



Expert Advice on Managing Severe Asthma: An Interactive Decision Support Tool Provides Real-Time Expert Recommendations

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1. Background

To help clinicians make personalized recommendations for patients with severe asthma, we developed an online tool based on treatment choices from 5 experts for customizable patient scenarios.

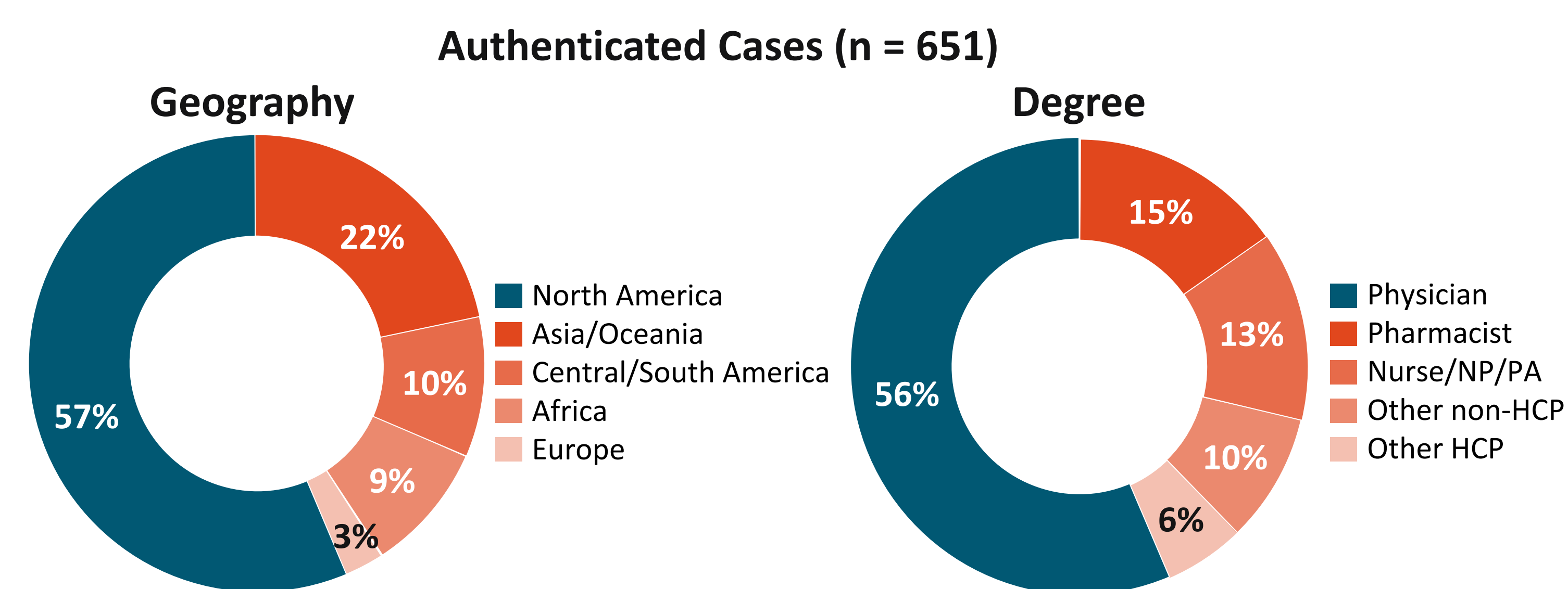
The goal was to provide real-time recommendations for severe asthma based on patient-specific characteristics and to identify variances between the treatment strategies of experts and community clinicians.

