Disclaimer

The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the modular program run(s).

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Overview for Request cder_mpl1p_wp057

Request ID: cder_mpl1p_wp057

Request Description: In this request we assessed switching patterns among Inhaled Corticosteroids (ICS)/ Long-acting Beta-agonists (LABA) users with prior asthma or Chronic Obstructive Pulmonary Disease (COPD) and without recent history of pneumonia in the Sentinel Distributed Database (SDD). We performed a post-hoc analysis to plot the cumulative incidence of switching function for each pattern, which could account for treatment cessation as a competing risk for switching.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 10.2.0, with custom programming.

Data Source: We distributed this query to seven Sentinel Data Partners on September 7, 2021. The study period included data from February 1, 2019 up to December 31, 2020 . Please see Appendix A for a list of dates of available data for each Data Partner.

Study Design: We identified mutually exclusive cohorts of Advair Diskus users who were diagnosed with either asthma or COPD in the 365 days prior to cohort entry. In each cohort, we excluded patients diagnosed with pneumonia in 90 days prior to cohort entry. We created two versions of each cohort: one where individuals with an ICS/LABA dispensing within the 183 days prior to cohort entry were excluded (new user cohort), and one where they were not (prevalent cohort). Within each cohort, we identified patients who switched from Advair Diskus to:

- Advair Approved Generic (AG) back to Advair Diskus
- Wixela back to Advair Diskus
- Symbicort back to Advair Diskus
- Breo Ellipta back to Advair Diskus (prevalent cohort only)

This is a Type 6 analysis in the Query Request Package (QRP) documentation.

Exposures of Interest: We identified the exposures of interest, Advair Authorized Generic (AG), Advair Diskus, Wixela, Symbicort, and Breo Ellipta using National Drug Codes (NDCs). All qualifying exposures were included; cohort re-entry was allowed. Please refer to Appendix B for generic names of medical products used to define exposures.

Follow-up Time: We created exposure episodes based on the number of days supplied per dispensing in the outpatient pharmacy dispensing records. We bridged together episodes less than 90 days apart. These "as-treated" episodes are the time during which we assessed switching. Follow-up began on the day of the index dispensing and continued until the first occurrence of any of the following: 1) disenrollment; 2) death; 3) the end of the data provided by each Data Partner; 4) product discontinuation.

Overview for Request cder_mpl1p_wp057

Cohort Eligibility Criteria: We required members to be enrolled in health plans with medical and drug coverage in the 365 days prior to their cohort entry (index) date in order to be included in the cohort; a gap in coverage of up to 45 days was allowed and treated as continuous enrollment. The following age groups were included in the cohort: 4-11, 12-18, 19-39, 40-64, and 65+ years. We formed 14 switching groups with the following criteria:
Incident: No evidence of any ICS/LABA use in the 183 days prior to and including day of index
Prevalent: Use of ICS/LABA allowed prior to and including index
Asthma Cohort: Evidence of asthma required in the 365 days prior to index; No evidence of COPD required in the 365 days prior to index; No evidence of pneumonia in the 90 days prior to index
COPD Cohort: Evidence of COPD required in the 365 days prior to index; No evidence of asthma required in the 365 days prior to index; No evidence of pneumonia in the 90 days prior to index

We examined the following switching patterns in each cohort:

- Advair Diskus to Advair AG to Advair Diskus (Incident with prior asthma)
- Advair Diskus to Wixela to Advair Diskus (Incident with prior asthma)
- Advair Diskus to Symbicort to Advair Diskus (Incident with prior asthma)
- Advair Diskus to Advair AG to Advair Diskus (Prevalent with prior asthma)
- Advair Diskus to Wixela to Advair Diskus (Prevalent with prior asthma)
- Advair Diskus to Symbicort to Advair Diskus (Prevalent with prior asthma)
- Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with prior asthma)
- Advair Diskus to Advair AG to Advair Diskus (Incident with prior COPD)
- Advair Diskus to Wixela to Advair Diskus (Incident with prior COPD)
- Advair Diskus to Symbicort to Advair Diskus (Incident with prior COPD)
- Advair Diskus to Advair AG to Advair Diskus (Prevalent with prior COPD)
- Advair Diskus to Wixela to Advair Diskus (Prevalent with prior COPD)
- Advair Diskus to Symbicort to Advair Diskus (Prevalent with prior COPD)
- Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with prior COPD)

Asthma, COPD, and pneumonia diagnoses were defined using International Classification of Diseases, Tenth Revision,

Switch Episodes: For the treatment episodes with switching, we allowed a 99% overlap tolerance indicating that 99% of overlap days were allowed in between treatment episodes for index and switch exposures. Further, a gap of up to 15 days in treatment was allowed before censoring for discontinuation of treatment for both index and switch exposures.

Overview for Request cder_mpl1p_wp057
Baseline Characteristics: We assessed the following characteristics in the 365 days prior to and including the index date: age, year, sex, Charlson/Elixhauser combined comorbidity score,[1] health service and drug utilization, respiratory failure, acute bronchospasm, asthma exacerbation (asthma exacerbation in any care setting or primary inpatient diagnosis of asthma or diagnosis of asthma in the emergency department or oral corticosteroid dispensing), COPD exacerbation (COPD exacerbation in any care setting or inpatient primary diagnosis of COPD or diagnosis of COPD in the emergency department or oral corticosteroid dispensing), short-acting beta agonists (albuterol, levalbuterol), long-acting beta agonists (arformoterol, formoterol, indacaterol, olodaterol), short-acting antimuscarinic agents (ipratropium), leukotriene modifiers (montelukast, zafirlukast, zileuton), long-acting antimuscarinic agents (aclidinium bromide, glycopyrrolate, tiotropium bromide, umeclidinium bromide), immunomodulators (omalizumab, mepolizumab, reslizumab), mast cell stabilizers (cromolyn sodium), and ease of generic substitution at the state level (highest, higher, lower, lowest, unknown). The states included in each category were as follows: Highest (WA, KY, MA, NY, OK, RI, TN, AZ, IL, NJ, NC, WI, WY), Higher (AL, ID, ME, MO, NV, NM, OR, PA, WV, CA, CO, FL, GA, HI, MD, MN, MS, NE, VT), Lower (DE, IN, KS, MI, MT, NH, ND, OH, SD), and Lowest (AK, DC, IA, TX, UT, VA, AR, CT, LA, SC). For the purpose of the post-hoc cumulative incidence functions only, we combined the higher/highest and lower/lowest categories into two categories (high and low) and excluded any episodes whose category was unknown. Baseline characteristics were defined using ICD-10-CM diagnosis codes, Healthcare Common Procedure Coding System (HCPCS) procedure codes, and NDCs. Please see Appendices E and F for a list of codes and generic and brand names used to define baseline characteristics. Please see Appendix G for a summary of ease of generic substitution at the state level. **Please see Appendices H and I for parameters used to define this request, and Appendix J for Baseline Characteristics.** **Limitations:** Algorithms used to define inclusion and exclusion criteria are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind. **Notes:** Please contact the Sentinel Operations Center (info@sentinelsystem.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (https://dev.sentinelsystem.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse).

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module*

Amount Supplied - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.
Blackout Period - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.
Care Setting - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

- **Ambulatory Visit (AV) -** includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.
- **Emergency Department (ED) -** includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.
- **Inpatient Hospital Stay (IP) -** includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.
- **Non-Acute Institutional Stay (IS) -** includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.
- **Other Ambulatory Visit (OA) -** includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

Charlson/Elixhauser Combined Comorbidity Score - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).
Code Days - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

Cohort Definition (drug/exposure) - indicates how the cohort will be defined: 01: Cohort includes only the first valid treatment episode during the query period; 02: Cohort includes all valid treatment episodes during the query period; 03: Cohort includes all valid treatment episodes during the query period until an event occurs.

Computed Start Marketing Date - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.
Days Supplied - number of days supplied for all dispensings in qualifying treatment episodes.
Eligible Members - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.
Enrollment Gap - number of days allowed between two consecutive enrollment periods without breaking a “continuously enrolled” sequence.
Episodes - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.
Episode Gap - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.
Event Deduplication - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).
Exposure Episode Length - number of days after exposure initiation that is considered "exposed time."
Exposure Extension Period - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.
Lookback Period - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).
Maximum Episode Duration - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.
Member-Years - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.
Minimum Days Supplied - specifies a minimum number of days in length of the days supplied for the episode to be considered.

Glossary of Terms for Analyses Using
Cohort Identification and Descriptive Analysis (CIDA) Module*

Minimum Episode Duration - specifies a minimum number of days in length of the episode for it to be considered. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

Monitoring Period - used to define time periods of interest for both sequential analysis and simple cohort characterization requests.

Principal Diagnosis (PDX) - diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the Caresetting/PDX parameter.

Query Period - period in which the modular program looks for exposures and outcomes of interest.

Switch Evaluation Step Value - value used to differentiate evaluation step. Each switch pattern can support up to 2 evaluation steps (0 = switch pattern evaluation start; 1 = first evaluation; 2 = second evaluation).

Switch Gap Inclusion Indicator - indicator for whether gaps in treatment episodes that are included in a switch episode will be counted as part of the switch episode duration.

Switch Pattern Cohort Inclusion Date - indicates which date to use for inclusion into the switch pattern cohort of interest as well as optionally as the index date of the treatment episode initiating the switch pattern. Valid options are the product approval date, product marketing date, other requester defined date, or computed start marketing date.

Switch Pattern Cohort Inclusion Strategy - indicates how the switch pattern cohort inclusion date will be used: 01: used only as a switch cohort entry date. First treatment episode dispensing date is used as index for computing time to first switch; 02: used as switch cohort entry date and as initial switch step index date for computing time to first switch.

Treatment Episode Truncation Indicator - indicates whether the exposure episode will be truncated at the occurrence of a requester-specified code.

Washout Period (drug/exposure) - number of days a user is required to have no evidence of prior exposure (drug dispensing/procedure) and continuous drug and medical coverage prior to an incident treatment episode.

Washout Period (event/outcome) - number of days a user is required to have no evidence of a prior event (procedure/diagnosis) and continuous drug and medical coverage prior to an incident treatment episode.

Years at Risk - number of days supplied plus any episode gaps and exposure extension periods all divided by 365.25.

*all terms may not be used in this report

Table 1.1a. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	85,419	N/A
Number of episodes	90,242	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	57.5	15.0
Age (Years)	**Number**	**Percent**
4-11	806	0.9%
12-18	1,924	2.1%
19-39	14,355	15.9%
40-64	33,974	37.6%
65+	39,183	43.4%
Sex		
Female	57,846	67.7%
Male	27,573	32.3%
Race		
White	40,334	47.2%
Black or African American	7,733	9.1%
Other	3,133	3.7%
Unknown	34,219	40.1%
Year		
2019	47,284	52.4%
2020	42,958	47.6%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.0	20.6
Mean number of emergency room encounters (ED)	0.6	1.6
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	7.8
Mean number of unique drug classes	9.3	5.4
Mean number of generics	10.0	6.2
Mean number of filled prescriptions	32.6	29.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	1,350	1.5%
Acute Bronchospasm	1,287	1.4%
Asthma Exacerbation	44,254	49.0%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	45,988	51.0%
1	21,283	23.6%
2	10,205	11.3%
3+	12,766	14.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	51,834	57.4%
Long Acting Beta Agonists	15	0.0%

Table 1.1a. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	1,957	2.2%
Long-Acting Antimuscarinic Agents	1,433	1.6%
Leukotriene Modifiers	26,227	29.1%
Immunomodulators	179	0.2%
Mast Cell Stabilizers	183	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	25,751	30.1%
Higher	36,725	43.0%
Lower	8,328	9.7%
Lowest	14,435	16.9%
Unknown	180	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2a. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD)from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,371	N/A
Number of episodes	1,371	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	63.3	14.8
Age (Years)	**Number**	**Percent**
4-11	11	0.8%
12-18	24	1.8%
19-39	126	9.2%
40-64	408	29.8%
65+	802	58.5%
Sex		
Female	934	68.1%
Male	437	31.9%
Race		
White	780	56.9%
Black or African American	132	9.6%
Other	32	2.3%
Unknown	427	31.1%
Year		
2019	595	43.4%
2020	776	56.6%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.4	2.5
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.5	22.1
Mean number of emergency room encounters (ED)	0.7	1.6
Mean number of inpatient hospital encounters (IP)	0.2	0.8
Mean number of non-acute institutional encounters (IS)	0.1	0.4
Mean number of other ambulatory encounters (OA)	5.4	12.3
Mean number of unique drug classes	12.0	6.0
Mean number of generics	13.0	7.1
Mean number of filled prescriptions	49.3	44.1
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	43	3.1%
Acute Bronchospasm	24	1.8%
Asthma Exacerbation	769	56.1%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	602	43.9%
1	302	22.0%
2	164	12.0%
3+	303	22.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	980	71.5%
Long Acting Beta Agonists	*****	*****

Table 1.2a. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD)from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	34	2.5%
Long-Acting Antimuscarinic Agents	62	4.5%
Leukotriene Modifiers	525	38.3%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	357	26.0%
Higher	527	38.4%
Lower	*****	*****
Lowest	256	18.7%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3a. Aggregated Baseline Characteristics of Users with Prior Asthma for Second Switch Episodes from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	131	N/A
Number of episodes	131	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	64.0	14.5
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	13	9.9%
40-64	40	30.5%
65+	78	59.5%
Sex		
Female	83	63.4%
Male	48	36.6%
Race		
White	82	62.6%
Black or African American	*****	*****
Other	*****	*****
Unknown	30	22.9%
Year		
2019	12	9.2%
2020	119	90.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.3	2.7
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.6	24.6
Mean number of emergency room encounters (ED)	0.7	1.2
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.5	10.7
Mean number of unique drug classes	11.8	5.9
Mean number of generics	13.0	7.0
Mean number of filled prescriptions	49.8	41.1
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	*****	*****
Acute Bronchospasm	0	0.0%
Asthma Exacerbation	65	49.6%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	66	50.4%
1	16	12.2%
2	12	9.2%
3+	37	28.2%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	96	73.3%
Long Acting Beta Agonists	0	0.0%

Table 1.3a. Aggregated Baseline Characteristics of Users with Prior Asthma for Second Switch Episodes from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	57	43.5%
Immunomodulators	*****	*****
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	38	29.0%
Higher	51	38.9%
Lower	19	14.5%
Lowest	23	17.6%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1b. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD)from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	85,419	N/A
Number of episodes	90,242	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	57.5	15.0
Age (Years)	**Number**	**Percent**
4-11	806	0.9%
12-18	1,924	2.1%
19-39	14,355	15.9%
40-64	33,974	37.6%
65+	39,183	43.4%
Sex		
Female	57,846	67.7%
Male	27,573	32.3%
Race		
White	40,334	47.2%
Black or African American	7,733	9.1%
Other	3,133	3.7%
Unknown	34,219	40.1%
Year		
2019	47,284	52.4%
2020	42,958	47.6%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.0	20.6
Mean number of emergency room encounters (ED)	0.6	1.6
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	7.8
Mean number of unique drug classes	9.3	5.4
Mean number of generics	10.0	6.2
Mean number of filled prescriptions	32.6	29.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	1,350	1.5%
Acute Bronchospasm	1,287	1.4%
Asthma Exacerbation	44,254	49.0%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	45,988	51.0%
1	21,283	23.6%
2	10,205	11.3%
3+	12,766	14.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	51,834	57.4%
Long Acting Beta Agonists	15	0.0%

Table 1.1b. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD)from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	1,957	2.2%
Long-Acting Antimuscarinic Agents	1,433	1.6%
Leukotriene Modifiers	26,227	29.1%
Immunomodulators	179	0.2%
Mast Cell Stabilizers	183	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	25,751	30.1%
Higher	36,725	43.0%
Lower	8,328	9.7%
Lowest	14,435	16.9%
Unknown	180	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2b. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	2,668	N/A
Number of episodes	2,672	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	61.5	14.7
Age (Years)	**Number**	**Percent**
4-11	24	0.9%
12-18	44	1.6%
19-39	295	11.0%
40-64	885	33.1%
65+	1,424	53.3%
Sex		
Female	1,802	67.5%
Male	866	32.5%
Race		
White	1,442	54.0%
Black or African American	251	9.4%
Other	67	2.5%
Unknown	908	34.0%
Year		
2019	1,051	39.3%
2020	1,621	60.7%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.3	2.1
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.7	23.2
Mean number of emergency room encounters (ED)	0.7	2.5
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.1	0.4
Mean number of other ambulatory encounters (OA)	5.1	11.7
Mean number of unique drug classes	11.4	5.8
Mean number of generics	12.3	6.6
Mean number of filled prescriptions	42.5	35.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	69	2.6%
Acute Bronchospasm	63	2.4%
Asthma Exacerbation	1,501	56.2%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	1,171	43.8%
1	613	22.9%
2	331	12.4%
3+	557	20.8%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,852	69.3%
Long Acting Beta Agonists	0	0.0%

Table 1.2b. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	84	3.1%
Long-Acting Antimuscarinic Agents	86	3.2%
Leukotriene Modifiers	948	35.5%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	867	32.5%
Higher	978	36.7%
Lower	*****	*****
Lowest	467	17.5%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3b. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	256	N/A
Number of episodes	256	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	61.6	17.0
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	*****	*****
40-64	79	30.9%
65+	137	53.5%
Sex		
Female	171	66.8%
Male	85	33.2%
Race		
White	151	59.0%
Black or African American	36	14.1%
Other	11	4.3%
Unknown	58	22.7%
Year		
2019	24	9.4%
2020	232	90.6%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.4	2.1
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	21.2	16.8
Mean number of emergency room encounters (ED)	0.6	1.7
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0.1	0.4
Mean number of other ambulatory encounters (OA)	6.4	14.0
Mean number of unique drug classes	11.6	6.3
Mean number of generics	12.6	7.2
Mean number of filled prescriptions	46.0	36.8
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	*****	*****
Acute Bronchospasm	*****	*****
Asthma Exacerbation	140	54.7%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	116	45.3%
1	55	21.5%
2	41	16.0%
3+	44	17.2%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	184	71.9%
Long Acting Beta Agonists	0	0.0%

Table 1.3b. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	12	4.7%
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	101	39.5%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	77	30.1%
Higher	79	30.9%
Lower	*****	*****
Lowest	62	24.2%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1c. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	85,419	N/A
Number of episodes	90,242	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	57.5	15.0
Age (Years)	**Number**	**Percent**
4-11	806	0.9%
12-18	1,924	2.1%
19-39	14,355	15.9%
40-64	33,974	37.6%
65+	39,183	43.4%
Sex		
Female	57,846	67.7%
Male	27,573	32.3%
Race		
White	40,334	47.2%
Black or African American	7,733	9.1%
Other	3,133	3.7%
Unknown	34,219	40.1%
Year		
2019	47,284	52.4%
2020	42,958	47.6%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.0	20.6
Mean number of emergency room encounters (ED)	0.6	1.6
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	7.8
Mean number of unique drug classes	9.3	5.4
Mean number of generics	10.0	6.2
Mean number of filled prescriptions	32.6	29.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	1,350	1.5%
Acute Bronchospasm	1,287	1.4%
Asthma Exacerbation	44,254	49.0%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	45,988	51.0%
1	21,283	23.6%
2	10,205	11.3%
3+	12,766	14.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	51,834	57.4%
Long Acting Beta Agonists	15	0.0%

Table 1.1c. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	1,957	2.2%
Long-Acting Antimuscarinic Agents	1,433	1.6%
Leukotriene Modifiers	26,227	29.1%
Immunomodulators	179	0.2%
Mast Cell Stabilizers	183	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	25,751	30.1%
Higher	36,725	43.0%
Lower	8,328	9.7%
Lowest	14,435	16.9%
Unknown	180	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2c. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,312	N/A
Number of episodes	1,314	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	55.4	14.5
Age (Years)	**Number**	**Percent**
4-11	25	1.9%
12-18	23	1.8%
19-39	235	17.9%
40-64	535	40.7%
65+	496	37.7%
Sex		
Female	894	68.1%
Male	418	31.9%
Race		
White	545	41.5%
Black or African American	119	9.1%
Other	25	1.9%
Unknown	623	47.5%
Year		
2019	509	38.7%
2020	805	61.3%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.3	2.1
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.5	22.2
Mean number of emergency room encounters (ED)	0.9	2.2
Mean number of inpatient hospital encounters (IP)	0.2	0.8
Mean number of non-acute institutional encounters (IS)	0.0	0.3
Mean number of other ambulatory encounters (OA)	4.9	9.9
Mean number of unique drug classes	12.0	5.8
Mean number of generics	13.1	6.9
Mean number of filled prescriptions	42.4	34.7
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	70	5.3%
Acute Bronchospasm	33	2.5%
Asthma Exacerbation	932	70.9%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	382	29.1%
1	310	23.6%
2	206	15.7%
3+	416	31.7%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,020	77.6%
Long Acting Beta Agonists	*****	*****

