

Baseline Characteristics, Including Hospitalizations, Of Asthma Patients Treated With Dupilumab In the Real World: The RAPID Registry

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BACKGROUND

- Patients with uncontrolled, moderate-to-severe asthma are at higher risk for exacerbations and impaired lung function¹
- RAPID (NCT04287621) is a global, prospective registry, aimed at characterizing patients with asthma initiating therapy with dupilumab in real-world clinical practice, including demographics, asthma control, lung function, and severity of disease at entry

OBJECTIVE

- To report the baseline characteristics in 205 patients enrolled in the RAPID registry study (NCT04287621)

METHODS

Study design

- The RAPID registry is designed to enroll up to 700 patients aged ≥12 years who initiate dupilumab treatment for a primary indication of asthma, according to the country-specific prescribing information

Study assessments

- Demographics
- Smoking status
- Disease Severity by Global Initiative for Asthma (GINA) categories
- Lung function
- Baseline type 2 biomarkers (FeNO and peripheral blood eosinophils)
- Number of severe asthma exacerbations in the year prior to study
- Number of hospitalizations and emergency room (ER) visits in the year prior to study

RESULTS

Figure. Distribution of Patients (n [%]) With Asthma Enrolled in the RAPID Study According to Therapy Step

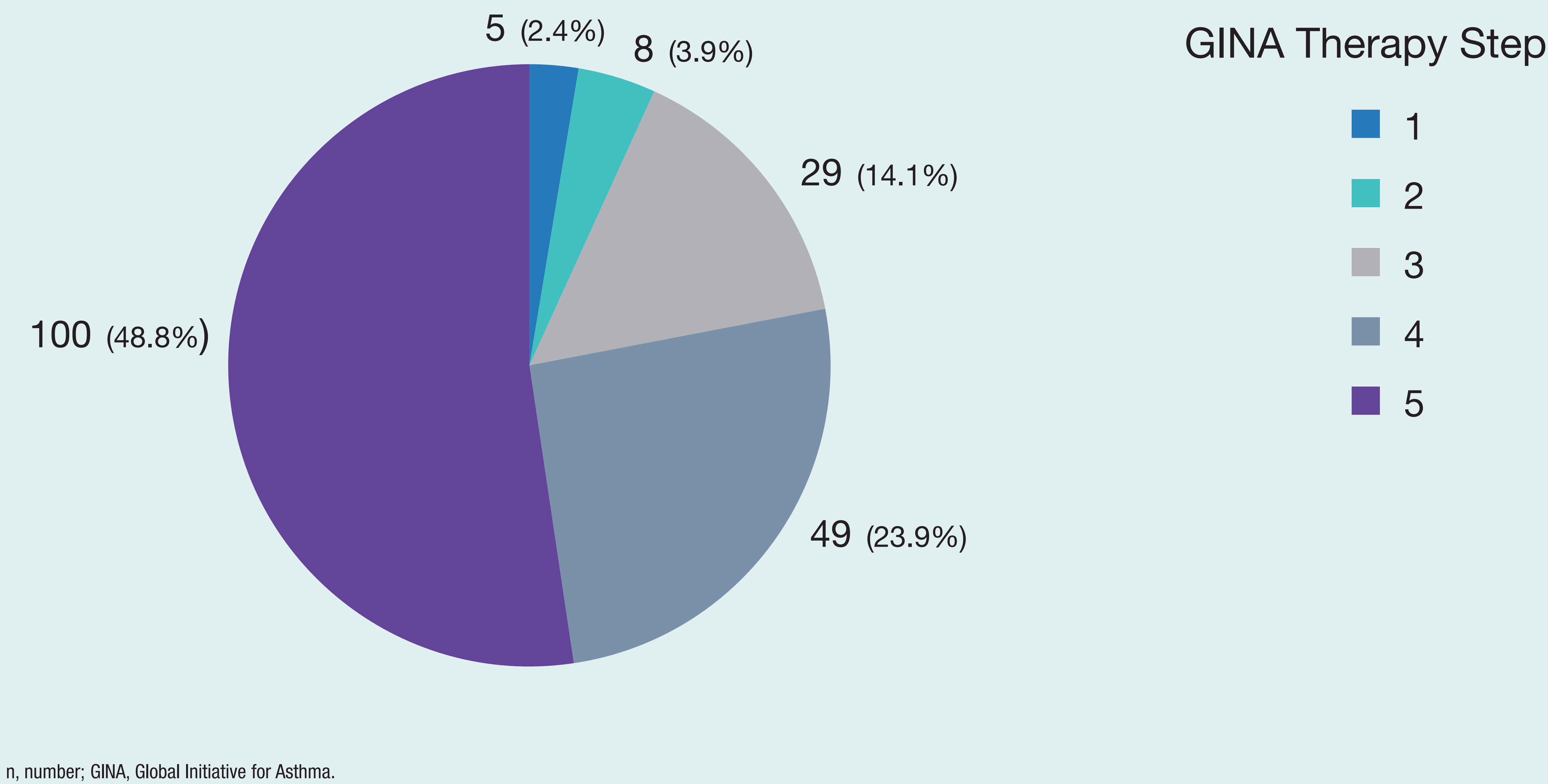


Table. Baseline Characteristics of Patients Enrolled in the RAPID Study

i) Baseline Demographics

Characteristics	Population (N = 205)
Age, years, mean (SD)	50.1 (17.41)
Gender (female, n (%))	134 (65.4)
Race, n (%)	
White	152 (74.1)
Black of African American	27 (13.2)
Asian	2 (1.0)
Multiple	2 (1.0)
Other	6 (2.9)
Not reported	15 (7.3)
Missing	1 (0.5)
BMI (kg/m²), (n = 194), mean (SD)	30.7 (8.0)

Table. Baseline Characteristics of Patients Enrolled in the RAPID Study (Cont.)

i) Baseline Demographics

Characteristics	Population (N = 205)