Five asthma experts provided treatment recommendations for a combination of patient variables totaling 70 possible scenarios based on:

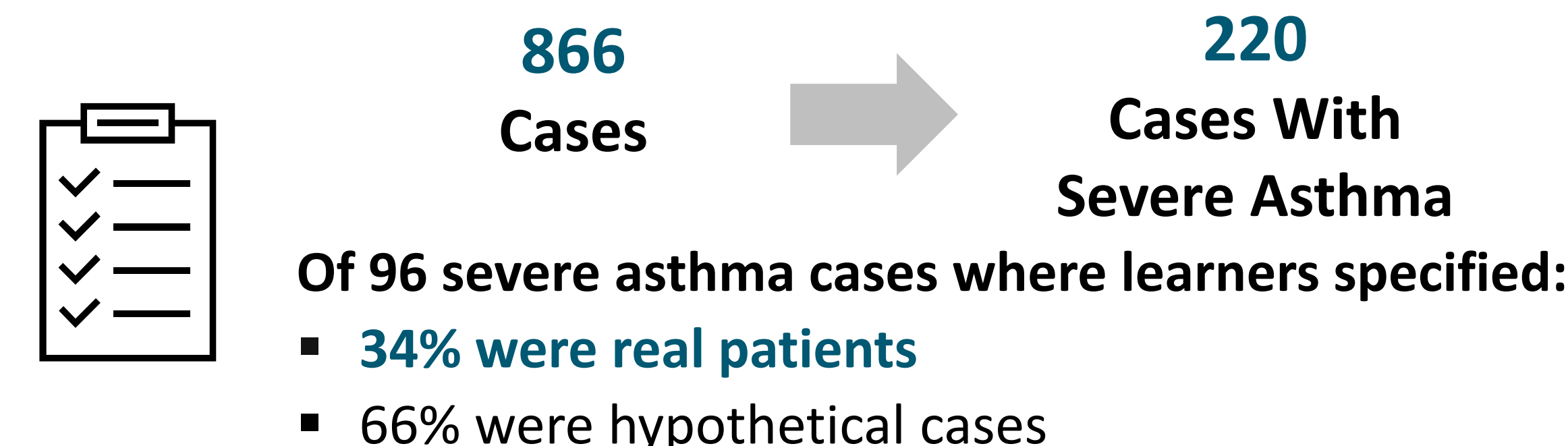
- Oral corticosteroid use
- Exhaled nitric oxide
- Blood eosinophils
- Allergic phenotype
- IgE
- Other allergies/comorbidities
- Body weight
- Childbearing potential

