

OPTIMIZING CARE FOR EGPA

Final Outcomes Summary
Online Enduring
Online Data from: 6/13/24 – 6/13/25
Grant ID: 91690859



Evidence-Based Strategies for
Diagnosis, Management and Treatment

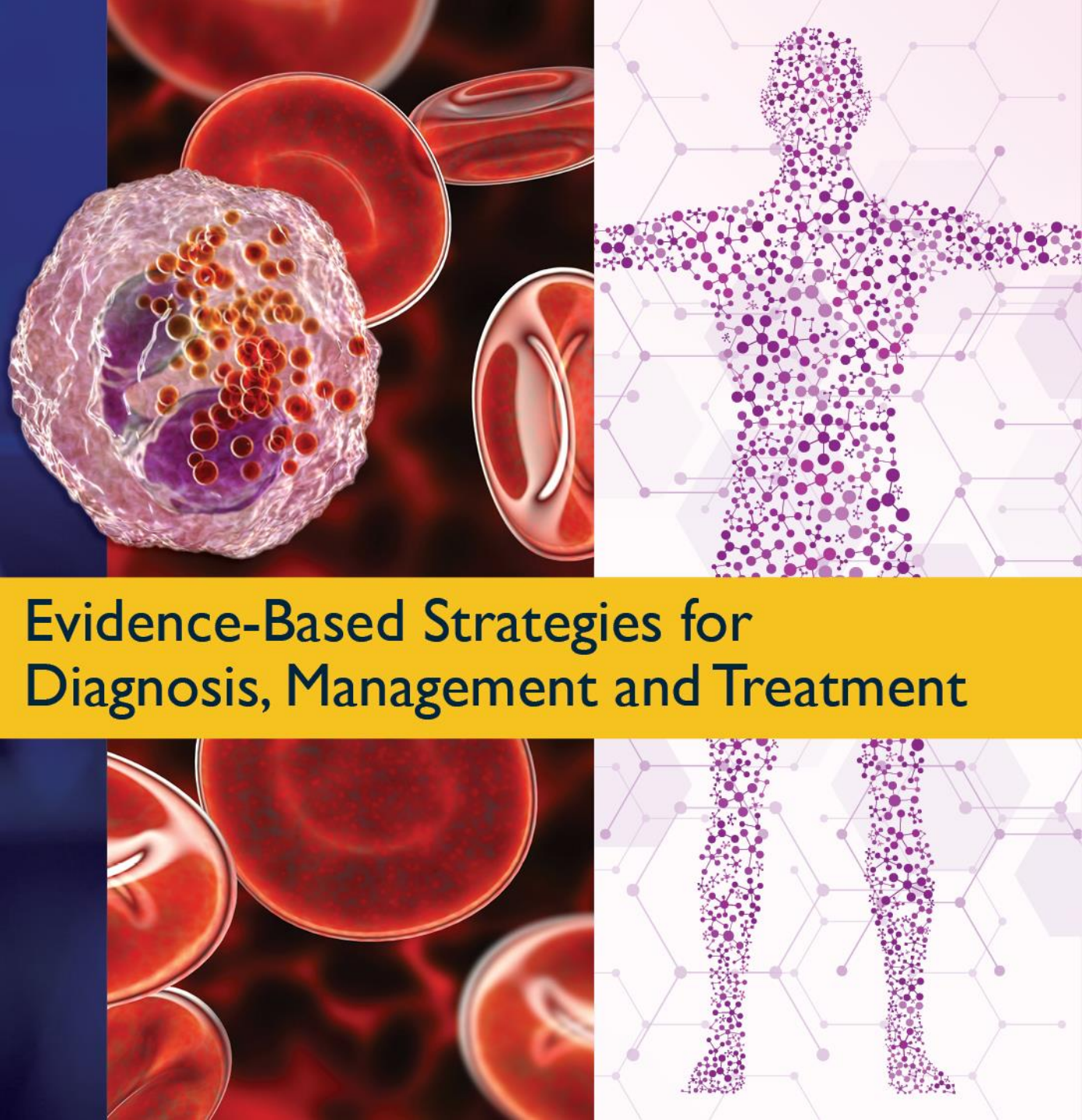


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Executive Summary

Final Outcomes Summary – Online Outcomes

Program Faculty



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Program Overview

Patients with EGPA experience a complex and challenging journey. EGPA is challenging to diagnose and differentiate from other related eosinophilic disorders, presenting healthcare providers with a challenge to effectively diagnose and provide timely interventions to prevent severe complications for patients with EGPA. In this online activity, a multidisciplinary expert faculty panel discussed EGPA pathophysiology, diagnostic criteria, and evidence-based management strategies to improve patient outcomes. Patient case scenarios and patient perspective video clips illustrated challenges and management strategies for providers who treat patients with EGPA, and a 3D animation illustrated the complex pathophysiology of EGPA.

Learning Objectives

- Define the role of eosinophils and IL-5 in EGPA
- Implement evidence-based diagnostic approaches to identify EGPA
- Integrate approaches that target comorbidities, enhance quality of life, and mitigate healthcare disparities in EGPA patient care
- Utilize the current evidence and guidelines for the management and treatment of EGPA

Target Audience & Accreditation

Target Audience: Rheumatologists, pulmonologists, allergists/immunologists, and advanced practice providers who treat patients with EGPA.

National Jewish Health designates this enduring material for a maximum of 1.0 *AMA PRA Category 1 Credit™*.

Enduring activity on Medscape:

