

**Table S1a.** Demographic, inflammatory, and clinical characteristics of the study subjects, asthmatic and control individuals (population 1; lung biopsy samples analysis).

	<b>Asthmatics (n=16)</b>	<b>Controls (n=20)</b>	<b>P-value</b>
<b>Age (years)<sup>^</sup></b>	52.4 (± 17.7)	63.7 (± 8.5)	*
<b>Female (%)</b>	6 (37.5%)	8 (40%)	N.S.
<b>Smoking habit (%)</b>			
<b>Smokers</b>	4/15 (26.7%)	4 (20%)	N.S.
<b>Ex-smokers</b>	7/15 (46.7%)	4 (20%)	N.S.
<b>Non-smokers</b>	4/15 (26.7%)	12 (40%)	N.S.
<b>Neutrophils (%)<sup>^</sup></b>	71.4 % (± 16.2)	80.6 % (± 6.1)	N.S.
<b>Lymphocytes (%)<sup>^</sup></b>	18.2 % (± 12.7)	10.7 % (± 3.9)	N.S.
<b>Monocytes (%)<sup>^</sup></b>	8.4 % (± 2.9)	7.7 % (± 2.6)	N.S.
<b>Eosinophils (%)<sup>^</sup></b>	1.6 % (± 1.9)	0.8 % (± 0.8)	N.S.
<b>Basophils (%)<sup>†</sup></b>	0.3 % (0.1-0.5)	0.2 % (0.1-0.4)	N.S.
<b>Atopy (%)</b>	3 (18.8%)	0/18 (0%)	N.S.

Results are expressed as <sup>^</sup>Mean (± SD) or <sup>†</sup>median (IQR); N.S., Non-significant; \*,  $p < 0.05$ .

**Table S1b.** Demographic, inflammatory, functional, and clinical characteristics of obese and non-obese asthmatic patients (population 2; serum samples analysis).

	<b>Obese (n=26)</b>	<b>Non-obese (n=51)</b>	<b>P-value</b>
<b>Age (years)<sup>^</sup></b>	52.5 (±10.7)	46.7 (±15.5)	N.S.
<b>Female (%)</b>	19 (73.1%)	35 (68.6%)	N.S.
<b>BMI<sup>†</sup></b>	33 (31.6-36.4)	23.8 (22.2-26.5)	****
<b>Obesity (%)</b>	26 (100%)	0 (0%)	****
<b>Tobacco habit (%)</b>			
<b>Smokers</b>	0/25 (0%)	3/47 (6.4%)	N.S.
<b>Passive</b>	2/25 (8%)	4/47 (8.5%)	N.S.
<b>Ex-smokers</b>	10/25 (40%)	15/47 (31.9%)	N.S.
<b>Non-smokers</b>	13/25 (52%)	25/47 (53.2%)	N.S.
<b>Blood eosinophils (cells/μL)<sup>†</sup></b>	200 (115-525)	500 (100-700)	N.S.
<b>Sputum eosinophils (%)<sup>†</sup></b>	4% (0-12)	2% (0-11.8)	N.S.
<b>Atopy (%)</b>	20 (76.9%)	33 (64.7%)	N.S.
<b>IgE (IU)<sup>†</sup></b>	180.5 (65.3-460.8)	178 (62.9-401.5)	N.S.
<b>FEV<sub>1</sub>/FVC (%)<sup>^</sup></b>	86.5% (±14.6)	78.8% (±13.5)	*
<b>FeNO (ppb)<sup>†</sup></b>	24 (14.5-36.5)	33.5 (15.8-68)	N.S.
<b>Exacerbations (%)</b>	13 (50%)	26 (51%)	N.S.
<b>Severity (%)</b>			
<b>Severe</b>	8/25 (32%)	25/44 (56.8%)	*
<b>Moderate</b>	11/25 (44%)	9/44 (20.5%)	*
<b>Mild</b>	6/25 (24%)	9/44 (20.5%)	N.S.
<b>Intermittent</b>	0/25 (0%)	1/44 (2.3%)	N.S.
<b>ACT<sup>†</sup></b>	21 (16.5-22)	21 (17-24)	N.S.
<b>ICS and LABA (%)</b>	25 (96.2%)	44 (86.3%)	N.S.
<b>Late asthma onset</b>	17/24 (70.8%)	34/43 (79.1%)	N.S.

Results are expressed as <sup>^</sup>mean (±SD) or <sup>†</sup>median (IQR); N.S., Non-significant; \*\*\*\*,  $p<0.0001$ ; \*,  $p<0.05$ ; BMI, Body Mass Index; FEV<sub>1</sub>, Forced Expiratory Volume measured during the first second; FVC, Forced Vital Capacity; FeNO, Fractional exhaled Nitric Oxide; Ppb, parts per billion; ICS and LABA, Inhaled Corticosteroids and Long-Acting  $\beta$ 2-Agonists; ACT, Asthma Control Test.