

SUPPLEMENTARY MATERIAL

Table 1. Characteristics of respondents

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
Sex, n (%)					
Man	402 (58.8)	210 (60.3)	113 (56.5)	79 (58.1)	12 (28.6)
Woman	282 (41.2)	138 (39.7)	87 (43.5)	57 (41.9)	30 (71.4)
Age, n (%)					
20-30 years	27 (3.9)	8 (2.3)	11 (5.5)	8 (5.9)	5 (11.9)
31-40 years	105 (15.4)	22 (6.3)	55 (27.5)	28 (20.6)	18 (42.9)
41-50 years	198 (28.9)	111 (31.9)	52 (26.0)	35 (25.7)	14 (33.3)
> 50 years	354 (51.8)	207 (59.5)	82 (41.0)	65 (47.8)	5 (11.9)
Geographical area where you currently work, n (%)					
South	19 (2.8)	9 (2.6)	6 (3.0)	4 (2.9)	1 (2.4)
West	198 (28.9)	102 (29.3)	70 (35.0)	26 (19.1)	15 (35.7)
Southwest	137 (20.0)	73 (21.0)	34 (17.0)	30 (22.1)	4 (9.5)
Center	231 (33.8)	106 (30.5)	66 (33.0)	59 (43.4)	16 (38.1)
North	99 (14.5)	58 (16.7)	24 (12.0)	17 (12.5)	6 (14.3)

South: Canarias, Ceuta y Melilla; West: Aragón, Cataluña, Levante y Baleares; Southwest: Extremadura y Andalucía; Center: Castilla y León, Castilla La Mancha y Madrid; North: Galicia, Asturias, Cantabria, País Vasco, La Rioja. * Except Hospital Pharmacists

Table 2. Asthma patients attended in each specialty

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
Of the total number of patients you see in outpatient clinics, indicate the approximate proportion of patients with ASTHMA, n (%)					
< 20%	322 (47.1)	276 (79.3)	36 (18.0)	10 (7.4)	-
21-40%	235 (34.4)	69 (19.8)	99 (49.5)	67 (49.3)	-
41-60%	77 (11.3)	1 (0.3)	32 (16.0)	44 (32.4)	-
61-80%	26 (3.8)	1(0.3)	14 (7.0)	11 (8.1)	-
> 81%	23 (3.4)	0 (0.0)	19 (9.5)	4 (2.9)	-
NA	1 (0.1)	1 (0.3)	0 (0.0)	0 (0.0)	-
Of the total number of patients you see, please indicate the approximate proportion of patients with SEVERE ASTHMA, n (%)					
< 5%	432 (63.2)	291 (83.6)	68 (34.0)	73 (53.7)	17 (40.5)
5-10%	156 (22.8)	40 (11.5)	68 (34.0)	48 (35.3)	11 (26.2)
11-20%	46 (6.7)	14 (4.0)	21 (10.5)	11 (8.1)	7 (16.6)
21-50%	26 (3.8)	1 (0.3)	23 (11.5)	2 (1.5)	5 (11.9)
> 50%	23 (3.4)	1 (0.3)	20 (10.0)	2 (1.5)	1 (2.4)
NA	1 (0.1)	1 (0.3)	0 (0.0)	0 (0.0)	1 (2.4)

NA: no answer. * Except Hospital Pharmacists

Table 3. Eosinophilia assessment

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
On the first visit of an asthma patient, do you request a blood eosinophil count? n (%)					
• Never	18 (2.6)	16 (4.6)	1 (0.5)	1 (0.7)	2 (4.8)
• Occasionally	144 (21.1)	78 (22.4)	26 (13.0)	40 (29.4)	8 (19.0)
• Always	449 (65.6)	223 (64.1)	151 (75.5)	75 (55.1)	17 (40.5)
• Only if it's allergic asthma	12 (1.8)	7 (2.0)	1 (0.5)	4 (2.9)	4 (9.5)
• Only if it's severe asthma	21 (3.1)	2 (0.6)	11 (5.5)	8 (5.9)	10 (23.8)
• NA	40 (5.8)	22 (6.3)	10 (5.0)	8 (5.9)	1 (2.4)
What other factors are associated with eosinophilia in asthma patients? n (%)					
• Increased severity of asthma	140 (20.5)	68 (19.5)	32 (16.0)	40 (29.4)	6 (14.3)
• Worse lung function	11 (1.6)	6 (1.7)	1 (0.5)	4 (2.9)	0 (0.0)
• Worse control of the disease	103 (15.1)	54 (15.5)	36 (18.0)	13 (9.6)	7 (16.7)
• Increased risk of exacerbations	326 (47.7)	155 (44.5)	111 (55.5)	60 (44.1)	12 (28.6)
• Worse quality of life	5 (0.7)	4 (1.1)	1 (0.5)	0 (0.0)	3 (7.1)
• Worse response to treatment	30 (4.4)	22 (6.3)	3 (1.5)	5 (3.7)	4 (9.5)
• NA	69 (10.1)	39 (11.2)	16 (8.0)	14 (10.3)	10 (23.8)
How do you rate a significant increase in blood eosinophils in a patient with NON-SEVERE ASTHMA? n (%)					
• Complementary data merely	54 (7.9)	5 (1.4)	23 (11.5)	26 (19.1)	3 (7.1)

