

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis:

Person-Centered Care in EGPA

Live Virtual Grand Rounds and Online Enduring
Final Outcomes Summary (MED-RD-31512)



**National Jewish
Health**

Breathing Science is Life.

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live and Online Final Outcomes]

Program Overview

This program consists of a multi-media online enduring activity and robust series of (7) interactive virtual webinar grand rounds presentations; (6) conducted within specialty academic centers, community/local hospitals, or regional chapter meetings of pulmonology and rheumatology associations via virtual webinar. (1) Live webinar presented to a national audience and marketed to the target audience via freeCME.com. The engaging, multimedia series features whiteboard animation of the pathophysiology of EGPA, physician/patient discussion, intra-activity polling questions, and case scenarios. Parallel content was video recorded to extend reach with an online enduring activity. The program builds upon the success of previous NJH live and online activities in EGPA and provides practical tools for healthcare providers with competing priorities and limited time to integrate into their practice. The goal of this educational activity is to improve clinician's knowledge and competence within the educational gaps of diagnosis and treatment of EGPA as well as to improve understanding of the patient's journey with EGPA.

Learning Objectives

- Describe clinical features that distinguish EGPA from other eosinophilic lung diseases
- Summarize best practices for the evaluation and differential diagnosis of EGPA
- Identify appropriate treatments for patients with EGPA
- Address quality of life concerns with patients and families using a person-centered care approach

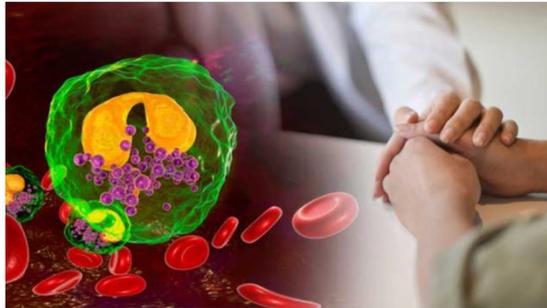
“This was an absolutely excellent presentation & one of the best CME’s I have completed in terms of general review of specific diseases.”
- Online enduring learner

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

Online Enduring Program

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

CME 100 Credit



Description Educational Objectives CME/CE Information Faculty and Disclosures Instructions

Program Description

For patients with EGPA, the risk of permanent tissue and organ damage is significant. Although there are treatments available, patients with EGPA tend to remain dependent on glucocorticoid therapy and are prone to relapse. Clinical data shows that new therapies can improve patient outcomes and clinicians are challenged to stay apprised of changes in this lesser-known and evolving therapeutic space. This activity addresses the diagnosis and treatment of EGPA as well as understanding the patient's journey with EGPA.

[myCME: Launched 5/26/2020](#)

“Excellent format – the aid in the resources is helpful.”
- Online enduring learner



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

Released On January 27, 2021	Expires On May 26, 2021	Media Type Internet	Completion Time 60 minutes
Specialty Allergy & Immunology, Pulmonology, Rheumatology	Topic(s) Respiratory		

Clicking *Start Activity* indicates that you have reviewed the CME/CE information for this activity.

[Start Activity](#)

Provided by National Jewish Health.



This educational activity is supported by an educational grant from GlaxoSmithKline.

[Click here for a downloadable slide deck](#)

[Click here for a downloadable reference guide](#)

[FreeCME*: Launched 1/27/2021](#)

**In an effort to increase participation numbers, we placed the activity on an additional platform for the remainder of the program.*

“Great representation of the topic.”
- Online enduring learner

Program Summary Dashboard – Final Outcomes Summary Through 5/26/2021

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

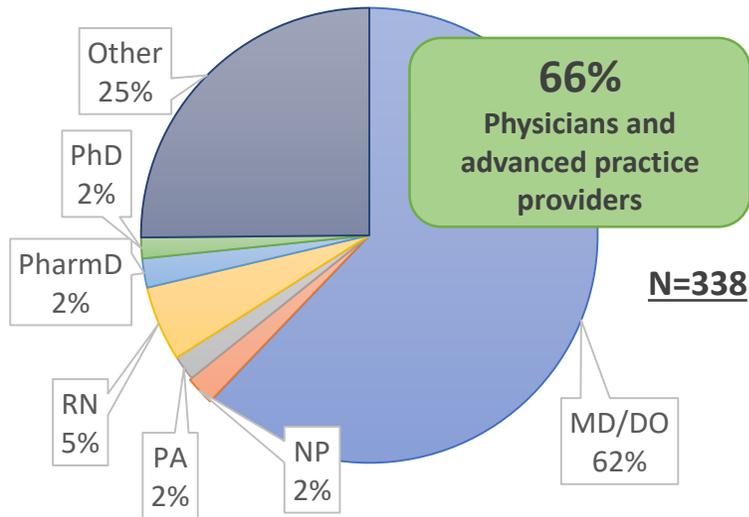
Program Faculty: Michael E. Wechsler, MD, MMSc, Curry Koenig, MD, MS

Live: Webinar Series: March 2020 – July 2020

Online: myCME: 5/26/2020 – 5/26/2021; FreeCME: 1/27/2021 – 5/26/2021

Live Program Participation

338 Learners | 338 Certs

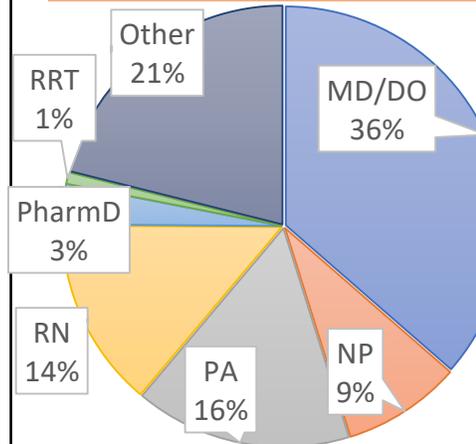


Specialty	# of Learners
Pulmonology	65
Family/Internal Medicine	47
Allergy	22
Primary Care	20
Rheumatology	16
Pediatrics	8
Other	160
Total	338

44%
Pulmonology, allergy, rheumatology, and internal medicine

Online Program Participation*

1888 Learners | 783 Completers | 758 Certs



Specialty	# of Learners
Family Med/General	249
Pulmonology	228
Internal Medicine	115
Allergy/Immunology	93
Rheumatology	89
Pediatrics	74
Emergency Medicine	73
Surgery	64
Cardiology	51
Pharmacy	40
Hematology/Oncology	35
OBGYN	30
Geriatric Medicine	29
Acute Care	29
Other	689
Total	1,888

61%
Physicians and advanced practice providers

28%
Pulmonology, allergy, rheumatology, and internal medicine

Learning Objectives

Learning Objectives

- Describe clinical features that distinguish EGPA from other eosinophilic lung diseases
- Summarize best practices for the evaluation and differential diagnosis of EGPA
- Identify appropriate treatments for patients with EGPA
- Address quality of life concerns with patients and families using a person-centered care approach

Satisfaction

Evaluation respondents in the live and online activities reported:

The activity was "good" or "excellent" at meeting the learning objectives

Live – 98%

Online – 91%

The activity was clinically relevant

Live – 100%

Online – 97%

The activity was free of commercial bias

Live – 99%

Online – 97%

N=118

N=758

Program Summary Dashboard – Final Outcomes Summary Through 5/26/2021

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

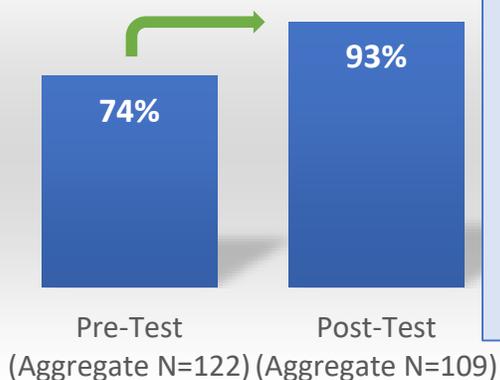
Program Faculty: Michael E. Wechsler, MD, MMSc, Curry Koenig, MD, MS

Live: Webinar Series: March 2020 – July 2020

Online: myCME: 5/26/2020 – 5/26/2021; FreeCME: 1/27/2021 – 5/26/2021

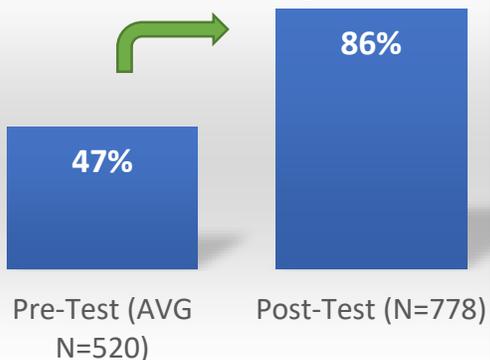
Knowledge

Live Program



26% relative gain in knowledge
19% absolute gain in knowledge

Online Program

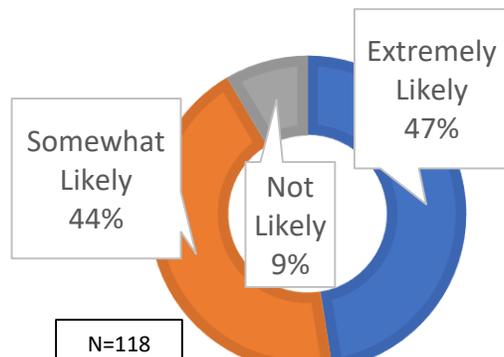


83% relative gain in knowledge
39% absolute gain in knowledge

Competence

Evaluation respondents in the live and online activities were asked how likely they are to make changes in their practice as a result of what they learned in the activity:

LIVE PROGRAM

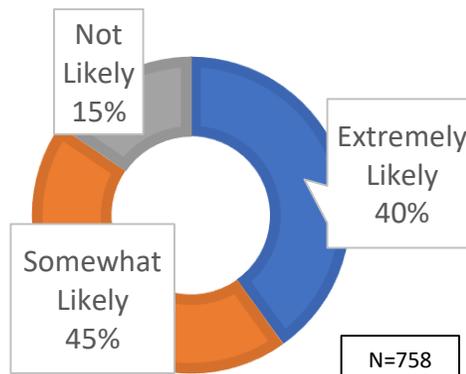


89%

average proportion of evaluation respondents who intend to make practice changes post-activity

ONLINE PROGRAM

98% of live and **92%** of online evaluation respondents reported the activity reinforced and/or improved their skills



Performance

63% reported having already made changes to practice within 45 days of the activity [N=16]:

- ✓ Incorporated different diagnostic strategies into patient evaluation (50%)
- ✓ Modified treatment plans (30%)
- ✓ Changed screening/prevention practices (10%)

19% of follow-up survey respondents still remained committed to making changes to practice

Performance change data was collected from live program learners only

Program Summary Dashboard – Final Outcomes Summary Through 5/26/2021

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

Program Faculty: Michael E. Wechsler, MD, MMSc, Curry Koenig, MD, MS

Live: Webinar Series: March 2020 – July 2020

Online: myCME: 5/26/2020 – 5/26/2021; FreeCME: 1/27/2021 – 5/26/2021

Top 3 Practice Changes

Evaluation respondents in the live and online activities reported specific intended practice changes as a result of what they learned:

- 1 Implement diagnostic strategies for earlier diagnosis and improved treatment
- 2 Apply knowledge of the disease of EGPA
- 3 Improve communication with patients about their treatment plans

Patient Impact

854

evaluation respondents in the live and online activities

Who treat **3,987 patients** with eosinophilic lung diseases weekly

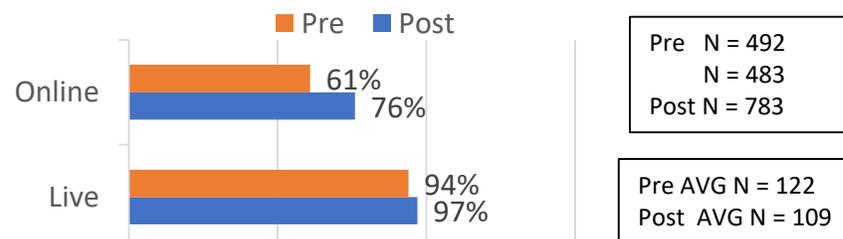
Based on self-reported number of patients seen on a weekly basis with condition discussed in activity (multiplied by 52 for annual estimate).

Potential to impact **207,324 patient visits** annually

Persistent Gaps and Needs

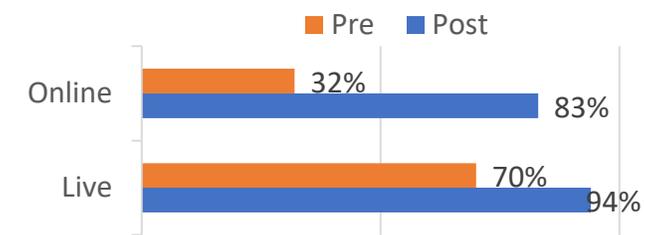
- ✓ A gap persists related to **identifying appropriate treatments for patients with EGPA.**

Learners were asked to identify clinical findings that would indicate the use of cyclophosphamide:



In the online activity, 24% still remained unable to use clinical findings to select treatment at post-test. Live participants showed knowledge in this area both pre- and post-test.

Learners were asked to identify what treatment is effective in reducing EGPA exacerbations:



In the online activity, 17% still remained unable to identify treatment that reduces exacerbations at post-test. Despite this persistent gap, online learners did show a relative knowledge gain of 159%.

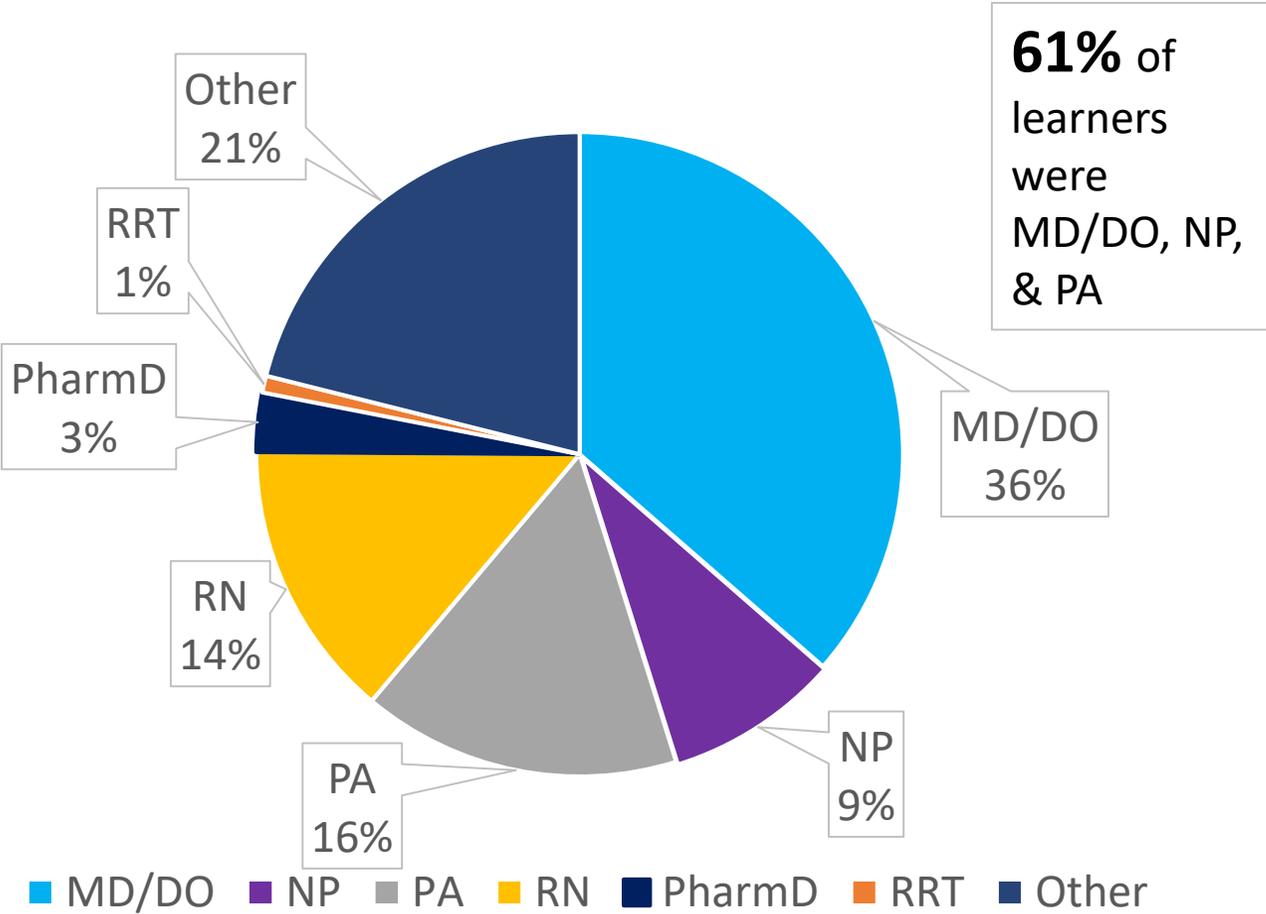
Program Insights

- Learners **demonstrated a 97% relative confidence gain** across learning objectives.
- Further education is needed on addressing quality of life concerns for EGPA patients and identifying appropriate treatments for patients with EGPA.
- Diagnostic strategies were the top cited takeaway and the top intended practice change among learners.

