

Supplementary files

Supplementary Table 1. Characteristics of patients approached for enrollment*

Characteristic	Approached for inclusion (n = 2722)	All Enrolled (n = 2026)
Age at screening, y		
Mean (SD)	55 (15)	54 (15)
Median (range)	56 (45, 64)	55 (45, 64)
Female, %	69	70
Insurance, %		
Commercial	57	60
Medicare	25	23
Medicaid	10	10
Other†	6	6
Uninsured	2	2
Screening/enrollment treatment class‡, %		
Uncontrolled on high-dosage ICS/LABA only	38	30
Any monoclonal antibody	57	64
Systemic corticosteroids or immunosuppressant	13	14
Exacerbations during 12 months prior to enrollment		
Confirmed exacerbations per patient, mean	1.4	1.3

*Percentages may not total 100% as a result of rounding.

†"Other" includes "other government insurance" and "other."

‡Use of systemic corticosteroids or other systemic immunosuppressants for $\geq 50\%$ of the prior 12 months. Treatment groups for biologics and systemic corticosteroids or immunosuppressants were not mutually exclusive.

Abbreviations: BMI, body mass index; ICS, inhaled corticosteroid; LABA, long-acting beta agonist; SD, standard deviation.

Supplementary Table 2. Characteristics of patients by PRO completion status*

Characteristic	Did not complete enrollment PROs (n = 775)	Completed enrollment PROs (n = 1109)
Age at enrollment, y		
Mean (SD)	55 (14)	54 (14)
Median (range)	56 (18, 92)	55 (18, 86)
Female, %	68	70
Race, %		
White	69	80
Black	23	15
Other	5	4
Not reported	3	1
Hispanic or Latino ethnicity, %		
Hispanic or Latino	11	7
Not Hispanic or Latino	89	93
BMI, kg/m ²		
Mean (SD)	33 (8)	33 (9)
Median (range)	32 (16, 65)	32 (9, 109)
Care by subspecialist at site, %		
Allergist/immunologist	34	43
Pulmonologist	58	47
Allergist/immunologist and pulmonologist	8	10
Insurance, %		
Commercial	55	64
Medicare	24	23
Medicaid	14	7

Other [†]	5	6
Uninsured	1	1
Residential area, %		
Suburban	47	52
Urban	27	25
Rural	20	20
Missing	5	3
Smoking status, %		
Never	64	68
Former	32	29
Current	4	3
Employment status, %		
Employed full-time	36	42
Employed part-time	5	6
Self-employed	3	4
Homemaker	3	3
Full-time student	1	2
Retired	23	22
Disabled due to asthma	8	8
Disabled due to nonasthma condition	8	6
Unemployed [‡]	7	5
Missing	6	3
Education level, %		
Some high school or less	7	3
Graduated high school	25	21
College	42	48
Graduate school	15	19
Missing	10	8

Screening/enrollment treatment class [§] , %		
Uncontrolled on high-dosage ICS/LABA only	33	28
Any monoclonal antibody	61	67
Omalizumab	28	34
Non-omalizumab	32	32
Systemic corticosteroids or immunosuppressant	15	13
Exacerbations during 12 months prior to enrollment		
Confirmed exacerbations per patient, mean	1.3	1.1

*Percentages may not total 100% as a result of rounding.

†"Other" includes "other government insurance" and "other."

‡"Unemployed" does not include retired, disabled, or homemaker.

§Use of systemic corticosteroids or other systemic immunosuppressants for $\geq 50\%$ of the prior 12 months. Treatment groups for biologics and systemic corticosteroids or immunosuppressants were not mutually exclusive.

Abbreviations: BMI, body mass index; ICS, inhaled corticosteroid; LABA, long-acting beta agonist; SD, standard deviation.