2. Learners

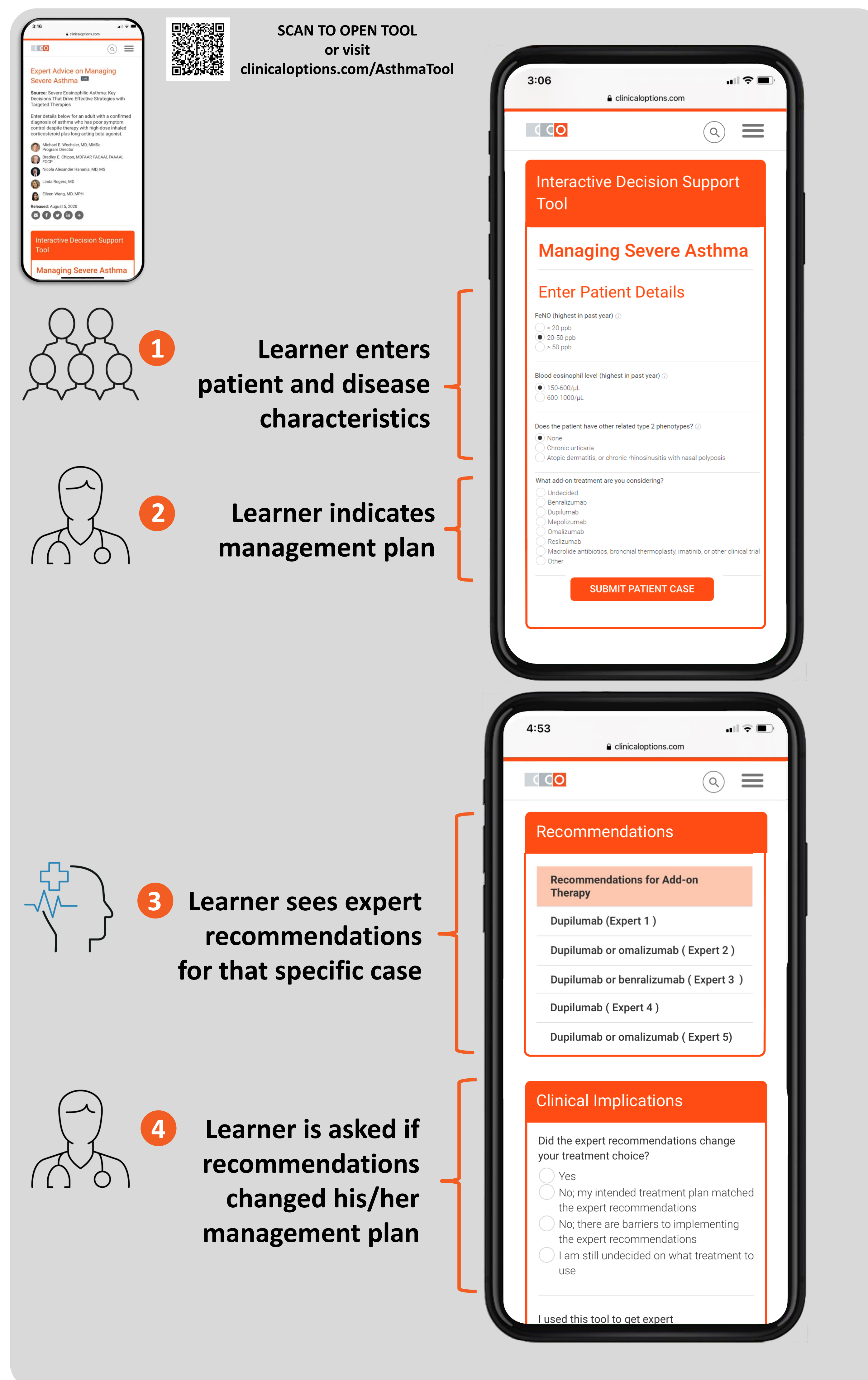
- From August 2020 through January 2021, **458 learners** entered **N = 866** cases into the tool
 - n = 215 cases via the app (anonymous)
 - n = 651 cases via the CCO site (authenticated)