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 1 Outcomes: Online Enduring Activity (Final): Participation by Degree

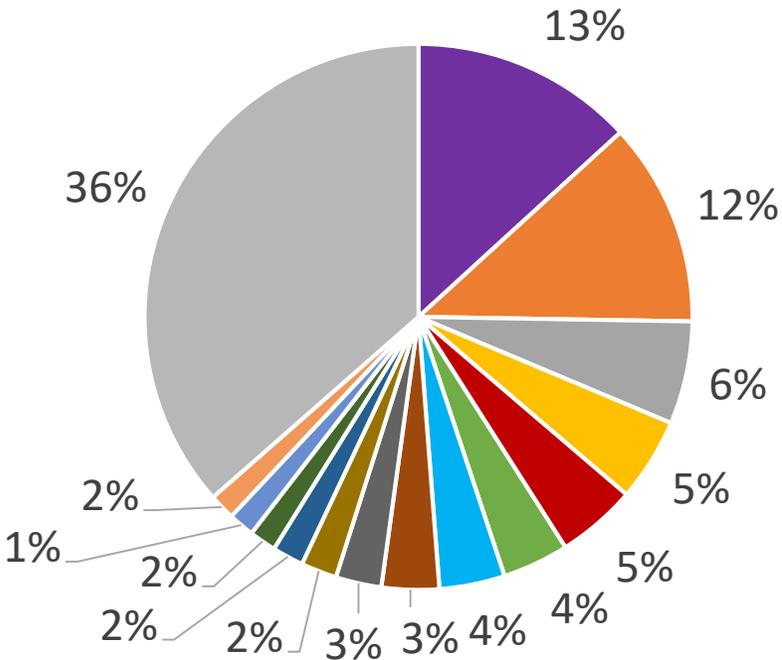


Degree	Total
MD/DO	688
PA	301
RN	264
NP	165
PharmD	56
RRT	16
Other	398
	1,888

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 1 Outcome: Online Enduring Activity (Final): Participation by Specialty



- Family Med/General
- Pulmonology
- Internal Medicine
- Allergy/Immunology
- Rheumatology
- Pediatrics
- Emergency Medicine
- Surgery
- Cardiology
- Pharmacy
- Hematology/Oncology
- Obstetrics/Gynecology
- Geriatric Medicine
- Acute Care
- Other

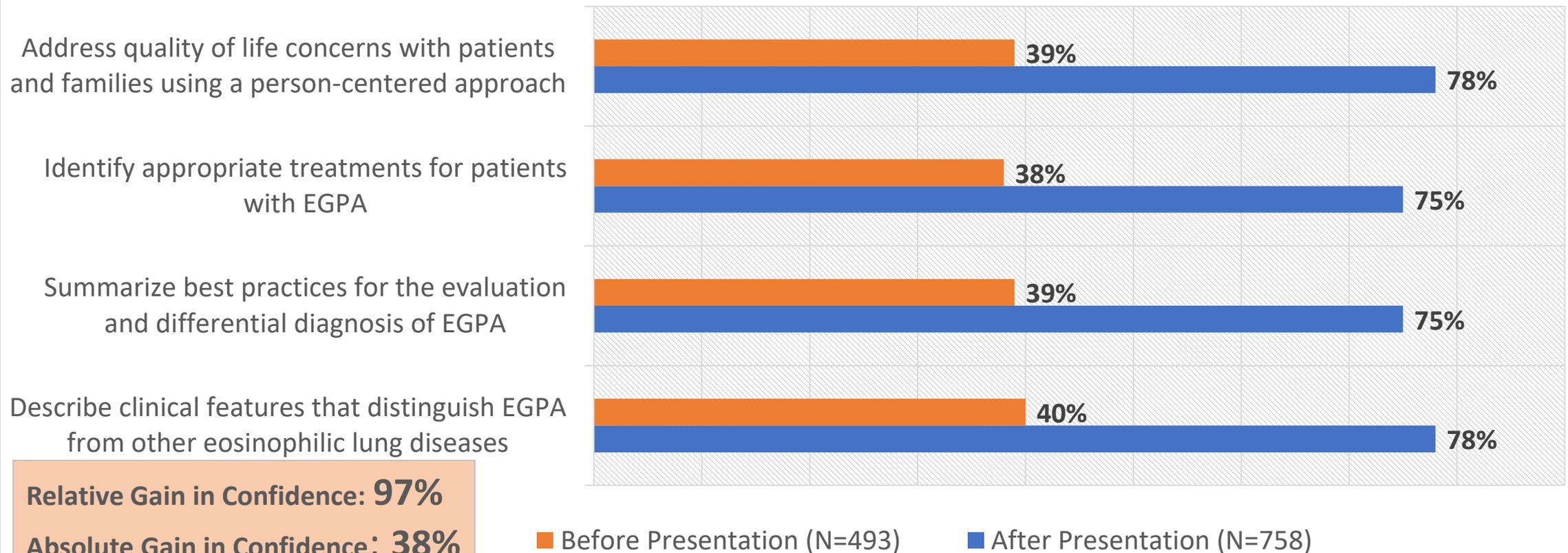
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Obstetrics/Gynecology	30
Geriatric Medicine	29
Acute Care	29
Other	689
	1,888

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 2&3 Outcomes: Learning & Satisfaction Online Enduring Activity (Final)

Learners reported their confidence regarding the learning objectives (somewhat confident – very confident)



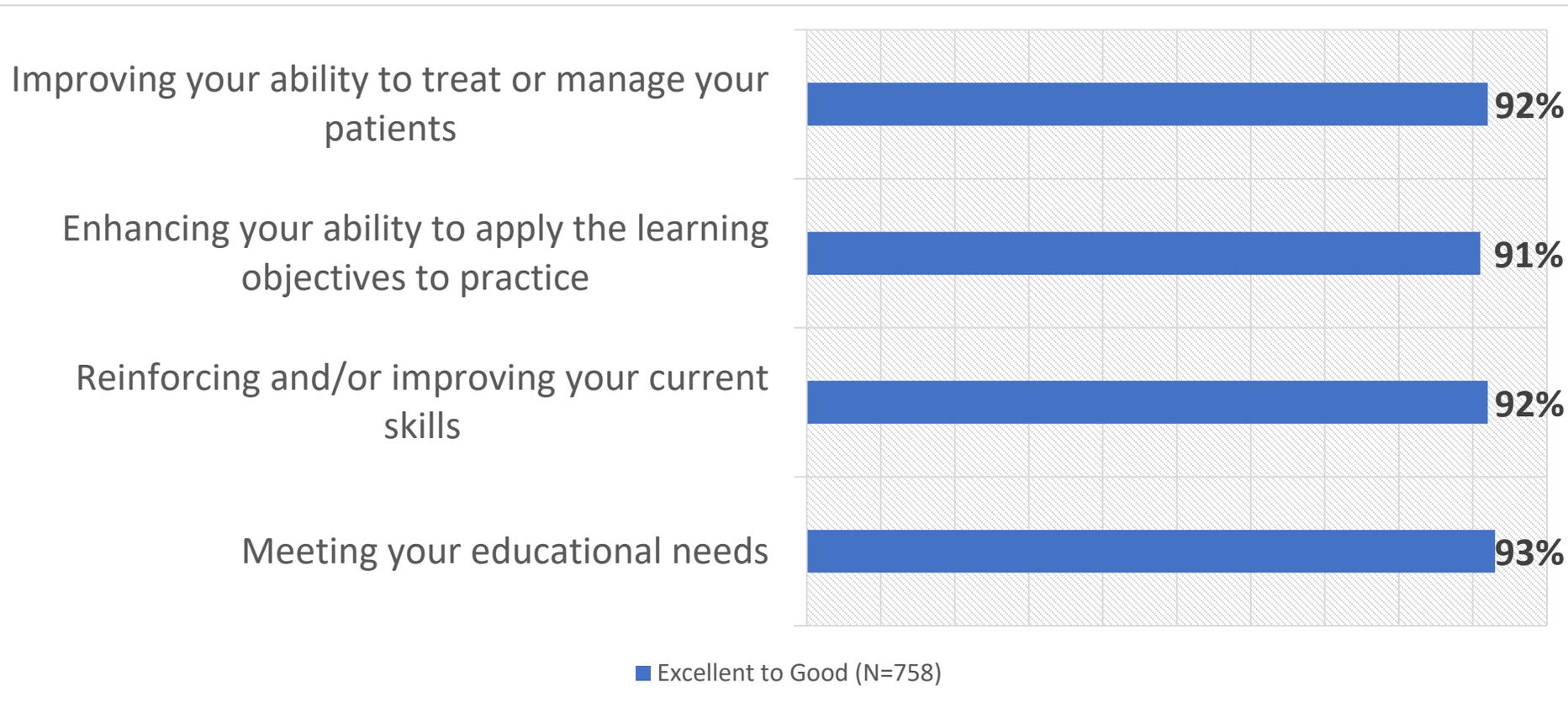
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 2&3 Outcomes: Learning & Satisfaction: Online Enduring Activity (Final)

Analysis of learners' responses related to educational needs

Learners reported the activity was “Excellent” to “Good” at:



Learners reported high levels of satisfaction related to the ability of the activity to impact practical applications

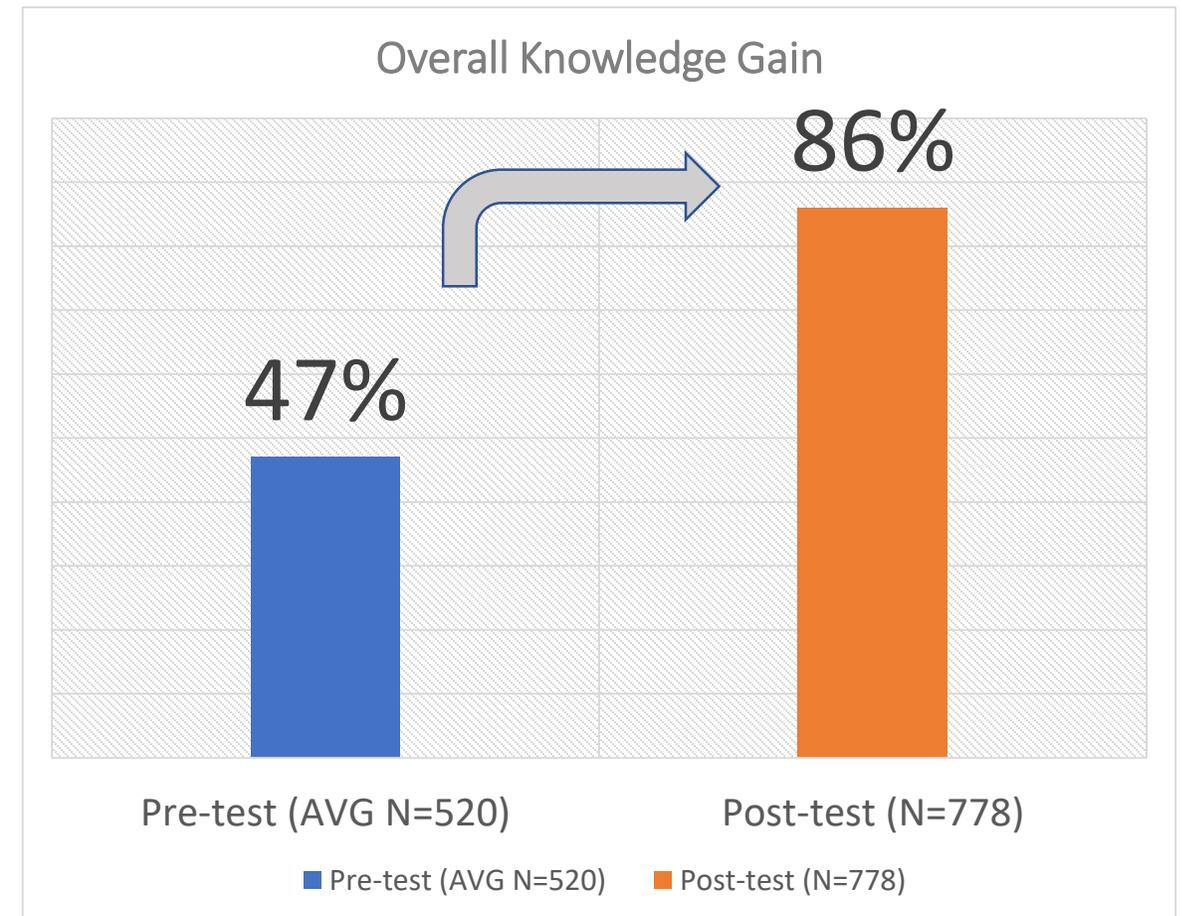
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Overall Knowledge Gain

83% Relative Knowledge Gain

39% Absolute Knowledge Gain



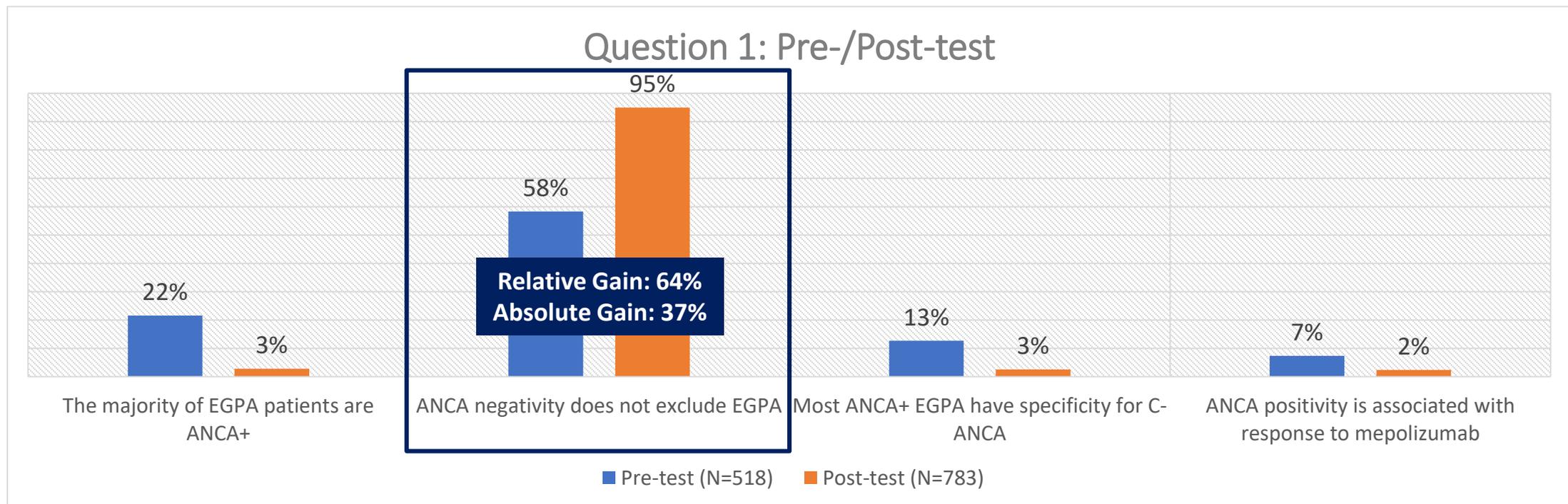
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Question 1

Learning Objective: *Describe clinical features that distinguish EGPA from other eosinophilic lung diseases.*

Question 1: As it pertains to Kyle's initial presentation, which of the following is a true statement?



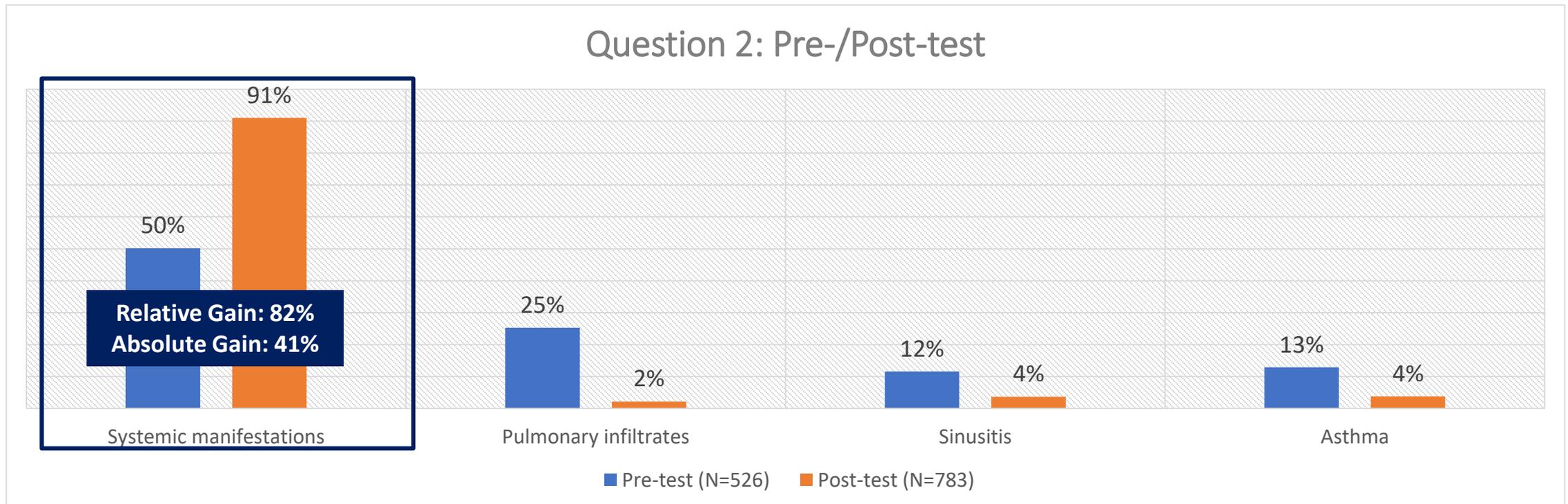
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Question 2

Learning Objective: *Describe clinical features that distinguish EGPA from other eosinophilic lung diseases.*

Question 2: Which of the following differentiates EGPA from chronic eosinophilic pneumonia?



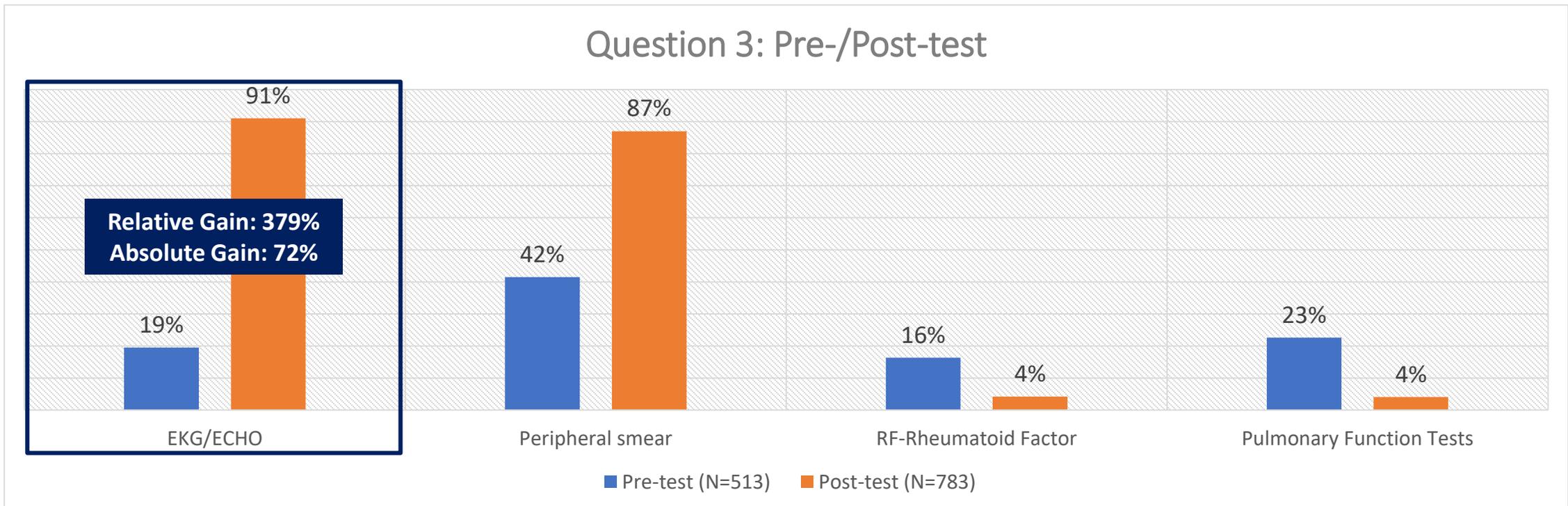
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Question 3

Learning Objective: *Summarize best practices for the evaluation and differential diagnosis of EGPA.*

Question 3: As it relates to the differential diagnosis of EGPA, which of the following will help to exclude more rare eosinophilic conditions/vasculitides?