Supplementary Table 3. Mean (SD) SGRQ total summary scores* by subgroups

	Total score, mean (SD)
Patients not receiving biologics or SCS during the study	
Highest blood eosinophil count, cells/μL	
< 150 (n = 180)	n = 72 47 (20)
150 to < 300 (n = 142)	n = 59 46 (21)
\geq 300 (n = 322)	n = 65 48 (24)
Highest total IgE level, IU/mL	
< 30 (n = 41)	n = 14 50 (18)
30 to 700 (n = 179)	n = 45 46 (21)
> 700 (n = 46)	n = 17 49 (23)
Patients with continuous biologic use for \geq 12 months prior to enrollment	
Exacerbation rate in year prior to enrollment	
No exacerbations (n = 478)	n = 311 34 (21)
Exacerbation rate \geq 1 per year (n = 131)	n = 74 47 (22)
HCP control assessment	
Controlled (n = 414)	n = 282 32 (21)
Not controlled (n = 194)	n = 103 46 (22)
Clinical remission status among patients receiving biologics for \geq 12 months during the study	
Meeting criteria (n = 69)	n = 67 13 (12)
Not meeting criteria (n = 465)	n = 446 39 (22)

*Scores range from 0 (perfect health) to 100 (maximum impairment).

Abbreviations: HD ICS+, high-dosage inhaled corticosteroids and additional controllers without biologics or maintenance systemic corticosteroids, HCP, healthcare provider; IgE, immunoglobulin E; SD, standard deviation; SGRQ, Saint George's Respiratory Questionnaire.

Supplementary Table 4. Mean (SD) WPAI scores by subgroups

	Percent work time missed	Impairment while working	Overall work impairment*	Activity impairment
Patients not receiving biologics or SCS during the study				
Highest blood eosinophil count, cells/μL, mean % (SD)				
< 150 (n = 180)	n = 44 13 (29)	n = 42 27 (27)	n = 42 31 (31)	n = 78 40 (28)
150 to < 300 (n = 142)	n = 33 12 (21)	n = 34 25 (24)	n = 33 31 (29)	n = 62 29 (27)
\geq 300 (n = 262)	n = 27 2 (8)	n = 27 18 (21)	n = 27 19 (23)	n = 74 35 (30)
Highest total IgE level, IU/mL, mean % (SD)				
< 30 (n = 41)	n = 5 3 (4)	n = 5 32 (16)	n = 5 34 (15)	n = 15 35 (31)
30 to 700 (n = 179)	n = 26 11 (24)	n = 25 23 (26)	n = 25 26 (31)	n = 51 34 (30)
> 700 (n = 46)	n = 7 0 (0)	n = 7 16 (17)	n = 7 16 (17)	n = 18 36 (30)
Patients with continuous biologic use for \geq 12 months prior to enrollment				
Annual exacerbation rate in year prior to enrollment, mean % (SD)				
No exacerbations (n = 478)	n = 170 1 (5)	n = 170 12 (20)	n = 170 13 (21)	n = 313 24 (28)
Exacerbation rate \geq 1 per year (n = 131)	n = 36 8 (16)	n = 36 28 (28)	n = 36 32 (31)	n = 76 41 (33)
HCP control assessment, mean % (SD)				
Controlled (n = 414)	n = 157 2 (7)	n = 157 12 (20)	n = 157 13 (22)	n = 285 23 (28)
Not controlled (n = 194)	n = 49 4 (12)	n = 49 25 (25)	n = 49 27 (27)	n = 104 39 (31)
Clinical remission status among patients receiving biologics for \geq 12 months during the study, mean % (SD)				
Meeting criteria (n = 69)	n = 43 2 (8)	n = 43 3 (13)	n = 43 5 (15)	n = 69 4 (7)
Not meeting criteria (n = 465)	n = 230 5 (17)	n = 226 16 (21)	n = 226 19 (24)	n = 458 28 (29)

*Overall work impairment is the sum of (a) work hours missed and (b) hours worked multiplied by impairment while working because of asthma.(20)

Abbreviations: HD ICS+, high-dosage inhaled corticosteroids and additional controllers without biologics or maintenance systemic corticosteroids, HCP, healthcare provider; IgE, immunoglobulin E; SD, standard deviation; WPAI, Work Productivity and Activity Impairment.