

Online supplement for

T2-High Endotype and Response to Biological Treatments in Patients with Bronchiectasis

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Table S1. Clinical characteristics of the cohort and of the cohort without patients with concomitant asthma.

Variable	Total Population (n = 249)	Pure Bronchiectasis Without Asthma (n = 203)
Demographics		
Sex (female), n (%)	193 (77.5%)	160 (78.8%)
Age, median (IQR) years	63.0 (50.0, 71.0)	63.0 (51.0, 71.0)
Former/active smoker, n (%)	109 (43.8%)	91 (44.8%)
Body mass index [Kg/m ²], median (IQR)	21.2 (19.2, 24.0)	21.2 (19.0, 24.0)
Radiology		
Reiff score, median (IQR)	4.0 (3.0, 6.0)	4.0 (3.0, 6.0)
Disease severity		
BSI, median (IQR)	5.0 (3.0, 8.0)	5.0 (3.0, 9.0)
BSI risk class, n (%)	Mild Moderate Severe	87 (36.1%) 95 (39.4%) 59 (24.5%)
Etiology		
Idiopathic, n (%)	156 (62.7%)	125 (61.6%)
Primary immunodeficiency, n (%)	23 (9.2%)	19 (9.4%)
Post Infective, n (%)	22 (8.8%)	19 (9.4%)
Primary Ciliary Diskynesia, n (%)	10 (4.0%)	9 (4.4%)
Secondary Immunodeficiency, n (%)	10 (4.0%)	9 (4.4%)
ABPA, n (%)	3 (1.2%)	2 (1.0%)

Other*, n (%)	27 (10.8%)	20 (9.8%)
Comorbidities		
BACI, median (IQR)	0.0 (0.0, 3.0)	0.0 (0.0, 0.0)
Gastroesophageal reflux disease, n (%)	127 (51.0%)	102 (50.2%)
Cardiovascular diseases, n (%)	88 (35.3%)	75 (36.9%)
Rinosinusitis, n (%)	92 (36.9%)	65 (32.0%)
Osteoporosis, n (%)	44 (17.7%)	38 (18.7%)
Neoplastic disease, n (%)	33 (13.3%)	31 (15.3%)
Depression, n (%)	23 (9.2%)	19 (9.4%)
Clinical status		
Exacerbations previous year, median (IQR)	1.0 (0.0, 2.0)	1.0 (0.0, 2.0)
3+ exacerbations in the previous year, n (%)	37 (16.2%)	27 (14.4%)
>1 hospitalization in previous year, n (%)	23 (10.1%)	17 (9.0%)
mMRC, n (%)		
0	150 (60.7%)	122 (60.4%)
1	74 (30.0%)	59 (29.2%)
2	11 (4.5%)	10 (5.0%)
3	7 (2.8%)	7 (3.5%)
4	5 (2.0%)	4 (2.0%)
3-4	12 (4.9%)	11 (5.4%)
Quality of life - QoL-B questionnaire		
QoL-B questionnaire Physical, median (IQR)	66.7 (40.0, 80.0)	66.7 (40.0, 86.7)
QoL-B questionnaire Role, median (IQR)	66.7 (46.7, 86.7)	70.0 (53.3, 86.7)
QoL-B questionnaire Vitality, median (IQR)	55.6 (44.4, 66.7)	55.6 (44.4, 66.7)
QoL-B questionnaire Emotion, median (IQR)	75.0 (55.6, 91.7)	79.2 (58.3, 91.7)
QoL-B questionnaire Social, median (IQR)	75.0 (47.2, 83.3)	75.0 (50.0, 91.7)
QoL-B questionnaire Treatment Burden, median (IQR)	66.7 (55.6, 77.8)	66.7 (55.6, 77.8)
QoL-B questionnaire Health, median (IQR)	41.7 (25.0, 58.3)	41.7 (25.0, 58.3)
QoL-B questionnaire Respiration, median (IQR)	74.1 (59.3, 81.5)	74.1 (63.0, 85.2)
Functional evaluation		
FEV ₁ , median (IQR) %predict.	84.0 (70.8, 98.2)	84.0 (71.0, 99.2)
FEV ₁ <50%predict., median (IQR)	16 (6.7%)	13 (6.6%)
FEV ₁ <35%predict., median (IQR)	6 (2.5%)	6 (3.1%)
Microbiology		
Chronic infection, n (%)	83 (40.3%)	74 (43.3%)
Chronic infection <i>P. aeruginosa</i> , n (%)	45 (21.8%)	41 (24.0%)
Chronic Infection <i>H. Influenzae</i> , n (%)	16 (7.8%)	15 (8.8%)
Chronic Infection MSSA, n (%)	16 (7.8%)	14 (8.2%)
Chronic Infection MRSA, n (%)	4 (1.9%)	4 (2.3%)
Chronic Infection <i>S. maltophilia</i> , n (%)	4 (1.9%)	3 (1.8%)
Chronic Infection <i>Achromobacter</i> , n (%)	2 (1.0%)	2 (1.2%)
Chronic Infection <i>S. pneumoniae</i> , n (%)	1 (0.5%)	1 (0.6%)
Chronic Infection <i>A. fumigatus</i> , n (%)	2 (1.0%)	1 (0.6%)
Other chronic infection, n (%)	10 (4.9%)	7 (4.1%)
Th2 high endotype		
Blood eosinophils, median (IQR) cells· μL^{-1}	130.0 (80.0, 220.0)	120.0 (80.0, 200.0)
Oral FeNO, median (IQR) ppb	14.6 (8.5, 24.3)	14.6 (9.2, 21.9)