June 13, 2024 – June 13, 2025

Link: <https://www.medscape.org/viewarticle/1001199>

Program Features

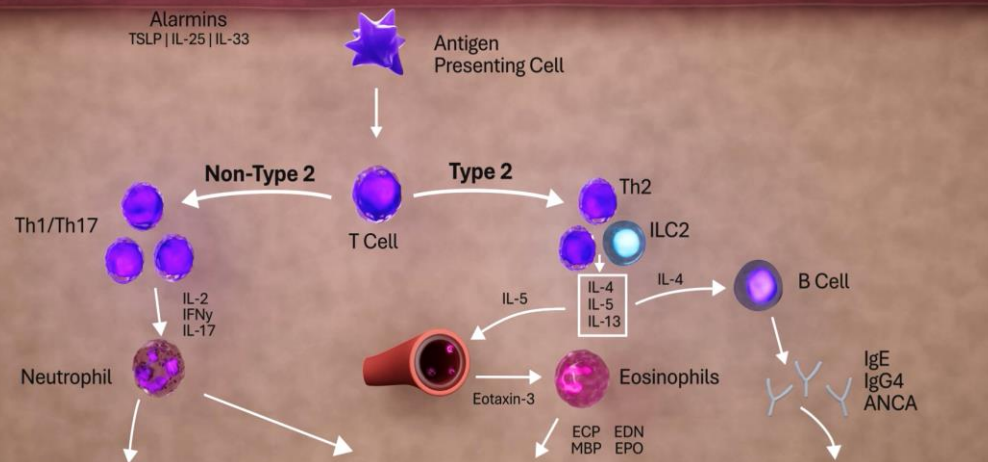
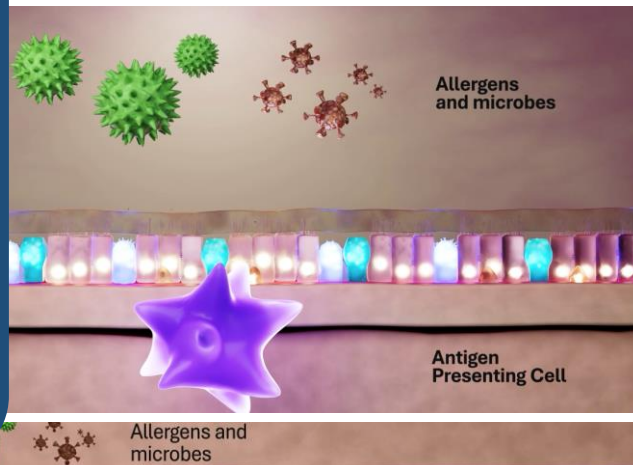
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Whiteboard Animation

85%

evaluation respondents reported the animation increased their understanding of EGPA pathophysiology

(N=1021)



Patient Perspective Video



Patient Case

Patient: Mr. K, a 42-year-old male

Case details:

- Adult-onset asthma, diagnosed 4 years ago by his primary care physician
- He is on inhaled CS/LABA
- He has had increasing frequency of asthma exacerbations requiring oral glucocorticoids

ROS:

- Notes numbness in his toes for about a year
- Also notes a rash on his legs for 3 months

Initial workup:

- WBC $22.0 \times 10^9/L$
- AEC $1.7 \times 10^9/L$
- creatinine 0.7mg/dL
- UA no blood or protein
- ANCA negative

85%

evaluation respondents reported the patient video improved their understanding of patient needs, challenges, and barriers (N=1021)

Case Discussions with Interactive Polling



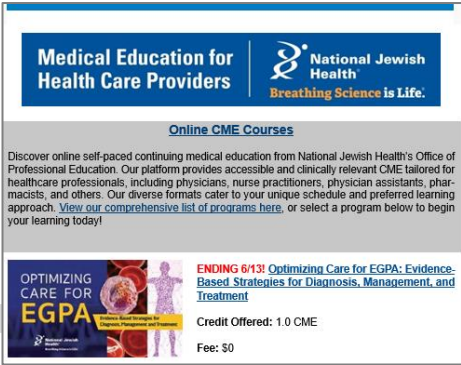
70% of rheumatologist, pulmonologist and allergist certificate earners (N=270) and **37%** of total physician certificate earners (N=634) downloaded the slide deck from the Medscape platform

Audience Generation

Final Outcomes Summary – Online Outcomes

Personalized targeting tools across numerous tactics reach HCPs by leveraging demographic data (such as location, profession, specialty) and behavioral data (such as learner participation history, areas of interest).

Emails and
e-newsletters sent to
National Jewish Health
and Medscape databases



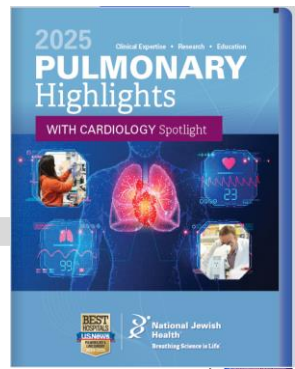
Social media
ads and posts



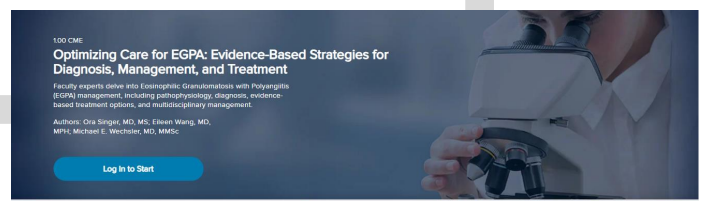
Promotion at
live conferences



Featured in 2025
Pulmonary Highlights
publication



Landing page on NJH and
Medscape websites



Online Enduring Program

Final Outcomes Summary – Online Outcomes

Medscape

June 13, 2024 – June 13, 2025

<https://www.medscape.org/viewarticle/1001199>

1.00 CME

Optimizing Care for EGPA: Evidence-Based Strategies for Diagnosis, Management, and Treatment

Faculty experts delve into Eosinophilic Granulomatosis with Polyangiitis (EGPA) management, including pathophysiology, diagnosis, evidence-based treatment options, and multidisciplinary management.

Authors: Ora Singer, MD, MS; Eileen Wang, MD, MPH; Michael E. Wechsler, MD, MMSc

[Log In to Start](#)

This activity is supported by an
independent educational grant from

AstraZeneca Pharmaceuticals LP

Learner Definitions and Guarantees: Online Enduring Program

Final Outcomes Summary – Online Outcomes

Category	Medscape Definition	Guarantees	Actuals
Learner	Progressed past front-matter (unique)	1,000 physicians	3,156 physician learners 4,424 total learners
Test-taker	Completed at least one question of the pre-test	100 physicians	924 physician test-takers 1,407 total test-takers
Post-test taker	Completed the activity and post-test	N/A	1,105 total post-test takers
Certificate	Passed the post-test, completed the evaluation and claimed credit on Medscape	N/A	1,024 total certificates