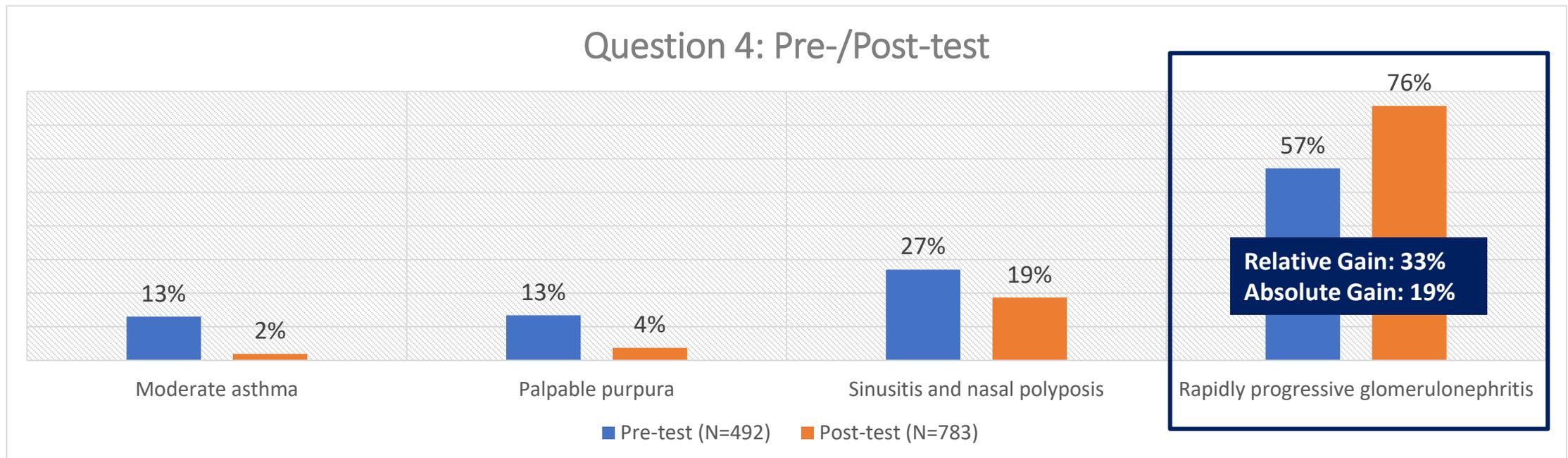
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Question 4

Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 4: Which one of these clinical findings would be an indication to use cyclophosphamide?



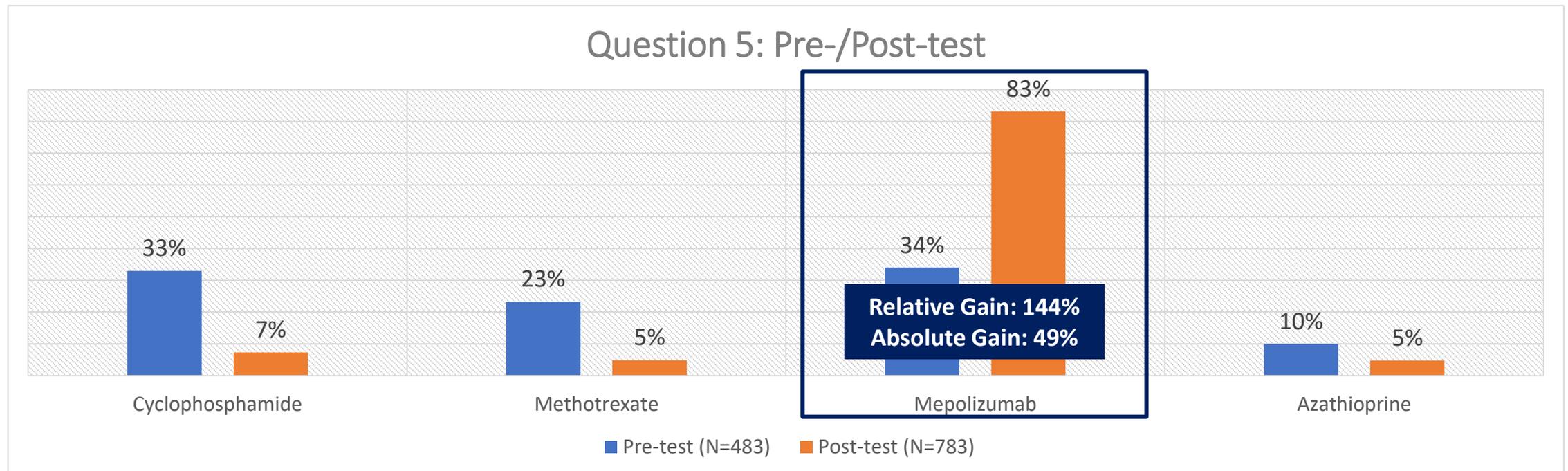
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Question 5

Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 5: Which of the following has been shown to be effective in reducing EGPA exacerbations?



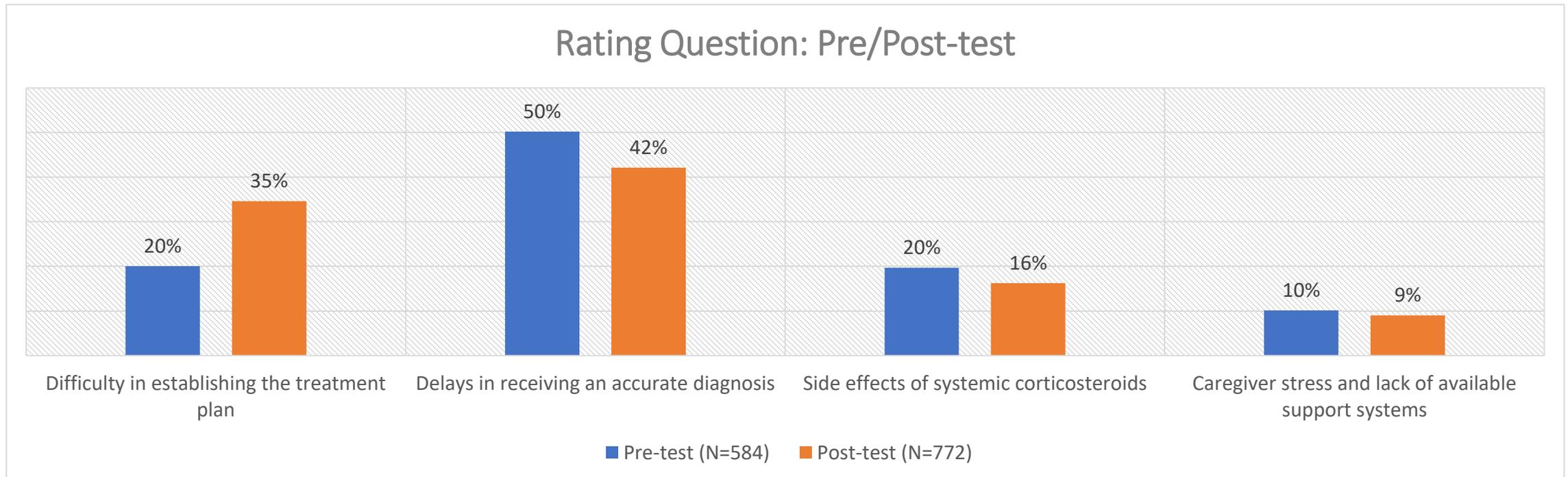
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Level 3 Outcomes (Knowledge): Online Enduring Activity (Final): Rating Question

Learning Objective: *Address quality of life concerns with patients and families using a person-centered care approach.*

Question: Which of the following do you feel is the most closely associated with overall lower quality of life for patients with EGPA?



This question doesn't have a "correct" answer but was intended to elicit thought about the patient journey.

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

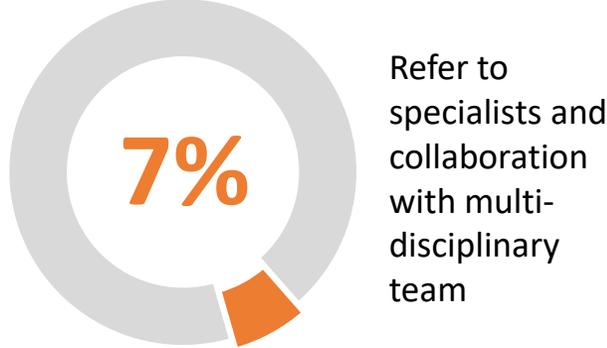
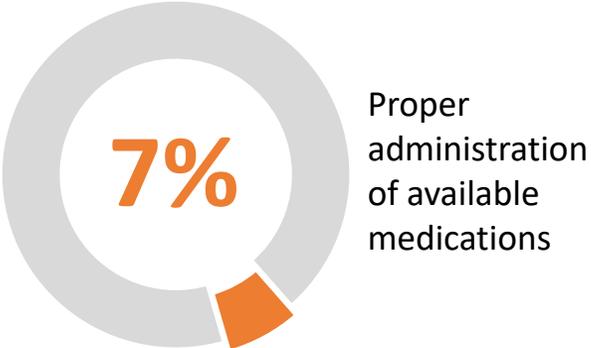
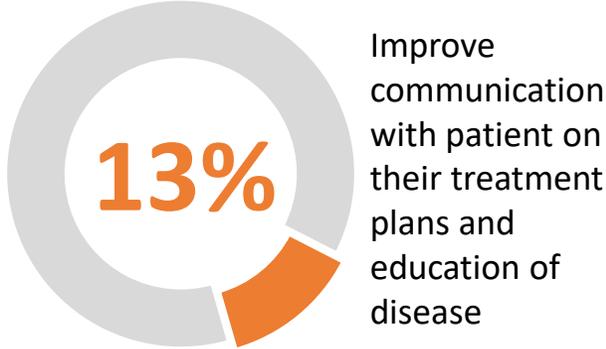
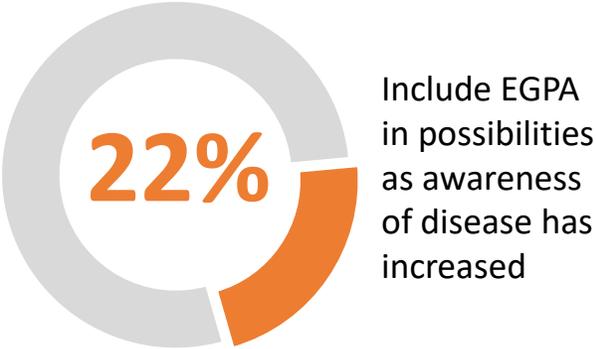
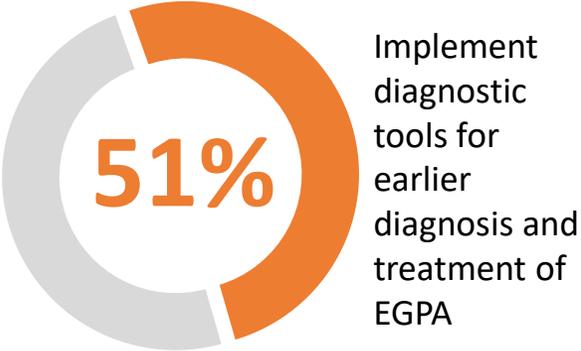
[Online Final Outcomes]

Level 4 Outcomes (Competence): Online Enduring Activity (Final)

An analysis of open-ended comments demonstrate the following changes learners intend to make:

85%
N=758

Learners intend to make changes to practice as a result of the activity

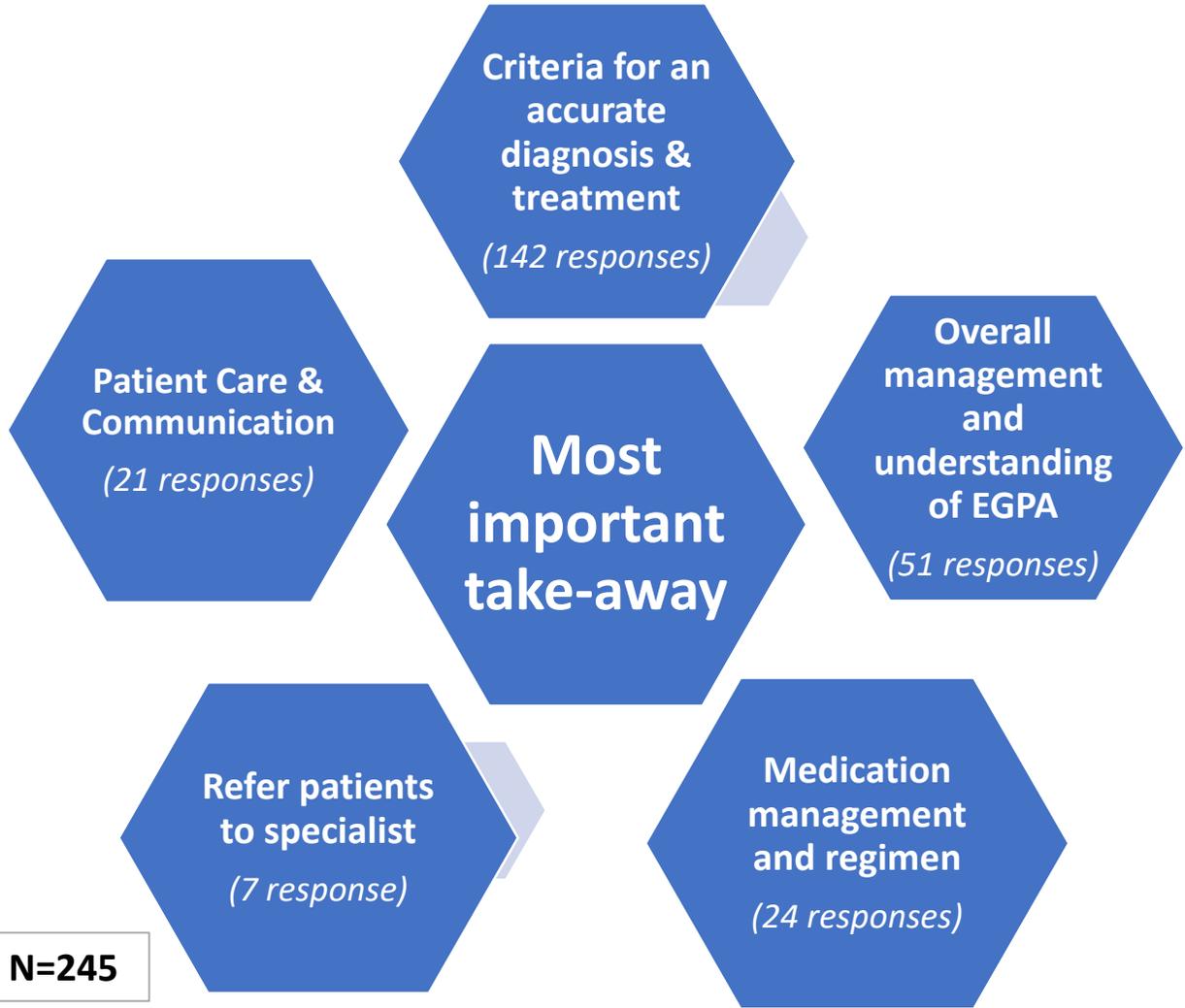


N=337

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Program Evaluation: Online Enduring Activity (Final)



97%

- Material presented in an objective manner and free of commercial bias

97%

- Content presented was evidence-based and clinically relevant

N=758

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Program Evaluation: Online Enduring Activity (Final)

What do you think is the primary reason why making a diagnosis of EGPA is so difficult?

Delay in diagnosis	Rare condition
Symptoms mistaken for other diseases	Same with asthma
Many variables	Crossover with other conditions
Lack of knowledge	Not many studies
Spectrum of disease manifestations and severity	Lack of confidence
Rarely encountered and easy to forget	Lack of awareness
Amount of testing involved to reach diagnosis	Costs and coverage
Trained clinicians in this area	Patient barriers
Lack of coordination with specialists	Time constraints

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis

with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Program Evaluation: Online Enduring Activity (Final) Strategies for Overcoming Barriers

- ✓ Understanding the diagnosis
- ✓ Better treatment options available
- ✓ How to communicate and support patients
- ✓ Access to medication
- ✓ Medication compliance
- ✓ Multidisciplinary approach

65%

N=758

Learners indicated
the activity
addressed strategies
for overcoming
barriers to optimal
patient care

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Online Final Outcomes]

Program Evaluation: Online Enduring Activity (Final)

What topics would you like more information about in future educational activities?

