

# Reasons Why Patients With Severe Asthma Discontinue Biologic Treatment

Poster No. P0018

Jared Silver<sup>1</sup>, Michael Bogart<sup>1</sup>, Nestor Molino<sup>1</sup>, James Siddall<sup>2</sup>, Mark Small<sup>2</sup>, Matt Hanson<sup>2</sup>, Beth Hahn<sup>1</sup>

<sup>1</sup>GSK, Research Triangle Park, NC, USA, <sup>2</sup>Adelphi Real World, Bollington, UK.

## Aims

- As more biologics are available to treat patients with severe asthma there is data available on the adherence and dosing rates<sup>1</sup>; however, little is known about patients who discontinue therapy.
- Understanding why patients discontinue therapy could aid physicians in selection of initial biologic therapy, as well as identify potential barriers to successful treatment.
- This study used physician and patient real-world cross-sectional survey data to understand patient characteristics and reasons for discontinuation from a U.S. patient cohort with severe asthma treated with a biologic.

## Methods

### Study Design

Retrospective analysis using Adelphi Respiratory Disease Specific Programme (DSP™) U.S. data which surveyed physicians and their patients from June 2019 to October 2019.

### Inclusion/Exclusion Criteria

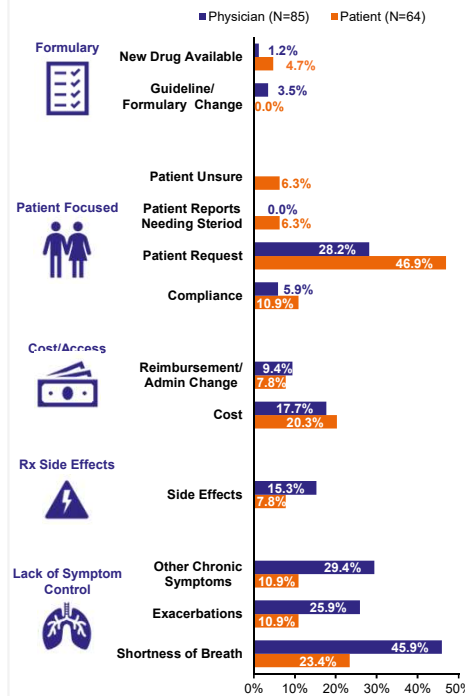
- U.S. Physician Sample:**
  - Board certified in primary care or respiratory (pulmonologist, allergist) specialty for ≥5 and ≤35 years
  - Required to manage patients with asthma (≥3/month)
- U.S. Patient Sample:**
  - ≥18 years with a physician confirmed diagnosis of asthma
- U.S. Patient Subgroups**
  - Severe oversample:** patients ≥ 18 with a physician confirmed label of severe asthma
  - Biologic oversample:** patients who have discontinued biologic therapy and/or switched from one biologic therapy to an alternative biologic

### Objectives

- Primary Objective**
  - To describe and compare patient-reported reasons with physician-reported reasons for discontinuation of biologic therapy among patients who are prescribed biologics to treat severe asthma
- Secondary Objective**
  - To compare patient characteristics between those who discontinue biologic therapy and those who do not

## Results

**Figure 1. Physicians' and Patients' Reasons for Discontinuation of Biologic Therapy (%)**

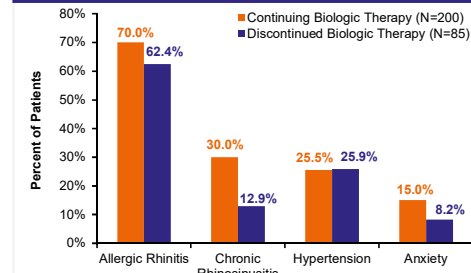


**Table 1. Demographic and Clinical Characteristics of Patients Who Continued Biologic Therapy and Patients Who Discontinued Biologic Therapy**

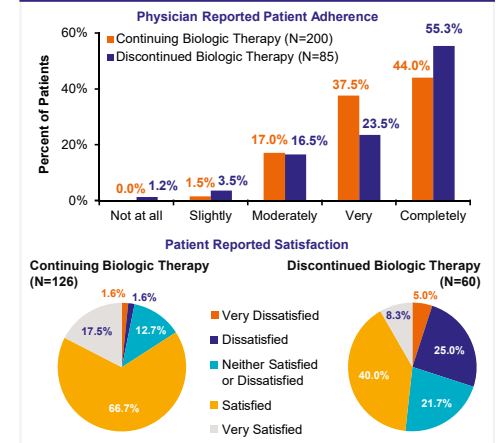
Characteristics	Continued Biologic Therapy (N=200)	Discontinued Biologic Therapy (N=85)
Average Age	47.6	43.8
Female, %	53.5	47.1
BMI, mean (SD)	28.2 (5.4)	27.3 (5.8)
<b>Primary Care Specialty, %</b>		
Primary Care Provider	3.0	0.0
Pulmonologist	49.0	49.4
Allergist	48.0	50.6
<b>Smoking Status, %</b>		
Current smoker	0.5	1.2
Ex-smoker	18.5	14.1
Never smoked	79.5	84.7
Unknown	1.5	0.0

Biologic discontinuation was not limited by timeframe. The average duration since discontinuation was 1.9 years, with maximum duration since discontinuation of 10.5 years (based on 82 patients reporting treatment duration).

**Figure 2. Frequency of Top Comorbidities Among Patients Who Continued Biologic Therapy and Patients Who Discontinued Biologic Therapy**



**Figure 3. Patient Adherence and Satisfaction with Injectable Therapy Among Patients Who Discontinued Therapy and Those that Continued Therapy**



## Conclusions

- The most frequent reason given by both physicians and patients for discontinuation of biologic therapy was lack of symptom control, followed by cost/insurance issues, and the request of the patient.
- Patients who continued biologic therapy were older with more frequent asthma-related comorbidities and more likely to be satisfied with biologic therapy compared with those who discontinued biologic therapy.

### Disclosures

- This study was funded by GlaxoSmithKline (GSK ID HO-19-19596/209643).
- On behalf of all authors, an audio recording of this poster was prepared by Jared Silver, who did not receive any payment for this recording.

- JS, MB, NM, and BH are GSK employees and hold stocks/shares. JS, MS, and MH are current employees of Adelphi Real World, a consulting company that has received research funds from GSK.

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### References

- Llanos JP, et al. *J Asthma Allergy* 2020;13:77-87.

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