Table 1.2c. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	55	4.2%
Long-Acting Antimuscarinic Agents	44	3.3%
Leukotriene Modifiers	576	43.8%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	460	35.1%
Higher	489	37.3%
Lower	*****	*****
Lowest	255	19.4%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3c. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	38	N/A
Number of episodes	38	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	58.8	11.8
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	*****	*****
40-64	12	31.6%
65+	19	50.0%
Sex		
Female	22	57.9%
Male	16	42.1%
Race		
White	16	42.1%
Black or African American	*****	*****
Other	*****	*****
Unknown	*****	*****
Year		
2019	*****	*****
2020	*****	*****
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.6	2.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	24.6	24.4
Mean number of emergency room encounters (ED)	0.7	1.0
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	5.0	9.1
Mean number of unique drug classes	11.7	5.2
Mean number of generics	13.9	6.2
Mean number of filled prescriptions	56.5	49.4
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	*****	*****
Acute Bronchospasm	*****	*****
Asthma Exacerbation	25	65.8%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	13	34.2%
1	11	28.9%
2	*****	*****
3+	*****	*****
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	31	81.6%
Long Acting Beta Agonists	0	0.0%

Table 1.3c. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	18	47.4%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	19	50.0%
Higher	*****	*****
Lower	*****	*****
Lowest	*****	*****
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1d. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	135,541	N/A
Number of episodes	160,032	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	59.2	14.7
Age (Years)	**Number**	**Percent**
4-11	1,226	0.8%
12-18	2,940	1.8%
19-39	21,964	13.7%
40-64	57,519	35.9%
65+	76,383	47.7%
Sex		
Female	90,559	66.8%
Male	44,982	33.2%
Race		
White	67,122	49.5%
Black or African American	11,910	8.8%
Other	4,798	3.5%
Unknown	51,711	38.2%
Year		
2019	81,724	51.1%
2020	78,308	48.9%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.3	20.4
Mean number of emergency room encounters (ED)	0.5	1.5
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	8.4
Mean number of unique drug classes	9.7	5.4
Mean number of generics	10.4	6.2
Mean number of filled prescriptions	34.4	30.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	2,370	1.5%
Acute Bronchospasm	2,116	1.3%
Asthma Exacerbation	79,459	49.7%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	80,573	50.3%
1	37,175	23.2%
2	18,263	11.4%
3+	24,021	15.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	96,355	60.2%
Long Acting Beta Agonists	33	0.0%

Table 1.1d. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	3,839	2.4%
Long-Acting Antimuscarinic Agents	3,562	2.2%
Leukotriene Modifiers	51,241	32.0%
Immunomodulators	405	0.3%
Mast Cell Stabilizers	342	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	41,510	30.6%
Higher	57,240	42.2%
Lower	13,743	10.1%
Lowest	22,774	16.8%
Unknown	274	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2d. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	3,257	N/A
Number of episodes	3,268	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	65.4	14.0
Age (Years)	**Number**	**Percent**
4-11	19	0.6%
12-18	38	1.2%
19-39	241	7.4%
40-64	876	26.8%
65+	2,094	64.1%
Sex		
Female	2,212	67.9%
Male	1,045	32.1%
Race		
White	1,967	60.4%
Black or African American	269	8.3%
Other	77	2.4%
Unknown	944	29.0%
Year		
2019	1,268	38.8%
2020	2,000	61.2%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.2	2.3
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	21.9	21.5
Mean number of emergency room encounters (ED)	0.6	1.3
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.1	0.3
Mean number of other ambulatory encounters (OA)	5.1	12.6
Mean number of unique drug classes	11.3	5.7
Mean number of generics	12.3	6.7
Mean number of filled prescriptions	47.1	40.8
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	103	3.2%
Acute Bronchospasm	46	1.4%
Asthma Exacerbation	1,696	51.9%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	1,572	48.1%
1	714	21.8%
2	377	11.5%
3+	605	18.5%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	2,158	66.0%
Long Acting Beta Agonists	*****	*****

Table 1.2d. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	90	2.8%
Long-Acting Antimuscarinic Agents	124	3.8%
Leukotriene Modifiers	1,257	38.5%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	856	26.3%
Higher	1,232	37.8%
Lower	528	16.2%
Lowest	629	19.3%
Unknown	12	0.4%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3d. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	370	N/A
Number of episodes	371	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	64.7	15.4
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	*****	*****
40-64	100	27.0%
65+	233	62.8%
Sex		
Female	263	71.1%
Male	107	28.9%
Race		
White	222	60.0%
Black or African American	45	12.2%
Other	14	3.8%
Unknown	89	24.1%
Year		
2019	38	10.2%
2020	333	89.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.1	2.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.1	24.8
Mean number of emergency room encounters (ED)	0.5	1.3
Mean number of inpatient hospital encounters (IP)	0.2	0.5
Mean number of non-acute institutional encounters (IS)	0.1	0.3
Mean number of other ambulatory encounters (OA)	5.2	14.9
Mean number of unique drug classes	11.0	5.7
Mean number of generics	12.0	6.6
Mean number of filled prescriptions	46.6	39.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	12	3.2%
Acute Bronchospasm	*****	*****
Asthma Exacerbation	174	46.9%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	197	53.1%
1	62	16.7%
2	36	9.7%
3+	76	20.5%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	254	68.5%
Long Acting Beta Agonists	0	0.0%

Table 1.3d. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	166	44.7%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	106	28.6%
Higher	137	37.0%
Lower	*****	*****
Lowest	66	17.8%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1e. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	135,466	N/A
Number of episodes	159,674	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	59.2	14.7
Age (Years)	**Number**	**Percent**
4-11	1,225	0.8%
12-18	2,934	1.8%
19-39	21,930	13.7%
40-64	57,411	36.0%
65+	76,174	47.7%
Sex		
Female	90,512	66.8%
Male	44,954	33.2%
Race		
White	67,078	49.5%
Black or African American	11,905	8.8%
Other	4,798	3.5%
Unknown	51,685	38.2%
Year		
2019	81,689	51.2%
2020	77,985	48.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.3	20.4
Mean number of emergency room encounters (ED)	0.5	1.5
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	8.4
Mean number of unique drug classes	9.7	5.4
Mean number of generics	10.4	6.2
Mean number of filled prescriptions	34.4	30.4
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	2,360	1.5%
Acute Bronchospasm	2,112	1.3%
Asthma Exacerbation	79,244	49.6%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	80,430	50.4%
1	37,075	23.2%
2	18,200	11.4%
3+	23,969	15.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	96,119	60.2%
Long Acting Beta Agonists	33	0.0%

Table 1.1e. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	3,824	2.4%
Long-Acting Antimuscarinic Agents	3,532	2.2%
Leukotriene Modifiers	51,130	32.0%
Immunomodulators	403	0.3%
Mast Cell Stabilizers	342	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	41,473	30.6%
Higher	57,209	42.2%
Lower	13,746	10.1%
Lowest	22,766	16.8%
Unknown	272	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2e. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	6,155	N/A
Number of episodes	6,184	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	63.5	14.2
Age (Years)	**Number**	**Percent**
4-11	41	0.7%
12-18	83	1.3%
19-39	579	9.4%
40-64	1,860	30.1%
65+	3,621	58.6%
Sex		
Female	4,163	67.6%
Male	1,992	32.4%
Race		
White	3,472	56.4%
Black or African American	556	9.0%
Other	135	2.2%
Unknown	1,992	32.4%
Year		
2019	2,197	35.5%
2020	3,987	64.5%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.2	2.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.1	22.1
Mean number of emergency room encounters (ED)	0.6	2.0
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0.1	0.3
Mean number of other ambulatory encounters (OA)	5.1	12.3
Mean number of unique drug classes	11.0	5.5
Mean number of generics	11.9	6.4
Mean number of filled prescriptions	41.7	33.8
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	148	2.4%
Acute Bronchospasm	108	1.7%
Asthma Exacerbation	3,362	54.4%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	2,822	45.6%
1	1,395	22.6%
2	740	12.0%
3+	1,227	19.8%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	4,068	65.8%
Long Acting Beta Agonists	*****	*****

Table 1.2e. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	194	3.1%
Long-Acting Antimuscarinic Agents	238	3.8%
Leukotriene Modifiers	2,285	37.0%
Immunomodulators	20	0.3%
Mast Cell Stabilizers	14	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	1,954	31.7%
Higher	2,344	38.1%
Lower	755	12.3%
Lowest	1,088	17.7%
Unknown	14	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3e. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	732	N/A
Number of episodes	732	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	64.4	15.0
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	72	9.8%
40-64	205	28.0%
65+	444	60.7%
Sex		
Female	491	67.1%
Male	241	32.9%
Race		
White	451	61.6%
Black or African American	87	11.9%
Other	24	3.3%
Unknown	170	23.2%
Year		
2019	65	8.9%
2020	667	91.1%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.2	2.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	20.5	18.5
Mean number of emergency room encounters (ED)	0.6	1.9
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0.1	0.3
Mean number of other ambulatory encounters (OA)	6.0	14.5
Mean number of unique drug classes	10.9	5.6
Mean number of generics	11.8	6.4
Mean number of filled prescriptions	42.5	33.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	22	3.0%
Acute Bronchospasm	*****	*****
Asthma Exacerbation	386	52.7%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	346	47.3%
1	167	22.8%
2	100	13.7%
3+	119	16.3%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	484	66.1%
Long Acting Beta Agonists	0	0.0%

Table 1.3e. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	27	3.7%
Long-Acting Antimuscarinic Agents	37	5.1%
Leukotriene Modifiers	275	37.6%
Immunomodulators	*****	*****
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	238	32.5%
Higher	268	36.6%
Lower	*****	*****
Lowest	142	19.4%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1f. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	135,615	N/A
Number of episodes	160,324	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	59.2	14.7
Age (Years)	**Number**	**Percent**
4-11	1,226	0.8%
12-18	2,939	1.8%
19-39	21,992	13.7%
40-64	57,593	35.9%
65+	76,574	47.8%
Sex		
Female	90,610	66.8%
Male	45,005	33.2%
Race		
White	67,169	49.5%
Black or African American	11,923	8.8%
Other	4,798	3.5%
Unknown	51,725	38.1%
Year		
2019	81,735	51.0%
2020	78,589	49.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.3	20.4
Mean number of emergency room encounters (ED)	0.5	1.5
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	8.4
Mean number of unique drug classes	9.7	5.4
Mean number of generics	10.5	6.2
Mean number of filled prescriptions	34.4	30.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	2,376	1.5%
Acute Bronchospasm	2,116	1.3%
Asthma Exacerbation	79,584	49.6%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	80,740	50.4%
1	37,218	23.2%
2	18,295	11.4%
3+	24,071	15.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	96,544	60.2%
Long Acting Beta Agonists	33	0.0%

Table 1.1f. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	3,845	2.4%
Long-Acting Antimuscarinic Agents	3,563	2.2%
Leukotriene Modifiers	51,362	32.0%
Immunomodulators	405	0.3%
Mast Cell Stabilizers	342	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	41,526	30.6%
Higher	57,269	42.2%
Lower	13,755	10.1%
Lowest	22,791	16.8%
Unknown	274	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2f. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	2,231	N/A
Number of episodes	2,237	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	56.9	14.8
Age (Years)	**Number**	**Percent**
4-11	41	1.8%
12-18	36	1.6%
19-39	365	16.3%
40-64	857	38.3%
65+	938	41.9%
Sex		
Female	1,526	68.4%
Male	705	31.6%
Race		
White	975	43.7%
Black or African American	214	9.6%
Other	58	2.6%
Unknown	984	44.1%
Year		
2019	805	36.0%
2020	1,432	64.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.3	2.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.6	23.0
Mean number of emergency room encounters (ED)	0.8	2.1
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.1	0.3
Mean number of other ambulatory encounters (OA)	5.4	11.7
Mean number of unique drug classes	12.1	5.9
Mean number of generics	13.4	7.0
Mean number of filled prescriptions	45.4	37.2
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	108	4.8%
Acute Bronchospasm	56	2.5%
Asthma Exacerbation	1,553	69.4%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	684	30.6%
1	511	22.8%
2	347	15.5%
3+	695	31.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,725	77.1%

Table 1.2f. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Long Acting Beta Agonists	*****	*****
Short-Acting Antimuscarinic Agents	90	4.0%
Long-Acting Antimuscarinic Agents	89	4.0%
Leukotriene Modifiers	1,026	45.9%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	762	34.2%
Higher	839	37.6%
Lower	*****	*****
Lowest	422	18.9%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3f. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	88	N/A
Number of episodes	88	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	59.7	15.7
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	*****	*****
40-64	25	28.4%
65+	48	54.5%
Sex		
Female	56	63.6%
Male	32	36.4%
Race		
White	38	43.2%
Black or African American	*****	*****
Other	*****	*****
Unknown	35	39.8%
Year		
2019	19	21.6%
2020	69	78.4%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.4	2.1
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	25.2	22.2
Mean number of emergency room encounters (ED)	0.7	1.1
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0.0	0.1
Mean number of other ambulatory encounters (OA)	4.7	7.6
Mean number of unique drug classes	12.1	4.9
Mean number of generics	14.5	5.9
Mean number of filled prescriptions	54.0	39.3
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	*****	*****
Acute Bronchospasm	*****	*****
Asthma Exacerbation	61	69.3%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	27	30.7%
1	22	25.0%
2	11	12.5%
3+	28	31.8%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	68	77.3%
Long Acting Beta Agonists	0	0.0%

Table 1.3f. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	45	51.1%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	31	35.2%
Higher	29	33.0%
Lower	12	13.6%
Lowest	16	18.2%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1g. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	135,607	N/A
Number of episodes	160,313	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	59.2	14.7
Age (Years)	**Number**	**Percent**
4-11	1,229	0.8%
12-18	2,941	1.8%
19-39	21,990	13.7%
40-64	57,583	35.9%
65+	76,570	47.8%
Sex		
Female	90,604	66.8%
Male	45,003	33.2%
Race		
White	67,165	49.5%
Black or African American	11,922	8.8%
Other	4,799	3.5%
Unknown	51,721	38.1%
Year		
2019	81,736	51.0%
2020	78,577	49.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	1.9	2.0
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19.3	20.4
Mean number of emergency room encounters (ED)	0.5	1.5
Mean number of inpatient hospital encounters (IP)	0.1	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.2
Mean number of other ambulatory encounters (OA)	4.0	8.4
Mean number of unique drug classes	9.7	5.4
Mean number of generics	10.5	6.2
Mean number of filled prescriptions	34.4	30.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	2,374	1.5%
Acute Bronchospasm	2,113	1.3%
Asthma Exacerbation	79,580	49.6%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	80,733	50.4%
1	37,225	23.2%
2	18,291	11.4%
3+	24,064	15.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	96,535	60.2%
Long Acting Beta Agonists	33	0.0%

Table 1.1g. Aggregated Baseline Characteristics of Users with Prior Asthma Initiating Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	3,845	2.4%
Long-Acting Antimuscarinic Agents	3,561	2.2%
Leukotriene Modifiers	51,351	32.0%
Immunomodulators	405	0.3%
Mast Cell Stabilizers	343	0.2%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	41,523	30.6%
Higher	57,267	42.2%
Lower	13,755	10.1%
Lowest	22,788	16.8%
Unknown	274	0.2%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

Table 1.2g. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Breo Ellipta in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,948	N/A
Number of episodes	1,954	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	60.2	14.2
Age (Years)	**Number**	**Percent**
4-11	*****	*****
12-18	*****	*****
19-39	283	14.5%
40-64	679	34.7%
65+	972	49.7%
Sex		
Female	1,374	70.5%
Male	574	29.5%
Race		
White	989	50.8%
Black or African American	185	9.5%
Other	60	3.1%
Unknown	714	36.7%
Year		
2019	670	34.3%
2020	1,284	65.7%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.5	2.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	25.0	25.4
Mean number of emergency room encounters (ED)	0.8	2.1
Mean number of inpatient hospital encounters (IP)	0.3	0.7
Mean number of non-acute institutional encounters (IS)	0.1	0.5
Mean number of other ambulatory encounters (OA)	6.1	14.8
Mean number of unique drug classes	12.6	6.1
Mean number of generics	14.0	7.2
Mean number of filled prescriptions	47.8	38.6
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	90	4.6%
Acute Bronchospasm	61	3.1%
Asthma Exacerbation	1,340	68.6%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	614	31.4%
1	429	22.0%
2	307	15.7%
3+	604	30.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,492	76.4%
Long Acting Beta Agonists	*****	*****

Table 1.2g. Aggregated Baseline Characteristics of Users with Prior Asthma at First Switch Date from Advair Diskus to Breo Ellipta in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	84	4.3%
Long-Acting Antimuscarinic Agents	109	5.6%
Leukotriene Modifiers	856	43.8%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	699	35.9%
Higher	664	34.1%
Lower	*****	*****
Lowest	358	18.4%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3g. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Breo Ellipta to Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	89	N/A
Number of episodes	89	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	62.7	13.7
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	50	56.2%
Sex		
Female	58	65.2%
Male	31	34.8%
Race		
White	44	49.4%
Black or African American	*****	*****
Other	*****	*****
Unknown	34	38.2%
Year		
2019	18	20.2%
2020	71	79.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	2.6	2.7
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	29.1	27.1
Mean number of emergency room encounters (ED)	0.8	1.6
Mean number of inpatient hospital encounters (IP)	0.4	0.9
Mean number of non-acute institutional encounters (IS)	0.1	0.5
Mean number of other ambulatory encounters (OA)	7.6	13.1
Mean number of unique drug classes	12.7	5.4
Mean number of generics	15.0	6.4
Mean number of filled prescriptions	49.6	34.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	*****	*****
Acute Bronchospasm	*****	*****
Asthma Exacerbation	59	66.3%
Number of Baseline Asthma Exacerbations:	**Number**	**Percent**
0	30	33.7%
1	18	20.2%
2	13	14.6%
3+	28	31.5%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	68	76.4%
Long Acting Beta Agonists	0	0.0%

Table 1.3g. Aggregated Baseline Characteristics of Users with Prior Asthma at Second Switch Date from Breo Ellipta to Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	*****	*****
Leukotriene Modifiers	50	56.2%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	30	33.7%
Higher	37	41.6%
Lower	*****	*****
Lowest	*****	*****
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	64,378	N/A
Number of episodes	67,504	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	70.3	10.9
Age (Years)	**Number**	**Percent**
4-11	14	0.0%
12-18	43	0.1%
19-39	734	1.1%
40-64	18,736	27.8%
65+	47,977	71.1%
Sex		
Female	37,026	57.5%
Male	27,352	42.5%
Race		
White	50,015	77.7%
Black or African American	5,566	8.6%
Other	1,530	2.4%
Unknown	7,267	11.3%
Year		
2019	37,294	55.2%
2020	30,210	44.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.7	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.0	25.5
Mean number of emergency room encounters (ED)	0.9	2.0
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.1	0.5
Mean number of other ambulatory encounters (OA)	9.2	18.6
Mean number of unique drug classes	11.7	5.8
Mean number of generics	12.7	6.7
Mean number of filled prescriptions	50.3	41.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	10,237	15.2%
Acute Bronchospasm	1,033	1.5%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	44,799	66.4%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	22,705	33.6%
1	13,520	20.0%
2	8,613	12.8%
3+	22,666	33.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	33,793	50.1%
Long Acting Beta Agonists	81	0.1%

Table 1.1h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	2,098	3.1%
Long-Acting Antimuscarinic Agents	10,131	15.0%
Leukotriene Modifiers	8,270	12.3%
Immunomodulators	*****	*****
Mast Cell Stabilizers	82	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	20,729	32.2%
Higher	24,578	38.2%
Lower	8,661	13.5%
Lowest	10,361	16.1%
Unknown	49	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,838	N/A
Number of episodes	1,839	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	72.4	10.3
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	*****	*****
65+	1,426	77.5%
Sex		
Female	1,067	58.1%
Male	771	41.9%
Race		
White	1,479	80.5%
Black or African American	148	8.1%
Other	33	1.8%
Unknown	178	9.7%
Year		
2019	814	44.3%
2020	1,025	55.7%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.3	3.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	24.8	27.2
Mean number of emergency room encounters (ED)	1.1	2.2
Mean number of inpatient hospital encounters (IP)	0.6	1.1
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	13.1	22.6
Mean number of unique drug classes	13.6	5.8
Mean number of generics	15.0	6.9
Mean number of filled prescriptions	65.2	50.2
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	388	21.1%
Acute Bronchospasm	28	1.5%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	1,332	72.4%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	507	27.6%
1	315	17.1%
2	250	13.6%
3+	767	41.7%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,172	63.7%
Long Acting Beta Agonists	*****	*****

Table 1.2h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	83	4.5%
Long-Acting Antimuscarinic Agents	470	25.6%
Leukotriene Modifiers	263	14.3%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	533	29.0%
Higher	649	35.3%
Lower	*****	*****
Lowest	351	19.1%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	180	N/A
Number of episodes	180	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.8	11.0
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	133	73.9%
Sex		
Female	107	59.4%
Male	73	40.6%
Race		
White	145	80.6%
Black or African American	*****	*****
Other	*****	*****
Unknown	19	10.6%
Year		
2019	20	11.1%
2020	160	88.9%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.1	3.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	21.2	20.2
Mean number of emergency room encounters (ED)	1.1	2.9
Mean number of inpatient hospital encounters (IP)	0.6	1.3
Mean number of non-acute institutional encounters (IS)	0.2	0.6
Mean number of other ambulatory encounters (OA)	13.1	21.6
Mean number of unique drug classes	13.4	5.6
Mean number of generics	14.7	6.6
Mean number of filled prescriptions	68.2	46.8
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	40	22.2%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	122	67.8%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	58	32.2%
1	26	14.4%
2	19	10.6%
3+	77	42.8%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	110	61.1%
Long Acting Beta Agonists	0	0.0%