Patient communication	Laboratory department
Asthma	Sleep
Pathology	Aspirin related respiratory disorders
Cardiology	Updates on treatment
Chronic eosinophilia	Immunotherapy
ILD	Vasculitis

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

(7) Live Activities



Michael E. Wechsler, MD, MMSc

Professor of Medicine

Director of the Cohen Family Asthma Institute

Division of Pulmonary, Critical Care and Sleep Medicine

National Jewish Health, Denver, CO



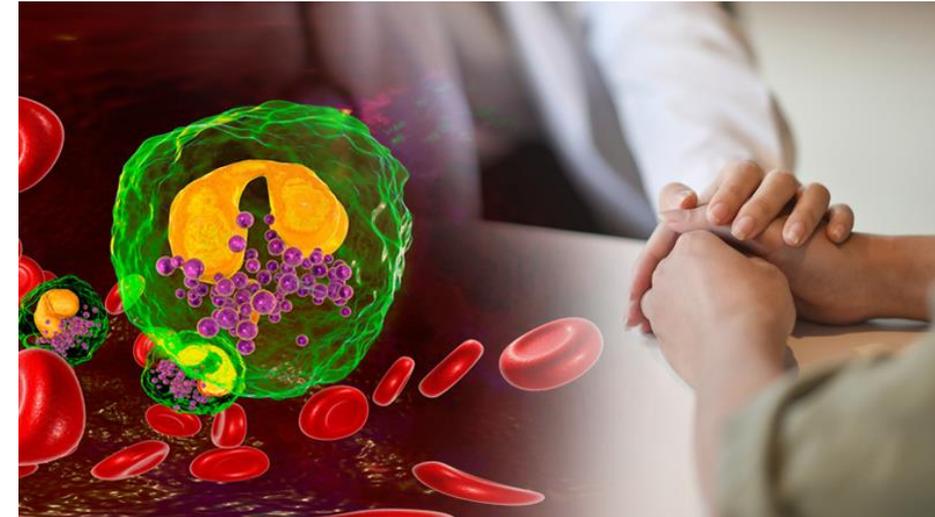
Curry Koenig, MD, MS

Associate Professor of Medicine, Division of Rheumatology

Director of the Vasculitis Clinic

University of Utah and Salt Lake City Veterans Affairs Medical Center

Salt Lake City, UT



Live Virtual Grand Round Series

(1) Allergy Rounds at National Jewish Health (NJH), Denver, CO (3/25/2020): 40 Learners

(2) St. Joseph Hospital, Denver, CO (4/3/2020): 11 Learners

(3) National Jewish Health, Denver, CO (6/12/2020): 52 Learners

(4) Creighton University, Omaha, NE (6/22/2020): 29 Learners

(5) Cedars-Sinai Medical Center, Los Angeles, CA (7/10/2020): 22 Learners

(6) University of Kansas, Lawrence, Kansas (7/22/2020): 95 Learners

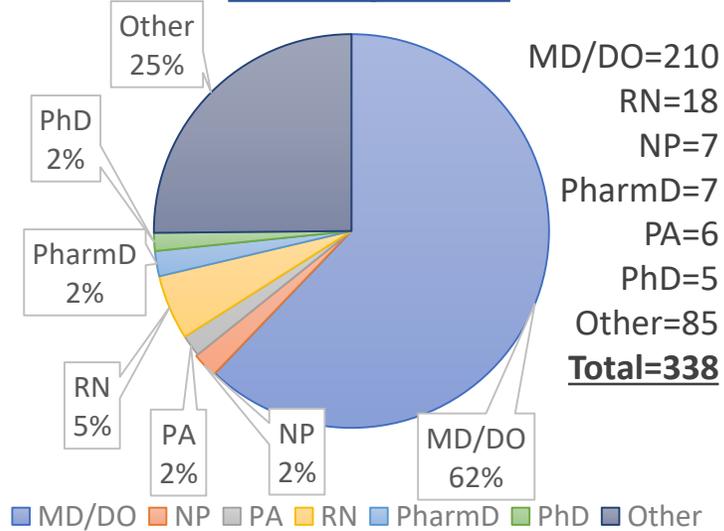
(7) FreeCME – Nationally marketed live webinar (7/23/2020): 89 Learners

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Quantitative Educational Impact Summary: Live Virtual Grand Round Sessions

Participation

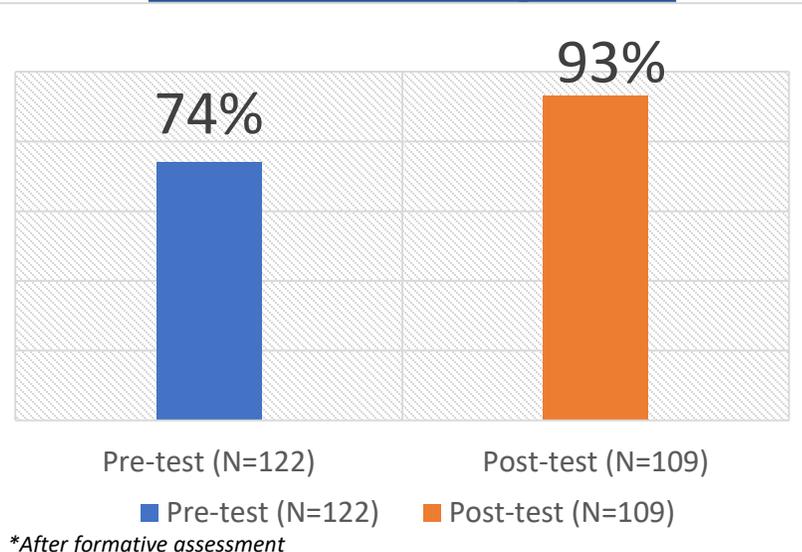


Live Participation: 338 Learners
exceeding projections by 108

66% of learners were physicians and advanced practice providers

Potential Impact to **9,204** patient visits this year

Overall Knowledge Gain



19% absolute gain in knowledge
26% relative gain in knowledge

221% relative gain in confidence
53% absolute gain in confidence

Top 3 Practice Changes

- 63%** reported having already made changes to practice within 45 days of the activity:
- ✓ Incorporated different diagnostic strategies into patient evaluation (50%)
 - ✓ Modified treatment plans (30%)
 - ✓ Changed screening/prevention practice (10%)

92%
N=118
Learners intend to make changes to practice as a result of the activity

"This program was of great practical value!"
- Live virtual session attendee

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

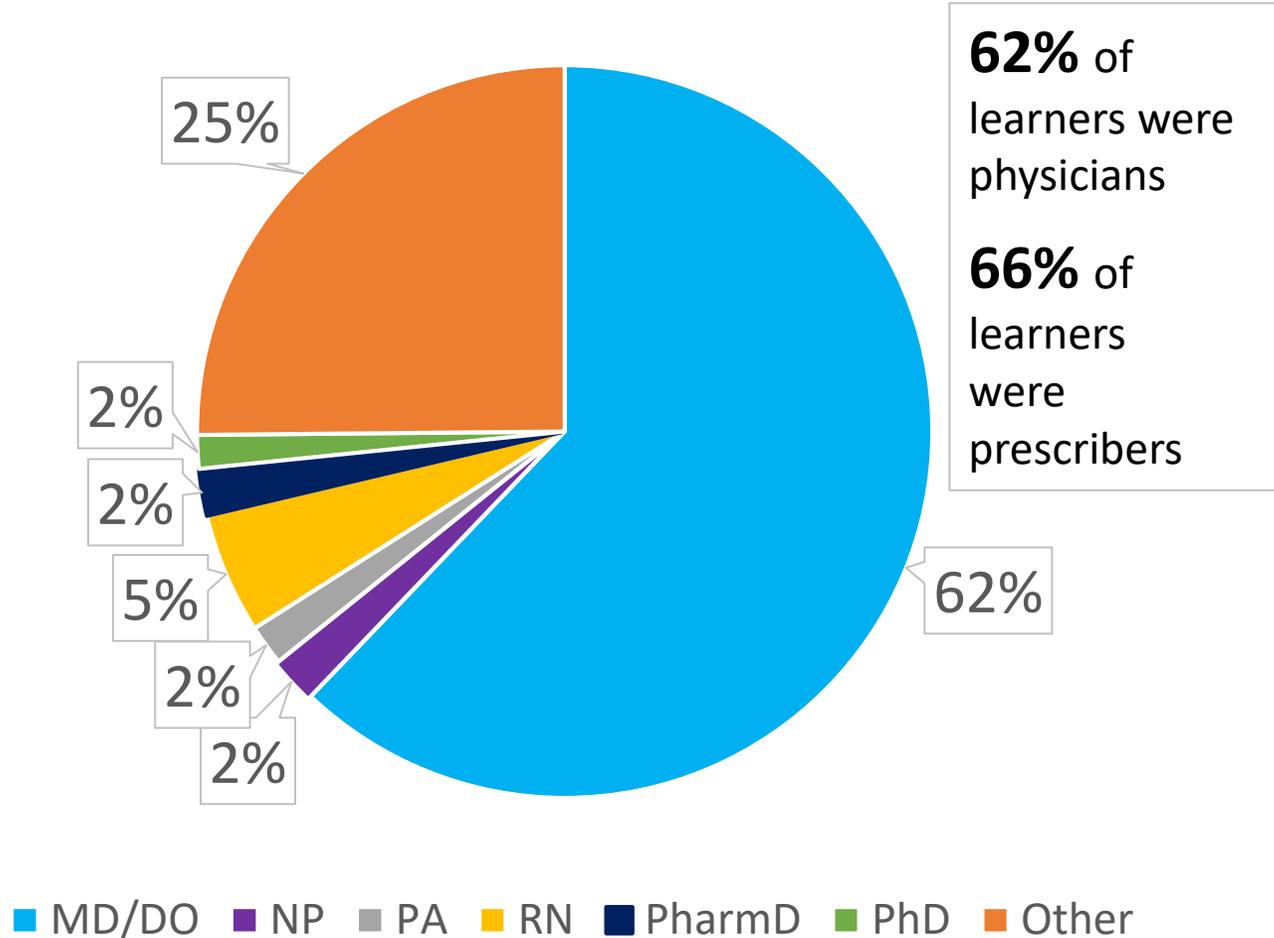
Qualitative Educational Impact Summary: Live Virtual Grand Rounds Sessions

Participants	Educational Impact	Practice Change
338 Total Learners	77% of learners reported that they were very confident or confident in their ability to distinguish EGPA from other eosinophilic lung diseases, summarize best practices for evaluation and differential diagnosis, identify appropriate treatments and address quality of life concerns of patients with EGPA after the activity [N=122]	92% of evaluation respondents reported they intended to make changes to their practice as a result of the educational activity [N=118] 63% for follow-up survey [N=16]
Who see 177 EGPA Patients Weekly	92% of learners indicated they intend to make changes to their practice based on the education in the areas of a more thorough work-up to lead to an earlier diagnosis, treatment regimen, and monitoring [N=118]	60% of follow up survey respondents reported they had not yet made changes, but were “very” to “somewhat likely” to make practice changes [N=16]
Which translates to 9,204 Potential patient Visits Annually	61% of learners indicated the education addressed strategies for overcoming barriers to optimal patient care including communication with the patient, understanding their frustrations, and doing testing as baseline during initial evaluation can lead to earlier diagnosis [N=118]	61% of follow up survey respondents reported lack of time, patient knowledge, and applicability of guidelines to current practice as barriers to patient outcomes. [N=16]

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 1 Outcomes: Live Virtual Grand Round Sessions: Participation by Degree

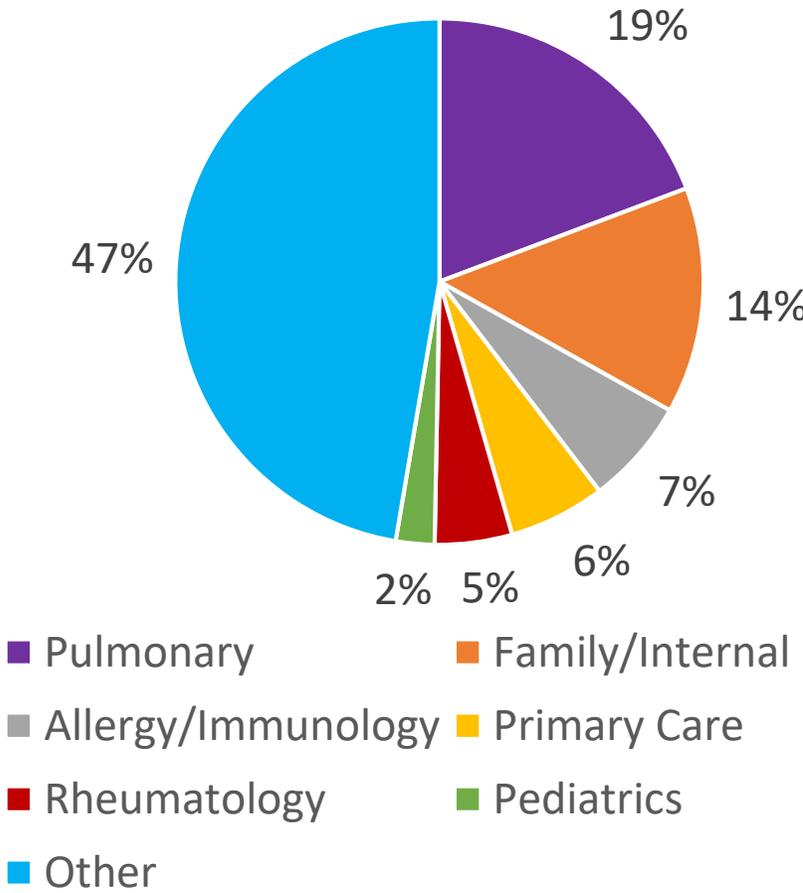


Degree	Total
MD/DO	210
RN	18
NP	7
PharmD	7
PA	6
PhD	5
Other	85
	338

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 1 Outcome: Live Virtual Grand Rounds Sessions: Participation by Specialty



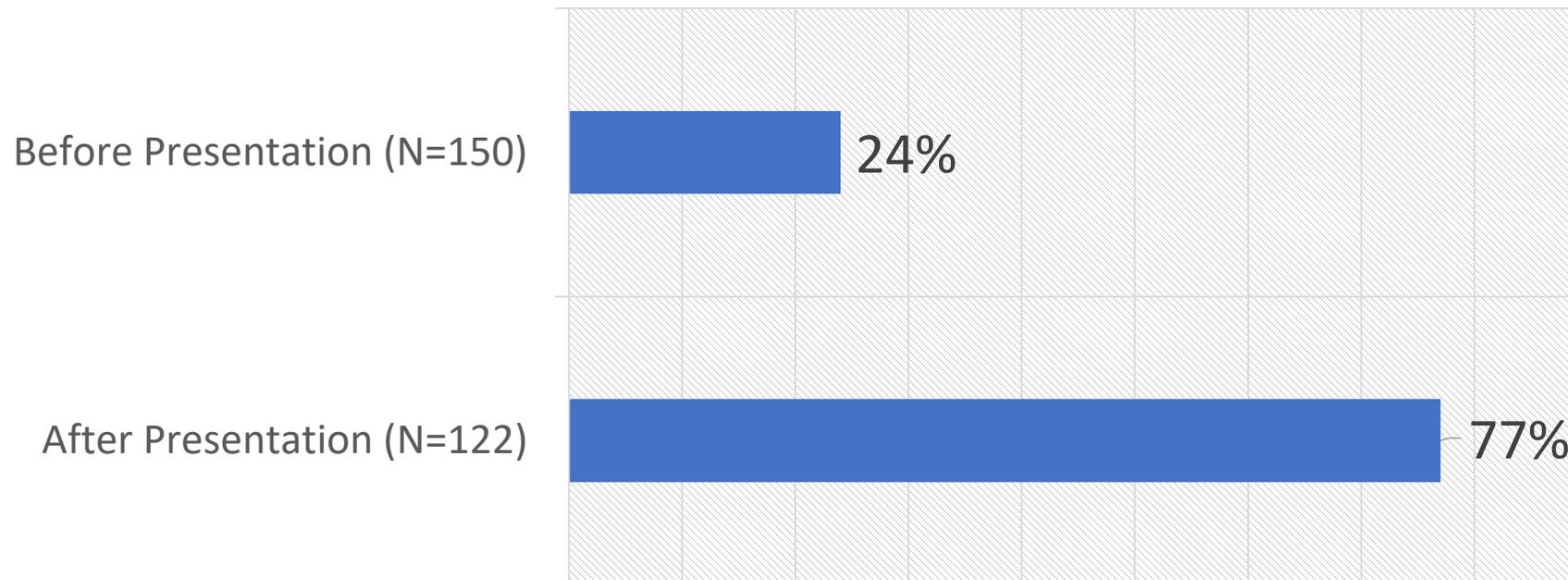
Specialty	Total
Pulmonology	65
Family/Internal	47
Allergy/Immunology	22
Primary Care	20
Rheumatology	16
Pediatrics	8
Other	160
	338

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 2&3 Outcomes: Learning & Satisfaction - Live Virtual Grand Rounds Sessions

Learners reported their confidence on the learning objectives before and after the presentation (somewhat confident – very confident)



Relative Gain in Confidence: 221%

Absolute Gain in Confidence: 53%



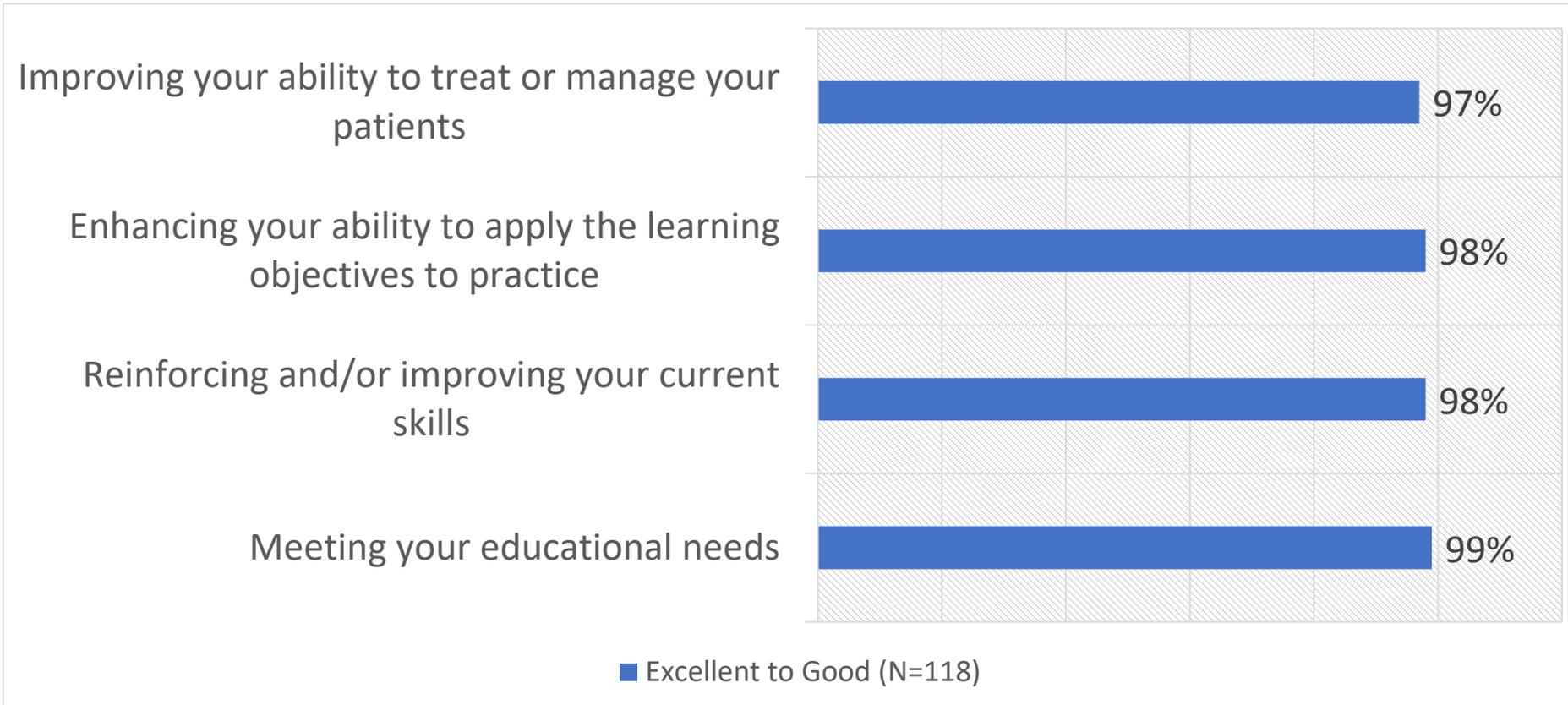
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 2&3 Outcomes: Learning & Satisfaction: Live Virtual Grand Round Sessions