descriptive					
• Patient with allergic asthma	129 (18.9)	92 (26.4)	18 (9.0)	19 (14.0)	14 (33.3)
• Patients with increased risk of exacerbations	348 (50.9)	164 (47.1)	122 (61.0)	62 (45.6)	11 (26.2)
• I adjust the maintenance treatment by increasing inhaled corticosteroids.	71 (10.4)	39 (11.2)	19 (9.5)	13 (9.6)	1 (2.4)
• I add other drugs to the treatment	12 (1.8)	8 (2.3)	2 (1.0)	2 (1.5)	3 (7.1)
• NA	70 (10.2)	40 (11.5)	16 (8.0)	14 (10.3)	10 (23.8)
How do you rate a significant increase in blood eosinophils in a patient with SEVERE ASTHMA? n (%)					
• Complementary data merely descriptive	8 (1.2)	3 (0.9)	2 (1.0)	3 (2.2)	1 (2.4)
• I assume it's severe eosinophilic asthma	138 (20.2)	55 (15.8)	50 (25.0)	33 (24.3)	6 (14.3)
• I assume it's severe allergic asthma	152 (22.2)	115 (33.0)	20 (10.0)	17 (12.5)	11 (26.2)
• I rule out other possibilities, such as parasitic infection	225 (32.9)	63 (18.1)	100 (50.0)	62 (45.6)	9 (21.4)
• I refer the patient to another specialist to rule out concomitant diseases	68 (9.9)	61 (17.5)	-	7 (5.1)	3 (7.1)
• Start treatment with anti-eosinophil biologics	23 (3.4)	11 (3.2)	12 (6.0)	-	2 (4.8)
• NA	70 (10.2)	40 (11.5)	16 (8.0)	14 (10.3)	10 (23.8)

NA: no answer. * Except Hospital Pharmacists

Table 4. Cut-off point for considering eosinophilia or hypereosinophilic syndrome

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
What is the cut-off value you use to establish the absolute number of blood eosinophils to define eosinophilia? n (%)					
150 cells/ μ l	50 (7.3)	27 (7.8)	16 (8.0)	7 (5.1)	2 (4.8)
300 cells/ μ l	284 (41.5)	124 (35.6)	122 (61.0)	38 (27.9)	7 (16.7)
400 cells/ μ l	85 (12.4)	46 (13.2)	19 (9.5)	20 (14.7)	12 (28.6)
500 cells/ μ l	203 (29.7)	113 (32.5)	33 (16.5)	57 (41.9)	18 (42.9)
700 cells/ μ l	22 (3.2)	16 (4.6)	0 (0.0)	6 (4.4)	2 (4.8)
NA	40 (5.8)	22 (6.3)	10 (5.0)	8 (5.9)	1 (2.4)
In a patient with asthma the diagnostic possibility of primary hypereosinophilic syndrome is raised when the absolute number of eosinophils in the blood is..., n (%)					
> 500 cells/ μ l	48 (7.0)	30 (8.6)	11 (5.5)	7 (5.1)	7 (16.7)
> 1500 cells/ μ l	339 (49.6)	119 (34.2)	132 (66.0)	88 (64.7)	8 (19.1)
> 3000 cells/ μ l	40 (5.8)	15 (4.3)	12 (6.0)	13 (9.6)	0 (0.0)
> 5000 cells/ μ l	21 (3.1)	10 (2.9)	3 (1.5)	8 (5.9)	1 (2.4)
I don't know	137 (20.0)	121 (34.8)	15 (7.5)	1 (0.7)	10 (23.8)
NA	99 (14.5)	53 (15.2)	27 (13.5)	19 (14.0)	16 (38.1)