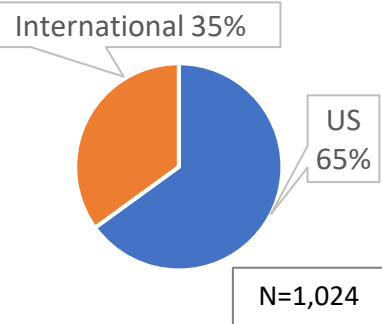
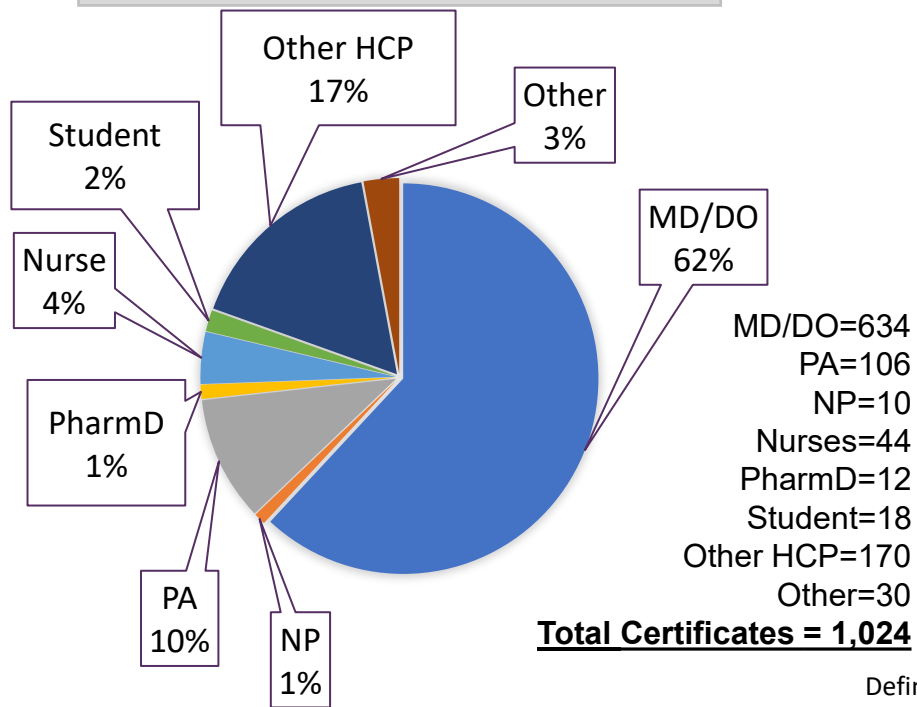
We have exceeded **learner guarantees by 2,156 physicians** and **test-taker guarantees by 824 physicians** for the activity!

Of 4,424 total learners
3,491 or **79% were**
physicians and APPs

Educational Impact Summary

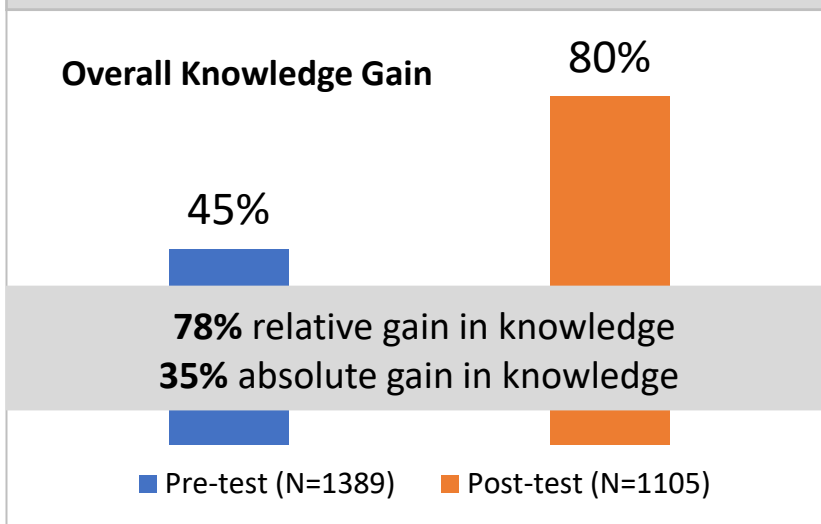
Final Outcomes Summary – Online Outcomes

