1   Table 1: Demographics and clinical characteristics of new user cohort (**N=8646**).

Characteristic	Count (%)[a]
Female	5726 (66.2)
Age, mean (SD), years	37.2 (17.5)
<=12 years	1012 (11.7)
<18 and >12 years	739 (8.6)
>=18 years	6895 (79.8)
Race; non-White	1579 (18.3)
Entered rolling cohort more than once	1,815 (21.0)
Index Long-Acting Beta Agonist	
fluticasone/salmeterol	7345 (85.0)
budesonide/formoterol	860 (10.0)
mometasone/formoterol	120 (1.4)
single long-acting beta agonist	321 (3.7)
Respiratory Diagnoses	
Asthma only	4570 (52.9)
COPD only	1426 (16.5)
Asthma and COPD	828 (9.6)
No respiratory diagnosis	1822 (21.1)
Respiratory controller use	2723 (31.5)
Respiratory controller use, asthma only [b]	1470 (32.2)

2   [a] All statistics are reported as n (%) except for age, which is reported as a mean (SD; standard
3   deviation)

4   [b] Denominators is n=4570

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Table 2: Segmented regression model estimates and confidence intervals for new use cohorts.

	Intercept[a]	Baseline Trend (95% CI)[b]	Level Change (95% CI)[c]	Trend Change (95% CI)[c]	Predicted absolute change (95% CI)[e]
LABA starts	9.59 (7.67 to 11.52)	-0.002 (-0.07 to 0.06)	-0.25 (-1.15 to 0.65)	-0.09 (-0.19 to -0.01)[f]	-3.16 (-4.09, -2.22)
LABA starts by asthma diagnosis					
Yes	4.78 (3.83 to 5.73)	0.04 (0.003 to 0.07)[f]	-0.48 (-0.93 to -0.03)[f]	-0.10 (-0.13 to -0.06)[g]	-3.76 (-4.09, -3.43)
No	4.64 (3.63 to 5.65)	-0.03 (-0.7 to 0.003)	0.19 (-0.29 to 0.68)	0.004 (-0.03 to 0.04)	na
LABA starts by age[h]					
<18 Years	2.62 (1.37 to 3.87)	0.02 (-0.02 to 0.06)	-0.44 (-1.06 to 0.18)	-0.06 (-0.11 to -0.01)[f]	-2.55 (-3.05, -2.05)
>=18 Years	22.17 (16.05 to 28.30)	0.02 (-0.20 to 0.23)	0.24 (-2.74 to 3.22)	-0.30 (-0.53 to -0.08)[f]	-10.10 (-12.42, -7.78)
Proportion of LABA starts with previous controller use	31.4% (23.4% to 39.4%)	-0. 2% (-0.5% to 0.1%)	4.7% (0.8% to 8.7%)[f]	0.3% (-0.01% to 0.6%)	na
Controller starts in those with asthma diagnosis	17.18 (12.50 to 21.86)	0.91 (-0.24 to 0.62)	2.02 (-3.71 to 7.75)	-0.42 (-2.63 to 0.07)	na

Abbreviations: CI, confidence intervals; LABA, long-acting beta agonist, na=not applicable

a Utilization level on July 2008
b Baseline trend is monthly change in new long-acting beta agonist starts per 10,000 patients per month.
c Level change is the estimate of change immediately after the February 2010 FDA advisory.
d Trend change is the change in the trend of new LABA starts per 10,000 patients per month.
e Predicted absolute change is the projected difference in the dependent variable on month 54 (December 2012) assuming continuation of baseline trend.
f controllers include inhaled corticosteroids, leukotriene modifiers, and theophylline
g p<.05
g p<.001
h denominator reflects age criteria on first of month