks, the following improved skills were reported regarding the **screening, diagnosis and treatment of Sarcoidosis** : 69% timely referral, 67% patient education and 66% screening protocols

Net gains were seen in several areas but score slippage after 4 weeks reinforces the need for continued education on the management of Sarcoidosis.