Participation

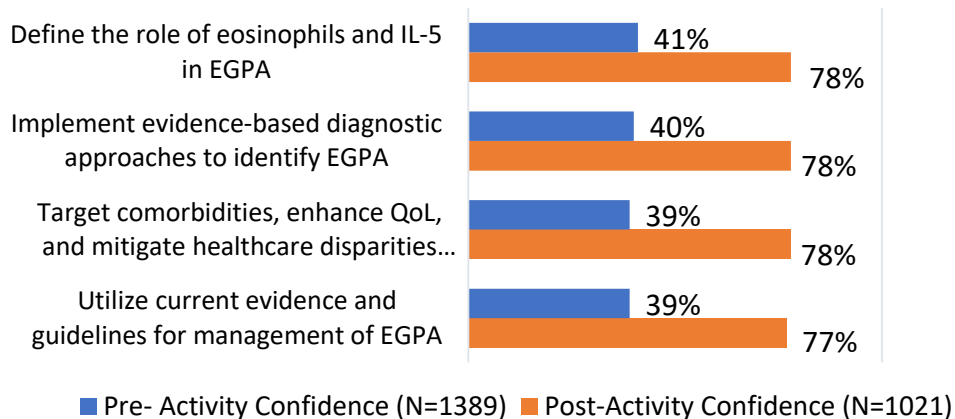


**Potential Impact
To
271,416
Patient Visits This
Year**

Learning Gain Across Objectives



Confidence Across Objectives



Evaluation

N=1021

Improved ability to treat patients **(84%)**



Reinforced or improved current skills **(85%)**



Addressed strategies for overcoming barriers to optimal patient care **(80%)**

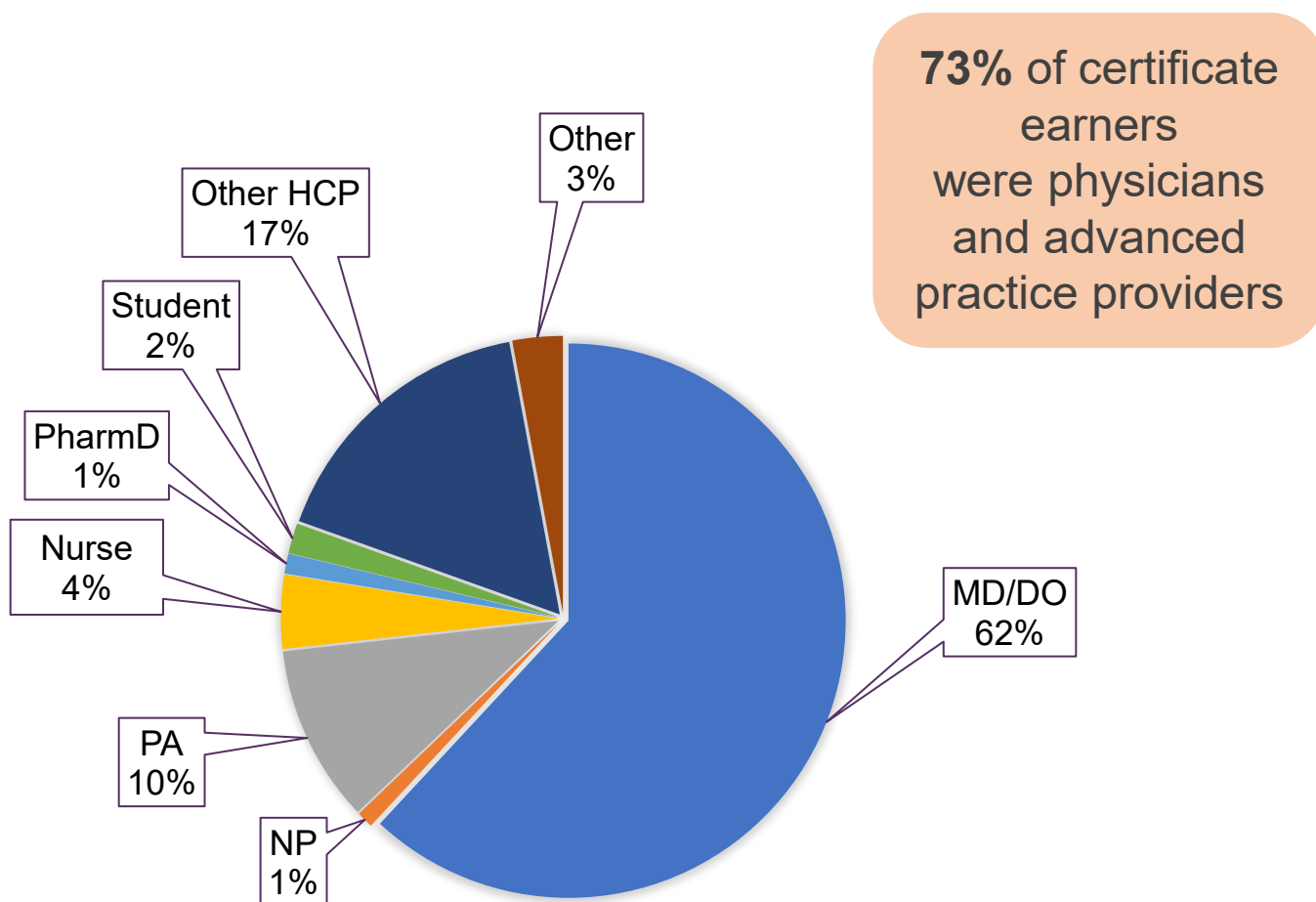
91%

N=878

Evaluation respondents intend to make changes in practice as a result of the activity

Level (1) Outcomes: Participation (Degree)

Final Outcomes Summary – Online Outcomes

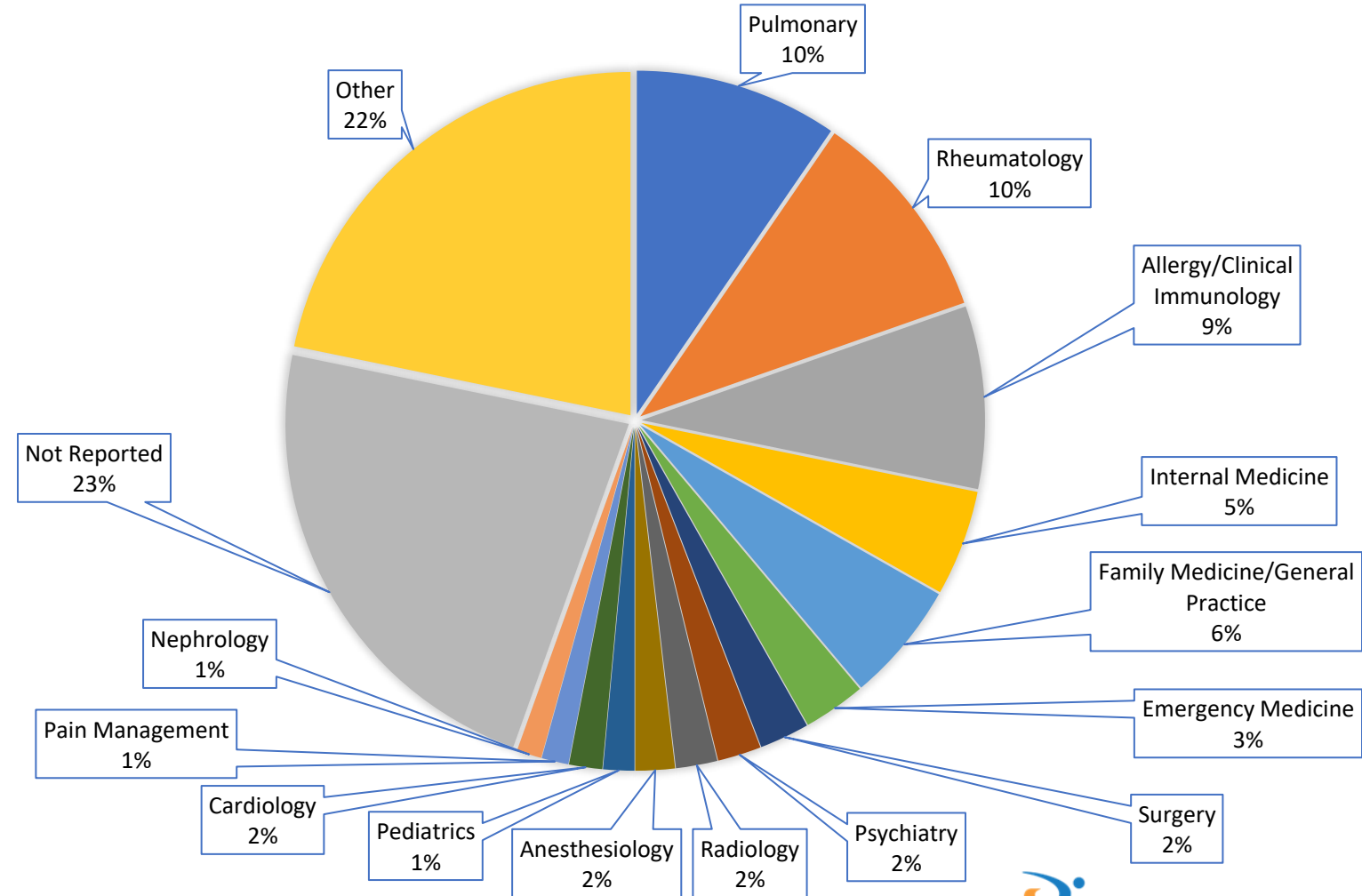


Degree	Total
MD/DO	634
PA	106
NP	10
Nurse	44
PharmD	12
Student	18
Other Healthcare Provider	170
Other (Administrator, Consumer, etc)	30
Total Certificates	1,024

Level (1) Outcomes: Participation (Specialty)

Final Outcomes Summary – Online Outcomes

Specialty Breakdown	
Pulmonary	98
Rheumatology	103
Allergy/Clinical Immunology	88
Internal Medicine	51
Family Medicine/General Practice	58
Emergency Medicine	30
Surgery	24
Psychiatry	21
Radiology	20
Anesthesiology	19
Pediatrics	15
Cardiology	16
Pain Management	13
Nephrology	12
Not Reported	233
Other (Gastroenterology, infectious disease, pathology, otolaryngology, and more)	223
Total Certificates	1,024