Definition of abbreviations: BSI= Bronchiectasis severity index; MRSA= Methicillin-Resistant Staphylococcus Aureus; MSSA= Methicillin- sensitive Staphylococcus Aureus; ABPA= Allergic bronchopulmonary aspergillosis. Data are presented as median (interquartile range) or n (%). * Connective Tissue Disease, Alpha1-antitrypsin deficiency, Rheumatoid arthritis, Ulcerative colitis, Aspiration, Asthma, COPD, Inflammatory bowel disease, NTM infection.

Table S2. Comparison of clinical characteristics of Th2 and non-Th2 high.

Variable	Th2 High Endotype (<i>n</i> = 88)	Non-Th2 High (<i>n</i> = 161)	<i>p</i> -Value
Demographics			
Sex (female), <i>n</i> (%)	61 (69.3%)	132 (82.0%)	0.022
Age, median (IQR) years	65.0 (54.8, 70.2)	62.0 (48.0, 71.0)	0.166
Former/Active smoker, <i>n</i> (%)	44 (50.0%)	65 (40.4%)	0.143
Body mass index [Kg/m ²], median (IQR), <i>n</i> (%)	21.4 (19.0, 23.8)	21.2 (19.2, 24.0)	0.920
Radiology			
Reiff score, median (IQR)	4.0 (3.0, 6.0)	4.0 (2.0, 6.0)	0.116
Disease severity			
BSI, median (IQR)	6.0 (4.0, 10.0)	5.0 (3.0, 8.0)	0.071
Etiology			
Idiopathic, <i>n</i> (%)	57 (64.8%)	99 (61.5%)	0.341
Primary immunodeficiency, <i>n</i> (%)	6 (6.8%)	17 (10.6%)	
Post Infective, <i>n</i> (%)	4 (4.5%)	18 (11.2%)	
Primary Ciliary Dyskinesia, <i>n</i> (%)	2 (2.3%)	8 (5.0%)	
Secondary Immunodeficiency, <i>n</i> (%)	5 (5.7%)	5 (3.1%)	
ABPA, <i>n</i> (%)	2 (2.3%)	1 (0.6%)	
Other*, <i>n</i> (%)	12 (13.6%)	14 (8.8%)	
Comorbidities			
BACI, median (IQR)	0.0 (0.0, 3.0)	0.0 (0.0, 0.0)	0.003
Gastroesophageal reflux disease, <i>n</i> (%)	47 (53.4%)	80 (49.7%)	0.575
Cardiovascular diseases, <i>n</i> (%)	24 (41.4%)	55 (34.2%)	0.598
Rinosinusitis, <i>n</i> (%)	41 (46.6%)	51 (31.7%)	0.020
Osteoporosis, <i>n</i> (%)	18 (20.5%)	26 (16.1%)	0.395
Neoplastic disease, <i>n</i> (%)	12 (13.6%)	21 (13.0%)	0.895
Depression, <i>n</i> (%)	10 (11.4%)	13 (8.1%)	0.392
Clinical status			
Exacerbations previous year, median (IQR)	1.0 (0.0, 2.0)	1.0 (0.0, 2.0)	0.309