Analysis of participants responses related to educational needs

Participants reported the activity was “Excellent” to “Good” at:



Learners reported high levels of satisfaction related to the ability of the activity to impact practical applications

Formative Assessment

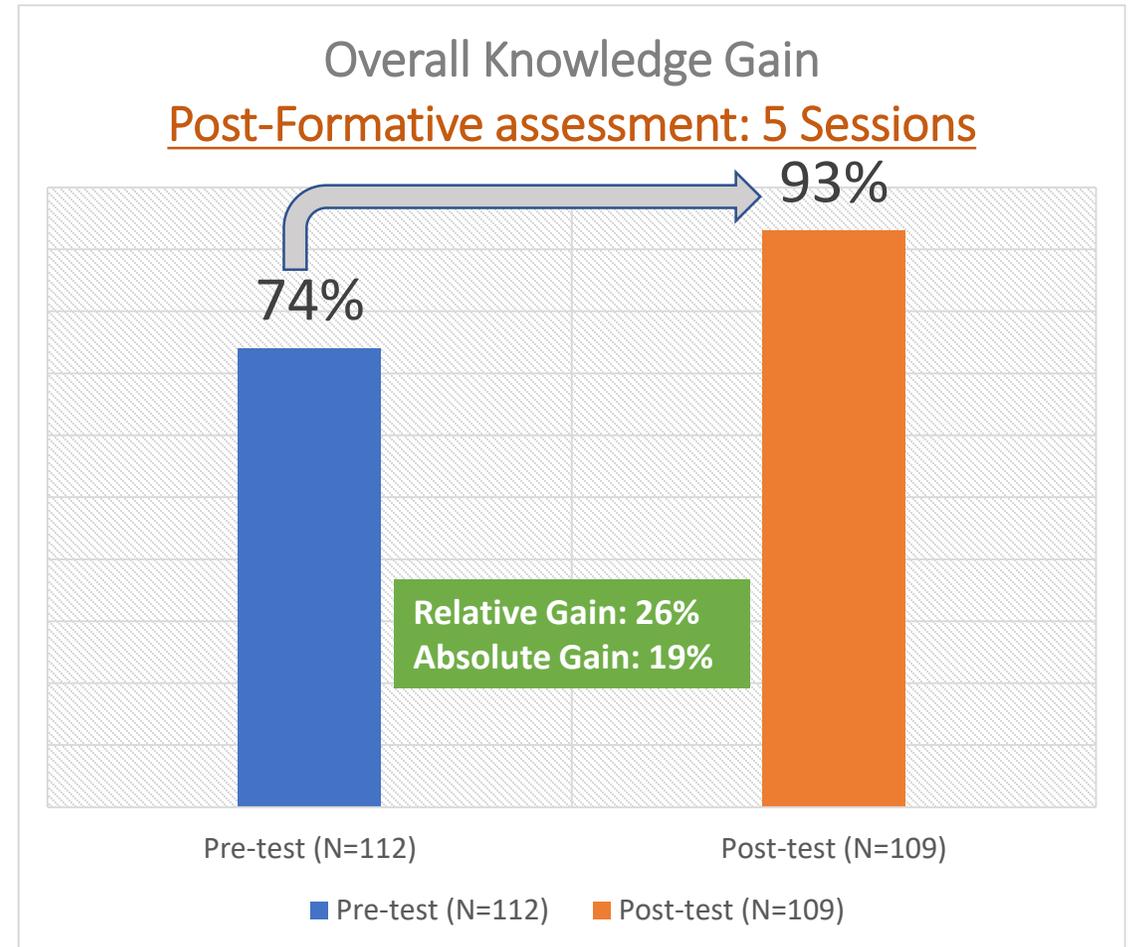
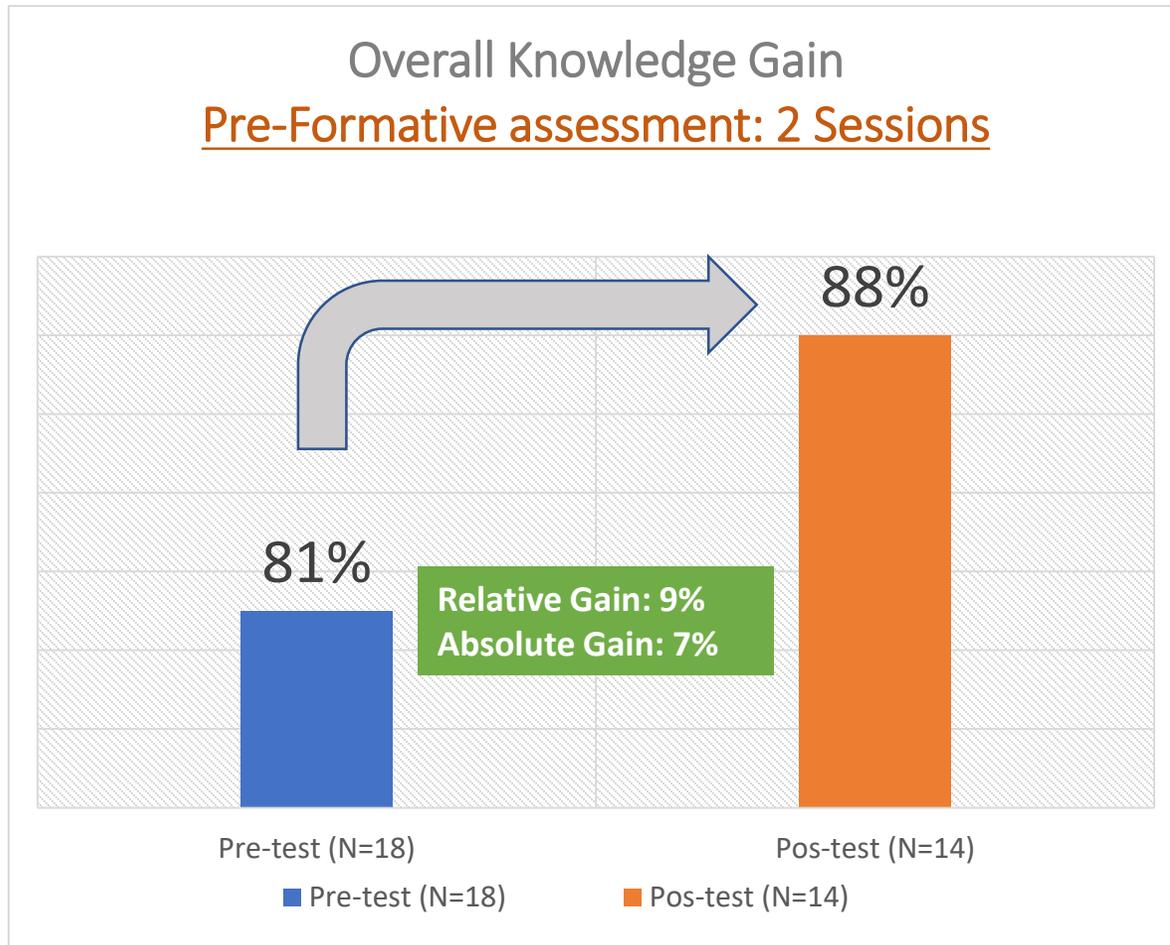
National Jewish Health strives to offer the best possible education to physician and healthcare providers. Our gold standard approach to a series of live presentations include formative assessment between sessions to support evidence-based refinement and improvement of subsequent presentations.

In this series, pre-/post-test questions were revised after the first two institution presentations at Denver Allergy Rounds and St. Joseph Hospital.

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Overall Knowledge Gain (Before & After Formative Assessment)



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

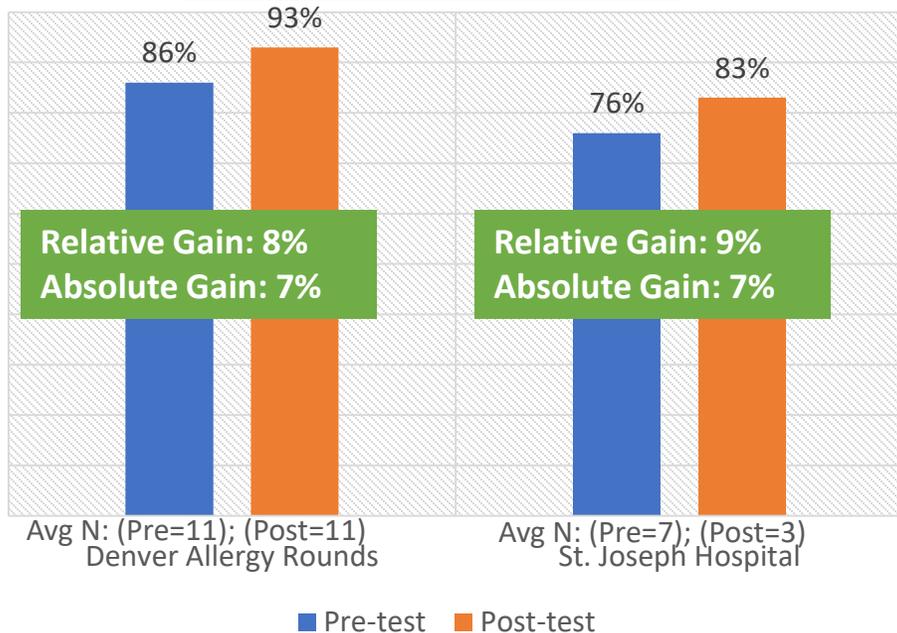
[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Overall Knowledge Gain (Before & After Formative Assessment)

Overall Knowledge Gain by Institution

Pre-Formative Assessment

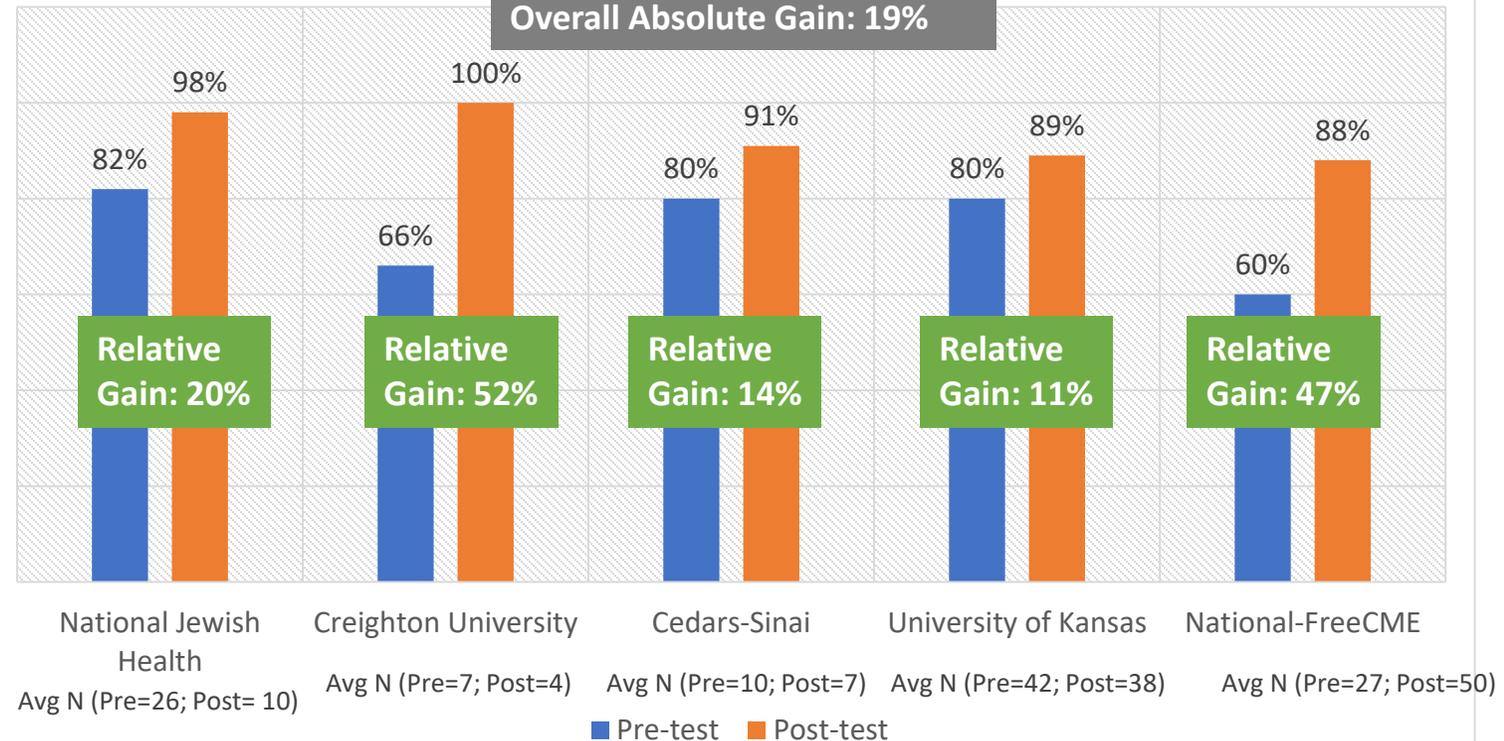
Overall Relative Gain: 9%
Overall Absolute Gain: 7%



Overall Knowledge Gain by Institution

Post-Formative Assessment

Overall Relative Gain: 26%
Overall Absolute Gain: 19%



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 1

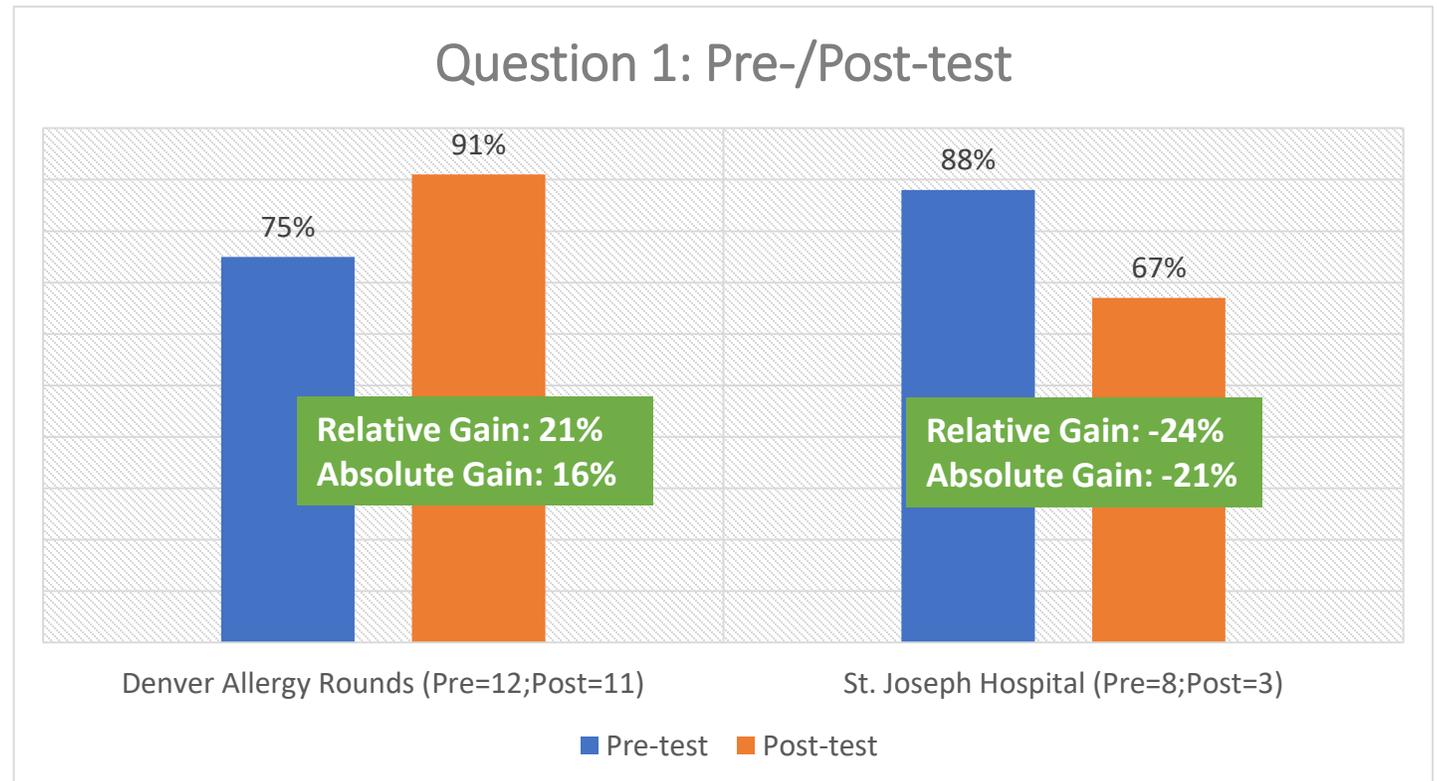
Learning Objective: *Summarize best practices for the evaluation and differential diagnosis of EGPA.*

Question 1 (Pre-formative assessment):

The most common cause of pulmonary infiltrates with eosinophilia in the United States is:

- a. Chronic eosinophilic pneumonia
- b. Eosinophilic granulomatosis with polyangiitis
- c. Parasitic infection
- d. **Drug reaction**

**Before formative assessment*



Average Knowledge Gain (Question 1): -3%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Rounds Sessions: Question 1

