

Interrupted Time Series Analysis

In this request, we estimate the longitudinal trend in incident use of long-acting beta-2 agonist (LABA) with and without a long-term asthma controller medication (ACM) among asthma patients in the Sentinel Distributed Database (SDD).

There are eight reports containing the interrupted time series (ITS) regression models for 15 cohorts. Each cohort contains a separate rate calculation based on differing numerator and denominator definitions. These cohorts are each duplicated for incident and prevalent medication use. Please find below a breakdown of the contents of each of these eight reports. Described are the rates for each cohort.

Final Report 1, Incident

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Analyses 1, 2, 3

- 1 = Incident SI-LABA Users Without Same-Day ACM Dispensing among Incident LABA Users
- 2 = Incident SI-LABA Users Without Presence of ACM Dispensing among Incident LABA Users
- 3 = Incident SI-LABA Users Without Presence of ACM or FDC-LABA Dispensing among LABA-Naive Patients with Asthma

Final Report 2, Incident

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Analyses 4, 5, 6, 7

- 4 = Incident LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Asthma
- 5 = Incident LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Asthma
- 6 = Incident LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Asthma
- 7 = Incident LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Asthma

Final Report 3, Incident

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Analyses 8, 9, 10, 11

- 8 = Incident LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Poorly-Controlled Asthma
- 9 = Incident LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma
- 10 = Incident LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma
- 11 = Incident LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Poorly-Controlled Asthma

Final Report 4, Incident

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Analyses 12, 13, 14, 15

12 = Incident LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

13 = Incident LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

14 = Incident LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

15 = Incident LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

Final Report 1, Prevalent

(cder_mpl2r_wp012_report_final_prev_report1_trunc_20210726.xlsx)

Analyses 1, 2, 3

1 = Prevalent SI-LABA Users Without Same-Day ACM Dispensing among Incident LABA Users

2 = Prevalent SI-LABA Users Without Presence of ACM Dispensing among Incident LABA Users

3 = Prevalent SI-LABA Users Without Presence of ACM or FDC-LABA Dispensing among LABA-Naive Patients with Asthma

Final Report 2, Prevalent

(cder_mpl2r_wp012_report_final_prev_report2_trunc_20210726.xlsx)

Analyses 4, 5, 6, 7

4 = Prevalent LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Asthma

5 = Prevalent LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Asthma

6 = Prevalent LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Asthma

7 = Prevalent LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Asthma

Final Report 3, Prevalent

(cder_mpl2r_wp012_report_final_prev_report3_trunc_20210726.xlsx)

Analyses 8, 9, 10, 11

8 = Prevalent LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Poorly-Controlled Asthma

9 = Prevalent LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma

10 = Prevalent LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma

11 = Prevalent LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Poorly-Controlled Asthma

Final Report 4, Prevalent

(cder_mpl2r_wp012_report_final_prev_report4_trunc_20210726.xlsx)

Analyses 12, 13, 14, 15

12 = Prevalent LABA Users with at Least 1 Day of ACM or FDC LABA Dispensing among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

13 = Prevalent LABA Users with at Least 50% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

14 = Prevalent LABA Users with at Least 75% Duration Overlap with ACM or FDC LABA Dispensings among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)

15 = Prevalent LABA Users with Same-Day Dispensing of ACM or FDC LABA among LABA-Naive Patients with Poorly-Controlled Asthma (Without SABA Criteria)