SUPPLEMENTARY MATERIAL

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Characterization and burden of severe eosinophilic asthma in New Zealand: Results from the HealthStat Database

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Items	Non-SEA (n=3116)	SEA (n=160)	Total (n=3276)
History of exacerbations, n (%)			
0	2183 (70.1)	-	2183 (66.7)
1	550 (17.7)	-	550 (16.8)
2	190 (6.1)	57 (35.6)	247 (7.5)
3	85 (2.7)	37 (23.1)	122 (3.7)
<u>≥</u> 4	49 (1.6)	21 (13.1)	70 (2.1)
Patients with controlled asthma*	2733 (87.7)	-	2733 (83.4)
Patients with uncontrolled asthma*	383 (12.3)	160 (100)	543 (16.6)
No. of exacerbations, mean±SD	0.6±1.3	3.8±2.2	0.7±1.5
No. of GP visits, mean±SD	14.0±9.3	22.0±14.2	14.4±9.8

Supplementary Table 1. Asthma control and exacerbations in the 12-month baseline period.

*Patients experiencing ≥ 2 exacerbations in the baseline period were considered to have uncontrolled asthma; patients with <2 exacerbations were considered to have controlled asthma. GP: general practice, SD: standard deviation, SEA: severe eosinophilic asthma.

Items	Non-SEA (n=3116)	SEA (n=160)	Total (N=3276)
Percentage of days covered [¥] by prescription for asthma treatment, %	20.6	45.2	-
No. of prescriptions, mean			
Any oral corticosteroids	0.6	3.8	0.7
Any single LABA	0.1	0.0	0.1
Any single ICS	0.8	0.1	0.7
Any single LAMA	0.0	0.1	0.0
SABD	1.2	1.8	1.2
Combined ICS + LABA	0.8	1.8	0.8
Antibiotics	0.2	0.6	0.2
Total	3.6	8.1	3.8
Treatment use, % (mutually exclusive categories)		1 1	
None	0.3	0	0.3
ICS alone	52.0	0	49.4
ICS/LABA	42.6	93.8	45.1
ICS/LAMA	0.2	0	0.2
LABA	0.3	0	0.3
ICS/LABA/LAMA	1.2	4.4	1.3
LAMA	0.1	0	0.1
SABD alone	3.4	1.9	3.3

Supplementary Table 2. Respiratory medication usage during the 12-month baseline period.

^{$\bar{v}}$ Assuming 90 days of coverage for each prescription. ICS: inhaled corticosteroid, LABA: long-acting β-agonist, LAMA: long-acting muscarinic antagonist, SABD: short-acting bronchodilator, SEA: severe eosinophilic asthma.</sup>



Supplementary Figure 1. Data obtained from the HealthStat database in the baseline and follow-up periods.

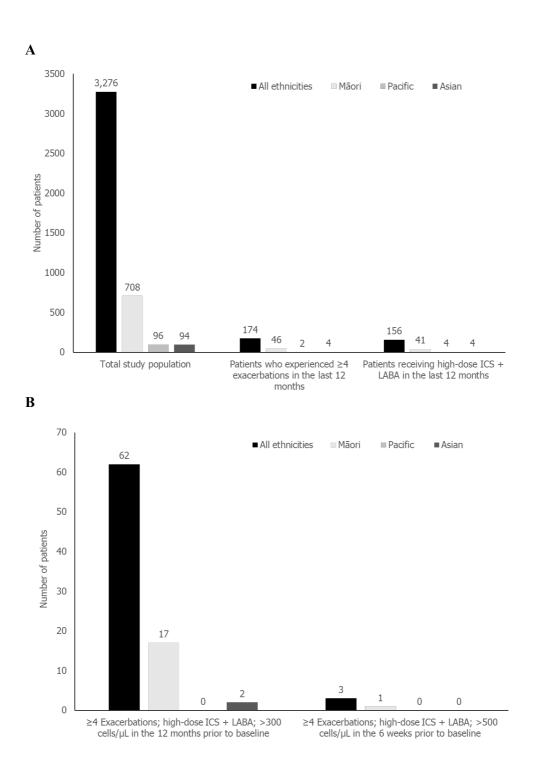
(31 December 2011)			
Baseline period	Follow-up period		
1 January, 2011 to 31 December, 2011	1 January, 2012 to 31 December, 2012		
 Demographics and baseline characteristics Exacerbation history and asthma control GP healthcare utilisation Treatment patterns and medication 	 Exacerbation history and asthma control GP healthcare utilisation Treatment patterns Characterize total and asthma-related HCRU and costs 		

*the baseline period did not include the index date. GP, general practice; HCRU, healthcare resource utilization.

Index date



Supplementary Figure 2. Stratification by ethnicity of the subgroup of total asthma patients by: A – those who experienced \geq 4 exacerbation in the 12-month baseline period and those on high-dose ICS + LABA, and B – by blood eosinophil count.





ICS: inhaled corticosteroid, LABA: long-acting $\beta\text{-}agonist.$

