

**Supplementary Table 1.** Clinical, demographic, and laboratory characteristics of the study population

Age, years, mean $\pm$ SD	47.07 $\pm$ 13.99
Gender, female, n (%)	128 (71.9)
Asthma onset age, years, mean $\pm$ SD	31.41 $\pm$ 14.14
Asthma duration, years, mean $\pm$ SD	15.36 $\pm$ 10.39
Smoking history, n(%)	
• Non smoker	116 (65.2)
• Exsmoker	36 (20.2)
• Current smoker	9 (5.1)
Smoking history $\geq$ 10 p/years, n(%)	30 (16.9)
Smoking p/years, mean $\pm$ SD	15.64 $\pm$ 13.31
Comorbidities, n (%)	
• AR	113 (63.5)
• GERD	66 (37.1)
• N-ERD	18 (10.1)
• NP	49 (27.5)
• Obesity	63 (35.4)
BMI, kg/m <sup>2</sup> , mean $\pm$ SD	28.72 $\pm$ 6.32
Biomarker levels	
• Total IgE, IU/mL, median (min –max)	226.50 (8-3747)
• PBEC, cells/ $\mu$ L, median (min-max)	455 (0-6370)
PFT parameters	
• FEV <sub>1</sub> , mL, mean $\pm$ SD	2057.70 $\pm$ 880.20
• FEV <sub>1</sub> , %, mean $\pm$ SD	70.32 $\pm$ 23.56
Atopy, n (%)	102 (57.3)
• House dust mites	83 (46.6)
• Cat and/or dog dander	27 (15.2)
• Pollen	46 (25.8)
• Mold	26 (14.6)
Asthma attack, mean $\pm$ SD	5.99 $\pm$ 5.79
ACT, mean $\pm$ SD	10.47 $\pm$ 3.82
Biologic agents, n(%)	
• Omalizumab	69 (39)
• Mepolizumab	79 (44)
• Benralizumab	30 (17)

Abbreviations: SD=Standart Deviation; AR = Allergic Rhinitis; GERD = Gastroesophageal Reflux Disease; N-ERD = Nonsteroidal Anti-Inflammatory Drug-Exacerbated Respiratory Disease; NP = Nasal Polyps; Ig = Immunoglobulin; BMI = Body Mass Index  
PBEC = Peripheral Blood Eosinophil Count; FEV<sub>1</sub> = Forced Expiratory Volume in 1 Second; ACT = Asthma Control Test.

**Supplementary Table 2.** Clinical, laboratory, and spirometric changes before and after treatment according to biologic therapy subgroups (omalizumab, mepolizumab, and benralizumab)

Patients treated with omalizumab n: 69			
	Pre-treatment	Post-treatment	p-value
PBEC, cells/ $\mu$ L, median (min-max)	460 (0-6370)	80 (0-1130)	<0.001
ACT, median (min-max)	9 (5-24)	22 (7-25)	<0.001
Asthma attack, median (min-max)	4 (0-30)	0 (0-20)	<0.001
PFT parameters			
• FEV <sub>1</sub> , mL, mean $\pm$ SD	2074.34 $\pm$ 918.71	2149.62 $\pm$ 925.63	0.099
• FEV <sub>1</sub> , %, mean $\pm$ SD	74.57 $\pm$ 22.75	78.81 $\pm$ 20.74	0.016
Patients treated with mepolizumab n: 79			
	Pre- treatment	Post-treatment	p value
PBEC, cells/ $\mu$ L, median (min-max)	650 (20-2840)	70 (0-1130)	<0.001
ACT, median (min-max)	11 (5-17)	23 (6-26)	<0.001
Asthma attack, median (min-max)	5 (0-30)	0 (0-10)	<0.001
PFT parameters			
• FEV <sub>1</sub> , mL, mean $\pm$ SD	2012.27 $\pm$ 926.51	2341.22 $\pm$ 905.00	<0.001
• FEV <sub>1</sub> , %, median (min-max)	76 (23-104)	85.50 (10-112)	<0.001
Patients treated with benralizumab n: 30			
	Pre- treatment	Post-treatment	p value
PBEC, cells/ $\mu$ L, median (min-max)	960 (200-6370)	0 (0-560)	<0.001
ACT, median (min-max)	9 (5-24)	22 (7-25)	<0.001
Asthma attack, median (min-max)	3 (0-10)	0 (0-7)	<0.001
PFT parameters			
• FEV <sub>1</sub> , mL, median (min-max)	2605(590-3130)	2875 (920-3600)	<0.013
• FEV <sub>1</sub> , %, mean $\pm$ SD	67.80 $\pm$ 26.16	83.27 $\pm$ 24.56	<0.005

Abbreviations: SD = Standard Deviation; PBEC = Peripheral Blood Eosinophil Count; ACT = Asthma Control Test; PFT = Pulmonary Function Test; FEV1 = Forced Expiratory Volume in 1 Second.