Table 1.3h. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	44	24.4%
Leukotriene Modifiers	33	18.3%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	66	36.7%
Higher	58	32.2%
Lower	27	15.0%
Lowest	29	16.1%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	64,378	N/A
Number of episodes	67,504	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	70.3	10.9
Age (Years)	**Number**	**Percent**
4-11	14	0.0%
12-18	43	0.1%
19-39	734	1.1%
40-64	18,736	27.8%
65+	47,977	71.1%
Sex		
Female	37,026	57.5%
Male	27,352	42.5%
Race		
White	50,015	77.7%
Black or African American	5,566	8.6%
Other	1,530	2.4%
Unknown	7,267	11.3%
Year		
2019	37,294	55.2%
2020	30,210	44.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.7	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.0	25.5
Mean number of emergency room encounters (ED)	0.9	2.0
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.1	0.5
Mean number of other ambulatory encounters (OA)	9.2	18.6
Mean number of unique drug classes	11.7	5.8
Mean number of generics	12.7	6.7
Mean number of filled prescriptions	50.3	41.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	10,237	15.2%
Acute Bronchospasm	1,033	1.5%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	44,799	66.4%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	22,705	33.6%
1	13,520	20.0%
2	8,613	12.8%
3+	22,666	33.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	33,793	50.1%
Long Acting Beta Agonists	81	0.1%

Table 1.1i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	2,098	3.1%
Long-Acting Antimuscarinic Agents	10,131	15.0%
Leukotriene Modifiers	8,270	12.3%
Immunomodulators	*****	*****
Mast Cell Stabilizers	82	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	20,729	32.2%
Higher	24,578	38.2%
Lower	8,661	13.5%
Lowest	10,361	16.1%
Unknown	49	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	2,692	N/A
Number of episodes	2,694	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	72.2	11.0
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	608	22.6%
65+	2,061	76.5%
Sex		
Female	1,539	57.2%
Male	1,153	42.8%
Race		
White	2,121	78.8%
Black or African American	225	8.4%
Other	58	2.2%
Unknown	288	10.7%
Year		
2019	999	37.1%
2020	1,695	62.9%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.4	3.5
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	25.6	27.7
Mean number of emergency room encounters (ED)	1.0	2.1
Mean number of inpatient hospital encounters (IP)	0.6	1.1
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	14.9	27.8
Mean number of unique drug classes	13.6	6.0
Mean number of generics	14.9	7.0
Mean number of filled prescriptions	62.2	49.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	528	19.6%
Acute Bronchospasm	46	1.7%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	1,892	70.2%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	802	29.8%
1	463	17.2%
2	324	12.0%
3+	1,105	41.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,681	62.4%
Long Acting Beta Agonists	13	0.5%

Table 1.2i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	109	4.0%
Long-Acting Antimuscarinic Agents	711	26.4%
Leukotriene Modifiers	409	15.2%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	892	33.1%
Higher	974	36.2%
Lower	*****	*****
Lowest	437	16.2%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	268	N/A
Number of episodes	268	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.8	11.1
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	0	0.0%
40-64	68	25.4%
65+	200	74.6%
Sex		
Female	158	59.0%
Male	110	41.0%
Race		
White	223	83.2%
Black or African American	*****	*****
Other	*****	*****
Unknown	*****	*****
Year		
2019	30	11.2%
2020	238	88.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.6	3.6
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	25.5	27.7
Mean number of emergency room encounters (ED)	1.2	2.0
Mean number of inpatient hospital encounters (IP)	0.7	1.2
Mean number of non-acute institutional encounters (IS)	0.3	0.9
Mean number of other ambulatory encounters (OA)	18.2	32.2
Mean number of unique drug classes	13.9	6.1
Mean number of generics	15.4	7.4
Mean number of filled prescriptions	68.2	51.4
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	64	23.9%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	181	67.5%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	87	32.5%
1	43	16.0%
2	31	11.6%
3+	107	39.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	178	66.4%
Long Acting Beta Agonists	0	0.0%

Table 1.3i. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	67	25.0%
Leukotriene Modifiers	34	12.7%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	93	34.7%
Higher	93	34.7%
Lower	34	12.7%
Lowest	48	17.9%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	64,378	N/A
Number of episodes	67,504	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	70.3	10.9
Age (Years)	**Number**	**Percent**
4-11	14	0.0%
12-18	43	0.1%
19-39	734	1.1%
40-64	18,736	27.8%
65+	47,977	71.1%
Sex		
Female	37,026	57.5%
Male	27,352	42.5%
Race		
White	50,015	77.7%
Black or African American	5,566	8.6%
Other	1,530	2.4%
Unknown	7,267	11.3%
Year		
2019	37,294	55.2%
2020	30,210	44.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.7	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.0	25.5
Mean number of emergency room encounters (ED)	0.9	2.0
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.1	0.5
Mean number of other ambulatory encounters (OA)	9.2	18.6
Mean number of unique drug classes	11.7	5.8
Mean number of generics	12.7	6.7
Mean number of filled prescriptions	50.3	41.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	10,237	15.2%
Acute Bronchospasm	1,033	1.5%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	44,799	66.4%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	22,705	33.6%
1	13,520	20.0%
2	8,613	12.8%
3+	22,666	33.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	33,793	50.1%
Long Acting Beta Agonists	81	0.1%

Table 1.1j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	2,098	3.1%
Long-Acting Antimuscarinic Agents	10,131	15.0%
Leukotriene Modifiers	8,270	12.3%
Immunomodulators	*****	*****
Mast Cell Stabilizers	82	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	20,729	32.2%
Higher	24,578	38.2%
Lower	8,661	13.5%
Lowest	10,361	16.1%
Unknown	49	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,136	N/A
Number of episodes	1,136	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	69.9	10.9
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	331	29.1%
65+	790	69.5%
Sex		
Female	639	56.3%
Male	497	43.8%
Race		
White	856	75.4%
Black or African American	107	9.4%
Other	27	2.4%
Unknown	146	12.9%
Year		
2019	533	46.9%
2020	603	53.1%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.4	3.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	27.5	27.8
Mean number of emergency room encounters (ED)	1.3	2.3
Mean number of inpatient hospital encounters (IP)	0.7	1.2
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	12.2	21.3
Mean number of unique drug classes	14.1	6.1
Mean number of generics	15.7	7.2
Mean number of filled prescriptions	62.7	47.6
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	256	22.5%
Acute Bronchospasm	36	3.2%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	878	77.3%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	258	22.7%
1	185	16.3%
2	152	13.4%
3+	541	47.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	777	68.4%
Long Acting Beta Agonists	*****	*****

Table 1.2j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	57	5.0%
Long-Acting Antimuscarinic Agents	240	21.1%
Leukotriene Modifiers	202	17.8%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	384	33.8%
Higher	407	35.8%
Lower	169	14.9%
Lowest	176	15.5%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	35	N/A
Number of episodes	35	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	69.5	10.4
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	0	0.0%
40-64	13	37.1%
65+	22	62.9%
Sex		
Female	21	60.0%
Male	14	40.0%
Race		
White	*****	*****
Black or African American	*****	*****
Other	*****	*****
Unknown	*****	*****
Year		
2019	*****	*****
2020	*****	*****
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	5.3	3.9
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	40.7	40.5
Mean number of emergency room encounters (ED)	1.9	2.9
Mean number of inpatient hospital encounters (IP)	1.2	2.2
Mean number of non-acute institutional encounters (IS)	0.9	3.2
Mean number of other ambulatory encounters (OA)	22.2	41.9
Mean number of unique drug classes	15.7	5.6
Mean number of generics	18.2	6.8
Mean number of filled prescriptions	66.5	40.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	12	34.3%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	31	88.6%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	*****	*****
1	*****	*****
2	*****	*****
3+	20	57.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	26	74.3%
Long Acting Beta Agonists	0	0.0%

Table 1.3j. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	0	0.0%
Long-Acting Antimuscarinic Agents	13	37.1%
Leukotriene Modifiers	*****	*****
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	*****	*****
Higher	12	34.3%
Lower	*****	*****
Lowest	*****	*****
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	105,133	N/A
Number of episodes	121,808	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.2	10.7
Age (Years)	**Number**	**Percent**
4-11	15	0.0%
12-18	50	0.0%
19-39	955	0.8%
40-64	31,113	25.5%
65+	89,675	73.6%
Sex		
Female	60,724	57.8%
Male	44,409	42.2%
Race		
White	82,592	78.6%
Black or African American	8,986	8.5%
Other	2,352	2.2%
Unknown	11,203	10.7%
Year		
2019	64,735	53.1%
2020	57,073	46.9%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.8	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.8	24.7
Mean number of emergency room encounters (ED)	0.9	1.9
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.2	0.6
Mean number of other ambulatory encounters (OA)	10.3	21.1
Mean number of unique drug classes	12.2	5.9
Mean number of generics	13.3	6.8
Mean number of filled prescriptions	54.3	45.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	19,978	16.4%
Acute Bronchospasm	1,641	1.3%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	81,334	66.8%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	40,474	33.2%
1	23,578	19.4%
2	15,303	12.6%
3+	42,453	34.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	65,796	54.0%
Long Acting Beta Agonists	138	0.1%

Table 1.1k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	4,260	3.5%
Long-Acting Antimuscarinic Agents	25,577	21.0%
Leukotriene Modifiers	16,709	13.7%
Immunomodulators	*****	*****
Mast Cell Stabilizers	140	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	34,101	32.4%
Higher	39,348	37.4%
Lower	14,755	14.0%
Lowest	16,845	16.0%
Unknown	84	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	4,182	N/A
Number of episodes	4,192	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	73.3	10.2
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	837	20.0%
65+	3,342	79.7%
Sex		
Female	2,455	58.7%
Male	1,727	41.3%
Race		
White	3,349	80.1%
Black or African American	308	7.4%
Other	61	1.5%
Unknown	464	11.1%
Year		
2019	1,635	39.0%
2020	2,557	61.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.1	3.3
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.0	24.2
Mean number of emergency room encounters (ED)	1.0	2.0
Mean number of inpatient hospital encounters (IP)	0.5	1.1
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	13.6	25.0
Mean number of unique drug classes	13.2	5.8
Mean number of generics	14.5	6.9
Mean number of filled prescriptions	65.8	53.2
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	879	21.0%
Acute Bronchospasm	60	1.4%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	2,947	70.3%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	1,245	29.7%
1	749	17.9%
2	549	13.1%
3+	1,649	39.3%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	2,531	60.4%
Long Acting Beta Agonists	*****	*****

Table 1.2k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Advair AG in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	173	4.1%
Long-Acting Antimuscarinic Agents	1,265	30.2%
Leukotriene Modifiers	623	14.9%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	1,209	28.9%
Higher	1,462	35.0%
Lower	*****	*****
Lowest	790	18.9%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	464	N/A
Number of episodes	464	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	72.9	10.6
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	361	77.8%
Sex		
Female	267	57.5%
Male	197	42.5%
Race		
White	382	82.3%
Black or African American	40	8.6%
Other	*****	*****
Unknown	*****	*****
Year		
2019	50	10.8%
2020	414	89.2%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.2	3.5
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	20.9	20.6
Mean number of emergency room encounters (ED)	1.0	2.1
Mean number of inpatient hospital encounters (IP)	0.6	1.2
Mean number of non-acute institutional encounters (IS)	0.3	0.7
Mean number of other ambulatory encounters (OA)	16.4	28.1
Mean number of unique drug classes	13.3	5.7
Mean number of generics	14.6	6.6
Mean number of filled prescriptions	71.2	57.4
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	110	23.7%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	321	69.2%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	143	30.8%
1	77	16.6%
2	50	10.8%
3+	194	41.8%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	271	58.4%
Long Acting Beta Agonists	*****	*****

Table 1.3k. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Advair AG to Advair Diskus in Switch Pattern of Advair Diskus to Advair AG to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	17	3.7%
Long-Acting Antimuscarinic Agents	135	29.1%
Leukotriene Modifiers	78	16.8%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	160	34.5%
Higher	141	30.4%
Lower	*****	*****
Lowest	83	17.9%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) between January 1, 2000 and December 31, 2020

Characteristic[1]	Number	
Number of unique patients	105,094	N/A
Number of episodes	121,586	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.2	10.7
Age (Years)	**Number**	**Percent**
4-11	15	0.0%
12-18	50	0.0%
19-39	956	0.8%
40-64	31,061	25.5%
65+	89,504	73.6%
Sex		
Female	60,700	57.8%
Male	44,394	42.2%
Race		
White	82,570	78.6%
Black or African American	8,974	8.5%
Other	2,349	2.2%
Unknown	11,201	10.7%
Year		
2019	64,714	53.2%
2020	56,872	46.8%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.8	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.8	24.7
Mean number of emergency room encounters (ED)	0.9	1.9
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.2	0.6
Mean number of other ambulatory encounters (OA)	10.3	21.0
Mean number of unique drug classes	12.2	5.8
Mean number of generics	13.3	6.8
Mean number of filled prescriptions	54.3	45.5
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	19,958	16.4%
Acute Bronchospasm	1,645	1.4%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	81,199	66.8%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	40,387	33.2%
1	23,525	19.3%
2	15,291	12.6%
3+	42,383	34.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	65,662	54.0%
Long Acting Beta Agonists	139	0.1%

Table 1.1l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) between January 1, 2000 and December 31, 2020

Short-Acting Antimuscarinic Agents	4,244	3.5%
Long-Acting Antimuscarinic Agents	25,524	21.0%
Leukotriene Modifiers	16,695	13.7%
Immunomodulators	*****	*****
Mast Cell Stabilizers	140	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	34,086	32.4%
Higher	39,337	37.4%
Lower	14,751	14.0%
Lowest	16,836	16.0%
Unknown	84	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	6,024	N/A
Number of episodes	6,040	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	73.6	10.6
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	1,166	19.3%
65+	4,842	80.2%
Sex		
Female	3,563	59.1%
Male	2,461	40.9%
Race		
White	4,762	79.1%
Black or African American	518	8.6%
Other	111	1.8%
Unknown	633	10.5%
Year		
2019	1,993	33.0%
2020	4,047	67.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.3	3.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	24.0	25.2
Mean number of emergency room encounters (ED)	1.0	2.0
Mean number of inpatient hospital encounters (IP)	0.6	1.1
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	15.3	28.8
Mean number of unique drug classes	13.2	6.0
Mean number of generics	14.6	7.0
Mean number of filled prescriptions	63.2	51.9
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	1,273	21.1%
Acute Bronchospasm	88	1.5%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	4,161	68.9%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	1,879	31.1%
1	1,058	17.5%
2	692	11.5%
3+	2,411	39.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	3,644	60.3%
Long Acting Beta Agonists	23	0.4%

Table 1.2l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Wixela in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	252	4.2%
Long-Acting Antimuscarinic Agents	1,883	31.2%
Leukotriene Modifiers	934	15.5%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	1,933	32.1%
Higher	2,172	36.1%
Lower	*****	*****
Lowest	1,020	16.9%
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	685	N/A
Number of episodes	685	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	73.2	10.8
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	532	77.7%
Sex		
Female	422	61.6%
Male	263	38.4%
Race		
White	554	80.9%
Black or African American	73	10.7%
Other	12	1.8%
Unknown	46	6.7%
Year		
2019	76	11.1%
2020	609	88.9%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.5	3.6
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	23.7	24.8
Mean number of emergency room encounters (ED)	1.0	2.0
Mean number of inpatient hospital encounters (IP)	0.6	1.1
Mean number of non-acute institutional encounters (IS)	0.3	0.8
Mean number of other ambulatory encounters (OA)	20.4	35.9
Mean number of unique drug classes	13.7	6.3
Mean number of generics	15.1	7.6
Mean number of filled prescriptions	71.7	58.2
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	135	19.7%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	454	66.3%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	231	33.7%
1	117	17.1%
2	69	10.1%
3+	268	39.1%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	418	61.0%
Long Acting Beta Agonists	*****	*****

Table 1.3l. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Wixela to Advair Diskus in Switch Pattern of Advair Diskus to Wixela to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	31	4.5%
Long-Acting Antimuscarinic Agents	199	29.1%
Leukotriene Modifiers	97	14.2%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	216	31.5%
Higher	241	35.2%
Lower	99	14.5%
Lowest	129	18.8%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	105,216	N/A
Number of episodes	122,199	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.2	10.7
Age (Years)	**Number**	**Percent**
4-11	15	0.0%
12-18	50	0.0%
19-39	957	0.8%
40-64	31,198	25.5%
65+	89,979	73.6%
Sex		
Female	60,770	57.8%
Male	44,446	42.2%
Race		
White	82,662	78.6%
Black or African American	8,990	8.5%
Other	2,355	2.2%
Unknown	11,209	10.7%
Year		
2019	64,771	53.0%
2020	57,428	47.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.8	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.8	24.7
Mean number of emergency room encounters (ED)	0.9	1.9
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.2	0.6
Mean number of other ambulatory encounters (OA)	10.3	21.2
Mean number of unique drug classes	12.2	5.9
Mean number of generics	13.3	6.8
Mean number of filled prescriptions	54.4	45.6
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	20,068	16.4%
Acute Bronchospasm	1,648	1.3%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	81,597	66.8%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	40,602	33.2%
1	23,646	19.4%
2	15,350	12.6%
3+	42,601	34.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	66,021	54.0%
Long Acting Beta Agonists	141	0.1%

Table 1.1m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	4,275	3.5%
Long-Acting Antimuscarinic Agents	25,688	21.0%
Leukotriene Modifiers	16,765	13.7%
Immunomodulators	*****	*****
Mast Cell Stabilizers	140	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	34,128	32.4%
Higher	39,373	37.4%
Lower	14,770	14.0%
Lowest	16,861	16.0%
Unknown	84	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	2,109	N/A
Number of episodes	2,114	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	70.4	10.6
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	*****	*****
19-39	*****	*****
40-64	596	28.2%
65+	1,498	70.9%
Sex		
Female	1,199	56.9%
Male	910	43.1%
Race		
White	1,620	76.8%
Black or African American	216	10.2%
Other	43	2.0%
Unknown	230	10.9%
Year		
2019	862	40.8%
2020	1,252	59.2%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	4.4	3.4
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	26.6	27.2
Mean number of emergency room encounters (ED)	1.3	2.4
Mean number of inpatient hospital encounters (IP)	0.7	1.4
Mean number of non-acute institutional encounters (IS)	0.2	0.7
Mean number of other ambulatory encounters (OA)	14.0	24.2
Mean number of unique drug classes	14.2	6.2
Mean number of generics	16.0	7.5
Mean number of filled prescriptions	68.3	56.8
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	537	25.4%
Acute Bronchospasm	51	2.4%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	1,652	78.1%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	462	21.9%
1	357	16.9%
2	259	12.3%
3+	1,036	49.0%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,440	68.1%
Long Acting Beta Agonists	*****	*****

Table 1.2m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Symbicort in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	108	5.1%
Long-Acting Antimuscarinic Agents	555	26.3%
Leukotriene Modifiers	388	18.4%
Immunomodulators	*****	*****
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	713	33.8%
Higher	770	36.5%
Lower	314	14.9%
Lowest	*****	*****
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	89	N/A
Number of episodes	89	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	70.5	11.5
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	64	71.9%
Sex		
Female	48	53.9%
Male	41	46.1%
Race		
White	69	77.5%
Black or African American	*****	*****
Other	*****	*****
Unknown	*****	*****
Year		
2019	13	14.6%
2020	76	85.4%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	5.2	3.9
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	32.9	30.9
Mean number of emergency room encounters (ED)	1.5	2.7
Mean number of inpatient hospital encounters (IP)	1.1	2.0
Mean number of non-acute institutional encounters (IS)	0.5	2.1
Mean number of other ambulatory encounters (OA)	20.0	35.0
Mean number of unique drug classes	16.0	7.4
Mean number of generics	19.0	9.2
Mean number of filled prescriptions	78.8	63.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	32	36.0%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	75	84.3%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	14	15.7%
1	*****	*****
2	14	15.7%
3+	53	59.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	62	69.7%
Long Acting Beta Agonists	0	0.0%

Table 1.3m. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Symbicort to Advair Diskus in Switch Pattern of Advair Diskus to Symbicort to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	31	34.8%
Leukotriene Modifiers	25	28.1%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	28	31.5%
Higher	33	37.1%
Lower	15	16.9%
Lowest	13	14.6%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.1n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	105,224	N/A
Number of episodes	122,206	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.2	10.7
Age (Years)	**Number**	**Percent**
4-11	15	0.0%
12-18	50	0.0%
19-39	957	0.8%
40-64	31,199	25.5%
65+	89,985	73.6%
Sex		
Female	60,777	57.8%
Male	44,447	42.2%
Race		
White	82,668	78.6%
Black or African American	8,991	8.5%
Other	2,354	2.2%
Unknown	11,211	10.7%
Year		
2019	64,763	53.0%
2020	57,443	47.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	3.8	3.2
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	22.8	24.7
Mean number of emergency room encounters (ED)	0.9	1.9
Mean number of inpatient hospital encounters (IP)	0.5	1.0
Mean number of non-acute institutional encounters (IS)	0.2	0.6
Mean number of other ambulatory encounters (OA)	10.4	21.2
Mean number of unique drug classes	12.2	5.9
Mean number of generics	13.3	6.8
Mean number of filled prescriptions	54.4	45.6
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	20,080	16.4%
Acute Bronchospasm	1,647	1.3%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	81,603	66.8%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	40,603	33.2%
1	23,651	19.4%
2	15,349	12.6%
3+	42,603	34.9%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	66,024	54.0%
Long Acting Beta Agonists	141	0.1%

