

## SUPPLEMENTARY MATERIAL

### Methods

Study data included asthma severity (following GINA guidelines) (1) and control (assessed using the Asthma Control Test) (2). Adherence to treatment was measured with the Test of Adherence to Inhalers (TAI) (3). Table 1 specifies the patient's controller therapy. Table 2 specifies the non-significant comorbidities between both groups. The 2012 Global Lung Initiative reference equations (4) were used to generate predicted values and Z-scores for FEV<sub>1</sub>, FVC and FEV<sub>1</sub>/FVC ratio.

**Table 1. Patient's controller therapy**

	<b>ACT ≥ 20 n = 94</b>	<b>ACT &lt; 20 n = 19</b>	<b>p</b>
<b>Antihistamines, n (%)</b>	43 (46)	9 (47)	0.897
<b>Oral corticosteroids n (%) doses, mg / day</b>	16 (17) 5 (2.5 – 25)	4 (20) 5 (5 – 15)	0.586
<b>LABA, n (%)</b>	87 (92)	19 (100)	0.219
<b>LAMA, n (%)</b>	57 (61)	16 (84)	<b>0.05</b>
<b>Montelukast, n (%)</b>	45 (48)	17 (89)	<b>0.001</b>
<b>Theophylline, n (%)</b>	2 (2)	0 (0)	0.521
<b>Azithromycin, n (%)</b>	9 (9)	7 (37)	<b>0.002</b>

LABA - Long-acting  $\beta$ 2- agonists; LAMA - Long-acting muscarinic antagonists.

Table 2. Control and exacerbations of patients with different biological treatments

	Omalizumab n = 62	Benralizumab n = 27	Mepolizumab n = 21	Reslizumab n = 3	p
<b>ACT, median (range)</b>	23 (11 – 25)	23 (10 – 25)	25 (16 – 25)	23 (22 – 25)	0.529
<b>ACT &lt; 20, n (%)</b>	11 (18)	4 (15)	2 (9)	0 (0)	
<b>Severe exacerbations, n (%)</b>	18 (29)	4 (15)	4 (19)	0 (0)	0.948
<b>Hospital admissions last 18 months, n (%)</b>	2 (3)	0 (0)	1 (5)	0 (0)	0.417

Table 3. Comorbidities

	n = 113	ACT ≥ 20 n = 94	ACT < 20 n = 19	p
<b>Atopy, n (%)</b>	81 (72)	66 (79)	15 (79)	0.441
<b>Gastroesophageal reflux, n (%)</b>	21 (19)	15 (16)	6 (31)	0.110
<b>Heart disease, n (%)</b>	6 (5)	5 (5)	1 (5)	0.992
<b>Arterial hypertension, n (%)</b>	27 (24)	20 (21)	7 (37)	0.147
<b>Dyslipidemia, n (%)</b>	27 (24)	23 (24)	4 (21)	0.750
<b>Diabetes, n (%)</b>	8 (7)	7 (7)	1 (5)	0.735
<b>Neurological disease, n (%)</b>	13 (12)	12 (13)	1 (5)	0.350
<b>Psychiatric disease, n (%)</b>	22 (19)	17 (18)	5 (26)	0.409
<b>Digestive disease, n (%)</b>	13 (12)	12 (13)	1 (5)	0.350

## References

1. Global Initiative for Asthma. Global strategy for asthma management and prevention. 2019. [www.ginasthma.org](http://www.ginasthma.org). Accessed September 3, 2020.
2. Vega JM, Badia X, Badiola C, et al. Validation of the Spanish version of the asthma control test (ACT). *J Asthma*. 2007;44:867-872.
3. Plaza V, López-Viña A, Cosío BG. Test of adherence to inhalers. *Arch Bronconeumol*. 2017;53(7):360-361.
4. Quanjer PH, Stanojevic S, Cole TJ, Baur X, Hall GL, Culver BH, et al. Multi-ethnic reference values for spirometry for the 3–95-yr age range: the global lung function 2012 equations. *Eur Respir J*. 2012; 40(6):1324–43.