3 + exacerbations in the previous year, <i>n</i> (%)	17 (20.7%)	20 (13.7%)	0.167
> 1 hospitalization in the previous year, <i>n</i> (%)	11 (13.4%)	12 (8.2%)	0.211
mMRC, <i>n</i> (%)	0	46 (52.9%)	104 (65.0%)
	1	29 (33.3%)	45 (28.1%)
	2	5 (5.7%)	6 (3.8%)
	3	4 (4.6%)	3 (1.9%)
	4	3 (3.4%)	2 (1.2%)
	3-4	7 (8.0%)	5 (3.1%)
			0.086
Quality of life-QoL-B questionnaire			
QoL-B questionnaire Physical, median (IQR)	63.4 (41.7, 80.0)	66.7 (40.0, 86.7)	0.455
QoL-B questionnaire Role, median (IQR)	66.7 (46.7, 86.7)	73.3 (51.6, 85.0)	0.726
QoL-B questionnaire Vitality, median (IQR)	55.6 (44.4, 77.8)	55.6 (33.3, 66.7)	0.279
QoL-B questionnaire Emotion, median (IQR)	79.2 (52.1, 100.0)	75.0 (57.0, 91.7)	0.726
QoL-B questionnaire Social, median (IQR)	58.3 (43.8, 83.3)	75.0 (50.0, 91.7)	0.199
QoL-B questionnaire Treatment Burden, median (IQR)	66.7 (66.7, 77.8)	66.7 (55.6, 77.8)	0.128
QoL-B questionnaire Health, median (IQR)	41.7 (19.4, 58.3)	41.7 (25.0, 58.3)	0.386
QoL-B questionnaire Respiration, median (IQR)	66.7 (54.9, 81.5)	77.8 (64.8, 85.2)	0.054
Functional evaluation			
FEV ₁ , median (IQR) %predict.	83.0 (66.0, 97.0)	86.0 (73.5, 100.5)	0.091
FEV ₁ <50%predict., <i>n</i> (%)	9 (11.1%)	7 (4.4%)	0.090

FEV ₁ <35%predict. , n (%)	4 (5.0%)	2 (1.3%)	0.191
Microbiology			
Chronic infection, n (%)	26 (34.7%)	57 (43.5%)	0.213
Chronic infection <i>P. aeruginosa</i> , n (%)	16 (21.3%)	29 (22.1%)	0.893
Chronic Infection <i>H. Influenzae</i> , n (%)	3 (4.0%)	13 (10.0%)	0.123
Chronic Infection MSSA, n (%)	4 (5.3%)	12 (9.2%)	0.323
Chronic Infection MRSA, n (%)	1 (1.3%)	3 (2.3%)	0.632
Chronic Infection <i>S. maltophilia</i> , n (%)	2 (2.7%)	2 (1.5%)	0.568
Chronic Infection <i>Achromobacter</i> , n (%)	1 (1.3%)	1 (0.8%)	0.688
Chronic Infection <i>S. pneumoniae</i> , n (%)	0 (0.0%)	1 (0.8%)	0.448
Chronic Infection <i>A. fumigatus</i> , n (%)	2 (2.7%)	0 (0.0%)	0.06
Other chronic infection, n (%)	3 (4.0%)	7 (5.3%)	0.666

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