Level (2) Outcomes: Satisfaction

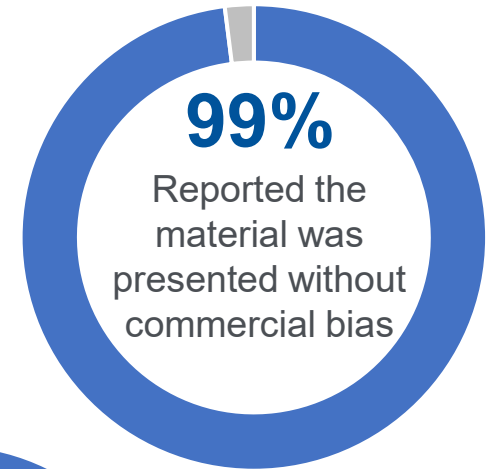
Final Outcomes Summary – Online Outcomes

Evaluation respondents reported they
“Strongly Agree” or “Agree” that the activity:



N=1021

An additional 13-15% reported they were “neutral” for all questions above

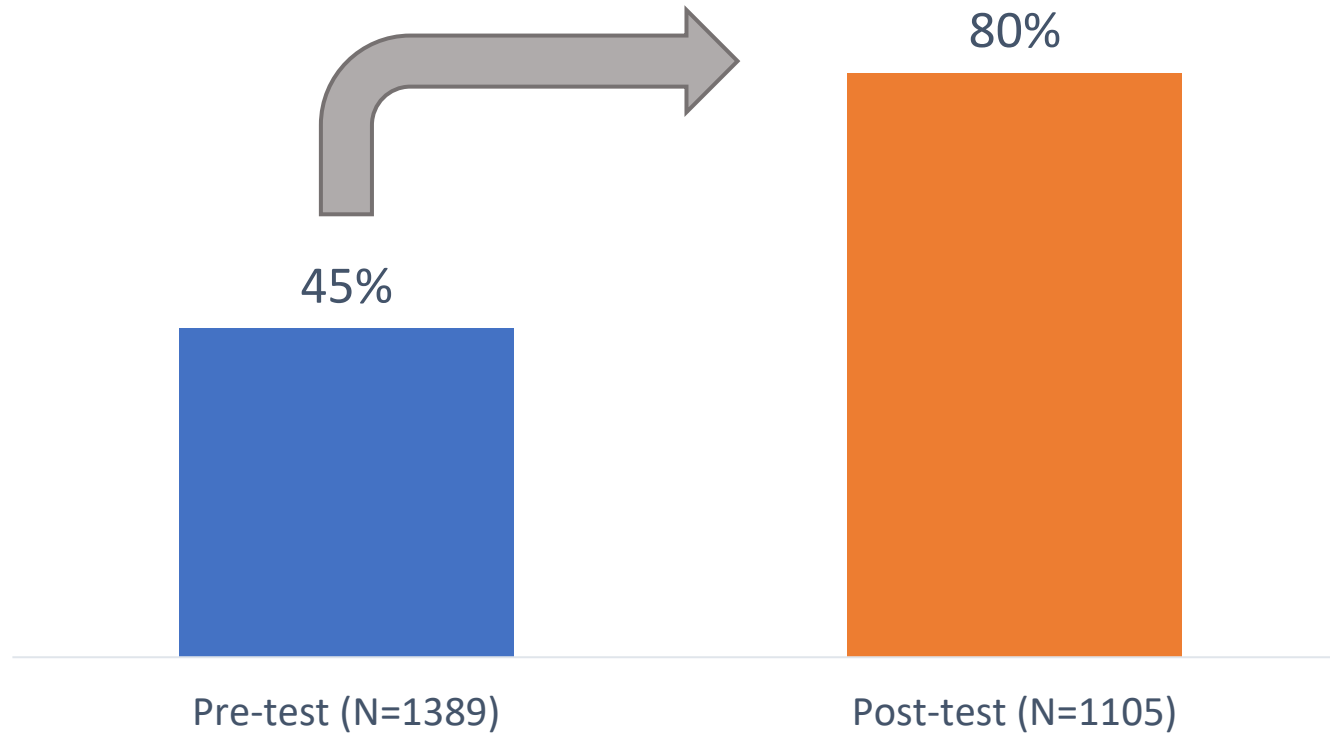


N=1021

Level (3&4) Outcomes: Knowledge and Competence

Final Outcomes Summary – Online Outcomes

Overall Knowledge Gain across Learning Objectives



78% Overall Relative Knowledge Gain



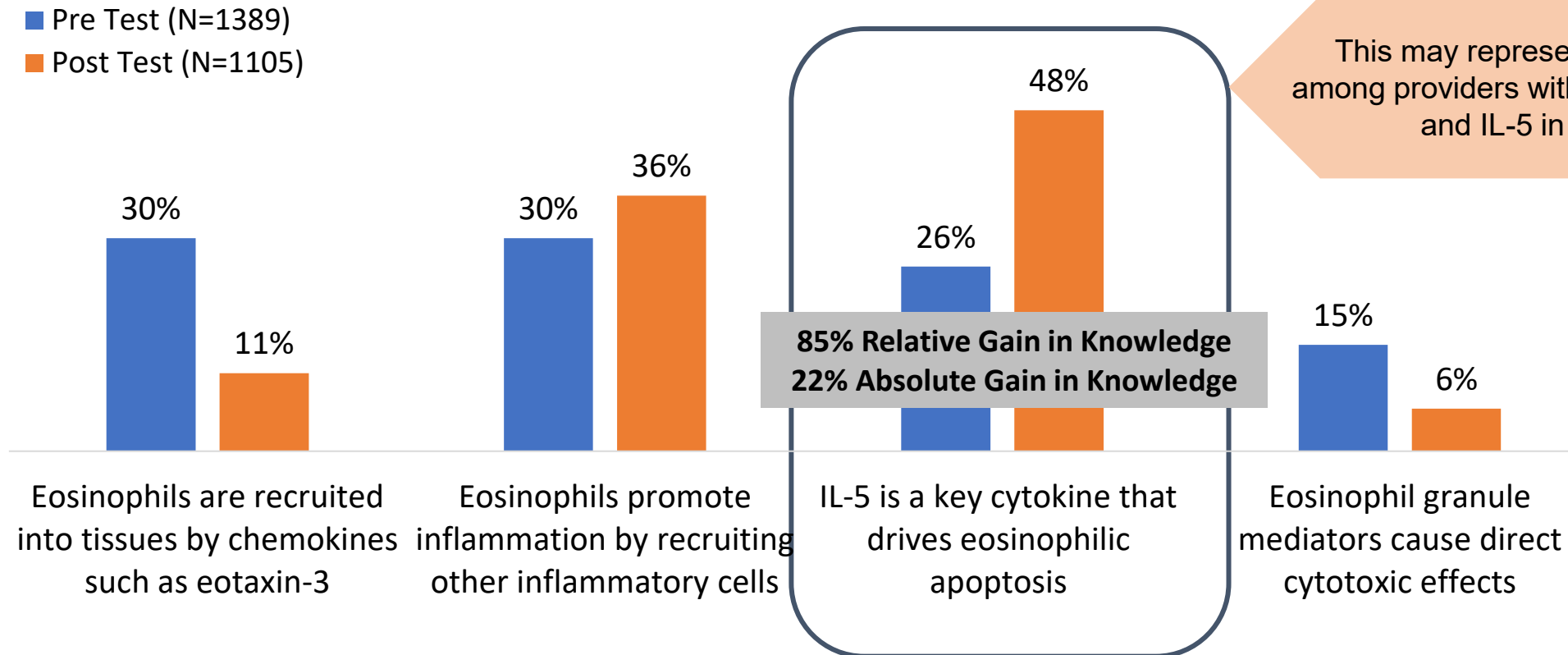
35% Overall Absolute Knowledge Gain

Level (3&4) Outcomes: Knowledge and Competence

Final Outcomes Summary – Online Outcomes

Learning Objective: Define the role of eosinophils and IL-5 in EGPA.