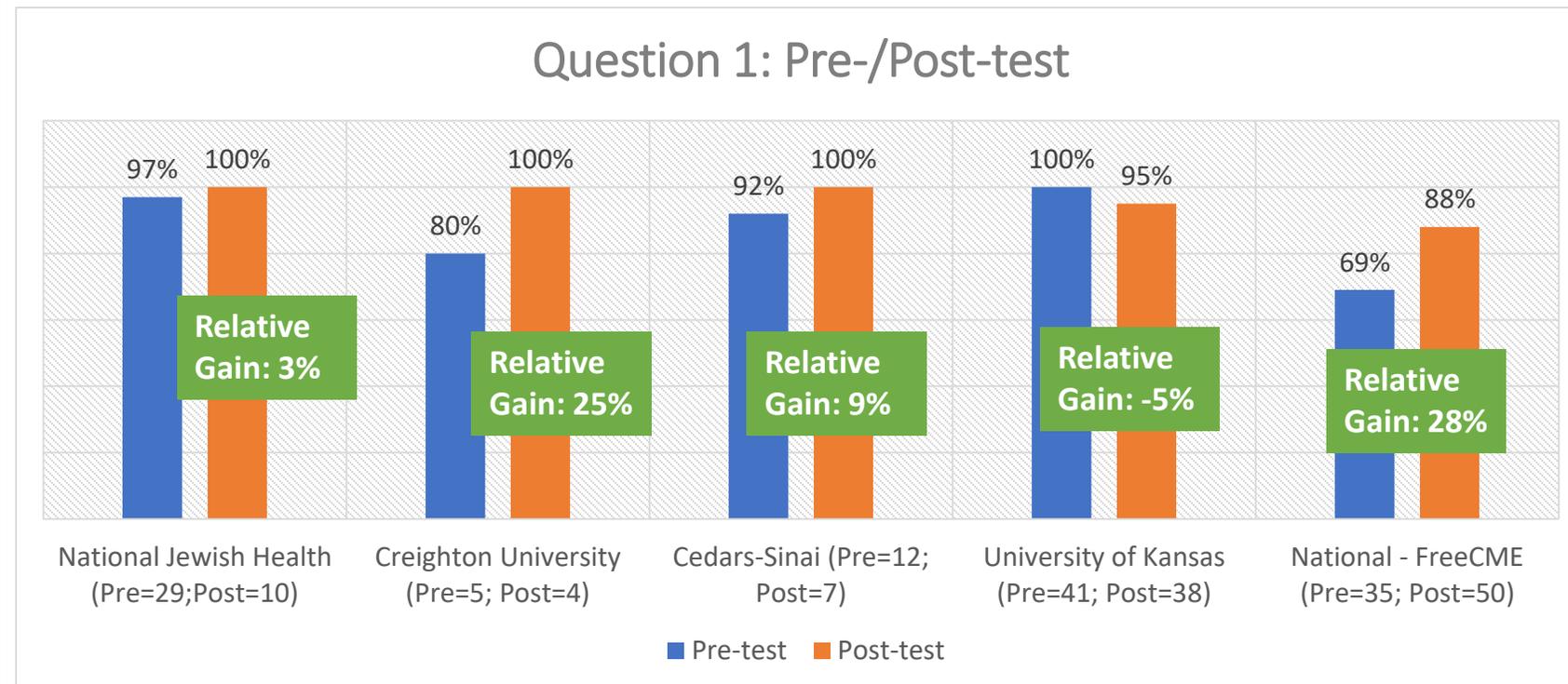
Learning Objective: *Describe clinical features that distinguish EGPA from other eosinophilic lung diseases.*

Question 1 (Revised after formative assessment):

As it pertains to Kyle's initial presentation, which of the following is a true statement?

- a. The majority of EGPA patients are ANCA+
- b. **ANCA negativity does not exclude EGPA**
- c. Most ANCA+ EGPA have specificity for C-ANCA
- d. ANCA positivity is associated with response to mepolizumab

**After formative assessment*



Average Knowledge Gain (Question 1): 10%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 2

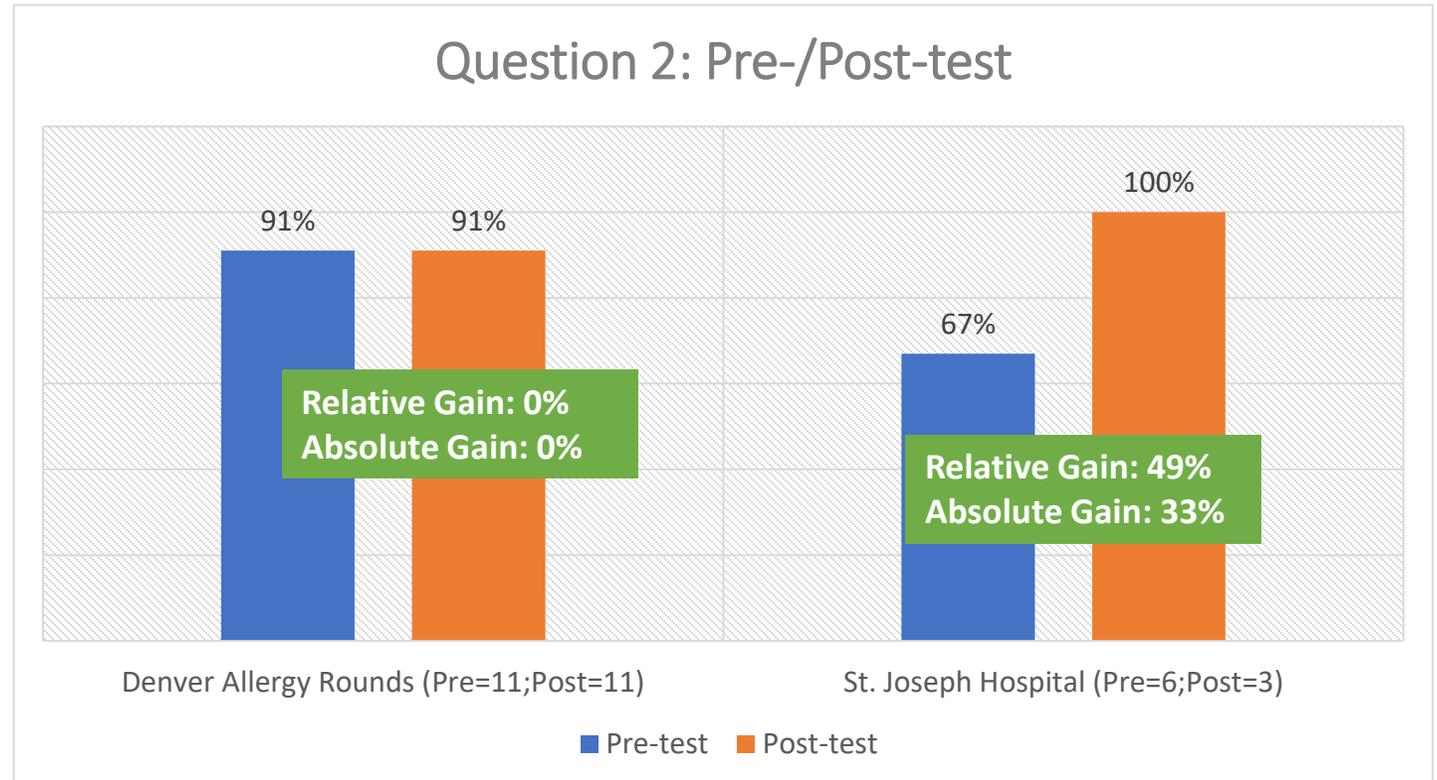
Learning Objective: *Describe clinical features that distinguish EPGA from other eosinophilic lung diseases.*

Question 2 (Pre-formative assessment):

EGPA can be differentiated from Chronic Eosinophilic Pneumonia and Hypereosinophilic syndrome with which of the following:

- a. Pulmonary infiltrates
- b. Blood eosinophilia
- c. BAL neutrophilia
- d. + ANCA

**Before formative assessment*



Average Knowledge Gain (Question 2): 21%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

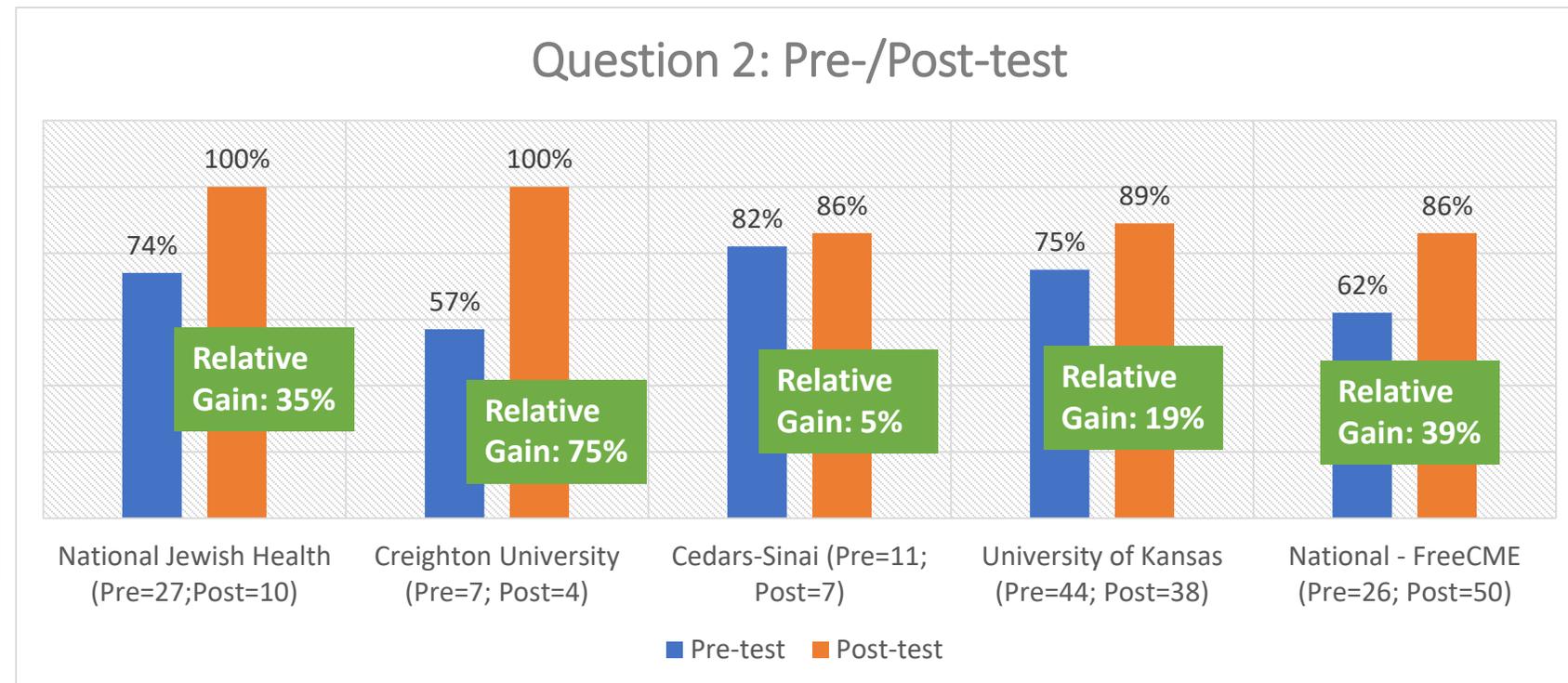
Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 2

Learning Objective: *Describe clinical features that distinguish EGPA from other eosinophilic lung diseases.*

Question 2 (Revised after formative assessment):

Which of the following differentiates EGPA from chronic eosinophilic pneumonia?

- a. Systemic manifestations
- b. Pulmonary infiltrates
- c. Sinusitis
- d. Asthma



*After formative assessment

Average Knowledge Gain (Question 2): 32%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

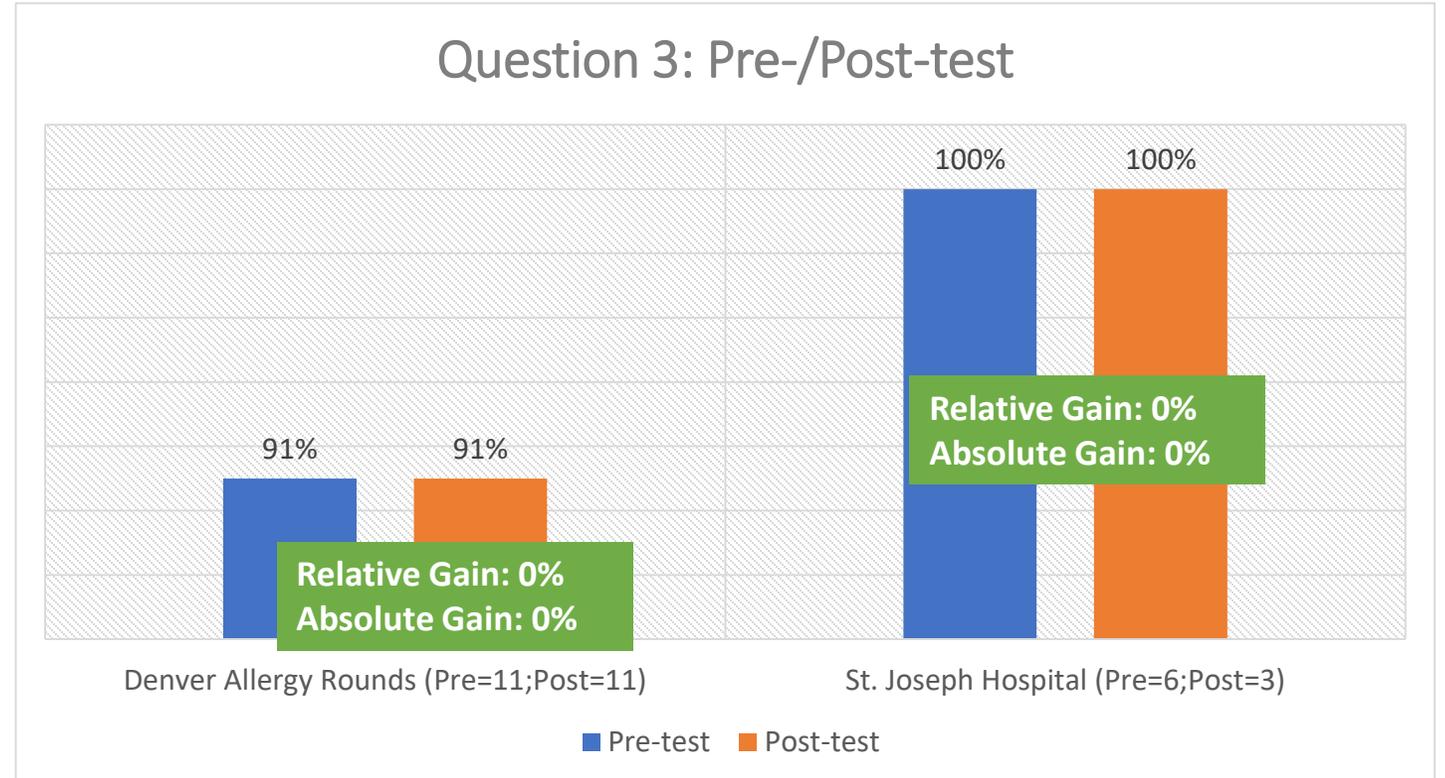
Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 3

Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 3 (Pre-formative assessment):

Which one of these clinical findings would be an indication to use cyclophosphamide?

- a. Moderate asthma
- b. Palpable purpura
- c. Sinusitis and nasal polyposis
- d. **Rapidly progressive glomerulonephritis**



*Before formative assessment

Average Knowledge Gain (Question 3): 0%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

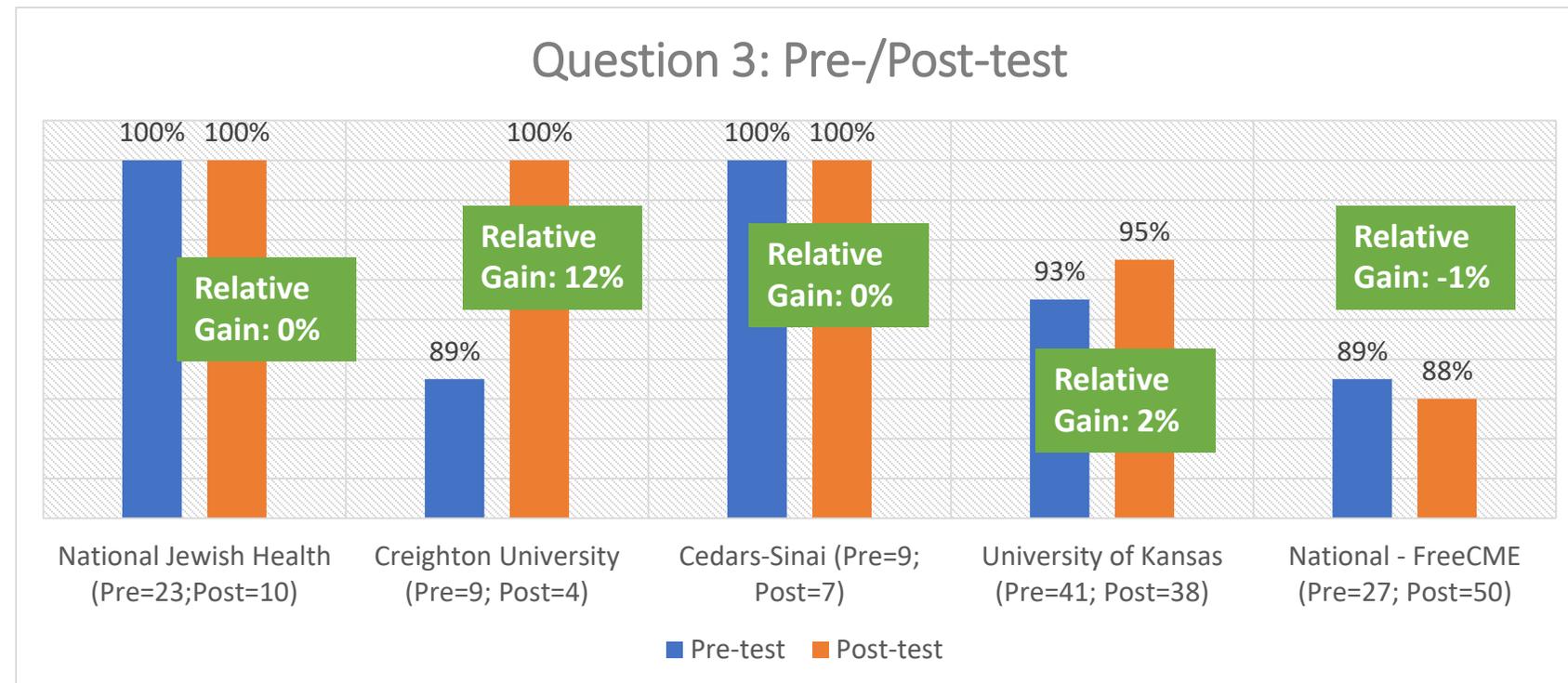
Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 3

Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 3 (Same after formative assessment): Which one of these clinical findings would be an indication to use cyclophosphamide?