Table 1.1n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) Initiating Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	4,274	3.5%
Long-Acting Antimuscarinic Agents	25,689	21.0%
Leukotriene Modifiers	16,777	13.7%
Immunomodulators	*****	*****
Mast Cell Stabilizers	140	0.1%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	34,126	32.4%
Higher	39,378	37.4%
Lower	14,770	14.0%
Lowest	16,866	16.0%
Unknown	84	0.1%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.2n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Breo Ellipta in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	1,908	N/A
Number of episodes	1,914	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	71.1	10.5
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	12	0.6%
40-64	511	26.7%
65+	1,391	72.7%
Sex		
Female	1,109	58.1%
Male	799	41.9%
Race		
White	1,471	77.1%
Black or African American	218	11.4%
Other	29	1.5%
Unknown	190	10.0%
Year		
2019	785	41.0%
2020	1,129	59.0%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	5.1	3.6
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	28.0	29.1
Mean number of emergency room encounters (ED)	1.5	3.9
Mean number of inpatient hospital encounters (IP)	1.0	1.6
Mean number of non-acute institutional encounters (IS)	0.4	1.0
Mean number of other ambulatory encounters (OA)	20.3	31.0
Mean number of unique drug classes	14.7	6.4
Mean number of generics	16.5	7.6
Mean number of filled prescriptions	72.3	56.7
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	564	29.5%
Acute Bronchospasm	32	1.7%
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	1,514	79.1%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	400	20.9%
1	299	15.6%
2	225	11.8%
3+	990	51.7%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	1,279	66.8%
Long Acting Beta Agonists	*****	*****

Table 1.2n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at First Switch Date from Advair Diskus to Breo Ellipta in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	90	4.7%
Long-Acting Antimuscarinic Agents	531	27.7%
Leukotriene Modifiers	325	17.0%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	*****	*****
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	706	37.0%
Higher	599	31.4%
Lower	324	17.0%
Lowest	*****	*****
Unknown	*****	*****

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 1.3n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Breo Ellipta to Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Characteristic[1]	Number	
Number of unique patients	89	N/A
Number of episodes	89	100%
Demographics	**Mean**	**Standard Deviation**
Mean Age (Years)	73.5	10.7
Age (Years)	**Number**	**Percent**
4-11	0	0.0%
12-18	0	0.0%
19-39	*****	*****
40-64	*****	*****
65+	72	80.9%
Sex		
Female	43	48.3%
Male	46	51.7%
Race		
White	72	80.9%
Black or African American	*****	*****
Other	*****	*****
Unknown	*****	*****
Year		
2019	23	25.8%
2020	66	74.2%
Combined Comorbidity Index:	**Mean**	**Standard Deviation**
Charlson/Elixhauser Combined Comorbidity Score	5.1	3.9
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	33.0	35.2
Mean number of emergency room encounters (ED)	1.3	2.0
Mean number of inpatient hospital encounters (IP)	1.1	2.1
Mean number of non-acute institutional encounters (IS)	0.5	2.1
Mean number of other ambulatory encounters (OA)	16.7	25.7
Mean number of unique drug classes	14.7	6.8
Mean number of generics	17.2	7.9
Mean number of filled prescriptions	66.3	47.0
Baseline Conditions:	**Number**	**Percent**
Respiratory Failure	24	27.0%
Acute Bronchospasm	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	73	82.0%
Number of Baseline COPD Exacerbations:	**Number**	**Percent**
0	16	18.0%
1	*****	*****
2	13	14.6%
3+	53	59.6%
Use of Other Medications to Treat Respiratory Conditions:	**Number**	**Percent**
Short Acting Beta Agonists	66	74.2%
Long Acting Beta Agonists	0	0.0%

Table 1.3n. Aggregated Baseline Characteristics of Users with Prior Chronic Obstructive Pulmonary Disease (COPD) at Second Switch Date from Breo Ellipta to Advair Diskus in Switch Pattern of Advair Diskus to Breo Ellipta to Advair Diskus in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

Short-Acting Antimuscarinic Agents	*****	*****
Long-Acting Antimuscarinic Agents	27	30.3%
Leukotriene Modifiers	16	18.0%
Immunomodulators	0	0.0%
Mast Cell Stabilizers	0	0.0%
Ease of Generic Drug Substitution at State Level[2]:	**Number**	**Percent**
Highest	25	28.1%
Higher	40	44.9%
Lower	12	13.5%
Lowest	12	13.5%
Unknown	0	0.0%

[1]All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients

[2]Sacks CA, Van de Viele VL, Fulchino LA, et al. Assessment of variation in state regulation of generic drug and interchangeable biologic substitutions. JAMA Intern Med. 2021;181(1):16-22

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Table 2.1a. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
First Switch	1,371	114.58	97.04	1	2	23	28	48	86	146	253	331	431	584
Censoring Reason 1: Product Discontinuation	88,694	105.26	116.06	0	4	24	29	29	59	131	265	357	567	699
Censoring Reason 2: End of Available Data	19,203	167.73	163.69	0	1	7	14	38	111	260	415	526	660	699
Censoring Reason 3: End of Enrollment	22,492	158.38	158.19	0	1	6	13	33	102	241	393	506	654	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	187	129.40	140.04	1	2	9	14	26	77	171	339	442	664	675
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
First Switch	2,672	115.93	94.98	1	1	21	26	41	91	160	256	313	412	636
Censoring Reason 1: Product Discontinuation	87,394	104.36	115.14	0	4	24	29	29	59	129	261	353	565	699
Censoring Reason 2: End of Available Data	19,053	165.87	162.23	0	1	7	14	37	110	255	409	521	659	699
Censoring Reason 3: End of Enrollment	22,315	156.63	156.77	0	1	6	13	32	100	238	387	500	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	186	128.92	139.66	1	2	9	14	26	76.5	171	326	442	664	675
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
First Switch	1,314	90.01	96.04	1	1	3	7	23	60	120	210	308	454	585
Censoring Reason 1: Product Discontinuation	88,747	105.85	116.86	0	4	24	29	29	59	132	266	359	569	699
Censoring Reason 2: End of Available Data	19,229	169.07	164.79	0	1	7	14	38	112	262	419	530	661	699
Censoring Reason 3: End of Enrollment	22,497	159.51	159.27	0	1	6	13	33	103	244	395	511	657	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	191	135.61	144.30	1	2	9	14	26	82	193	351	462	664	675
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
First Switch	3,268	131.52	97.57	1	4	26	31	60	104	180	275	327	429	611
Censoring Reason 1: Product Discontinuation	156,400	123.59	128.33	0	4	24	29	29	89	176	302	400	590	699
Censoring Reason 2: End of Available Data	39,678	187.65	168.31	0	1	8	16	48	140	290	442	545	658	699
Censoring Reason 3: End of Enrollment	45,699	177.51	163.64	0	1	7	15	44	128	276	421	530	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	383	138.93	140.69	1	4	10	14	36	86	197	351	444	636	675
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
First Switch	6,184	135.54	99.19	1	3	24	28	62	110	183	283	335	434	651
Censoring Reason 1: Product Discontinuation	153,139	122.46	127.55	0	4	24	29	29	89	173	300	396	589	699
Censoring Reason 2: End of Available Data	39,162	185.72	167.20	0	1	8	16	48	137	288	437	542	656	699

Table 2.1a. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 3: End of Enrollment	45,120	175.69	162.52	0	1	7	15	43	126	274	416	526	648	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	370	133.64	135.71	1	4	10	14	34	84.5	184	333	421	636	675
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
First Switch	2,237	103.57	99.09	1	1	4	9	30	77	141	239	314	454	595
Censoring Reason 1: Product Discontinuation	157,717	124.37	129.02	0	4	25	29	29	89	178	304	404	591	699
Censoring Reason 2: End of Available Data	39,913	189.16	169.24	0	1	8	16	49	141	292	444	548	659	699
Censoring Reason 3: End of Enrollment	45,916	178.90	164.60	0	1	8	15	44	129	279	426	533	653	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	389	141.84	141.55	1	4	10	14	37	88	198	351	446	636	675
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior Asthma)														
First Switch	1,954	111.01	101.47	1	1	7	15	39	84	152	244	317	485	681
Censoring Reason 1: Product Discontinuation	157,990	124.25	128.96	0	4	25	29	29	89	178	304	404	591	699
Censoring Reason 2: End of Available Data	39,921	189.18	169.29	0	1	8	16	49	141	292	444	548	659	699
Censoring Reason 3: End of Enrollment	45,945	178.92	164.63	0	1	8	15	44	129	279	426	533	653	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	388	142.72	143.23	1	4	10	14	36	88	202	362	462	636	675
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Chronic Obstructive Pulmonary Disease [COPD])														
First Switch	1,839	121.65	97.48	1	7	24	28	46	91	170	270	329	413	633
Censoring Reason 1: Product Discontinuation	64,562	112.33	126.08	0	6	28	29	29	62	143	279	393	605	699
Censoring Reason 2: End of Available Data	13,295	190.63	180.78	0	1	8	15	43	131	293	484	582	675	699
Censoring Reason 3: End of Enrollment	15,248	179.91	175.42	0	1	8	15	39	120	272	462	570	668	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	1,194	124.91	134.04	0	3	7	12	25	72	173	322	427	576	638
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
First Switch	2,694	123.72	96.38	1	12	24	27	50	95	174	268	325	403	650
Censoring Reason 1: Product Discontinuation	63,725	111.16	124.99	0	6	27	29	29	61	141	274	389	604	699
Censoring Reason 2: End of Available Data	13,167	188.15	179.38	0	1	8	15	43	128	288	478	581	674	699
Censoring Reason 3: End of Enrollment	15,103	177.52	174.00	0	1	8	15	38	118	267	455	569	668	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	1,172	121.63	130.64	0	3	7	12	25	70	171	312	410	560	638

Table 2.1a. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
First Switch	1,136	101.01	99.73	1	1	5	10	31	74	135	233	315	457	638
Censoring reason 1: product discontinuation	65,254	113.73	127.54	0	6	28	29	29	64	147	284	400	610	699
Censoring reason 2: end of available data	13,403	193.65	182.78	0	1	8	16	44	133	299	491	588	675	699
Censoring reason 3: end of enrollment	15,376	182.81	177.42	0	1	8	15	40	122	279	470	574	672	699
Censoring reason 4: end of query period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring reason 5: death	1,203	126.92	134.91	0	3	8	13	25	72	176	329	429	562	638
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior COPD)														
First Switch	4,192	134.53	97.93	1	11	26	32	60	108	189	276	329	419	633
Censoring Reason 1: Product Discontinuation	115,380	129.02	134.40	0	6	29	29	29	89	179	316	429	611	699
Censoring Reason 2: End of Available Data	27,294	209.56	178.64	0	1	10	19	57	167	313	492	581	670	699
Censoring Reason 3: End of Enrollment	30,910	198.31	174.82	0	1	9	17	52	153	297	476	572	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	2,403	131.38	132.57	0	3	8	13	28	82	192	330	413	560	663
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
First Switch	6,040	137.40	99.43	1	14	26	29	62	110	191	283	333	420	650
Censoring Reason 1: Product Discontinuation	113,358	127.71	133.44	0	6	29	29	29	89	179	311	425	610	699
Censoring Reason 2: End of Available Data	26,954	207.38	177.53	0	1	9	19	57	164	309	489	580	668	699
Censoring Reason 3: End of Enrollment	30,531	196.19	173.69	0	1	9	17	51	150	295	470	569	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	2,352	129.82	131.20	0	3	8	13	28	80	191	327	404	559	663
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
First Switch	2,114	110.54	99.71	1	1	6	14	37	85.5	149	242	315	464	638
Censoring Reason 1: Product Discontinuation	117,826	130.51	135.49	0	6	29	29	29	89	180	320	434	614	699
Censoring Reason 2: End of Available Data	27,693	212.67	180.24	0	1	10	20	58	170	318	500	586	672	699
Censoring Reason 3: End of Enrollment	31,361	201.24	176.45	0	1	9	17	52	156	302	482	575	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	2,429	133.85	134.00	0	3	8	14	28	84	197	334	420	562	663

Table 2.1a. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior COPD)														
First Switch	1,914	120.51	107.74	1	1	8	17	41	91	165	274	351	491	639
Censoring Reason 1: Product Discontinuation	118,024	130.42	135.47	0	6	29	29	29	89	179	319	434	614	699
Censoring Reason 2: End of Available Data	27,723	213.00	180.26	0	1	10	20	58	170	318	500	586	672	699
Censoring Reason 3: End of Enrollment	31,394	201.51	176.50	0	1	9	17	52	156	303	482	575	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	2,440	134.10	134.13	0	3	8	14	28	83.5	198	335	421	562	663

Table 2.2a. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Second Switch	131	107.02	70.42	26	27	30	40	67	92	120	176	246	393	410
Censoring Reason 1: Product Discontinuation	1,237	138.52	155.31	0	9	29	29	29	59	208	385	489	620	662
Censoring Reason 2: End of Available Data	229	281.97	184.19	0	0	15	24	122	295	397	545	615	658	662
Censoring Reason 3: End of Enrollment	272	259.35	183.98	0	0	9	19	78	275.5	373	519	601	658	662
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	45.00	30.45	18	18	18	18	18	39	78	78	78	78	78
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Second Switch	256	111.96	73.75	20	24	28	34	69	98	129	196	259	390	470
Censoring Reason 1: Product Discontinuation	2,408	147.18	164.15	0	10	29	29	29	62	236	421	517	616	672
Censoring Reason 2: End of Available Data	522	285.39	195.42	0	3	14	27	92	289	459	550	598	654	672
Censoring Reason 3: End of Enrollment	611	264.33	193.20	0	3	13	23	73	255	430	537	593	653	672
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	171.50	173.30	10	10	10	19	60	96.5	274	456	546	546	546
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Second Switch	38	151.26	80.44	46	46	49	64	100	131.5	188	301	323	358	358
Censoring Reason 1: Product Discontinuation	1,271	144.21	149.45	0	3	20	29	29	89	211	367	470	629	685
Censoring Reason 2: End of Available Data	402	205.34	174.11	0	2	10	17	52	162.5	316	464	569	657	685
Censoring Reason 3: End of Enrollment	480	190.37	169.13	0	2	9	16	49	143	300	446	537	657	685
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	143.67	152.85	16	16	16	16	23	107.5	205	403	403	403	403
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Second Switch	371	109.68	79.13	23	27	33	42	62	90	123	211	262	419	542
Censoring Reason 1: Product Discontinuation	2,887	149.75	158.64	0	7	29	29	29	81	246	402	491	620	668
Censoring Reason 2: End of Available Data	714	267.03	181.10	0	3	13	27	105	276	382	525	601	657	668
Censoring Reason 3: End of Enrollment	809	249.55	181.10	0	1	9	21	79	249	360	517	597	655	668
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	165.91	155.23	8	8	8	18	24	141	280	387	459	459	459
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Second Switch	732	110.83	69.53	12	23	28	36	67	96	135	190	255	374	470
Censoring Reason 1: Product Discontinuation	5,428	161.41	166.66	0	9	29	29	29	89	270	431	524	623	674
Censoring Reason 2: End of Available Data	1,559	269.20	185.28	0	3	14	27	92	273	406	538	591	654	674

Table 2.2a. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 3: End of Enrollment	1,756	254.38	183.99	0	3	13	24	83	245	379	531	584	653	674
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	28	141.82	156.10	10	10	16	17	28	73	223	417	507	546	546
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Second Switch	88	138.39	75.82	2	2	36	55	85	121	163	270	276	358	358
Censoring Reason 1: Product Discontinuation	2,141	147.94	146.33	0	3	20	29	29	89	216	372	460	604	685
Censoring Reason 2: End of Available Data	743	199.58	166.35	0	2	10	18	59	154	307	448	530	640	685
Censoring Reason 3: End of Enrollment	853	187.11	162.99	0	2	9	16	51	141	290	432	513	633	685
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	132.70	156.37	16	16	16	18	23	29	205	398	403	403	403
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior Asthma)														
Second Switch	89	147.16	89.10	19	19	48	59	88	113	194	260	318	465	465
Censoring Reason 1: Product Discontinuation	1,851	170.10	154.23	0	4	23	29	29	119	274	402	490	617	666
Censoring Reason 2: End of Available Data	752	230.46	169.63	0	2	14	25	80	204.5	343	483	548	652	665
Censoring Reason 3: End of Enrollment	837	219.67	167.66	0	1	12	21	73	184	332	470	540	645	665
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	14	136.64	138.56	1	1	1	5	44	78.5	263	381	391	391	391
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Chronic Obstructive Pulmonary Disease [COPD])														
Second Switch	180	102.05	66.40	21	21	28	36	62	87.5	115	194	260	322	418
Censoring Reason 1: Product Discontinuation	1,622	132.43	158.11	0	11	29	29	29	29	184	398	505	605	662
Censoring Reason 2: End of Available Data	255	314.31	190.28	0	0	13	28	167	324	481	572	610	658	662
Censoring Reason 3: End of Enrollment	296	285.23	195.37	0	0	10	21	97	293.5	455	567	605	658	662
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	39	141.38	159.78	2	2	3	11	19	64	267	406	489	564	564
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Second Switch	268	98.79	64.99	7	24	28	37	61	88.5	112	167	226	358	490
Censoring Reason 1: Product Discontinuation	2,359	140.00	164.96	0	14	29	29	29	35	212	424	519	631	671
Censoring Reason 2: End of Available Data	417	320.16	196.34	0	5	22	50	144	318	488	590	632	660	671
Censoring Reason 3: End of Enrollment	482	293.06	199.56	0	1	16	28	99	287.5	469	575	626	660	671
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	69	153.42	173.01	0	0	3	7	23	68	247	430	570	608	608

Table 2.2a. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Second Switch	35	146.26	81.90	49	49	55	61	91	119	169	282	312	349	349
Censoring Reason 1: Product Discontinuation	1,066	175.38	166.33	0	3	27	29	29	113.5	278	444	533	632	678
Censoring Reason 2: End of Available Data	357	258.25	190.60	0	1	15	23	80	246	405	545	605	657	678
Censoring Reason 3: End of Enrollment	401	246.49	189.87	0	1	13	22	66	229	387	532	595	653	678
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	39	141.00	155.36	2	2	4	9	24	65	255	380	478	538	538
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior COPD)														
Second Switch	464	105.33	65.23	21	25	31	40	62	90	126	183	252	336	418
Censoring Reason 1: Product Discontinuation	3,644	137.77	153.40	0	8	29	29	29	59	209	378	480	608	670
Censoring Reason 2: End of Available Data	788	253.60	179.46	0	2	12	26	90	236.5	366	517	587	657	670
Censoring Reason 3: End of Enrollment	876	239.16	179.57	0	1	10	21	80	217	353	506	579	657	670
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	90	126.09	143.36	2	2	8	13	22	69	163	327	489	564	564
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Second Switch	685	104.53	66.37	2	24	30	41	67	91	118	176	226	385	490
Censoring Reason 1: Product Discontinuation	5,233	145.91	159.89	0	11	29	29	29	64	235	401	504	612	672
Censoring Reason 2: End of Available Data	1,257	273.32	184.06	0	2	16	34	102	273	414	539	598	654	672
Censoring Reason 3: End of Enrollment	1,396	257.45	184.38	0	1	14	27	86	247	381	531	595	653	672
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	127	125.52	147.79	0	1	5	11	20	62	198	338	430	579	608
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Second Switch	89	136.18	78.70	33	33	49	61	80	112	169	267	289	391	391
Censoring Reason 1: Product Discontinuation	1,966	165.73	154.83	0	2	23	29	29	113	253	405	493	620	678
Censoring Reason 2: End of Available Data	730	228.21	176.32	0	1	13	23	72	197	345	489	567	653	678
Censoring Reason 3: End of Enrollment	811	219.26	174.69	0	1	10	21	65	185	335	483	558	646	678
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	66	139.12	144.08	2	2	6	9	24	79	255	362	444	538	538

Table 2.2a. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior COPD)														
Second Switch	89	132.85	82.34	36	36	49	60	85	110	146	294	342	403	403
Censoring Reason 1: Product Discontinuation	1,764	176.02	161.69	0	3	20	29	29	119	282	422	506	617	688
Censoring Reason 2: End of Available Data	712	238.34	173.38	0	1	11	23	76	227	359	493	547	635	688
Censoring Reason 3: End of Enrollment	784	228.20	171.54	0	0	11	21	71	211.5	345	488	534	635	688
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	67	144.93	158.03	1	1	9	11	21	62	251	401	442	592	592