Question 1: Which of the following is NOT true regarding eosinophils in EGPA?



This may represent a persistent knowledge gap among providers with regard to the role of eosinophils and IL-5 in EGPA pathophysiology.

Rationale:

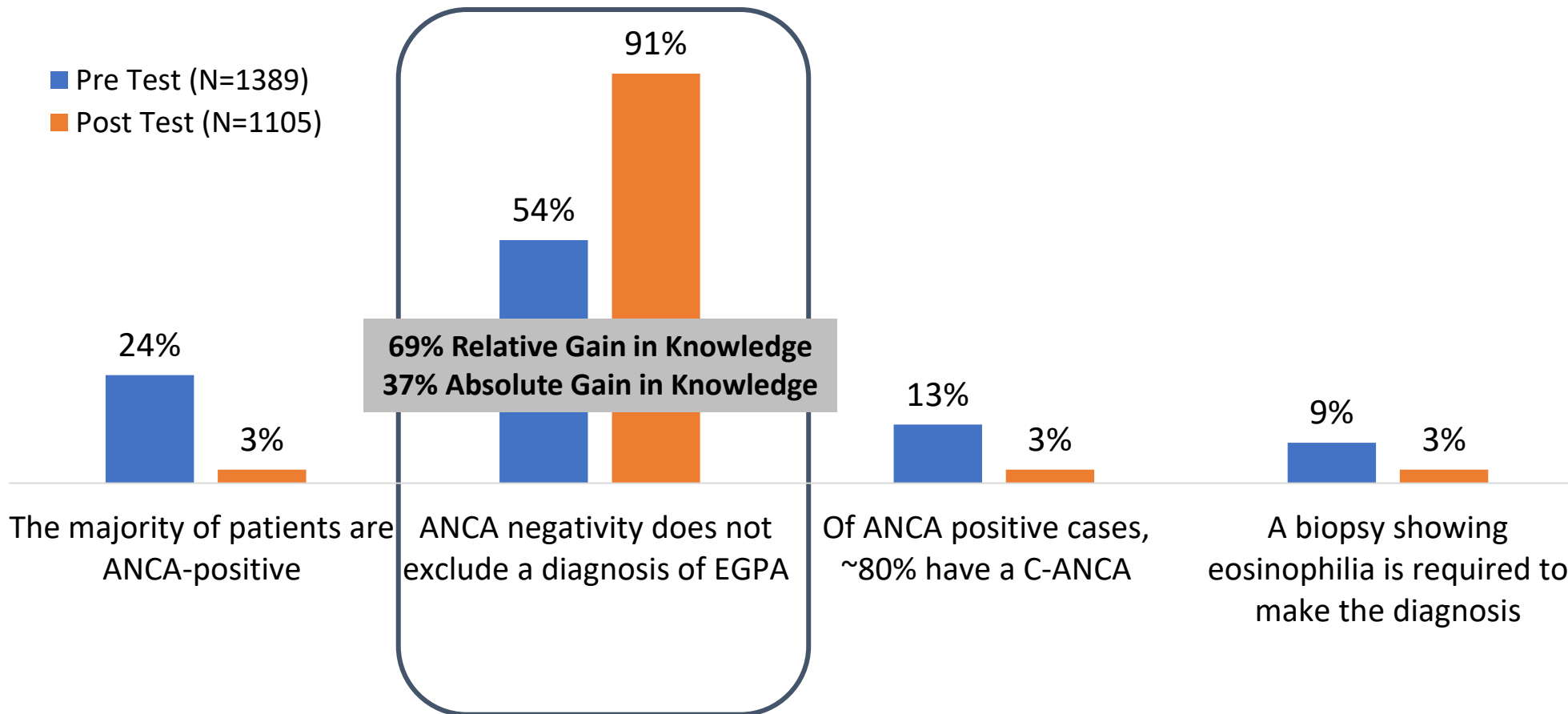
The correct answer is C, as IL-5 does not drive eosinophilic apoptosis. IL-5 is a key cytokine that drives eosinophilic proliferation, maturation, recruitment and survival.

Level (3&4) Outcomes: Knowledge and Competence

Final Outcomes Summary – Online Outcomes

Learning Objective: Implement evidence-based diagnostic approaches to identify EGPA.

Question 2: Which of the following statements is true regarding the diagnosis of EGPA?



Rationale:

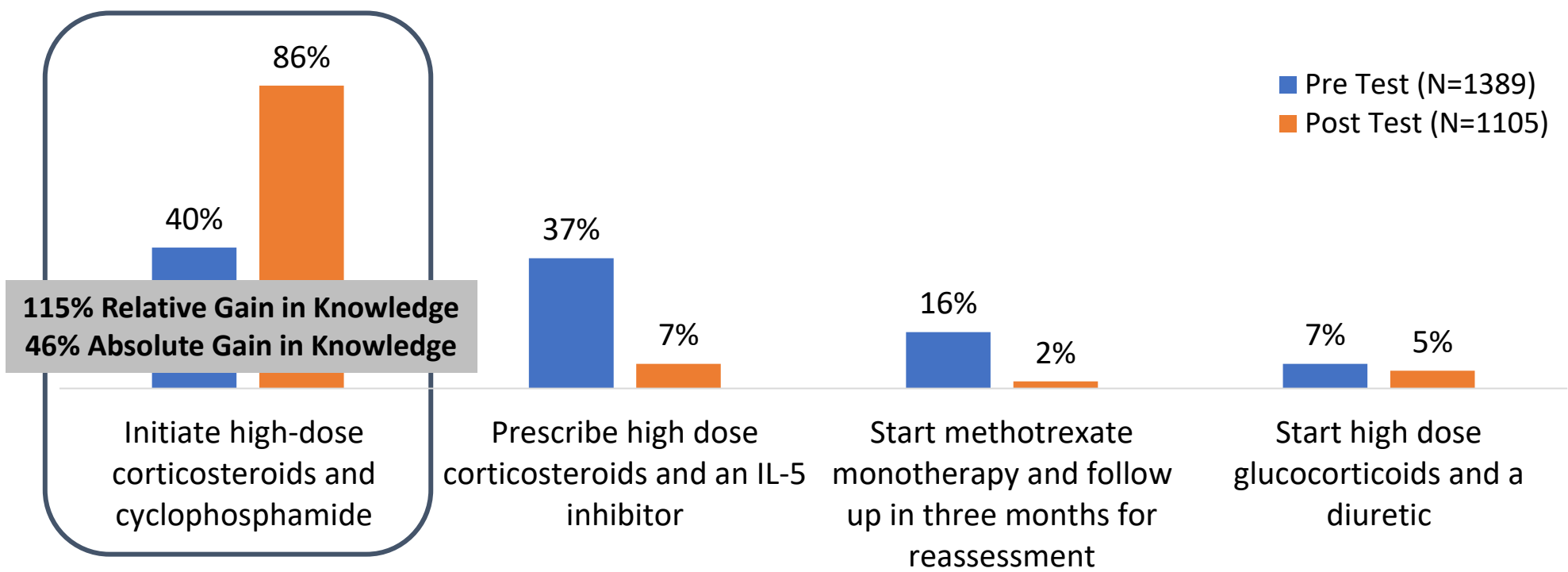
The correct answer is B. The majority of EGPA cases are ANCA negative and thus ANCA negativity does not exclude the diagnosis. Of those that are ANCA-positive, the majority have P-ANCA (not C-ANCA). A positive biopsy is only one of several tools that can be used to make the diagnosis but histologic confirmation of the diagnosis is not required.

Level (3&4) Outcomes: Knowledge and Competence

Final Outcomes Summary – Online Outcomes

Learning Objective: Utilize the current evidence and guidelines for the management and treatment of EGPA.

Question 3: A 45-year-old woman with a history of asthma presents with a three-month history of worsening dyspnea, fatigue, and lower extremity swelling. On examination, she has expiratory wheeze and lower extremity edema. Laboratory tests reveal peripheral eosinophilia, positive ANCA testing for pANCA, a creatinine of 3.2 and blood and protein on urine analysis. A kidney biopsy shows pauci-immune glomerulonephritis. She is diagnosed with eosinophilic granulomatosis with polyangiitis (EGPA). Which of the following is the most appropriate next step in the management of this patient?



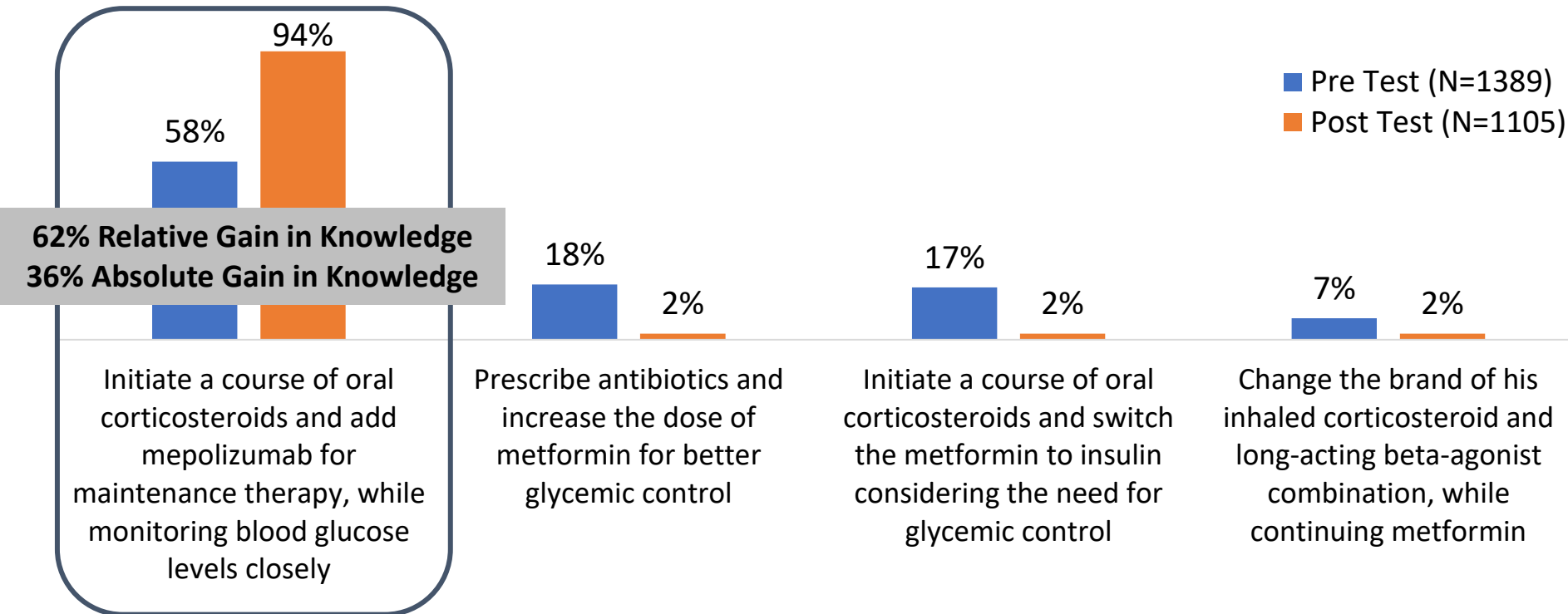
Rationale:
The correct answer is to initiate high-dose corticosteroids and cyclophosphamide. This patient has evidence of glomerulonephritis putting her in the severe disease category. This approach aligns with current evidence and guidelines for the management and treatment of severe EGPA, which involves the use of high-dose corticosteroids as first-line therapy along with cyclophosphamide up-front given the severe organ involvement to induce remission.

Level (3&4) Outcomes: Knowledge and Competence

Final Outcomes Summary – Online Outcomes

Learning Objective: Integrate approaches that target comorbidities, enhance quality of life, and mitigate healthcare disparities in EGPA patient care.

Question 4: A 62-year-old man with a long-standing history of eosinophilic granulomatosis with polyangiitis (EGPA) presents with worsening shortness of breath and a non-productive cough. Despite being on a long-acting B agonist and inhaled steroid inhaler, he is unable to taper his oral prednisone dose below 5mg a day. He has had 3 prior asthma flares this year requiring higher doses of oral corticosteroid therapy. He also has a history of type 2 diabetes mellitus, which is managed with metformin. On examination, there are bilateral wheezes, and his blood pressure is elevated at 150/95 mmHg. Laboratory tests show persistent eosinophilia and elevated blood glucose levels with a HgA1c of 6.5. What is the most appropriate next step in the management of this patient, considering his comorbidities?