NA: no answer. * Except Hospital Pharmacists

Table 5. Treatment of eosinophilic asthma

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
In a patient with severe asthma, which parameter do you consider most relevant for treatment? n (%)					
• Increased IgE	73 (10.7)	31 (8.9)	32 (16.0)	10 (7.4)	7 (16.7)
• Blood eosinophilia	126 (18.4)	75 (21.6)	16 (8.0)	35 (25.7)	5 (11.9)
• Both	265 (38.7)	142 (40.8)	75 (37.5)	48 (35.3)	14 (33.3)
• It depends	106 (15.5)	22 (6.3)	55 (27.5)	29 (21.3)	3 (7.1)
• I don't know	45 (6.6)	39 (11.2)	6 (3.0)	0 (0.0)	3 (7.1)
• NA	69 (10.1)	39 (11.2)	16 (8.0)	14 (10.3)	10 (23.8)
Does the complete suppression of eosinophils produced by any of the biologic drugs used in the treatment of severe asthma have long-term negative consequences? n (%)					
• Yes	37 (5.4)	22 (6.3)	8 (4.0)	7 (5.1)	5 (11.9)
• Yes, but only in endemic areas to parasitosis	62 (9.1)	17 (4.9)	28 (14.0)	17 (12.5)	3 (7.1)
• No	117 (17.1)	51 (14.7)	40 (20.0)	26 (19.1)	1 (2.4)
• It depends	110 (16.1)	57 (16.4)	31 (15.5)	22 (16.2)	10 (23.8)
• I don't know	259 (37.9)	148 (42.5)	66 (33.0)	45 (33.1)	7 (16.7)
• NC	99 (14.5)	53 (15.2)	27 (13.5)	19 (14.0)	16 (38.1)

By whom are patients with allergic granulomatosis and asthma preferentially controlled in your center? n (%)					
• Allergy service	16 (2.3)	6 (1.7)	1(0.5)	9 (6.6)	1 (2.4)
• Pulmonology service	124 (18.1)	42 (12.1)	56 (28.0)	26 (19.1)	3 (7.1)
• Hematology service	7 (1.0)	4 (1.1)	0 (0.0)	3 (2.2)	0 (0.0)
• Internal Medicine/Rheumatology services	112 (16.4)	88 (25.3)	11 (5.5)	13 (9.6)	4 (9.5)
• Combination of Allergy and Internal Medicine/Rheumatology or Hematology services	99 (14.5)	47 (13.5)	2 (1.0)	50 (36.8)	5 (11.9)
• Combination of Pulmonology and Internal Medicine/Rheumatology or Hematology services	227 (33.2)	108 (31.0)	103 (51.5)	16 (11.8)	13 (31.0)
• NA	99 (14.5)	53 (15.2)	27 (13.5)	19 (14.0)	16 (38.1)
By whom are patients with primary eosinophilic syndrome and asthma preferentially controlled in your center? n (%)					
• Allergy service	104 (15.2)	58 (16.7)	12 (6.0)	34 (25.0)	4 (9.5)
• Pulmonology service	224 (32.7)	147 (42.2)	65 (32.5)	12 (8.8)	15 (35.7)
• Hematology service	16 (2.3)	5 (1.4)	7 (3.5)	4 (2.9)	1 (2.4)
• Internal Medicine/Rheumatology services	34 (5.0)	18 (5.2)	9 (4.5)	7 (5.1)	0 (0.0)
• Combination of Allergy and Internal Medicine/Rheumatology or Hematology services	72 (10.5)	19 (5.5)	0 (0.0)	53 (39.0)	1 (2.4)

• Combination of Pulmonology and Internal Medicine/Rheumatology or Hematology services	135 (19.7)	48 (13.8)	80 (40.0)	7 (5.1)	5 (11.9)
• NA	99 (14.5)	53 (15.2)	27 (13.5)	19 (14.0)	16 (38.1)

NA: no answer. * Except Hospital Pharmacists

Table 6. Need for training

	Global * (n = 684)	Primary Care Physicians (n = 348)	Pulmonologists (n = 200)	Allergists (n = 136)	Hospital Pharmacists (n = 42)
Do you think you need more training on eosinophils in general and on asthma in particular? n (%)					
• Yes	530 (77.5)	283 (81.3)	149 (74.5)	98 (72.1)	26 (61.9)
• No	34 (5.0)	4 (1.1)	17 (8.5)	13 (9.6)	0 (0.0)
• I don't know	21 (3.1)	8 (2.3)	7 (3.5)	6 (4.4)	0 (0.0)
• NA	99 (14.5)	53 (15.2)	27 (13.5)	19 (14.0)	16 (38.1)

NA: no answer. * Except Hospital Pharmacists