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	357	108.88	92.80	1	1	23	28	44	86	140	239	333	418	549
Censoring Reason 1: Product Discontinuation	26,936	113.00	122.23	0	4	27	29	29	70	148	278	380	582	699
Censoring Reason 2: End of Available Data	5,782	186.00	172.14	0	1	8	15	44	134	287	451	554	671	699
Censoring Reason 3: End of Enrollment	6,788	173.79	166.47	0	1	7	14	41	117.5	272	421	538	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	58	153.50	162.37	2	2	8	14	43	91	220	467	570	636	636
Higher Ease of Generic Substitution														
First Switch	527	116.36	94.90	1	1	24	28	50	87	152	268	316	429	471
Censoring Reason 1: Product Discontinuation	37,928	98.91	111.26	0	3	22	29	29	59	119	247	340	550	698
Censoring Reason 2: End of Available Data	8,543	150.44	154.50	0	1	5	12	29	94	219	381	493	647	698
Censoring Reason 3: End of Enrollment	9,840	144.58	150.03	0	1	5	11	29	90	206	360	475	637	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	76	116.76	132.91	4	4	7	14	24	71.5	159	315	371	675	675
Lower Ease of Generic Substitution														
First Switch	*****	104.27	87.25	1	3	23	28	43	76	132	221	262	449	500
Censoring Reason 1: Product Discontinuation	8,592	112.99	121.48	0	4	26	29	29	73	149	273	378	581	699
Censoring Reason 2: End of Available Data	1,908	181.25	170.56	0	1	8	15	43	127	277	442	555	666	699
Censoring Reason 3: End of Enrollment	2,260	169.46	164.38	0	1	8	15	39	115.5	254	423	534	661	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	18	146.67	124.14	10	10	10	11	24	124.5	223	362	372	372	372
Lowest Ease of Generic Substitution														
First Switch	256	128.21	113.25	1	2	19	27	56	90.5	165	295	378	568	584
Censoring Reason 1: Product Discontinuation	15,053	103.20	112.61	0	4	27	29	29	59	129	255	342	554	699
Censoring Reason 2: End of Available Data	2,932	173.65	163.54	0	1	7	14	41	122	275	412	524	657	699
Censoring Reason 3: End of Enrollment	3,548	160.74	157.25	0	1	5	13	34	106	248	388	500	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	35	108.03	120.14	1	1	7	10	23	64	148	375	400	442	442

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Unknown Ease of Generic Substitution														
First Switch	*****	90.00	-	90	90	90	90	90	90	90	90	90	90	90
Censoring Reason 1: Product Discontinuation	185	91.36	90.21	7	9	17	29	29	59	120	214	294	420	421
Censoring Reason 2: End of Available Data	38	136.37	110.05	9	9	10	15	28	113	211	294	323	421	421
Censoring Reason 3: End of Enrollment	56	119.77	108.76	7	7	9	14	26	83.5	191	286	323	421	421
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Chronic Obstructive Pulmonary Disease [COPD])														
Highest Ease of Generic Substitution														
First Switch	534	120.79	96.90	1	6	22	27	49	91	166	268	322	424	476
Censoring Reason 1: Product Discontinuation	20,877	115.86	128.64	0	7	29	29	29	67	150	291	407	605	699
Censoring Reason 2: End of Available Data	4,216	200.08	182.37	0	1	9	16	51	143	304	495	590	679	699
Censoring Reason 3: End of Enrollment	4,805	188.86	177.67	0	1	8	15	44	129	288	472	580	672	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	372	137.10	138.41	1	2	8	14	28	83.5	200	356	456	560	638
Higher Ease of Generic Substitution														
First Switch	649	115.57	93.44	1	11	26	29	41	87	160	250	320	411	464
Censoring Reason 1: Product Discontinuation	24,612	109.40	123.53	0	5	24	29	29	59	136	269	384	601	699
Censoring Reason 2: End of Available Data	5,245	180.89	177.66	0	1	8	15	38	120	274	470	574	671	699
Censoring Reason 3: End of Enrollment	5,946	171.98	172.48	0	1	7	14	34	112	255	447	561	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	472	122.41	134.85	0	4	7	13	25	70.5	170	320	432	576	620
Lower Ease of Generic Substitution														
First Switch	*****	134.85	107.74	4	18	25	29	51	96.5	193	302	356	413	633
Censoring Reason 1: Product Discontinuation	8,677	116.36	127.40	0	7	29	29	29	73	149	288	403	612	699
Censoring Reason 2: End of Available Data	1,837	199.17	181.16	0	1	10	20	50	141	302	491	583	674	699
Censoring Reason 3: End of Enrollment	2,125	187.26	176.15	0	1	9	19	44	128	284	477	570	672	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	159	115.79	133.59	1	4	6	10	22	62	172	290	435	595	629
Lowest Ease of Generic Substitution														
First Switch	351	122.40	95.59	3	13	24	28	51	93	174	261	336	410	504
Censoring Reason 1: Product Discontinuation	10,351	108.94	125.55	0	5	27	29	29	59	135	270	388	606	699

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	1,991	188.82	183.99	0	1	8	14	37	127	293	497	588	680	699
Censoring Reason 3: End of Enrollment	2,365	175.47	176.63	0	1	7	14	31	112	267	463	570	674	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	190	113.75	121.74	1	2	6	10	25	64	166	275	391	533	581
Unknown Ease of Generic Substitution														
First Switch	*****	172.00	115.49	97	97	97	97	97	114	305	305	305	305	305
Censoring Reason 1: Product Discontinuation	45	86.98	107.92	10	10	28	29	29	29	89	225	357	497	497
Censoring Reason 2: End of Available Data	*****	43.33	29.79	10	10	10	10	20	36	78	80	80	80	80
Censoring Reason 3: End of Enrollment	*****	47.00	28.87	10	10	10	10	20	44	78	80	80	80	80
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	460	93.54	97.14	1	1	3	6	26	64	126	218	315	454	549
Censoring Reason 1: Product Discontinuation	26,832	113.55	123.04	0	4	27	29	29	70	148	280	382	585	699
Censoring Reason 2: End of Available Data	5,792	187.33	173.15	0	1	8	15	45	135	289	454	559	672	699
Censoring Reason 3: End of Enrollment	6,789	174.92	167.48	0	1	7	15	41	118	274	426	540	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	59	158.73	165.90	2	2	8	14	43	97	226	467	570	636	636
Higher Ease of Generic Substitution														
First Switch	490	86.58	97.17	1	1	4	8	22	56	108	206	306	481	585
Censoring Reason 1: Product Discontinuation	37,964	99.44	112.01	0	3	22	29	29	59	119	249	344	554	698
Censoring Reason 2: End of Available Data	8,548	151.76	155.81	0	1	5	12	29	96	222	385	497	647	698
Censoring Reason 3: End of Enrollment	9,836	145.68	151.27	0	1	5	11	29	90	209	364	482	639	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	77	121.35	133.79	4	4	7	14	24	73	170	315	371	675	675
Lower Ease of Generic Substitution														
First Switch	*****	92.53	100.08	1	1	4	7	22	56.5	134	228	285	401	560
Censoring Reason 1: Product Discontinuation	8,715	113.72	122.25	0	4	26	29	29	74	149	277	384	577	699
Censoring Reason 2: End of Available Data	1,923	183.67	171.50	0	1	8	15	44	129	283	447	555	668	699
Censoring Reason 3: End of Enrollment	2,274	171.69	165.52	0	1	8	15	41	118	258	425	538	663	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	19	167.21	150.25	10	10	10	11	24	130	268	372	537	537	537
Lowest Ease of Generic Substitution														
First Switch	256	89.11	90.71	1	1	3	8	22	66	118	181	294	458	482
Censoring Reason 1: Product Discontinuation	15,052	103.93	113.50	0	4	27	29	29	59	132	258	347	559	699
Censoring Reason 2: End of Available Data	2,928	174.34	164.31	0	1	7	14	41	122	275	414	524	658	699
Censoring Reason 3: End of Enrollment	3,542	161.22	157.95	0	1	5	13	34	106	249	392	504	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	36	111.56	120.28	1	1	7	10	24	70	153	375	400	442	442
Unknown Ease of Generic Substitution														
First Switch	*****	102.00	25.46	84	84	84	84	84	102	120	120	120	120	120
Censoring Reason 1: Product Discontinuation	184	91.91	90.24	7	9	17	29	29	59	121	214	294	420	421
Censoring Reason 2: End of Available Data	38	136.37	110.05	9	9	10	15	28	113	211	294	323	421	421
Censoring Reason 3: End of Enrollment	56	119.77	108.76	7	7	9	14	26	83.5	191	286	323	421	421
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	384	97.48	99.30	1	1	4	8	28	69	130	219	300	511	631
Censoring Reason 1: Product Discontinuation	21,023	117.15	129.91	0	7	29	29	29	69	152	296	413	609	699
Censoring Reason 2: End of Available Data	4,247	202.43	183.74	0	1	9	16	51	146	311	503	591	675	699
Censoring Reason 3: End of Enrollment	4,844	191.19	179.03	0	1	8	15	45	133	292	477	581	672	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	375	139.01	138.05	1	2	8	14	28	85	204	362	437	560	638
Higher Ease of Generic Substitution														
First Switch	407	110.44	101.09	1	1	7	13	35	83	148	267	326	440	526
Censoring Reason 1: Product Discontinuation	24,847	110.51	124.79	0	5	25	29	29	60	139	272	388	605	699
Censoring Reason 2: End of Available Data	5,284	183.59	179.34	0	1	8	15	40	121	281	475	576	673	699
Censoring Reason 3: End of Enrollment	5,990	174.59	174.17	0	1	7	14	36	113.5	262	455	566	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	479	124.62	136.22	0	4	7	13	25	72	173	331	436	576	620
Lower Ease of Generic Substitution														
First Switch	169	92.46	86.39	1	1	6	14	29	71	124	203	258	380	550

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 1: Product Discontinuation	8,809	118.67	129.98	0	7	29	29	29	77	153	297	414	619	699
Censoring Reason 2: End of Available Data	1,860	204.58	185.16	0	1	10	20	50	146	315	512	598	675	699
Censoring Reason 3: End of Enrollment	2,149	192.38	180.17	0	1	10	19	45	133	297	485	581	675	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	159	119.82	137.09	1	4	6	10	23	63	174	320	449	595	629
Lowest Ease of Generic Substitution														
First Switch	176	95.14	108.25	1	1	4	8	28	61.5	118	252	313	595	638
Censoring Reason 1: Product Discontinuation	10,527	110.46	126.92	0	5	27	29	29	59	138	274	393	611	699
Censoring Reason 2: End of Available Data	2,006	191.90	186.22	0	1	8	14	38	131.5	300	502	595	681	699
Censoring Reason 3: End of Enrollment	2,386	178.20	178.75	0	1	7	14	31	113	271	472	577	675	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	189	113.62	121.32	1	2	6	10	25	64	164	271	391	533	581
Unknown Ease of Generic Substitution														
First Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	48	89.71	106.71	10	10	28	29	29	29	90	236	357	497	497
Censoring Reason 2: End of Available Data	*****	43.33	29.79	10	10	10	10	20	36	78	80	80	80	80
Censoring Reason 3: End of Enrollment	*****	47.00	28.87	10	10	10	10	20	44	78	80	80	80	80
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	868	113.56	93.70	1	1	11	24	39	89	160	251	311	399	536
Censoring Reason 1: Product Discontinuation	26,428	111.85	121.26	0	4	27	29	29	68	145	275	374	581	699
Censoring Reason 2: End of Available Data	5,720	183.71	170.93	0	1	8	15	44	132	283	444	549	668	699
Censoring Reason 3: End of Enrollment	6,718	171.61	165.20	0	1	7	14	40	114	268	416	534	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	55	141.24	154.30	2	2	8	14	37	83	193	462	476	636	636
Higher Ease of Generic Substitution														
First Switch	979	113.92	93.61	1	1	22	26	40	90	150	252	316	412	567
Censoring Reason 1: Product Discontinuation	37,475	98.28	110.58	0	3	22	29	29	59	119	245	338	549	698
Censoring Reason 2: End of Available Data	8,495	149.23	153.49	0	1	5	12	29	94	215	378	489	645	698
Censoring Reason 3: End of Enrollment	9,778	143.32	149.01	0	1	5	11	28	89	204	357	470	634	698

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	77	118.81	133.52	4	4	7	14	24	72	159	315	371	675	675
Lower Ease of Generic Substitution														
First Switch	*****	121.76	97.33	1	1	23	26	43	94	169	267	313	423	633
Censoring Reason 1: Product Discontinuation	8,473	111.62	120.05	0	4	26	29	29	71	147	272	371	576	699
Censoring Reason 2: End of Available Data	1,894	178.19	167.50	0	1	8	15	43	126	268	429	548	663	699
Censoring Reason 3: End of Enrollment	2,244	166.94	161.66	0	1	8	15	39	114	252	413	525	660	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	18	169.28	154.32	10	10	10	11	24	141	268	372	537	537	537
Lowest Ease of Generic Substitution														
First Switch	469	119.93	98.79	1	2	22	27	48	93	164	269	314	442	636
Censoring Reason 1: Product Discontinuation	14,839	102.36	111.58	0	3	26	29	29	59	128	253	339	554	696
Censoring Reason 2: End of Available Data	2,906	171.78	161.86	0	1	7	14	40	121	273	408	519	654	696
Censoring Reason 3: End of Enrollment	3,519	159.03	155.62	0	1	5	13	34	105	246	384	498	645	696
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	36	111.56	120.28	1	1	7	10	24	70	153	375	400	442	442
Unknown Ease of Generic Substitution														
First Switch	*****	133.57	52.70	68	68	68	68	99	119	182	224	224	224	224
Censoring Reason 1: Product Discontinuation	179	90.20	88.55	7	9	16	29	29	54	120	214	294	420	421
Censoring Reason 2: End of Available Data	38	136.37	110.05	9	9	10	15	28	113	211	294	323	421	421
Censoring Reason 3: End of Enrollment	56	119.77	108.76	7	7	9	14	26	83.5	191	286	323	421	421
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	894	127.98	100.13	4	9	24	28	56	96	179	278	329	418	650
Censoring Reason 1: Product Discontinuation	20,523	114.13	127.09	0	7	29	29	29	64	149	284	400	604	699
Censoring Reason 2: End of Available Data	4,151	196.28	180.52	0	1	9	16	50	140	296	485	589	675	699
Censoring Reason 3: End of Enrollment	4,739	185.34	175.78	0	1	8	15	43	127	282	463	576	669	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	364	135.48	137.68	1	2	8	14	28	83	193	356	437	560	638

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Higher Ease of Generic Substitution														
First Switch	974	116.06	90.76	1	8	23	27	45	92	158	242	306	380	599
Censoring Reason 1: Product Discontinuation	24,295	108.69	122.86	0	5	24	29	29	59	135	269	379	598	699
Censoring Reason 2: End of Available Data	5,207	178.78	176.05	0	1	8	14	38	118	269	463	573	667	699
Censoring Reason 3: End of Enrollment	5,902	169.94	170.84	0	1	7	14	34	111	253	441	556	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	464	119.36	131.67	0	4	7	13	25	67.5	168	312	410	576	620
Lower Ease of Generic Substitution														
First Switch	*****	123.18	96.12	7	16	24	28	48	97	170	272	334	390	439
Censoring Reason 1: Product Discontinuation	8,598	115.67	126.80	0	7	29	29	29	72.5	149	285	398	617	699
Censoring Reason 2: End of Available Data	1,834	199.28	181.82	0	1	10	20	50	141	302	492	590	675	699
Censoring Reason 3: End of Enrollment	2,116	186.92	176.73	0	1	9	18	44	128	283	477	574	674	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	155	113.28	130.25	1	4	6	10	22	60	172	296	404	595	629
Lowest Ease of Generic Substitution														
First Switch	437	132.79	100.06	9	18	26	28	58	102	181	281	341	408	558
Censoring Reason 1: Product Discontinuation	10,266	107.46	124.16	0	5	26	29	29	59	132	268	382	606	699
Censoring Reason 2: End of Available Data	1,969	185.89	182.22	0	1	8	14	37	125	288	492	583	675	699
Censoring Reason 3: End of Enrollment	2,339	172.70	174.90	0	1	7	13	30	108	262	454	570	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	188	106.18	110.69	1	2	6	10	25	63.5	162	261	329	514	533
Unknown Ease of Generic Substitution														
First Switch	*****	103.40	93.25	38	38	38	38	45	73	96	265	265	265	265
Censoring Reason 1: Product Discontinuation	43	77.26	81.03	10	10	28	29	29	29	89	210	236	357	357
Censoring Reason 2: End of Available Data	*****	43.33	29.79	10	10	10	10	20	36	78	80	80	80	80
Censoring Reason 3: End of Enrollment	*****	47.00	28.87	10	10	10	10	20	44	78	80	80	80	80
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	858	133.59	97.91	1	3	26	32	62	108	183	271	335	446	565
Censoring Reason 1: Product Discontinuation	48,778	132.27	133.97	0	5	28	29	29	89	184	323	423	602	699

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	12,403	204.64	174.21	0	1	9	19	56	162	309	471	566	666	699
Censoring Reason 3: End of Enrollment	14,260	192.41	169.81	0	1	9	17	51	146	294	449	551	661	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	121	155.40	148.16	2	3	9	14	50	100	226	362	469	620	636
Higher Ease of Generic Substitution														
First Switch	1,238	128.38	95.60	1	4	26	31	57	99	179	273	316	413	611
Censoring Reason 1: Product Discontinuation	64,952	115.34	122.97	0	3	22	29	29	75	153	287	377	577	698
Censoring Reason 2: End of Available Data	16,801	169.67	161.69	0	1	7	14	41	115	266	412	520	645	698
Censoring Reason 3: End of Enrollment	19,115	162.53	157.39	0	1	6	13	37	109	252	393	505	638	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	148	125.81	135.23	4	5	9	14	29	79	171	319	384	664	675
Lower Ease of Generic Substitution														
First Switch	530	132.69	99.82	1	5	26	32	58	106	184	277	334	449	577
Censoring Reason 1: Product Discontinuation	15,732	133.26	133.22	0	4	27	29	29	89	187	315	426	602	699
Censoring Reason 2: End of Available Data	4,114	201.30	171.65	0	1	9	17	55	164	300	466	560	660	699
Censoring Reason 3: End of Enrollment	4,793	189.32	166.52	0	1	9	17	50	147	285	443	544	658	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	45	146.36	135.99	10	10	12	13	43	119	198	362	384	583	583
Lowest Ease of Generic Substitution														
First Switch	630	134.12	99.47	1	4	25	30	66	106	173	286	332	424	607
Censoring Reason 1: Product Discontinuation	26,648	122.26	126.36	0	4	27	29	29	89	175	298	392	583	699
Censoring Reason 2: End of Available Data	6,294	193.55	167.17	0	1	9	17	51	150	296	442	542	657	699
Censoring Reason 3: End of Enrollment	7,440	180.29	162.44	0	1	8	15	45	135	281	418	525	647	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	69	133.33	141.54	1	1	10	12	26	80	176	400	421	632	632
Unknown Ease of Generic Substitution														
First Switch	12	119.00	75.53	32	32	32	41	73	103.5	138	252	275	275	275
Censoring Reason 1: Product Discontinuation	290	110.37	113.10	2	7	17	29	29	65	159	288	330	490	675
Censoring Reason 2: End of Available Data	66	155.97	143.87	2	2	9	13	31	113	276	323	421	675	675
Censoring Reason 3: End of Enrollment	91	138.24	134.16	2	2	9	14	30	89	211	309	420	675	675
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	1,211	132.57	96.85	1	6	25	30	60	108	184	271	321	431	615
Censoring Reason 1: Product Discontinuation	37,768	132.40	136.39	0	7	29	29	29	89	182	323	436	612	699
Censoring Reason 2: End of Available Data	8,851	216.73	179.49	0	1	10	21	63	178	320	505	587	675	699
Censoring Reason 3: End of Enrollment	9,946	205.57	176.31	0	1	9	19	57	164	304	483	577	669	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	775	132.41	131.33	0	3	9	13	29	82	197	336	412	548	638
Higher Ease of Generic Substitution														
First Switch	1,464	128.86	96.05	1	11	26	31	55	102	178	271	328	411	523
Censoring Reason 1: Product Discontinuation	43,025	125.82	132.87	0	6	27	29	29	89	178	310	423	608	699
Censoring Reason 2: End of Available Data	10,336	200.95	178.15	0	1	9	17	51	151.5	307	484	576	666	699
Censoring Reason 3: End of Enrollment	11,602	191.23	174.15	0	1	8	16	48	140	290	468	567	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	891	129.91	135.92	0	4	8	13	27	78	187	335	425	576	663
Lower Ease of Generic Substitution														
First Switch	*****	145.14	103.09	4	20	27	35	64	116.5	204	292	351	455	633
Censoring Reason 1: Product Discontinuation	16,107	133.68	134.93	0	6	29	29	29	89	187	318	433	612	699
Censoring Reason 2: End of Available Data	3,974	216.05	175.39	0	1	10	22	66	186	314	489	583	670	699
Censoring Reason 3: End of Enrollment	4,552	203.38	172.03	0	1	10	20	57	165	300	472	568	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	341	136.44	132.28	1	5	8	13	29	93	201	320	417	549	629
Lowest Ease of Generic Substitution														
First Switch	795	138.17	97.52	1	14	26	33	63	111	191	281	329	422	560
Censoring Reason 1: Product Discontinuation	18,394	125.62	133.23	0	6	29	29	29	88	179	309	420	615	699
Censoring Reason 2: End of Available Data	4,118	209.83	180.37	0	1	9	17	57	167	317	499	589	671	699
Censoring Reason 3: End of Enrollment	4,791	195.88	175.45	0	1	8	16	50	149	294	477	575	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	395	127.77	127.61	1	3	8	15	28	85	181	308	391	575	660
Unknown Ease of Generic Substitution														
First Switch	*****	172.00	94.30	97	97	97	97	106	143	239	305	305	305	305
Censoring Reason 1: Product Discontinuation	86	97.21	100.83	10	10	29	29	29	59	119	227	351	497	497