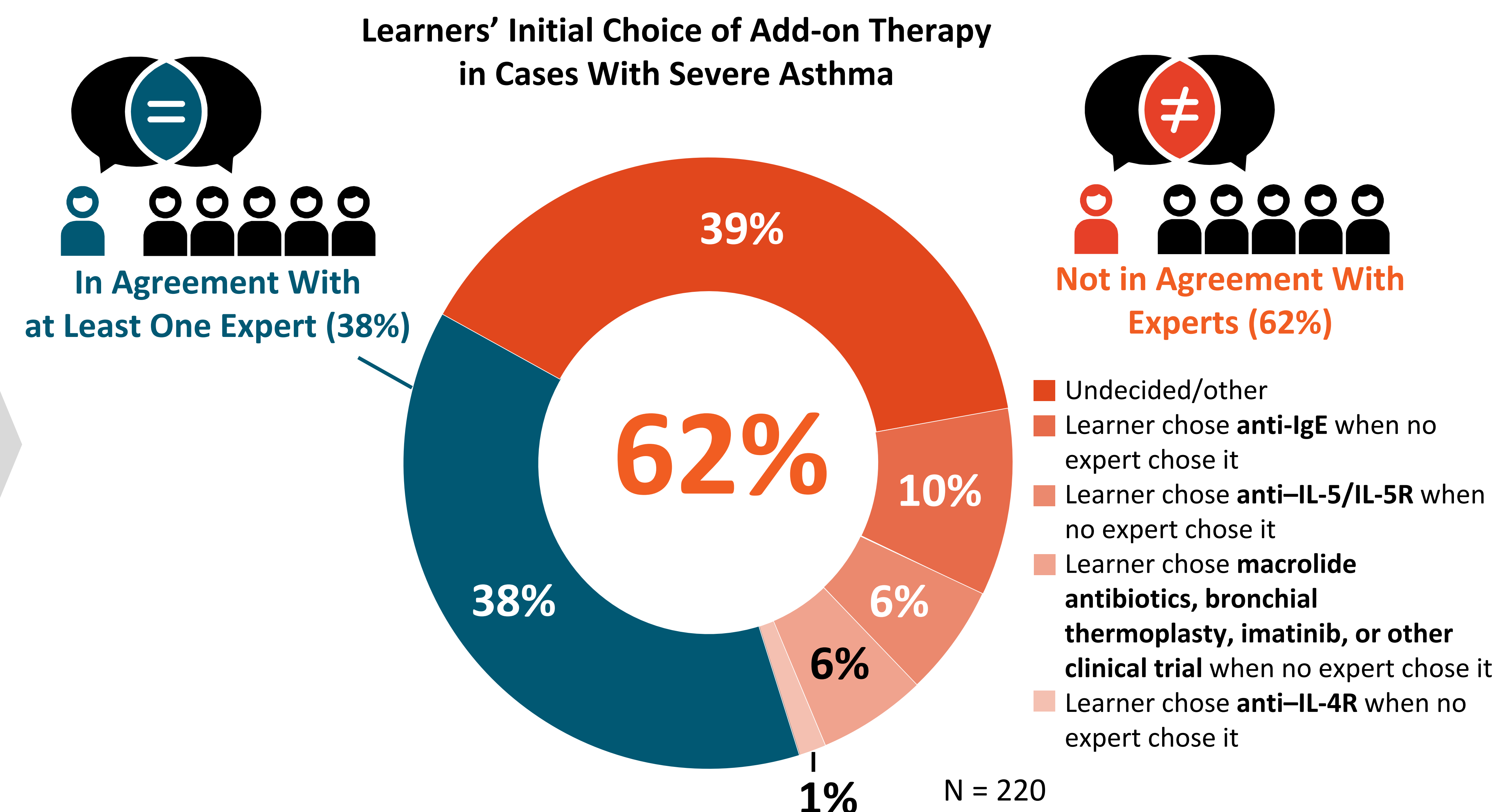
3. Cases Entered



4. Online Decision Support Tool Provides Patient-Specific Recommendations

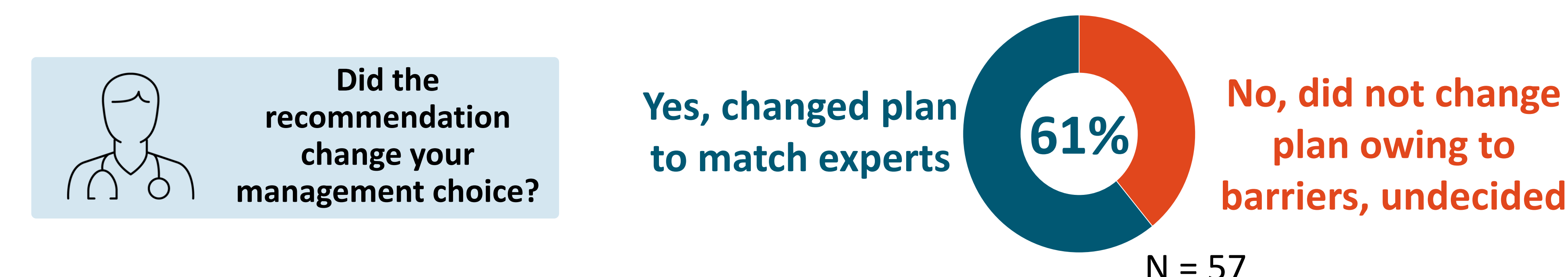


5. Intended Management Approach



6. Posteducation Impact

Subset of Learner Cases Where Baseline Plan Differed From Experts and Learner Identified Future Plan



7. Conclusions

- This online decision support tool showed that learners' initial choice of add-on therapy for severe asthma **differed from experts for 62% of case scenarios**
- Of cases in which the learners' intentions differed from expert recommendations, **61% indicated that they planned to change their approach** after being provided the recommendation by the tool, suggesting the tool's use can help optimize care of patients with severe asthma

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