Smoking history ^a , n (%)	
Current	9 (4.4)
Former	41 (20.0)
Age of asthma onset, years, n (%)	
<18	73 (35.6)
≥18 to ≤40	54 (26.3)
>40	78 (38.0)

ii) Baseline Disease Characteristics and Biomarkers

Characteristics	Population (N = 205)
Severe asthma exacerbations in the year prior to the screening visit, (n = 78), mean (SD)	4.40 (6.44)
Patients hospitalized in the year prior to the screening visit, n (%)	19 (9.3)
Emergency room visits in the year prior to the screening visit, n (%)	38 (18.5)
Pre-BD FEV ₁ (L), (n = 89), mean (SD)	2.29 (1.14)
Pre-BD PP FEV ₁ (%), (n = 100), mean (SD)	70.34 (20.30)
FVC (L), (n = 89) mean (SD)	3.09 (1.08)
PEF (L/min), (n = 68), mean (SD)	356.88 (169.83)
FeNO (ppb), (n = 61), mean (SD)	42.2 (34.83)
Eosinophils (cells/μL), (n = 64)	
Mean (SD)	492.66 (443.46)
(Min-Max)	(0.0 – 2142.0)

iii) Baseline Values of Patient-Reported Outcomes

Characteristics	Population (N = 205)
ACQ-6 score, (n = 193), mean (SD)	2.40 (1.18)
AQLQ global score, (n = 192), mean (SD)	4.10 (1.31)

^aSelf-reported. n, number; SD, standard deviation; BMI, body mass index; BD, bronchodilator; FEV₁, forced expiratory volume in 1 second; L, liter; min, minute; FVC, Forced Vital Capacity; PEF, Peak Expiratory Flow; FeNO, fractional exhaled nitric oxide; ppb, parts per billion; μL, microliter; Q1, first quartile; Q3, third quartile; ACQ-6, 6-item Asthma Control Questionnaire; AQLQ, Asthma Quality-of-life Questionnaire. ACQ-6 cut-off point is 1.5.

CONCLUSIONS

- This initial sample of patients with moderate-to-severe asthma from the RAPID registry were predominantly female, white, and overweight
- These patients also had a high number of exacerbations with high healthcare utilization in the past year, impaired lung function, and poor asthma control and quality of life, suggesting a population with a high disease burden despite standard-of-care treatment

Reference: 1. Castro M, et al N Engl J Med 2018; 378: 2486–96

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