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	15	115.67	115.32	10	10	10	20	34	78	160	345	394	394	394
Censoring Reason 3: End of Enrollment	19	114.37	104.07	10	10	10	20	44	78	160	345	394	394	394
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	700	109.24	101.87	1	1	6	15	35	86	148	230	334	536	681
Censoring Reason 1: Product Discontinuation	49,013	133.06	134.72	0	5	28	29	29	89	185	324	427	602	699
Censoring Reason 2: End of Available Data	12,476	206.41	175.16	0	1	9	19	56	164	311	476	568	667	699
Censoring Reason 3: End of Enrollment	14,335	194.12	170.80	0	1	9	17	51	148	297	453	555	664	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	120	159.11	151.09	2	3	9	14	49	106	230	402	473	620	636
Higher Ease of Generic Substitution														
First Switch	667	113.71	102.41	1	1	7	15	39	84	163	256	314	450	659
Censoring Reason 1: Product Discontinuation	65,622	115.87	123.52	0	3	22	29	29	75	154	288	381	579	698
Censoring Reason 2: End of Available Data	16,886	171.09	162.79	0	1	7	14	41	118	268	416	526	646	698
Censoring Reason 3: End of Enrollment	19,197	163.80	158.47	0	1	7	13	38	111	253	396	510	639	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	150	128.05	135.61	4	5	9	14	29	80.5	171	317	384	664	675
Lower Ease of Generic Substitution														
First Switch	*****	115.56	104.58	1	1	7	12	39	87	160	263	315	469	657
Censoring Reason 1: Product Discontinuation	16,094	134.09	133.78	0	4	27	29	29	89	189	317	427	602	699
Censoring Reason 2: End of Available Data	4,166	203.42	172.48	0	1	9	17	56	166.5	303	469	561	663	699
Censoring Reason 3: End of Enrollment	4,849	191.25	167.43	0	1	9	17	51	149	287	444	545	659	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	47	153.87	144.85	10	10	12	13	43	119	205	372	491	583	583
Lowest Ease of Generic Substitution														
First Switch	359	106.24	97.04	1	2	8	17	42	77	138	229	313	469	625
Censoring Reason 1: Product Discontinuation	26,964	122.94	126.98	0	4	27	29	29	89	176	300	393	588	699
Censoring Reason 2: End of Available Data	6,326	194.47	167.91	0	1	9	17	52	152	297	443	545	658	699
Censoring Reason 3: End of Enrollment	7,472	181.15	163.15	0	1	8	15	45	135	282	420	527	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	70	134.79	141.03	1	1	10	14	26	80.5	180	392	421	632	632
Unknown Ease of Generic Substitution														
First Switch	*****	139.80	109.24	40	40	40	40	69	124	146	320	320	320	320
Censoring Reason 1: Product Discontinuation	297	109.08	112.64	2	7	17	29	29	65	151	286	330	491	675
Censoring Reason 2: End of Available Data	67	153.69	142.96	2	2	9	13	30	106	276	323	421	675	675
Censoring Reason 3: End of Enrollment	92	136.77	133.36	2	2	9	14	30	83.5	209	309	420	675	675
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	407.00	-	407	407	407	407	407	407	407	407	407	407	407
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	707	120.17	110.46	1	1	8	15	39	90	170	271	351	511	639
Censoring Reason 1: Product Discontinuation	38,404	133.66	137.30	0	7	29	29	29	89	184	326	441	615	699
Censoring Reason 2: End of Available Data	8,985	219.99	180.72	0	1	10	21	64	183	325	511	588	675	699
Censoring Reason 3: End of Enrollment	10,096	208.60	177.61	0	1	10	19	58	168	309	491	579	671	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	789	135.32	133.20	0	3	9	14	29	84	200	340	416	560	648
Higher Ease of Generic Substitution														
First Switch	602	117.36	100.77	1	2	8	20	45	92	158	253	316	457	600
Censoring Reason 1: Product Discontinuation	43,984	126.98	133.77	0	6	27	29	29	89	179	315	429	610	699
Censoring Reason 2: End of Available Data	10,460	203.95	179.75	0	1	9	17	52	154	311	490	577	667	699
Censoring Reason 3: End of Enrollment	11,747	194.02	175.76	0	1	8	16	49	142	296	472	570	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	903	132.68	137.18	0	4	8	13	27	79	195	346	425	563	663
Lower Ease of Generic Substitution														
First Switch	325	129.71	114.09	1	4	13	23	46	94	173	295	378	485	549
Censoring Reason 1: Product Discontinuation	16,564	135.69	136.65	0	6	29	29	29	89	190	323	439	619	699
Censoring Reason 2: End of Available Data	4,071	220.95	177.91	0	1	11	22	68	192	317	504	590	672	699
Censoring Reason 3: End of Enrollment	4,654	207.94	174.69	0	1	10	21	58	171	306	484	577	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	346	139.96	134.79	1	5	8	13	29	98	204	327	435	549	629

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Lowest Ease of Generic Substitution														
First Switch	*****	117.47	107.84	1	1	4	12	38	88	160	273	346	468	564
Censoring Reason 1: Product Discontinuation	18,982	127.37	134.48	0	6	29	29	29	89	179	315	426	618	699
Censoring Reason 2: End of Available Data	4,191	213.26	181.99	0	1	9	17	58	170	322	503	594	674	699
Censoring Reason 3: End of Enrollment	4,877	199.03	177.09	0	1	9	16	51	153	301	484	580	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	401	129.32	128.36	1	4	9	15	28	86	182	308	391	542	660
Unknown Ease of Generic Substitution														
First Switch	*****	108.00	-	108	108	108	108	108	108	108	108	108	108	108
Censoring Reason 1: Product Discontinuation	90	100.01	100.20	10	10	29	29	29	59	130	232	351	497	497
Censoring Reason 2: End of Available Data	16	120.81	113.30	10	10	10	20	39	79	173	345	394	394	394
Censoring Reason 3: End of Enrollment	20	118.55	103.01	10	10	15	24	50	79	168	272	370	394	394
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	764	102.33	98.11	1	1	3	7	33	76	139	227	313	454	595
Censoring Reason 1: Product Discontinuation	48,950	133.12	134.75	0	5	28	29	29	89	185	324	427	603	699
Censoring Reason 2: End of Available Data	12,473	206.32	175.13	0	1	9	19	57	164	311	476	568	667	699
Censoring Reason 3: End of Enrollment	14,323	193.97	170.79	0	1	9	17	51	147	296	453	555	664	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	123	158.14	149.53	2	3	9	14	50	104	229	384	469	620	636
Higher Ease of Generic Substitution														
First Switch	840	99.99	97.81	1	1	5	9	27	71.5	137	229	305	453	585
Censoring Reason 1: Product Discontinuation	65,460	116.02	123.64	0	3	22	29	29	76	154	288	381	580	698
Censoring Reason 2: End of Available Data	16,878	171.17	162.80	0	1	7	14	42	118	268	416	526	647	698
Censoring Reason 3: End of Enrollment	19,180	163.88	158.50	0	1	6	13	38	111	253	396	511	640	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	148	126.01	131.93	4	5	9	14	29	80.5	171	315	371	664	675
Lower Ease of Generic Substitution														
First Switch	*****	112.99	105.88	1	1	5	11	30	76.5	165	269	314	455	560
Censoring Reason 1: Product Discontinuation	16,110	134.22	133.84	0	4	27	29	29	89	189	318	427	602	699

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	4,168	203.19	172.27	0	1	9	17	56	166	303	469	561	661	699
Censoring Reason 3: End of Enrollment	4,849	191.10	167.28	0	1	9	17	51	149	287	444	545	659	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	47	153.87	144.85	10	10	12	13	43	119	205	372	491	583	583
Lowest Ease of Generic Substitution														
First Switch	425	108.09	100.02	1	1	4	10	32	84	146	256	327	458	594
Censoring Reason 1: Product Discontinuation	26,899	122.98	126.93	0	4	27	29	29	89	176	300	393	587	699
Censoring Reason 2: End of Available Data	6,326	194.42	167.77	0	1	9	17	52	151	297	444	545	658	699
Censoring Reason 3: End of Enrollment	7,471	181.09	163.04	0	1	8	15	45	135	282	421	526	652	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	70	134.79	141.03	1	1	10	14	26	80.5	180	392	421	632	632
Unknown Ease of Generic Substitution														
First Switch	*****	132.50	84.98	70	70	70	70	77	102	188	256	256	256	256
Censoring Reason 1: Product Discontinuation	298	111.61	115.36	2	7	17	29	29	66.5	155	290	370	491	675
Censoring Reason 2: End of Available Data	68	158.63	147.64	2	2	9	13	31	113	278	333	446	675	675
Censoring Reason 3: End of Enrollment	93	140.57	137.59	2	2	9	14	30	89	211	316	421	675	675
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	407.00	-	407	407	407	407	407	407	407	407	407	407	407
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	713	110.57	100.92	1	1	5	11	37	86	150	239	310	492	631
Censoring Reason 1: Product Discontinuation	38,403	133.74	137.31	0	7	29	29	29	89	184	327	440	614	699
Censoring Reason 2: End of Available Data	8,989	219.28	180.49	0	1	10	21	64	182	324	510	588	675	699
Censoring Reason 3: End of Enrollment	10,100	208.00	177.35	0	1	10	19	57	168	308	490	578	669	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	784	135.20	132.94	0	3	9	14	29	84	201	340	413	560	648
Higher Ease of Generic Substitution														
First Switch	774	113.46	98.48	1	1	8	17	41	90.5	151	249	321	457	587
Censoring Reason 1: Product Discontinuation	43,808	126.93	133.77	0	6	27	29	29	89	179	314	429	611	699
Censoring Reason 2: End of Available Data	10,428	203.59	179.88	0	1	9	17	51	154	311	490	579	668	699
Censoring Reason 3: End of Enrollment	11,713	193.69	175.85	0	1	8	16	48	141	295	472	570	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	903	132.75	137.63	0	4	8	13	27	79	192	347	432	563	663
Lower Ease of Generic Substitution														
First Switch	314	109.21	94.82	1	1	8	18	38	86	149	237	297	441	550
Censoring Reason 1: Product Discontinuation	16,577	136.04	136.87	0	6	29	29	29	89	191	325	440	619	699
Censoring Reason 2: End of Available Data	4,069	221.00	177.96	0	1	11	22	69	191	318	504	590	672	699
Censoring Reason 3: End of Enrollment	4,653	208.10	174.70	0	1	10	21	59	171	306	484	577	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	342	138.29	133.35	1	5	9	13	29	95	203	322	430	549	629
Lowest Ease of Generic Substitution														
First Switch	*****	104.88	105.07	1	1	5	10	31	73	143	252	308	470	638
Censoring Reason 1: Product Discontinuation	18,949	127.55	134.37	0	6	29	29	29	89	179	314	426	617	699
Censoring Reason 2: End of Available Data	4,191	213.35	181.95	0	1	9	17	58	170	322	503	595	674	699
Censoring Reason 3: End of Enrollment	4,875	199.18	177.12	0	1	9	16	51	154	301	484	580	667	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	399	129.37	128.26	1	3	8	15	29	86	182	312	392	575	660
Unknown Ease of Generic Substitution														
First Switch	*****	56.50	20.51	42	42	42	42	42	56.5	71	71	71	71	71
Censoring Reason 1: Product Discontinuation	89	101.20	100.26	10	10	29	29	29	63	130	236	351	497	497
Censoring Reason 2: End of Available Data	16	120.81	113.30	10	10	10	20	39	79	173	345	394	394	394
Censoring Reason 3: End of Enrollment	20	118.55	103.01	10	10	15	24	50	79	168	272	370	394	394
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
First Switch	1,962	136.69	101.07	1	2	23	28	61	110	192	289	340	425	568
Censoring Reason 1: Product Discontinuation	47,537	130.92	132.98	0	4	27	29	29	89	182	319	420	598	699
Censoring Reason 2: End of Available Data	12,199	202.12	172.67	0	1	9	18	55	160	307	462	562	666	699
Censoring Reason 3: End of Enrollment	14,037	190.08	168.26	0	1	8	17	50	143	292	442	546	660	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	114	141.81	134.43	2	3	8	14	48	98.5	214	289	467	594	636

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Higher Ease of Generic Substitution														
First Switch	2,353	134.60	98.31	1	6	24	28	62	109	179	280	332	434	651
Censoring Reason 1: Product Discontinuation	63,710	114.35	122.39	0	3	22	29	29	72	150	284	375	576	698
Censoring Reason 2: End of Available Data	16,616	168.36	161.10	0	1	7	14	41	114	263	409	519	644	698
Censoring Reason 3: End of Enrollment	18,900	161.17	156.76	0	1	6	13	37	107	248	389	503	638	698
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	144	120.69	131.42	4	5	9	14	28	78	166	310	371	664	675
Lower Ease of Generic Substitution														
First Switch	762	136.63	100.83	1	2	25	28	63	110	186	285	333	447	642
Censoring Reason 1: Product Discontinuation	15,490	132.37	132.50	0	4	27	29	29	89	186	313	423	597	699
Censoring Reason 2: End of Available Data	4,074	198.85	170.18	0	1	9	17	54	161	297	457	554	660	699
Censoring Reason 3: End of Enrollment	4,752	187.27	165.08	0	1	9	16	50	146	283	436	538	653	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	45	153.64	147.97	10	10	12	13	43	113	205	372	491	583	583
Lowest Ease of Generic Substitution														
First Switch	1,093	134.87	97.08	1	4	26	29	64	110	182	277	330	442	636
Censoring Reason 1: Product Discontinuation	26,117	121.10	125.54	0	3	26	29	29	87	172	296	387	583	699
Censoring Reason 2: End of Available Data	6,208	191.65	166.09	0	1	9	16	51	149	294	437	540	656	699
Censoring Reason 3: End of Enrollment	7,341	178.53	161.36	0	1	8	14	45	133	280	414	520	647	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	66	129.98	135.60	1	1	10	12	29	80.5	176	375	421	632	632
Unknown Ease of Generic Substitution														
First Switch	14	125.93	53.21	35	35	35	53	99	118.5	165	186	224	224	224
Censoring Reason 1: Product Discontinuation	285	110.52	115.93	2	7	17	29	29	64	155	286	333	491	675
Censoring Reason 2: End of Available Data	65	154.03	149.13	2	2	9	13	30	106	253	333	446	675	675
Censoring Reason 3: End of Enrollment	90	136.64	137.92	2	2	9	14	29	77.5	207	320	421	675	675
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	407.00	-	407	407	407	407	407	407	407	407	407	407	407

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
First Switch	1,939	139.33	101.55	1	12	26	29	63	111	196	282	336	446	650
Censoring Reason 1: Product Discontinuation	36,998	130.75	135.19	0	7	29	29	29	89	180	318	433	609	699
Censoring Reason 2: End of Available Data	8,730	214.05	178.16	0	1	10	21	62	175	315	498	582	671	699
Censoring Reason 3: End of Enrollment	9,815	203.05	174.93	0	1	9	18	56	162	302	478	574	668	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	759	133.13	133.08	0	3	9	13	29	82	194	340	419	560	648
Higher Ease of Generic Substitution														
First Switch	2,176	133.30	96.61	1	10	25	29	61	108	181	280	326	411	612
Censoring Reason 1: Product Discontinuation	42,229	124.59	131.94	0	5	27	29	29	89	176	308	420	607	699
Censoring Reason 2: End of Available Data	10,190	198.44	176.86	0	1	9	17	50	148	302	478	574	666	699
Censoring Reason 3: End of Enrollment	11,448	188.74	172.77	0	1	8	16	47	136	288	461	564	663	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	873	127.23	132.70	0	4	8	13	27	77	180	330	409	576	663
Lower Ease of Generic Substitution														
First Switch	894	137.41	99.62	1	16	25	30	60	111	187	288	339	402	600
Censoring Reason 1: Product Discontinuation	15,915	132.99	134.53	0	6	29	29	29	89	185	315	430	614	699
Censoring Reason 2: End of Available Data	3,967	215.65	175.26	0	1	10	22	65	185	313	489	582	672	699
Censoring Reason 3: End of Enrollment	4,534	202.84	171.92	0	1	10	20	56	164.5	300	472	569	665	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	334	136.75	132.54	1	5	8	13	28	90.5	203	323	430	543	629
Lowest Ease of Generic Substitution														
First Switch	1,022	142.61	101.13	1	21	26	29	63	117	199	289	338	420	558
Censoring Reason 1: Product Discontinuation	18,134	124.29	132.23	0	6	29	29	29	86	176	305	414	615	699
Censoring Reason 2: End of Available Data	4,051	207.73	179.24	0	1	9	17	56	165	311	496	589	667	699
Censoring Reason 3: End of Enrollment	4,714	193.89	174.43	0	1	8	16	49	148	291	470	575	666	699
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	385	122.59	122.30	1	3	8	14	28	81	175	298	377	542	660

Table 2.1b. Descriptive Statistics of Time to First Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Unknown Ease of Generic Substitution														
First Switch	*****	121.67	73.11	38	38	38	38	73	115	138	265	265	265	265
Censoring Reason 1: Product Discontinuation	82	93.59	88.48	10	10	29	29	29	61	116	225	285	394	394
Censoring Reason 2: End of Available Data	16	120.81	113.30	10	10	10	20	39	79	173	345	394	394	394
Censoring Reason 3: End of Enrollment	20	118.55	103.01	10	10	15	24	50	79	168	272	370	394	394
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	337.00	-	337	337	337	337	337	337	337	337	337	337	337

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	38	99.71	69.19	26	26	28	30	61	83.5	113	202	242	365	365
Censoring Reason 1: Product Discontinuation	319	111.42	140.75	0	8	27	29	29	29	138	329	463	598	660
Censoring Reason 2: End of Available Data	63	201.40	180.26	0	0	9	18	42	152	313	463	535	660	660
Censoring Reason 3: End of Enrollment	71	191.77	176.09	0	0	8	15	40	149	307	459	535	660	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Higher Ease of Generic Substitution														
Second Switch	51	113.37	73.57	30	30	40	45	77	95	120	162	246	410	410
Censoring Reason 1: Product Discontinuation	473	152.96	163.20	0	7	29	29	29	72	252	405	501	620	662
Censoring Reason 2: End of Available Data	94	311.06	182.76	0	0	9	27	160	329	417	563	615	662	662
Censoring Reason 3: End of Enrollment	110	285.82	184.89	0	0	9	27	125	307.5	403	549	601	658	662
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	45.00	30.45	18	18	18	18	18	39	78	78	78	78	78
Lower Ease of Generic Substitution														
Second Switch	19	95.16	50.59	38	38	38	40	62	86	117	174	245	245	245
Censoring Reason 1: Product Discontinuation	211	157.12	158.52	2	18	29	29	29	89	247	427	482	602	653
Censoring Reason 2: End of Available Data	40	330.63	157.19	18	18	57	105	224	332.5	439	519	623	653	653
Censoring Reason 3: End of Enrollment	52	289.54	172.37	2	2	18	41	183	287	428	482	602	653	653
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Lowest Ease of Generic Substitution														
Second Switch	23	114.78	80.52	27	27	27	32	67	92	135	262	268	332	332
Censoring Reason 1: Product Discontinuation	233	129.93	150.16	1	13	29	29	29	59	190	335	474	631	646
Censoring Reason 2: End of Available Data	32	294.31	185.13	13	13	20	32	190	295.5	353	563	636	646	646
Censoring Reason 3: End of Enrollment	39	267.46	185.66	1	1	13	18	108	282	342	563	636	646	646
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	29.00	-	29	29	29	29	29	29	29	29	29	29	29
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Advair AG to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	66	98.92	68.12	21	21	25	28	60	85.5	111	235	261	298	298
Censoring Reason 1: Product Discontinuation	459	114.88	138.89	0	13	29	29	29	29	149	337	439	568	643
Censoring Reason 2: End of Available Data	64	261.13	178.29	0	0	13	20	86	273.5	401	513	541	587	587
Censoring Reason 3: End of Enrollment	79	232.72	174.70	0	0	11	20	70	205	360	506	541	587	587
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	133.11	131.86	17	17	17	17	21	80	199	390	390	390	390
Higher Ease of Generic Substitution														
Second Switch	58	106.09	63.52	28	28	34	42	69	90.5	119	194	263	322	322
Censoring Reason 1: Product Discontinuation	578	142.06	171.61	0	12	29	29	29	29	204	457	539	651	662
Censoring Reason 2: End of Available Data	103	347.23	199.42	2	4	19	64	175	351	513	597	651	658	662
Censoring Reason 3: End of Enrollment	121	311.67	209.19	0	2	15	26	118	319	489	589	637	658	662
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	15	105.00	148.86	2	2	2	11	18	23	98	326	489	489	489
Lower Ease of Generic Substitution														
Second Switch	27	87.70	57.38	21	21	28	33	43	85	102	145	249	261	261
Censoring Reason 1: Product Discontinuation	270	148.23	160.86	0	2	29	29	29	59	262	411	489	567	620
Censoring Reason 2: End of Available Data	43	298.63	160.63	0	0	3	22	184	325	367	489	567	620	620
Censoring Reason 3: End of Enrollment	48	279.96	165.34	0	0	3	10	179	310	358	489	567	620	620
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	168.60	188.45	22	22	22	22	34	65	267	455	455	455	455
Lowest Ease of Generic Substitution														
Second Switch	29	114.45	75.71	26	26	38	38	65	98	142	194	198	418	418
Censoring Reason 1: Product Discontinuation	312	125.37	152.64	0	14	29	29	29	29	164	378	481	605	661