- a. Moderate asthma
- b. Palpable purpura
- c. Sinusitis and nasal polyposis
- d. **Rapidly progressive glomerulonephritis**

**After formative assessment*



Average Knowledge Gain (Question 3): 3%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 4

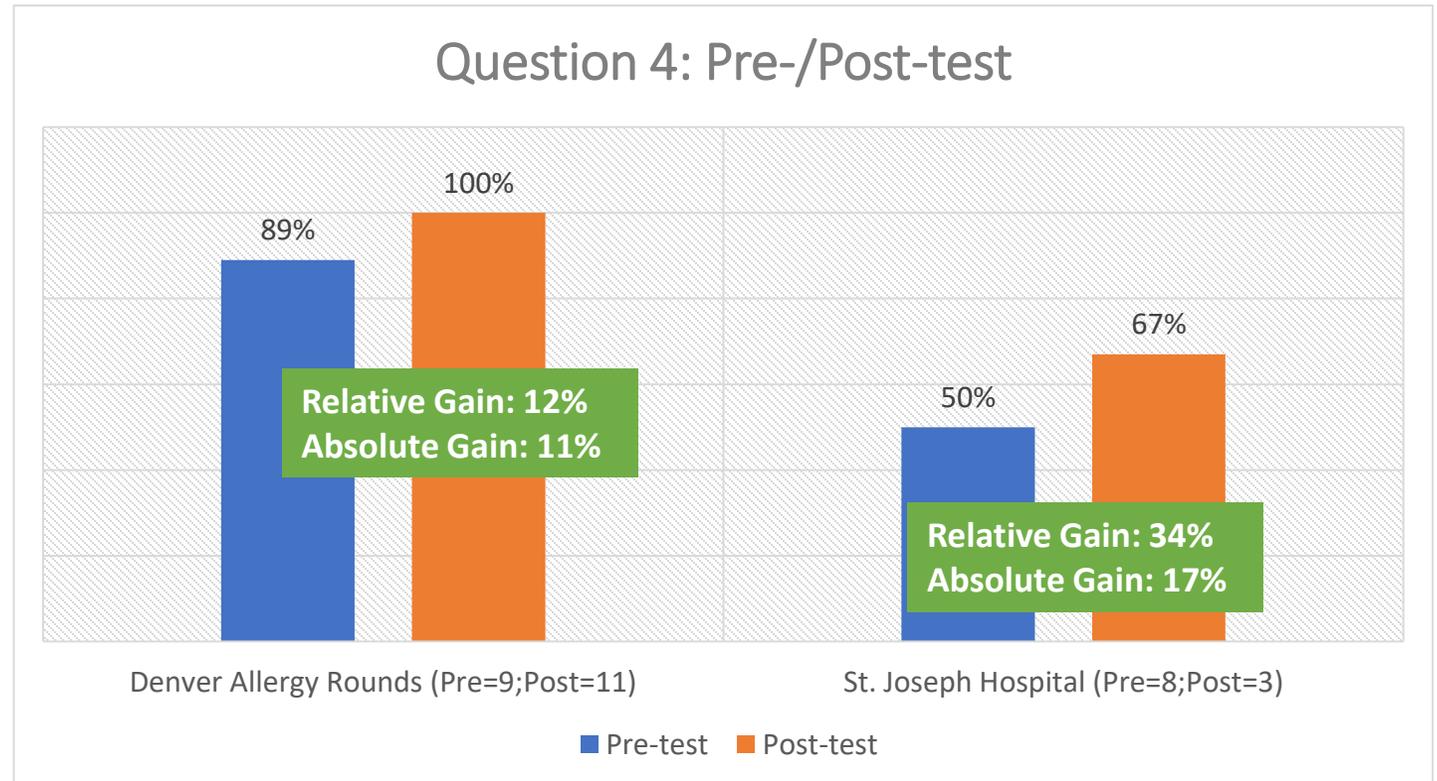
Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 4 (Pre-formative assessment):

Which of the following has been shown to be effective in reducing EGPA exacerbations?

- a. Cyclophosphamide
- b. Methotrexate
- c. **Mepolizumab**
- d. Azathioprine

*Before formative assessment



Average Knowledge Gain (Question 4): 20%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

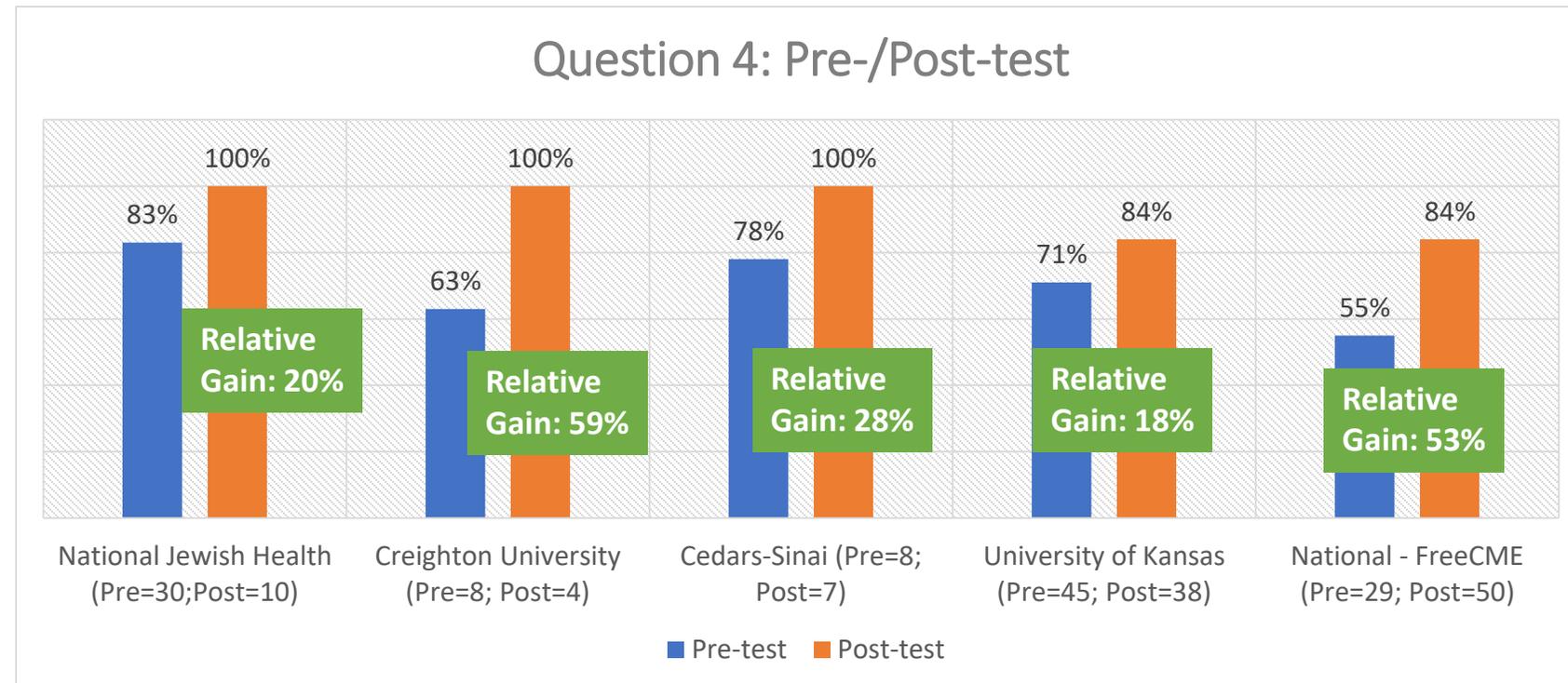
[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Virtual Grand Round Sessions: Question 4

Learning Objective: *Identify appropriate treatments for patients with EGPA.*

Question 4 (Same after formative assessment): Which of the following has been shown to be effective in reducing EGPA exacerbations?

- a. Cyclophosphamide
- b. Methotrexate
- c. **Mepolizumab**
- d. Azathioprine



*After formative assessment

Average Knowledge Gain (Question 4): 34%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

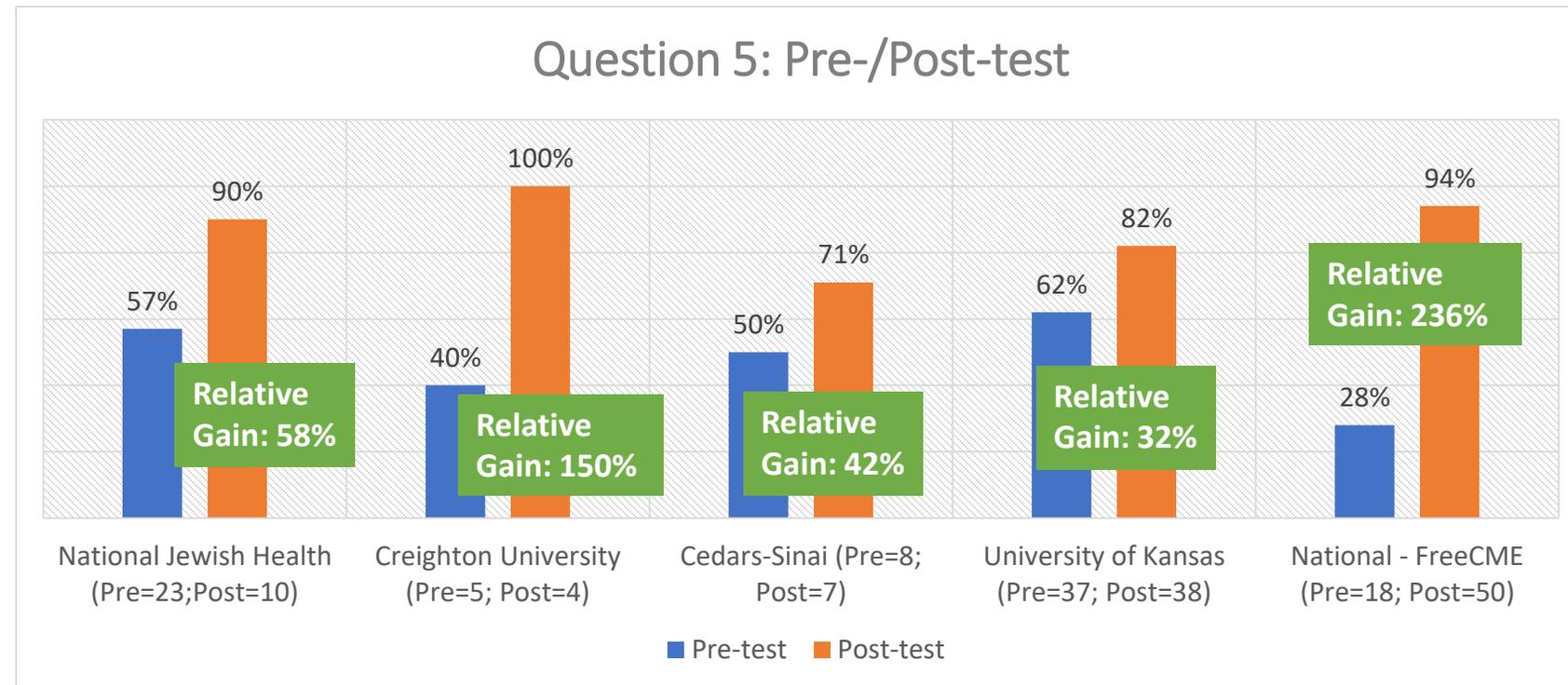
Level 3 Outcomes (Knowledge): Live Virtual Grand Rounds Sessions: Question 5

Learning Objective: *Summarize best practices for the evaluation and differential diagnosis of EGPA.*

Question 5 (Added after formative assessment): As it relates to the differential diagnosis of EGPA, which of the following will help to exclude more rare eosinophilic conditions/vasculitides?

- a. EKG/ECHO
- b. Peripheral smear**
- c. RF-Rheumatoid Factor
- d. Pulmonary Function Tests

**After formative assessment*



Average Knowledge Gain (Question 5): 84%

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Live Virtual Grand Round Sessions: Rating Question 6 (Pre-and Post-activity)

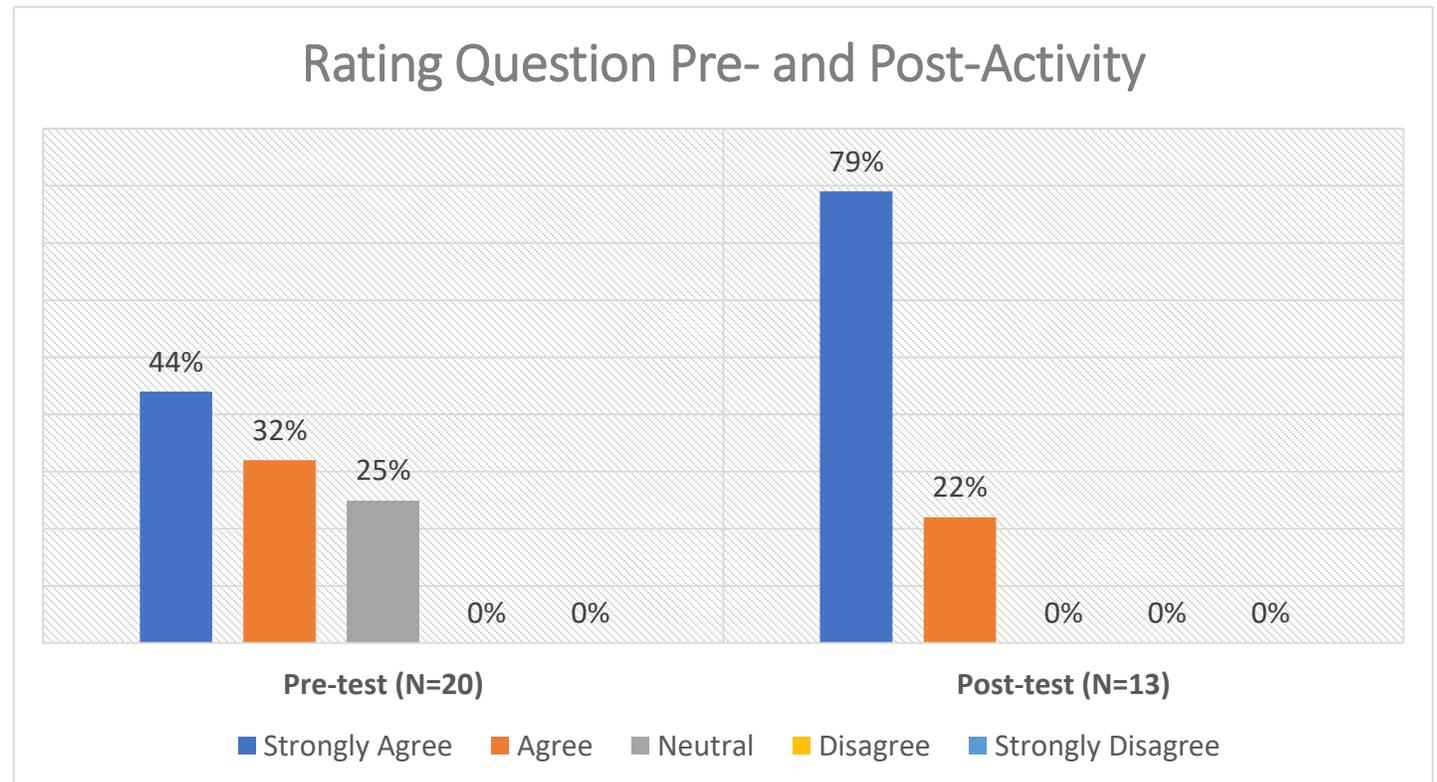
Learning Objective: *Address quality of life concerns with patients and families using a person-centered care approach.*

This question doesn't have a "correct" answer, but was intended to elicit thought about the patient journey.

Rating Question 6: (Pre-formative assessment): The side effect of systemic corticosteroids and delays in receiving an accurate diagnosis often result in a lower overall quality of life for patients with EGPA:

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

**Before formative assessment*



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Live Virtual Grand Round Sessions: Rating Question 7 (Pre-and Post-activity)

Learning Objective: Address quality of life concerns with patients and families using a person-centered care approach.

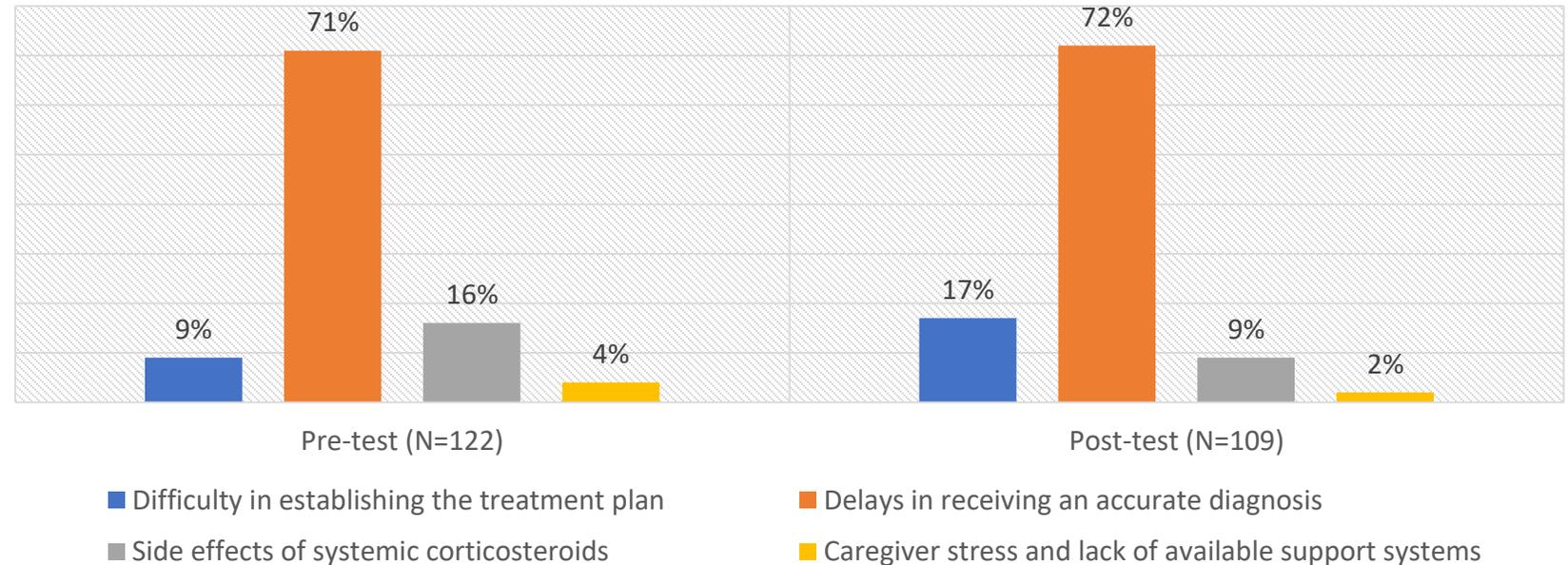
This question doesn't have a "correct" answer, but was intended to elicit thought about the patient journey.