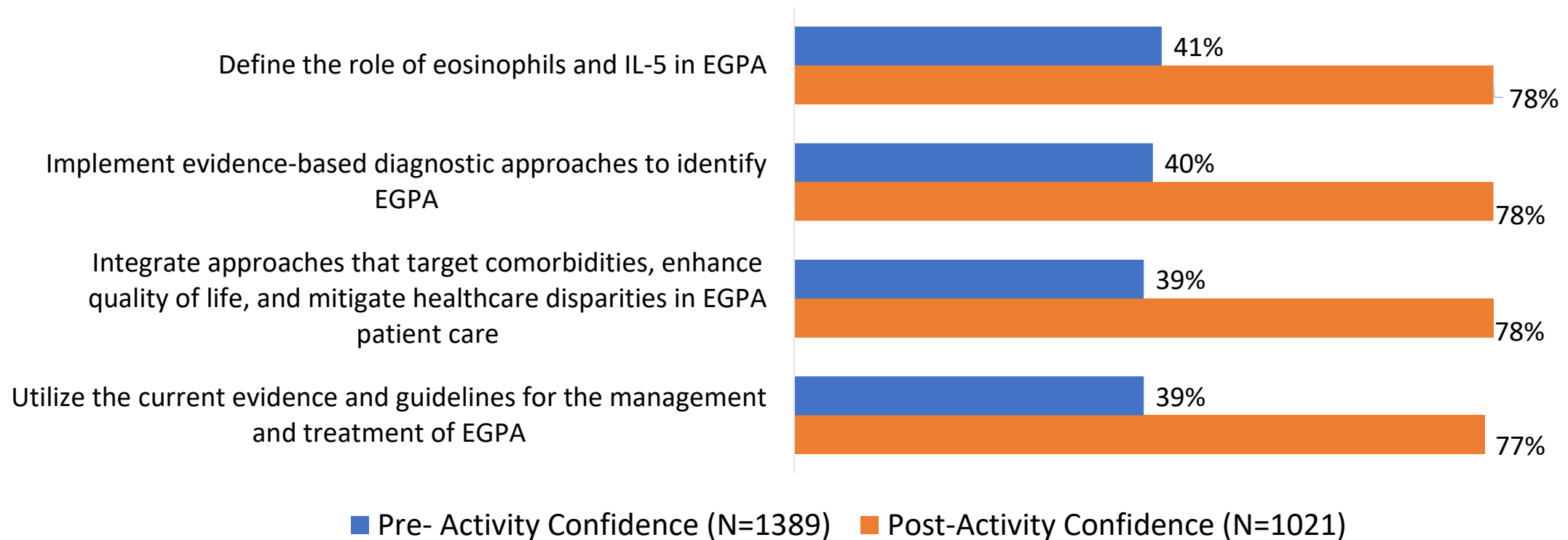
Rationale:

The correct answer is to initiate a course of oral corticosteroids and add mepolizumab for maintenance therapy, while monitoring blood glucose levels closely. High-dose corticosteroids are the cornerstone of treatment for EGPA acute exacerbations. This patient has had multiple flares and is unable to taper off daily prednisone despite inhaler use. Adding an agent targeting anti-IL5 can help in the maintenance phase as a steroid sparing agent. Given the patient's type 2 diabetes, it is crucial to monitor and manage blood glucose levels carefully due to the hyperglycemic effect of corticosteroids. If he is able to taper off GC with the addition of IL-5 inhibitor he might not need an adjustment in his DM regimen.

Level (4) Outcomes: Competence

Final Outcomes Summary – Online Outcomes

**Evaluation respondents reported their confidence as it relates to the learning objectives before and after the activity
("Very Confident" to "Somewhat Confident")**



Level (4) Outcomes: Competence

Final Outcomes Summary – Online Outcomes

What changes will you incorporate in practice as a result of what you've learned in the activity?

- Adopt a multidisciplinary approach.
- More extensive screening for EGPA and consideration of alternative diagnoses.
- Better differential diagnosis.
- Order more tests when suspecting EGPA.
- Early diagnosis and aggressive treatment.
- Use eosinophil counts more liberally.
- More precise use of biologics in EGPA patients.
- Use anti-IL-5 agents early.
- I will know when and how to use an IL-5 inhibitor in EGPA.
- Initiation of high dose corticosteroid and cyclophosphamide in patients with EGPA presenting with multiple organ involvement.
- I will consider biologic medications prior to DMARDs for management.
- Shared decision making with patients regarding treatment options.
- Improve patient explanation of the outcome of treatment.
- Referrals and consulting the appropriate specialists.
- EGPA treatment considerations include controlling inflammation and achieving long term remission, which I was not familiar with.
- Increased usage of IL-5 inhibitors
- Access the data on a situational basis
- Will have to repeat w/ or w/o ANCA probably on a monthly basis

91%

N=878

Evaluation
respondents intend
to make changes in
practice as a result
of the activity

Evaluation Survey Results

Final Outcomes Summary – Online Outcomes

Key Takeaways



- Not all cases of EGPA are by the book; having this pathology in mind helps not to under-evaluate patients
- Keep a broad differential diagnosis in mind
- Diagnostic approaches
- Understanding pathophysiology clearly
- Role of IL5 in EGPA
- The relevance of eosinophils
- Newer treatment options
- Use of therapeutics based on recent trials
- IL-5 inhibition is very effective as a steroid sparing agent
- How to approach the diagnosis and treatment of EGPA
- Addition of biologic treatment in eosinophilic diseases
- The need for multidisciplinary interactions
- Better assessment of EGPA complications
- This activity improved my knowledge of EGPA diagnosis and management
- Availability of new treatments
- It is sometimes difficult to diagnose – learned more what symptoms are present with this illness.

Future Topics



- Impact of treatment on prognosis
- Organ-specific management of EGPA
- Guidelines and case presentations
- Overlap syndromes among eosinophilic diseases
- Immunology and mechanisms of cytokines
- Longer series to evaluate therapies
- EGPA and pregnancy
- How to manage non-responders
- Treatment options in development
- Research on pathobiology
- Autoimmune related rheumatology
- Diagnosis and treatment
- Vasculitis
- IL-5
- Additional algorithms for treatment

"It was very well presented and the presenters were extremely knowledgeable. The case studies really helped enhance my understanding of the content presented."

- Online Learner

Accreditation Information

Final Outcomes Summary – Online Outcomes

National Jewish Health is accredited with Commendation 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.

National Jewish Health designates this enduring material for a maximum of 1.0 *AMA PRA Category 1 Credits*™.