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	44	324.14	197.75	2	2	14	40	186	335.5	498	602	616	661	661
Censoring Reason 3: End of Enrollment	47	304.77	205.40	0	0	13	25	80	325	481	602	616	661	661
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	189.80	191.81	3	3	3	5	13	153.5	328	485	564	564	564
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	275.33	273.09	29	29	29	29	29	228	569	569	569	569	569
Censoring Reason 2: End of Available Data	*****	569.00	-	569	569	569	569	569	569	569	569	569	569	569
Censoring Reason 3: End of Enrollment	*****	569.00	-	569	569	569	569	569	569	569	569	569	569	569
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	19	125.58	72.99	46	46	46	49	78	111	146	267	317	317	317
Censoring Reason 1: Product Discontinuation	440	136.11	144.12	0	3	20	29	29	77.5	193	349	440	632	681
Censoring Reason 2: End of Available Data	144	207.36	176.03	0	0	10	21	64	150.5	306	492	576	657	681
Censoring Reason 3: End of Enrollment	174	192.43	169.07	0	0	9	16	57	142	289	435	569	657	681
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	16.00	-	16	16	16	16	16	16	16	16	16	16	16
Higher Ease of Generic Substitution														
Second Switch	12	198.00	90.36	104	104	104	112	122	172	281	323	358	358	358
Censoring Reason 1: Product Discontinuation	476	142.97	148.04	0	2	21	29	29	89	210	362	476	629	685
Censoring Reason 2: End of Available Data	144	197.78	170.86	0	0	10	17	51	168.5	303	465	493	678	685
Censoring Reason 3: End of Enrollment	168	184.73	167.16	0	0	10	17	42	154	277	461	489	678	685
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	117.00	124.45	29	29	29	29	29	117	205	205	205	205	205
Lower Ease of Generic Substitution														
Second Switch	*****	137.00	58.91	74	74	74	74	100	131	152	228	228	228	228
Censoring Reason 1: Product Discontinuation	101	163.05	162.95	2	9	20	24	29	89	279	392	519	624	670
Censoring Reason 2: End of Available Data	34	193.50	162.85	2	2	14	21	34	179	321	392	519	610	610
Censoring Reason 3: End of Enrollment	43	168.72	158.34	2	2	13	15	24	92	303	352	416	610	610
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Lowest Ease of Generic Substitution														
Second Switch	*****	150.50	7.78	145	145	145	145	145	150.5	156	156	156	156	156
Censoring Reason 1: Product Discontinuation	253	153.55	155.34	2	4	20	29	29	89	246	406	451	608	660
Censoring Reason 2: End of Available Data	80	220.31	182.94	2	2	8	15	47	173	346	458	569	660	660
Censoring Reason 3: End of Enrollment	95	206.38	178.27	2	2	9	15	48	147	335	451	556	660	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	294.50	153.44	186	186	186	186	186	294.5	403	403	403	403	403
Unknown Ease of Generic Substitution														
Second Switch	*****	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	24.00	-	24	24	24	24	24	24	24	24	24	24	24
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	23.00	-	23	23	23	23	23	23	23	23	23	23	23
Incident Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	*****	144.50	94.10	49	49	49	53	64	115	225	290	312	312	312
Censoring Reason 1: Product Discontinuation	362	174.16	165.23	0	3	27	29	29	116.5	276	450	519	620	659
Censoring Reason 2: End of Available Data	117	262.09	189.36	1	3	16	24	100	246	401	532	604	632	659
Censoring Reason 3: End of Enrollment	128	250.43	190.17	0	1	13	21	84	234	390	521	604	632	659
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	14	107.71	130.63	2	2	2	9	15	43	232	331	372	372	372
Higher Ease of Generic Substitution														
Second Switch	12	172.50	97.21	61	61	61	87	101	130	264	306	349	349	349
Censoring Reason 1: Product Discontinuation	385	171.16	162.40	0	1	23	29	29	101	272	432	535	626	657
Censoring Reason 2: End of Available Data	131	242.71	188.26	0	0	11	22	63	227	385	541	577	630	657
Censoring Reason 3: End of Enrollment	148	230.73	186.35	0	0	11	22	58	194	361	541	574	630	657
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	194.18	144.68	25	25	25	26	78	147	308	322	478	478	478
Lower Ease of Generic Substitution														
Second Switch	*****	110.57	37.52	63	63	63	63	91	99	154	169	169	169	169

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 1: Product Discontinuation	156	191.98	177.98	1	1	27	29	29	124.5	294	468	554	653	674
Censoring Reason 2: End of Available Data	51	274.80	196.59	1	1	14	30	87	287	423	554	646	674	674
Censoring Reason 3: End of Enrollment	65	254.15	194.41	1	1	10	18	72	268	422	545	595	674	674
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	243.86	209.85	4	4	4	4	35	180	444	538	538	538	538
Lowest Ease of Generic Substitution														
Second Switch	*****	138.33	60.67	55	55	55	55	112	130	166	237	237	237	237
Censoring Reason 1: Product Discontinuation	163	172.20	166.99	2	9	29	29	29	99	263	413	496	645	678
Censoring Reason 2: End of Available Data	58	271.07	195.39	2	2	16	28	84	259.5	409	605	639	678	678
Censoring Reason 3: End of Enrollment	60	268.67	194.49	2	2	17	32	78	259.5	405	566	629	678	678
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	21.14	9.39	8	8	8	8	9	24	26	34	34	34	34
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	77	107.17	72.03	24	24	28	33	79	94	117	189	274	470	470
Censoring Reason 1: Product Discontinuation	789	127.21	154.86	0	14	29	29	29	29	179	360	509	623	664
Censoring Reason 2: End of Available Data	156	273.49	190.93	0	1	19	48	92	261	407	567	612	658	664
Censoring Reason 3: End of Enrollment	173	258.33	192.57	0	1	17	28	73	244	386	556	605	658	664
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	198.75	241.17	10	10	10	10	38	119.5	360	546	546	546	546
Higher Ease of Generic Substitution														
Second Switch	79	119.57	86.26	20	20	26	33	62	103	142	227	349	435	435
Censoring Reason 1: Product Discontinuation	897	159.46	172.40	2	8	29	29	29	89	260	457	534	644	672
Censoring Reason 2: End of Available Data	203	289.24	205.83	2	3	9	17	82	294	481	563	602	657	672
Censoring Reason 3: End of Enrollment	237	271.07	200.24	2	3	9	17	76	267	457	559	598	657	672

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	84.33	27.39	60	60	60	60	60	79	114	114	114	114	114
Lower Ease of Generic Substitution														
Second Switch	*****	103.24	57.88	26	26	31	49	68	92	119	183	255	301	301
Censoring Reason 1: Product Discontinuation	311	150.27	160.83	8	17	29	29	29	89	263	418	510	598	653
Censoring Reason 2: End of Available Data	74	316.85	187.65	8	8	20	38	170	339.5	476	543	598	653	653
Censoring Reason 3: End of Enrollment	94	274.83	190.52	8	8	20	25	72	284	437	532	590	653	653
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	274.00	-	274	274	274	274	274	274	274	274	274	274	274
Lowest Ease of Generic Substitution														
Second Switch	62	114.19	67.74	24	24	28	40	75	100	135	193	213	374	374
Censoring Reason 1: Product Discontinuation	405	154.49	161.39	1	10	29	29	29	86	264	410	502	591	663
Censoring Reason 2: End of Available Data	88	267.60	182.39	1	1	10	19	93	294	417	524	539	641	641
Censoring Reason 3: End of Enrollment	106	246.59	179.48	1	3	10	19	72	247	377	513	532	603	641
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	196.50	238.29	28	28	28	28	28	196.5	365	365	365	365	365
Unknown Ease of Generic Substitution														
Second Switch	*****	63.00	-	63	63	63	63	63	63	63	63	63	63	63
Censoring Reason 1: Product Discontinuation	*****	283.00	199.24	59	59	59	59	89	284.5	384	597	597	597	597
Censoring Reason 2: End of Available Data	*****	597.00	-	597	597	597	597	597	597	597	597	597	597	597
Censoring Reason 3: End of Enrollment	*****	597.00	-	597	597	597	597	597	597	597	597	597	597	597
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Incident Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	93	98.88	60.12	7	7	27	35	63	89	112	178	230	334	334
Censoring Reason 1: Product Discontinuation	775	131.46	160.35	0	14	29	29	29	29	182	384	518	632	671
Censoring Reason 2: End of Available Data	135	310.24	199.30	0	8	16	44	119	299	483	595	637	658	671
Censoring Reason 3: End of Enrollment	155	288.32	197.89	0	8	16	35	93	282	460	584	632	658	671
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	27	173.70	184.66	0	0	1	7	16	81	320	484	570	571	571

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Higher Ease of Generic Substitution														
Second Switch	93	95.65	70.46	21	21	27	31	61	83	110	152	199	490	490
Censoring Reason 1: Product Discontinuation	858	150.25	172.68	0	12	29	29	29	59	237	460	531	618	671
Censoring Reason 2: End of Available Data	164	321.52	196.11	0	1	23	52	134	324.5	483	588	611	660	671
Censoring Reason 3: End of Enrollment	186	296.49	201.18	0	0	19	29	106	288	469	579	611	660	671
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	24	113.38	141.15	3	3	4	5	23	54.5	164	338	338	568	568
Lower Ease of Generic Substitution														
Second Switch	34	101.79	69.08	26	26	28	32	57	93	118	176	226	367	367
Censoring Reason 1: Product Discontinuation	340	134.80	162.31	5	14	29	29	29	29	204	389	511	653	665
Censoring Reason 2: End of Available Data	51	325.67	206.76	5	5	21	53	96	327	513	586	654	665	665
Censoring Reason 3: End of Enrollment	66	279.76	206.77	5	5	15	23	86	279.5	472	575	642	665	665
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	106.00	134.72	1	1	1	9	26	33.5	134	329	430	430	430
Lowest Ease of Generic Substitution														
Second Switch	48	102.58	61.73	30	30	50	53	62	91.5	113	173	234	358	358
Censoring Reason 1: Product Discontinuation	381	140.15	158.75	0	13	29	29	29	59	228	378	503	631	660
Censoring Reason 2: End of Available Data	67	332.63	185.95	12	12	22	64	205	338	488	582	631	660	660
Censoring Reason 3: End of Enrollment	75	306.04	195.52	0	0	13	24	133	324	471	563	631	660	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	264.38	225.72	16	16	16	16	95	193.5	457	608	608	608	608
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	46.00	24.90	29	29	29	29	29	29	59	84	84	84	84
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	106	103.48	84.09	26	27	29	34	57	82.5	114	202	242	438	542
Censoring Reason 1: Product Discontinuation	749	129.43	148.17	0	6	29	29	29	51	189	368	462	598	660

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	185	222.79	178.15	0	1	9	22	56	185	344	493	551	657	660
Censoring Reason 3: End of Enrollment	205	210.79	176.32	0	1	8	18	51	170	332	485	545	634	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	120.67	88.27	24	24	24	24	24	141	197	197	197	197	197
Higher Ease of Generic Substitution														
Second Switch	137	111.61	74.13	23	25	35	43	67	93	121	209	261	410	419
Censoring Reason 1: Product Discontinuation	1,098	159.56	165.35	0	5	29	29	29	89	264	423	516	622	668
Censoring Reason 2: End of Available Data	280	288.31	184.67	0	3	9	26	129	297	408	557	605	666	668
Censoring Reason 3: End of Enrollment	317	269.59	185.07	0	0	9	22	106	269	395	545	604	662	668
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	45.00	30.45	18	18	18	18	18	39	78	78	78	78	78
Lower Ease of Generic Substitution														
Second Switch	*****	108.25	83.71	34	34	41	48	62	82	119	174	245	513	513
Censoring Reason 1: Product Discontinuation	466	160.08	156.45	1	10	29	29	29	89	265	418	479	602	653
Censoring Reason 2: End of Available Data	122	279.43	169.27	1	10	20	34	149	287	395	480	590	643	653
Censoring Reason 3: End of Enrollment	144	254.88	173.35	1	2	15	22	77	268	364	476	571	643	653
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	196.33	189.51	8	8	8	8	8	194	387	387	387	387	387
Lowest Ease of Generic Substitution														
Second Switch	66	114.70	76.19	27	27	39	42	69	92.5	135	219	268	389	389
Censoring Reason 1: Product Discontinuation	563	148.55	158.64	0	8	29	29	29	89	238	394	508	631	663
Censoring Reason 2: End of Available Data	124	273.26	180.69	5	8	13	36	126	270.5	364	552	626	655	663
Censoring Reason 3: End of Enrollment	139	257.12	180.76	0	1	9	20	108	256	353	549	626	655	663
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	369.50	126.57	280	280	280	280	280	369.5	459	459	459	459	459
Unknown Ease of Generic Substitution														
Second Switch	*****	261.00	-	261	261	261	261	261	261	261	261	261	261	261
Censoring Reason 1: Product Discontinuation	*****	176.82	147.77	27	27	27	29	29	108	346	353	379	379	379
Censoring Reason 2: End of Available Data	*****	248.00	126.19	108	108	108	108	108	283	353	353	353	353	353
Censoring Reason 3: End of Enrollment	*****	192.75	151.09	27	27	27	27	68	195.5	318	353	353	353	353
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Prevalent Use of Advair Diskus to Advair AG to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	160	108.02	69.67	21	23	28	37	62	91	126	214	260	331	413
Censoring Reason 1: Product Discontinuation	1,032	125.41	144.66	0	8	29	29	29	50	178	359	449	590	663
Censoring Reason 2: End of Available Data	205	227.60	171.71	0	0	8	19	70	220	345	469	536	617	663
Censoring Reason 3: End of Enrollment	232	215.88	170.31	0	0	9	21	60	190.5	332	465	529	617	663
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	21	108.62	110.98	9	9	10	14	21	80	162	267	314	390	390
Higher Ease of Generic Substitution														
Second Switch	141	106.04	61.34	28	28	35	45	65	91	130	178	244	322	365
Censoring Reason 1: Product Discontinuation	1,291	149.83	162.65	0	10	29	29	29	72	239	416	506	629	670
Censoring Reason 2: End of Available Data	302	275.46	187.45	2	4	19	37	105	254	417	569	610	658	670
Censoring Reason 3: End of Enrollment	342	256.30	188.48	0	3	15	26	89	231	385	541	605	658	670
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	36	110.64	133.78	2	2	2	11	20	59.5	143	319	489	554	554
Lower Ease of Generic Substitution														
Second Switch	*****	101.58	66.19	21	21	28	37	60	86	119	190	259	369	369
Censoring Reason 1: Product Discontinuation	626	146.35	155.53	0	5	29	29	29	67	250	398	481	571	641
Censoring Reason 2: End of Available Data	142	255.71	166.57	0	2	10	34	112	284	358	467	547	620	641
Censoring Reason 3: End of Enrollment	155	242.05	168.27	0	2	10	17	89	262	353	465	547	620	641
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	13	155.46	169.46	16	16	16	22	34	95	163	455	539	539	539
Lowest Ease of Generic Substitution														
Second Switch	83	102.73	63.11	26	26	36	40	61	88	120	182	198	418	418
Censoring Reason 1: Product Discontinuation	692	125.34	143.39	0	8	29	29	29	59	171	342	450	612	665
Censoring Reason 2: End of Available Data	138	239.92	179.93	1	1	10	25	80	203	349	517	602	661	665
Censoring Reason 3: End of Enrollment	146	230.68	179.92	0	1	10	19	78	190.5	339	515	572	661	665
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	20	153.15	173.37	3	3	5	10	34	83.5	201	473	552	564	564
Unknown Ease of Generic Substitution														
Second Switch	*****	87.00	-	87	87	87	87	87	87	87	87	87	87	87
Censoring Reason 1: Product Discontinuation	*****	275.33	273.09	29	29	29	29	29	228	569	569	569	569	569

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	*****	569.00	-	569	569	569	569	569	569	569	569	569	569	569
Censoring Reason 3: End of Enrollment	*****	569.00	-	569	569	569	569	569	569	569	569	569	569	569
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	30	150.37	107.46	19	19	34	43	82	110	202	324	357	465	465
Censoring Reason 1: Product Discontinuation	664	162.43	153.44	0	8	24	29	29	97	265	394	482	616	665
Censoring Reason 2: End of Available Data	275	215.35	168.59	2	3	13	21	66	183	322	454	540	657	665
Censoring Reason 3: End of Enrollment	294	207.63	167.32	0	2	10	21	62	168.5	311	448	534	657	665
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	116.67	145.37	1	1	1	1	5	85.5	132	391	391	391	391
Higher Ease of Generic Substitution														
Second Switch	37	141.68	84.89	41	41	48	62	88	112	185	252	290	450	450
Censoring Reason 1: Product Discontinuation	626	178.20	156.04	0	7	22	29	42	134	279	402	493	639	666
Censoring Reason 2: End of Available Data	251	240.94	170.96	0	7	15	29	92	217	349	493	567	659	664
Censoring Reason 3: End of Enrollment	285	228.96	168.81	0	1	15	17	79	203	336	483	553	659	664
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	111.25	131.40	15	15	15	15	30	63	193	304	304	304	304
Lower Ease of Generic Substitution														
Second Switch	*****	168.38	70.91	75	75	75	75	113	157.5	227	277	277	277	277
Censoring Reason 1: Product Discontinuation	214	158.02	144.17	0	1	18	29	37	104	239	367	460	573	653
Censoring Reason 2: End of Available Data	87	204.20	164.14	1	1	7	14	64	151	325	455	520	653	653
Censoring Reason 3: End of Enrollment	99	194.16	159.37	1	1	7	18	64	150	321	451	520	653	653
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	49.00	-	49	49	49	49	49	49	49	49	49	49	49
Lowest Ease of Generic Substitution														
Second Switch	*****	142.64	70.02	65	65	65	67	92	126.5	159	242	312	312	312
Censoring Reason 1: Product Discontinuation	342	178.17	158.56	0	2	27	29	29	120	289	423	499	593	625
Censoring Reason 2: End of Available Data	138	257.62	169.60	0	0	9	35	107	273	370	510	555	603	625
Censoring Reason 3: End of Enrollment	157	242.17	169.10	0	0	9	24	99	241	359	497	549	603	625
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	*****	239.67	154.33	75	75	75	75	75	263	381	381	381	381	381
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	141.40	101.12	28	28	28	28	89	117	179	294	294	294	294
Censoring Reason 2: End of Available Data	*****	294.00	-	294	294	294	294	294	294	294	294	294	294	294
Censoring Reason 3: End of Enrollment	*****	161.00	188.09	28	28	28	28	28	161	294	294	294	294	294
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Prevalent Use of Advair Diskus to Breo Ellipta to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	25	127.84	71.57	44	44	49	59	88	112	147	189	295	353	353
Censoring Reason 1: Product Discontinuation	660	180.53	163.86	0	3	24	29	29	119	289	433	518	619	688
Censoring Reason 2: End of Available Data	289	255.36	173.04	0	2	12	27	105	266	383	499	548	645	688
Censoring Reason 3: End of Enrollment	307	247.59	172.72	0	2	12	24	91	239	363	492	547	636	688
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	22	98.77	137.06	9	9	10	12	18	41.5	124	278	279	592	592
Higher Ease of Generic Substitution														
Second Switch	40	136.60	85.62	36	36	46	58	83	111.5	162	303	329	391	391
Censoring Reason 1: Product Discontinuation	543	176.46	163.87	0	0	20	29	29	104	290	439	500	603	650
Censoring Reason 2: End of Available Data	205	247.85	171.12	0	0	16	27	80	248	378	489	531	632	650
Censoring Reason 3: End of Enrollment	235	230.40	170.52	0	0	11	21	72	229	357	475	531	632	650
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	21	164.48	167.66	1	1	5	10	16	100	291	361	409	569	569
Lower Ease of Generic Substitution														
Second Switch	12	116.33	76.25	63	63	63	63	84	96	119	131	349	349	349
Censoring Reason 1: Product Discontinuation	302	174.82	156.54	0	5	17	29	29	121	277	403	503	610	654
Censoring Reason 2: End of Available Data	126	214.82	172.27	0	0	8	17	58	169	328	503	534	638	654
Censoring Reason 3: End of Enrollment	140	205.32	168.88	0	0	9	17	50	161	316	495	532	638	654
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	13	144.23	160.07	7	7	7	14	32	51	201	409	507	507	507