Rating Question 7: (Revised after formative assessment):

Which of the following do you feel is the most closely associated with overall lower quality of life for patients with EGPA?

- a. Difficulty in establishing the treatment plan
- b. Delays in receiving an accurate diagnosis
- c. Side effects of systemic corticosteroids
- d. Caregiver stress and lack of available support systems

Rating Question: Pre-/Post-activity



*Added after formative assessment

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Level 4 Outcomes (Competence): Live Virtual Grand Round Sessions

An analysis of open-ended comments demonstrate the following changes learners intend to make:

92%

N=118

Learners intend to make changes to practice as a result of the activity

Extended work-up and incorporate patient's thoughts to come to an earlier diagnosis

[N=50]

Overall increased knowledge on the disease of EGPA

[N=17]

Consideration of use of mepolizumab

[N=9]

Consideration of other agents

[N=9]

Treatment regimen and monitoring

[N=8]

N=93

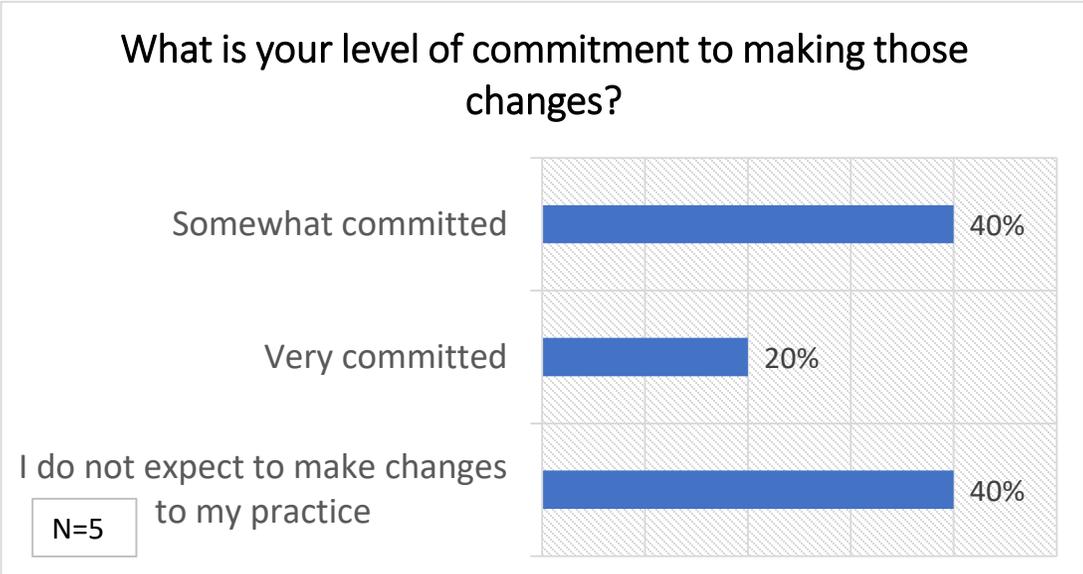
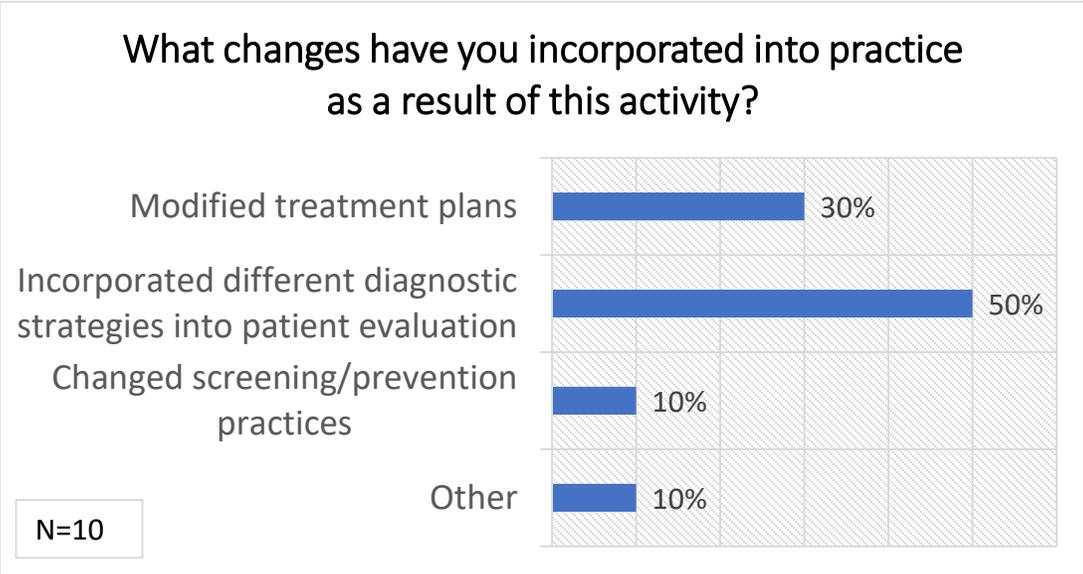
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

45-day Follow-up Survey: Live Virtual Grand Round Sessions

63% stated that the activity provided new ideas or information they have used in practice.
[N=16]

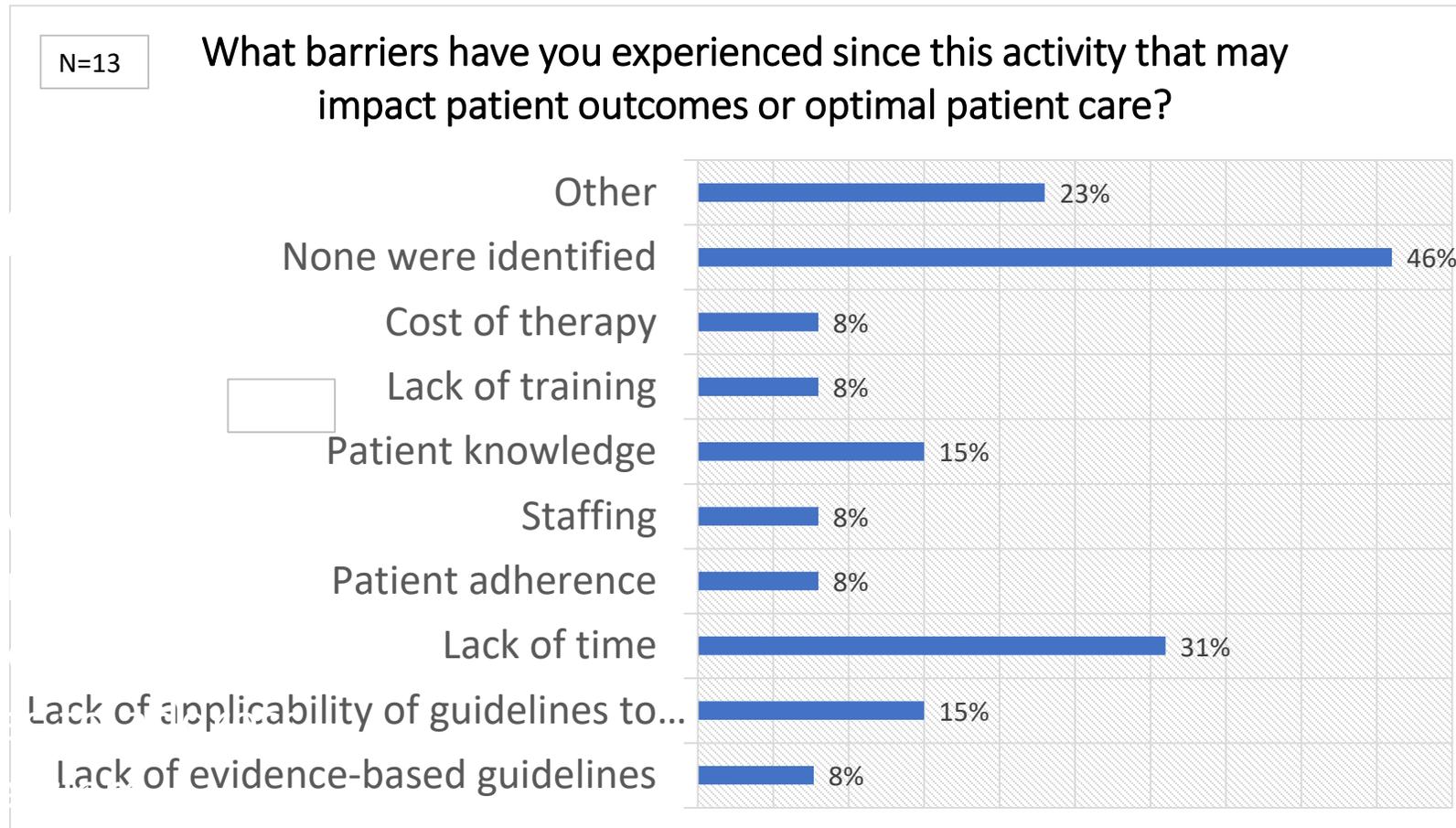
60% indicated if they haven't made changes yet but that they are thinking of making those changes.
[N=5]



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

45-day Follow-up Survey: Live Virtual Grand Round Sessions



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Program Evaluation: Live Virtual Grand Round Sessions

Criteria for an accurate diagnosis
(46 responses)

Treatment Plan
(12 responses)

Most important take-away

Overall management and understanding of EGPA
(34 responses)

Refer patients to specialist
(2 responses)

Medication management and regimen
(13 responses)

N=107

99%

- Material presented in an objective manner and free of commercial bias

100%

- Content presented was evidence-based and clinically relevant

N=117

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Program Evaluation: Live Virtual Grand Round Sessions

What do you think is the primary reason why making a diagnosis of EGPA is so difficult?

Lack of training and clinical experience	The many manifestations of EGPA
Symptoms and signs shared by other diseases	Not that common
ANCA negativity	Symptoms are a lot like asthma
Difficult getting tests done in a timely manner	Insurance
Hard to find a specialist with expertise	Complexity of disease
Requires collaboration from other disciplines	Lack of understanding of the proper work-up
Non-compliance by patient to medical regimen	Masked signs and symptoms
Lack of access to lab kits and tests	Multi-system involvement of disease

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Program Evaluation: Live Virtual Grand Round Sessions Strategies for Overcoming Barriers

- Communication with patient
- Understanding of key frustrations and hurdles patients experience
- Reinforced to not hesitate to do up front testing as baseline during initial evaluation
- Early detection of signs and symptoms of the disease
- Proper approach to diagnosis and step-wise therapy



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Program Evaluation: Live Virtual Grand Round Sessions

What topics would you like more information about in future educational activities?

COVID-19	Severe asthma; non-eosinophilic asthma
Management of T-cell mediated drug reaction	Nasal polyps
Pulmonary vasculitis	ANCA diseases
ILD	Sleep disorders
Acute eosinophilia pneumonia	Treatment of refractory asthma
Practical outpatient pearls from specialists	Hypersensitivity reactions
Renal outcomes in EGPA patients	Atypical mycobacteria
Immunosuppressant	Cardiology
Nephrology	Gastroenterology
Vocal cord dysfunction	Use of biologics in asthma
Lung transplant	Polyarteritis nodosa (PAN)
Case studies	Type 1 and 2 diabetes mellitus
Cancer	Skin diseases

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

A clinical reference aid was developed for healthcare providers to reference in their practice.

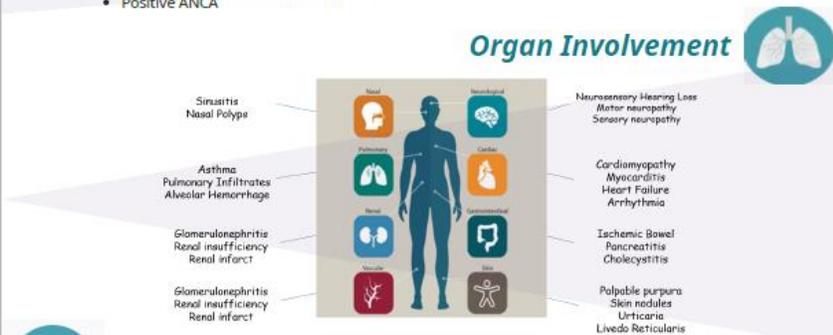
Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA



Characteristics

- Moderate to severe asthma
- Peripheral blood eosinophilia (> 10% eosinophils)
- Pulmonary infiltrates
- Paranasal sinus abnormality
- Mononeuropathy or polyneuropathy
- Extravascular eosinophils/eosinophilic vasculitis of small- to medium-sized blood vessels
- Positive ANCA

Organ Involvement



Differential Diagnosis

	Acute Eosinophilic Pneumonia	Chronic Eosinophilic Pneumonia	Hypereosinophilic Syndrome	Eosinophilic Granulomatosis with Polyangiitis
Key Features 1	Acute fibrin (blood), hypoxic respiratory failure, diffuse pulmonary infiltrates, BAL fluid eosinophils > 25%, previously healthy person	Subacute blood eosinophils in lung tissue and blood, bilateral pulmonary infiltrates may be peripheral in location	Sustained overproduction of eosinophils, elevated peripheral blood eosinophils, tissue eosinophils, end-organ damage includes retroperitoneal, lymphatic, cardiac, and idiopathic ventricle	Necrotizing vasculitis of small- to medium-sized blood vessels; asthma; eosinophil-rich granulomatous inflammation of respiratory tract; involves multiple organs
Onset	Acute (days)	Insidious (months/years)	Insidious (months/years)	Insidious (months/years)
Pulmonary Infiltrates	Diffuse	Peripheral	Patchy	Patchy
Frequently Occurs	• Pulmonary respiratory failure	• Chronic sinusitis	• Cardiac involvement • Neurologic involvement	• Asthma/history • Vasculitis • Neurologic involvement
Commonly Occurs	• Smoking history	• Asthma/allergy history	• Requirement for therapies other than corticosteroids	• ANCA • Cardiac involvement • Requirement for therapies other than corticosteroids

Treatment



References: 1 Wechsler ME. Pulmonary eosinophilic syndromes. Immunol Allergy Clin N Am. 2007;27:477-492.3
2 Wechsler ME, et al. Mepolizumab or Placebo for Eosinophilic Granulomatosis with Polyangiitis. N Engl J Med. 2017 May 18;376(20):1921-1932.
This educational activity is supported by an educational grant from GlaxoSmithKline.



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

“I really enjoyed the patient speaking about his experiences and the impact of getting a correct diagnosis and treatment made to his quality of life.”
–from learner evaluation

“Patient videos are a great addition!” –from learner evaluation



Kyle W. – Patient Perspective

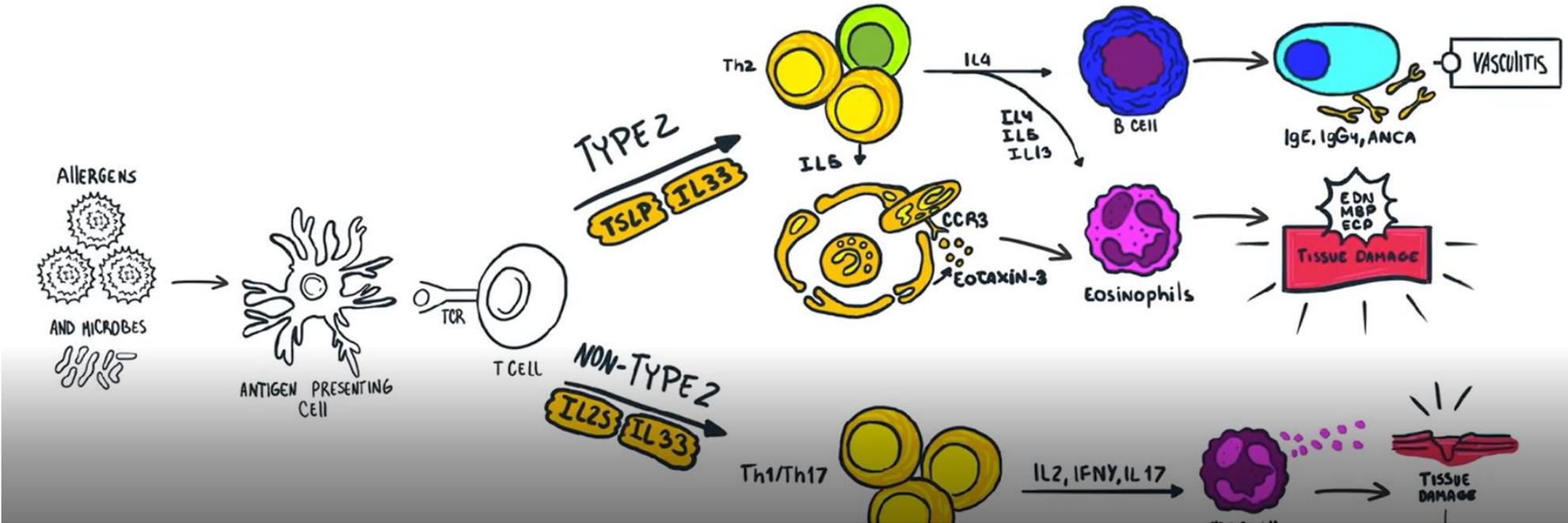
“Patient example was a good reminder to look deeper and listen better to patients.”
–from learner evaluation

Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live Final Outcomes]

Really like the pathophysiology animation slide! – From Learner Evaluation

Loved the whiteboard animation!
-From Learner Evaluation



Diagnosis and Treatment Selection for Eosinophilic Granulomatosis with Polyangiitis: Person-Centered Care in EGPA

[Live & Online Final Outcomes]

Accreditation

NJH is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The NJH Office of Professional Education produced and accredited this program and adhered to the updated ACCME guidelines.

NJH designates the live activity and enduring material for a maximum of 1.0 *AMA PRA Category 1 Credits*[™].

Provider approved by the California Board of Registered Nursing, Provider Number 12724 for 1.0 nursing contact hours.



**Thank you for your support of this
educational program!**