SUPPLEMENTARY RESULTS

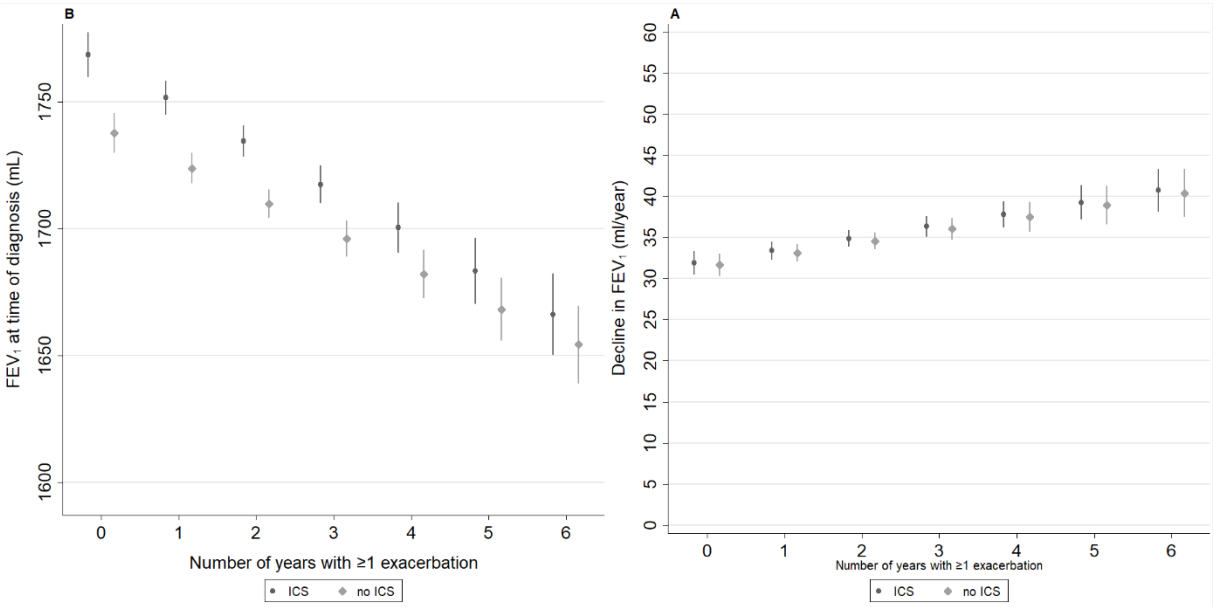
Table E1. Baseline patient characteristics

Variable		**Total (N= 11,337)**
Year of index date (ID)	Mean (SD)	2006.8 (2.9)
	Median (IQR)	2007.0 (2005.0;2009.0)
Follow-up after ID, years	Mean (SD)	8.8 (2.2)
	Median (IQR)	8.2 (7.0;10.1)
Age group	35-59, n (%)	3,233 (28.5)
	60-79, n (%)	7,302 (64.4)
	80+, n (%)	802 (7.1)
Rhinitis diagnosis	Never, n (%)	8,916 (78.6)
	Active, n (%)	1,717 (15.1)
	Ever, not active, n (%)	704 (6.2)
Eczema diagnosis	Never, n (%)	9,267 (81.7)
	Active, n (%)	328 (2.9)
	Ever, not active, n (%)	1,742 (15.4)
Nasal polyps diagnosis	Ever, n (%)	142 (1.3)
Chronic sinusitis diagnosis	Ever, n (%)	650 (5.7)
Gastroesophageal reflux disease diagnosis	Ever, n (%)	1,476 (13.0)
Diabetes Mellitus diagnosis	Ever, n (%)	976 (8.6)
Osteoporosis diagnosis	Ever, n (%)	465 (4.1)
Hypertension diagnosis	Ever, n (%)	3,943 (34.8)
Ischemic heart disease diagnosis	Ever, n (%)	1,891 (16.7)
Heart failure diagnosis	Ever, n (%)	345 (3.0)
Chronic kidney disease diagnosis	Ever, n (%)	506 (4.5)
Depression diagnosis	Ever, n (%)	2,437 (21.5)
Anxiety diagnosis	Ever, n (%)	2,327 (20.5)
Sleep apnoea diagnosis	Ever, n (%)	65 (0.6)
Sleep disorder diagnosis	Ever, n (%)	1,328 (11.7)
Oral corticosteroids (OCS) courses, number in year prior to ID	0, n (%)	9,268 (81.8)
	1, n (%)	1,406 (12.4)
	2, n (%)	423 (3.7)
	3, n (%)	134 (1.2)
	≥4, n (%)	106 (0.9)
Antibiotics courses with lower respiratory consultation, number in year prior to ID	None, n (%)	6,287 (55.5)
	1, n (%)	2,671 (23.6)
	2, n (%)	1,346 (11.9)
	3, n (%)	577 (5.1)
	≥4, n (%)	456 (4.0)
Mean daily dose of oral corticosteroids in year prior to ID (mg /day)	N (% non-missing)	2,957 (26.1)
	No OCS, n (%)	470 (15.9)
	<2.5, n (%)	2,205 (74.6)
	2.5 to <5, n (%)	178 (6.0)
	5 to <7.5, n (%)	54 (1.8)
	≥7.5, n (%)	50 (1.7)
Daily SABA dose (µg /day)	No SABA, n (%)	4,378 (38.6)
	1-100, n (%)	2,492 (22.0)

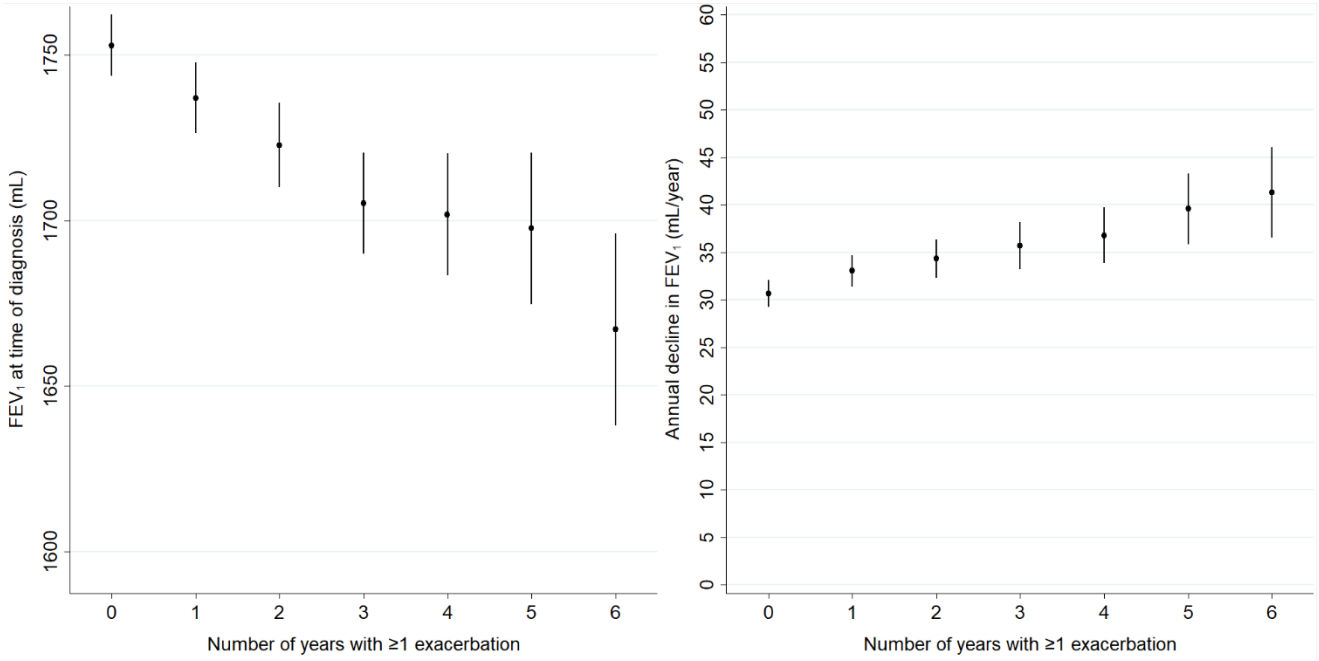
Variable		Total (N= 11,337)
	101-200, n (%)	1,837 (16.2)
	201-300, n (%)	860 (7.6)
	301-400, n (%)	489 (4.3)
	>400, n (%)	1,281 (11.3)
Any SAMA prescriptions	Yes, n (%)	1,919 (16.9)
Type of therapy within 120 days prior to index date (spirometry around time of diagnosis)	Minimal or no therapy, n (%)	6,722 (59.3)
	LAMA or LABA, n (%)	641 (5.7)
	ICS monotherapy, n (%)	1,859 (16.4)
	ICS+(LABA or LAMA), n (%)	1,708 (15.1)
	LABA+LAMA, n (%)	24 (0.2)
	Triple therapy, n (%)	383 (3.4)
General practice (GP) consultations, COPD-related, number in year prior to ID	None, n (%)	2,102 (18.5)
	1, n (%)	8,226 (72.6)
	2-4, n (%)	961 (8.5)
	5-7, n (%)	44 (0.4)
	≥8, n (%)	4 (0.0)
GP consultations, all-cause, number in year prior to ID	0-1, n (%)	97 (0.9)
	2-4, n (%)	1,238 (10.9)
	5-8, n (%)	2,786 (24.6)
	9-13, n (%)	3,036 (26.8)
	14-17, n (%)	1,598 (14.1)
	18-22, n (%)	1,220 (10.8)
	≥23, n (%)	1,362 (12.0)

COPD = Chronic obstructive pulmonary disease; OCS = oral corticosteroids; ICS = Inhaled corticosteroid; IQR = Interquartile range; SD = Standard deviation; SABA = Short acting β2 agonist; SAMA = Short acting muscarinic antagonist.

Supplementary Figure E1. The association between the number of years with ≥1 exacerbation and FEV_1 at time of diagnosis (Left) and rate of FEV_1 decline (Right) for patients treated with and without ICS prior to spirometry.



Supplementary Figure E2. Sensitivity analysis excluding 5,647 (6.8%) FEV_1 values recorded within 2 weeks before or after occurrence of an exacerbation showing the relationship of the number of years with ≥1 exacerbation with FEV_1 at time of diagnosis (Left) and rate of FEV_1 decline (Right).



Supplementary Figure E3. Sensitivity analysis excluding 1,413 (12.6%) patients who were ever diagnosed with asthma showing the relationship of the number of years with ≥1 exacerbation with FEV_1 at time of diagnosis (Left) and rate of FEV_1 decline (Right).