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Lowest Ease of Generic Substitution														
Second Switch	12	147.33	103.08	57	57	57	67	89	104.5	191	264	403	403	403
Censoring Reason 1: Product Discontinuation	259	165.01	157.77	0	8	17	29	29	100	269	402	518	635	684
Censoring Reason 2: End of Available Data	92	195.91	173.12	0	0	10	16	54	147.5	299	479	554	635	635
Censoring Reason 3: End of Enrollment	102	196.17	167.98	0	3	13	17	58	156.5	297	461	528	590	635
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	180.70	166.94	22	22	22	27	32	107	380	412	442	442	442
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	401.00	-	401	401	401	401	401	401	401	401	401	401	401
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	31	120.29	66.63	36	36	46	63	80	111	144	222	271	317	317
Censoring Reason 1: Product Discontinuation	731	141.42	143.39	0	3	21	29	29	89	201	352	453	609	681
Censoring Reason 2: End of Available Data	260	200.12	169.23	0	0	10	21	63	144	306	453	544	656	681
Censoring Reason 3: End of Enrollment	298	188.99	164.73	0	0	9	17	57	140.5	295	430	530	656	681
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	204.00	265.87	16	16	16	16	16	204	392	392	392	392	392
Higher Ease of Generic Substitution														
Second Switch	29	173.31	78.80	55	55	70	95	114	156	220	301	323	358	358
Censoring Reason 1: Product Discontinuation	807	150.26	146.62	0	4	21	29	29	89	226	368	471	587	685
Censoring Reason 2: End of Available Data	268	200.55	164.57	0	1	13	19	58	168	308	454	510	633	685
Censoring Reason 3: End of Enrollment	306	187.31	162.00	0	1	10	17	50	148.5	286	436	490	631	685
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	69.50	90.43	19	19	19	19	22	27	117	205	205	205	205
Lower Ease of Generic Substitution														
Second Switch	12	123.83	72.02	29	29	29	35	77	121.5	146	228	276	276	276
Censoring Reason 1: Product Discontinuation	192	152.97	149.67	2	7	15	29	29	89	237	364	440	624	670

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 2: End of Available Data	72	189.58	154.09	2	2	10	18	61	155	297	416	519	610	610
Censoring Reason 3: End of Enrollment	83	173.81	152.23	2	2	10	15	43	119	289	392	440	610	610
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Lowest Ease of Generic Substitution														
Second Switch	16	121.06	74.47	2	2	2	33	59	127	158	260	270	270	270
Censoring Reason 1: Product Discontinuation	408	153.12	149.69	2	4	15	29	29	89.5	226	399	453	581	660
Censoring Reason 2: End of Available Data	143	201.79	171.76	2	3	8	14	52	147	329	451	534	640	660
Censoring Reason 3: End of Enrollment	166	190.01	167.94	2	3	9	15	51	140.5	295	450	531	640	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	206.00	187.80	29	29	29	29	29	186	403	403	403	403	403
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	87.33	105.40	24	24	24	24	24	29	209	209	209	209	209
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	23.00	-	23	23	23	23	23	23	23	23	23	23	23
Prevalent Use of Advair Diskus to Symbicort to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	28	122.18	67.21	42	42	49	57	80	95.5	148	225	267	312	312
Censoring Reason 1: Product Discontinuation	666	164.26	153.76	0	3	26	29	29	113	251	392	499	604	659
Censoring Reason 2: End of Available Data	244	228.23	173.11	1	1	15	24	83	196.5	346	493	554	631	659
Censoring Reason 3: End of Enrollment	265	219.14	172.15	0	1	13	23	70	182	337	485	553	631	659
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	23	114.57	121.99	2	2	6	9	16	65	232	331	331	372	372
Higher Ease of Generic Substitution														
Second Switch	33	143.30	88.10	33	33	36	61	87	112	202	282	306	349	349
Censoring Reason 1: Product Discontinuation	721	164.13	152.04	0	5	22	29	29	113	244	399	482	618	667
Censoring Reason 2: End of Available Data	273	216.17	174.28	0	0	13	22	66	171	332	478	555	630	667
Censoring Reason 3: End of Enrollment	302	208.65	171.75	0	1	11	17	59	164	324	475	552	626	667
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 5: Death	21	151.48	133.87	6	6	11	18	26	104	281	308	322	478	478
Lower Ease of Generic Substitution														
Second Switch	15	146.60	87.66	53	53	53	63	91	119	172	261	391	391	391
Censoring Reason 1: Product Discontinuation	288	176.21	167.25	1	2	18	29	29	117.5	280	444	547	659	674
Censoring Reason 2: End of Available Data	113	243.72	187.95	1	2	10	24	85	213	336	554	610	673	674
Censoring Reason 3: End of Enrollment	131	233.93	185.67	1	1	10	20	71	203	329	503	610	673	674
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	13	237.08	185.52	4	4	4	35	42	180	380	459	538	538	538
Lowest Ease of Generic Substitution														
Second Switch	13	136.23	69.69	55	55	55	64	76	122	169	237	274	274	274
Censoring Reason 1: Product Discontinuation	289	161.78	150.52	0	1	27	29	29	105	239	378	478	639	678
Censoring Reason 2: End of Available Data	100	243.50	176.16	0	1	14	23	93	227.5	357	487	610	662	678
Censoring Reason 3: End of Enrollment	113	230.88	175.67	0	0	7	17	64	218	350	485	605	645	678
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	31.56	24.15	8	8	8	8	23	24	34	87	87	87	87
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	297.50	337.29	59	59	59	59	59	297.5	536	536	536	536	536
Censoring Reason 2: End of Available Data	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 3: End of Enrollment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior Asthma)														
Highest Ease of Generic Substitution														
Second Switch	238	107.53	69.39	12	23	28	33	67	96	123	182	239	408	470
Censoring Reason 1: Product Discontinuation	1,718	144.77	159.89	0	10	29	29	29	61	237	400	509	618	664
Censoring Reason 2: End of Available Data	453	255.75	176.34	0	3	17	37	92	247	358	525	584	653	664
Censoring Reason 3: End of Enrollment	495	245.50	177.87	0	3	14	26	84	234	355	525	581	653	664
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	137.11	162.59	10	10	10	10	66	87	147	546	546	546	546
Higher Ease of Generic Substitution														
Second Switch	268	116.31	73.27	20	21	27	37	65	99.5	147	214	264	352	435

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 1: Product Discontinuation	2,074	174.32	174.65	1	8	29	29	29	89	287	460	542	634	674
Censoring Reason 2: End of Available Data	636	279.72	193.26	1	3	12	24	100	280	439	560	598	657	674
Censoring Reason 3: End of Enrollment	708	265.94	190.93	1	3	12	24	88	257	409	549	591	657	674
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	12	140.42	169.45	16	16	16	21	25	69.5	206	417	507	507	507
Lower Ease of Generic Substitution														
Second Switch	*****	99.76	52.90	22	22	28	36	71	92.5	119	160	183	301	301
Censoring Reason 1: Product Discontinuation	678	164.18	163.72	0	8	29	29	29	89	290	419	509	616	653
Censoring Reason 2: End of Available Data	204	280.68	182.05	0	2	15	27	91	298.5	417	531	573	640	653
Censoring Reason 3: End of Enrollment	245	254.96	181.13	0	2	14	23	68	274	369	525	554	640	653
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	159.00	162.63	44	44	44	44	44	159	274	274	274	274	274
Lowest Ease of Generic Substitution														
Second Switch	142	111.37	69.02	24	24	31	42	71	98	133	190	222	374	431
Censoring Reason 1: Product Discontinuation	946	160.61	160.02	1	7	29	29	29	89	269	412	494	598	663
Censoring Reason 2: End of Available Data	262	256.87	181.30	1	2	12	27	83	264.5	384	517	586	641	661
Censoring Reason 3: End of Enrollment	303	241.04	177.91	1	3	10	24	72	227	364	497	556	636	661
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	*****	146.80	160.65	17	17	17	17	28	52	272	365	365	365	365
Unknown Ease of Generic Substitution														
Second Switch	*****	184.00	171.12	63	63	63	63	63	184	305	305	305	305	305
Censoring Reason 1: Product Discontinuation	12	218.92	189.32	14	14	14	28	44	186.5	364	395	597	597	597
Censoring Reason 2: End of Available Data	*****	341.00	235.53	28	28	28	28	186	369.5	496	597	597	597	597
Censoring Reason 3: End of Enrollment	*****	275.60	250.98	14	14	14	14	28	344	395	597	597	597	597
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Prevalent Use of Advair Diskus to Wixela to Advair Diskus (with Prior COPD)														
Highest Ease of Generic Substitution														
Second Switch	216	105.28	68.14	7	24	32	41	69	90	118	188	274	362	467
Censoring Reason 1: Product Discontinuation	1,680	140.18	157.65	0	11	29	29	29	59	219	386	500	610	672
Censoring Reason 2: End of Available Data	384	268.05	187.02	0	2	13	27	106	271	402	537	597	656	672
Censoring Reason 3: End of Enrollment	432	252.33	186.19	0	2	13	26	85	224.5	374	533	595	653	672

Table 2.2b. Descriptive Statistics of Time to Second Switch or Censoring (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD), by Ease of Generic Substitution at State Level in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020: Episode Level

Switch Pattern	Episodes (Number)	Mean	Standard Deviation	Minimum	1%	5%	10%	25%	50%	75%	90%	95%	99%	Maximum
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	45	134.62	164.80	0	0	5	7	16	56	264	382	484	571	571
Higher Ease of Generic Substitution														
Second Switch	241	105.69	69.39	21	25	29	41	64	92	123	175	221	385	490
Censoring Reason 1: Product Discontinuation	1,892	153.43	164.14	0	10	29	29	29	80	247	431	516	611	671
Censoring Reason 2: End of Available Data	481	280.77	182.20	0	2	22	43	113	283	423	537	594	654	671
Censoring Reason 3: End of Enrollment	524	266.64	183.56	0	2	17	30	92	259	414	531	591	651	671
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	46	110.50	118.65	3	3	5	10	28	67.5	156	280	338	568	568
Lower Ease of Generic Substitution														
Second Switch	99	94.69	66.16	23	23	28	36	55	87	107	160	226	438	438
Censoring Reason 1: Product Discontinuation	776	140.91	157.15	0	12	29	29	29	59	228	380	481	632	665
Censoring Reason 2: End of Available Data	172	273.26	183.01	0	5	24	45	97	280	408	528	607	657	665
Censoring Reason 3: End of Enrollment	199	251.97	182.45	0	5	18	25	85	248	367	519	588	657	665
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	19	94.11	127.61	1	1	1	6	17	31	132	404	430	430	430
Lowest Ease of Generic Substitution														
Second Switch	129	108.66	57.14	2	29	48	56	78	96	119	176	207	358	413
Censoring Reason 1: Product Discontinuation	876	144.83	156.94	0	12	29	29	29	68.5	233	381	484	631	660
Censoring Reason 2: End of Available Data	217	265.05	185.20	0	1	18	30	86	253	378	547	616	652	660
Censoring Reason 3: End of Enrollment	238	249.88	185.52	0	1	14	27	78	235	364	539	612	652	660
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	17	177.18	185.77	14	14	14	15	36	147	227	579	608	608	608
Unknown Ease of Generic Substitution														
Second Switch	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 1: Product Discontinuation	*****	170.00	156.70	29	29	29	29	29	84	289	432	432	432	432
Censoring Reason 2: End of Available Data	*****	354.67	72.21	289	289	289	289	289	343	432	432	432	432	432
Censoring Reason 3: End of Enrollment	*****	354.67	72.21	289	289	289	289	289	343	432	432	432	432	432
Censoring Reason 4: End of Query Period	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Censoring Reason 5: Death	0	-	-	-	-	-	-	-	-	-	-	-	-	-

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 3.1a. Frequency Distribution of Time to First Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Switch:	**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	**1,371**	
Days from Index		
Overall	1,371	100.0%
1-30	187	13.6%
31-60	277	20.2%
61-90	265	19.3%
91+	642	46.8%
Switch:	**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	**2,668**	
Days from Index		
Overall	2,672	100.0%
1-30	478	17.9%
31-60	401	15.0%
61-90	450	16.8%
91+	1,343	50.3%
Switch:	**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	**1,312**	
Days from Index		
Overall	1,314	100.0%
1-30	413	31.4%
31-60	246	18.7%
61-90	175	13.3%
91+	480	36.5%
Switch:	**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	**3,257**	
Days from Index		
Overall	3,268	100.0%
1-30	312	9.5%
31-60	509	15.6%
61-90	561	17.2%
91+	1,886	57.7%
Switch:	**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	**6,155**	
Days from Index		
Overall	6,184	100.0%
1-30	721	11.7%
31-60	774	12.5%
61-90	959	15.5%
91+	3,730	60.3%

Table 3.1a. Frequency Distribution of Time to First Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Switch:	**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	**2,231**	
Days from Index		
Overall	2,237	100.0%
1-30	561	25.1%
31-60	374	16.7%
61-90	310	13.9%
91+	992	44.3%
Switch:	**Advair Diskus to Breo Ellipta**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	**1,948**	
Days from Index		
Overall	1,954	100.0%
1-30	390	20.0%
31-60	369	18.9%
61-90	272	13.9%
91+	923	47.2%
Switch:	**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	**1,838**	
Days from Index		
Overall	1,839	100.0%
1-30	234	12.7%
31-60	384	20.9%
61-90	287	15.6%
91+	934	50.8%
Switch:	**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	**2,692**	
Days from Index		
Overall	2,694	100.0%
1-30	402	14.9%
31-60	410	15.2%
61-90	469	17.4%
91+	1,413	52.4%
Switch:	**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	**1,136**	
Days from Index		
Overall	1,136	100.0%
1-30	282	24.8%
31-60	214	18.8%
61-90	171	15.1%
91+	469	41.3%

Table 3.1a. Frequency Distribution of Time to First Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Switch:	**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	**4,182**	
Days from Index		
Overall	4,192	100.0%
1-30	383	9.1%
31-60	688	16.4%
61-90	663	15.8%
91+	2,458	58.6%
Switch:	**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	**6,024**	
Days from Index		
Overall	6,040	100.0%
1-30	687	11.4%
31-60	761	12.6%
61-90	952	15.8%
91+	3,640	60.3%
Switch:	**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	**2,109**	
Days from Index		
Overall	2,114	100.0%
1-30	442	20.9%
31-60	356	16.8%
61-90	306	14.5%
91+	1,010	47.8%
Switch:	**Advair Diskus to Breo Ellipta**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	1,908	
Days from Index		
Overall	1,914	100.0%
1-30	334	17.5%
31-60	344	18.0%
61-90	270	14.1%
91+	966	50.5%

Table 3.2a. Frequency Distribution of Time to Second Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Switch:	**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	131	
Days from Index		
Overall	131	100.0%
1-30	*****	*****
31-60	*****	*****
61-90	39	29.8%
91+	68	51.9%
Switch:	**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	256	
Days from Index		
Overall	256	100.0%
1-30	17	6.6%
31-60	33	12.9%
61-90	57	22.3%
91+	149	58.2%
Switch:	**Symbicort to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	38	
Days from Index		
Overall	38	100.0%
1-30	0	0.0%
31-60	*****	*****
61-90	*****	*****
91+	*****	*****
Switch:	**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	370	
Days from Index		
Overall	371	100.0%
1-30	14	3.8%
31-60	71	19.1%
61-90	104	28.0%
91+	182	49.1%
Switch:	**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	732	
Days from Index		
Overall	732	100.0%
1-30	49	6.7%
31-60	100	13.7%
61-90	171	23.4%
91+	412	56.3%
Switch:	**Symbicort to Advair Diskus**	

Table 3.2a. Frequency Distribution of Time to Second Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	88	
Days from Index		
Overall	88	100.0%
1-30	*****	*****
31-60	*****	*****
61-90	15	17.0%
91+	62	70.5%
Switch:	**Breo Ellipta to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	89	
Days from Index		
Overall	89	100.0%
1-30	*****	*****
31-60	*****	*****
61-90	*****	*****
91+	64	71.9%
Switch:	**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	180	
Days from Index		
Overall	180	100.0%
1-30	12	6.7%
31-60	31	17.2%
61-90	52	28.9%
91+	85	47.2%
Switch:	**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	268	
Days from Index		
Overall	268	100.0%
1-30	20	7.5%
31-60	45	16.8%
61-90	76	28.4%
91+	127	47.4%
Switch:	**Symbicort to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	35	
Days from Index		
Overall	35	100.0%
1-30	0	0.0%
31-60	*****	*****
61-90	*****	*****
91+	*****	*****
Switch:	**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior COPD)**	

Table 3.2a. Frequency Distribution of Time to Second Switch (in Days) in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)
Number of Patients	464	
Days from Index		
Overall	464	100.0%
1-30	23	5.0%
31-60	82	17.7%
61-90	129	27.8%
91+	230	49.6%
Switch:	**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	685	
Days from Index		
Overall	685	100.0%
1-30	36	5.3%
31-60	108	15.8%
61-90	191	27.9%
91+	350	51.1%
Switch:	**Symbicort to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	89	
Days from Index		
Overall	89	100.0%
1-30	0	0.0%
31-60	*****	*****
61-90	*****	*****
91+	61	68.5%
Switch:	**Breo Ellipta to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	89	
Days from Index		
Overall	89	100.0%
1-30	0	0.0%
31-60	*****	*****
61-90	*****	*****
91+	63	70.8%

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Switch:	**Advair Diskus to Advair AG**		**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior Asthma)**		**Advair Diskus to Wixela to Advair Diskus (Incident with Prior Asthma)**	
Number of Patients	1,371		2,668	
Days from Index				
Overall	1,371	100.0%	2,672	100.0%
Highest Ease of Generic Substitution	357	26.0%	868	32.5%
Higher Ease of Generic Substitution	527	38.4%	979	36.6%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	256	18.7%	469	17.6%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
1-30	187	100.0%	478	100.0%
Highest Ease of Generic Substitution	51	27.3%	168	35.1%
Higher Ease of Generic Substitution	67	35.8%	172	36.0%
Lower Ease of Generic Substitution	28	15.0%	61	12.8%
Lowest Ease of Generic Substitution	41	21.9%	77	16.1%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	277	100.0%	401	100.0%
Highest Ease of Generic Substitution	78	28.2%	132	32.9%
Higher Ease of Generic Substitution	104	37.5%	148	36.9%
Lower Ease of Generic Substitution	62	22.4%	54	13.5%
Lowest Ease of Generic Substitution	33	11.9%	67	16.7%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	265	100.0%	450	100.0%
Highest Ease of Generic Substitution	65	24.5%	144	32.0%
Higher Ease of Generic Substitution	103	38.9%	173	38.4%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	54	20.4%	82	18.2%
Unknown Ease of Generic Substitution	*****	*****	*****	*****

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
91+	642	100.0%	1,343	0.0%
Highest Ease of Generic Substitution	163	25.4%	424	31.6%
Higher Ease of Generic Substitution	253	39.4%	486	36.2%
Lower Ease of Generic Substitution	98	15.3%	*****	*****
Lowest Ease of Generic Substitution	128	19.9%	243	18.1%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
Switch:	**Advair Diskus to Symbicort**		**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior Asthma)**		**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	1,312		3,257	
Days from Index				
Overall	1,314	100.0%	3,268	100.0%
Highest Ease of Generic Substitution	460	35.0%	858	26.3%
Higher Ease of Generic Substitution	490	37.3%	1,238	37.9%
Lower Ease of Generic Substitution	*****	*****	530	16.2%
Lowest Ease of Generic Substitution	256	19.5%	630	19.3%
Unknown Ease of Generic Substitution	*****	*****	12	0.4%
1-30	413	100.0%	312	100.0%
Highest Ease of Generic Substitution	132	32.0%	82	26.3%
Higher Ease of Generic Substitution	169	40.9%	120	38.5%
Lower Ease of Generic Substitution	36	8.7%	46	14.7%
Lowest Ease of Generic Substitution	76	18.4%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	246	100.0%	509	100.0%
Highest Ease of Generic Substitution	92	37.4%	128	25.1%
Higher Ease of Generic Substitution	90	36.6%	212	41.7%
Lower Ease of Generic Substitution	21	8.5%	98	19.3%
Lowest Ease of Generic Substitution	43	17.5%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
61-90	175	100.0%	561	100.0%
Highest Ease of Generic Substitution	58	33.1%	137	24.4%
Higher Ease of Generic Substitution	70	40.0%	220	39.2%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	120	21.4%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
91+	480	100.0%	1,886	0.0%
Highest Ease of Generic Substitution	178	37.1%	511	27.1%
Higher Ease of Generic Substitution	161	33.5%	686	36.4%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	100	20.8%	377	20.0%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
Switch:	**Advair Diskus to Wixela**		**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior Asthma)**		**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior Asthma)**	
Number of Patients	6,155		2,231	
Days from Index				
Overall	6,184	100.0%	2,237	100.0%
Highest Ease of Generic Substitution	1,962	31.7%	764	34.2%
Higher Ease of Generic Substitution	2,353	38.0%	840	37.6%
Lower Ease of Generic Substitution	762	12.3%	*****	*****
Lowest Ease of Generic Substitution	1,093	17.7%	425	19.0%
Unknown Ease of Generic Substitution	14	0.2%	*****	*****
1-30	721	100.0%	561	100.0%
Highest Ease of Generic Substitution	238	33.0%	180	32.1%
Higher Ease of Generic Substitution	273	37.9%	232	41.4%
Lower Ease of Generic Substitution	86	11.9%	51	9.1%
Lowest Ease of Generic Substitution	124	17.2%	98	17.5%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	774	100.0%	374	100.0%
Highest Ease of Generic Substitution	249	32.2%	140	37.4%
Higher Ease of Generic Substitution	295	38.1%	140	37.4%
Lower Ease of Generic Substitution	*****	*****	32	8.6%
Lowest Ease of Generic Substitution	134	17.3%	62	16.6%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
61-90	959	100.0%	310	100.0%
Highest Ease of Generic Substitution	313	32.6%	107	34.5%
Higher Ease of Generic Substitution	354	36.9%	110	35.5%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	168	17.5%	64	20.6%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
91+	3,730	0.0%	992	100.0%
Highest Ease of Generic Substitution	1,162	31.2%	337	34.0%
Higher Ease of Generic Substitution	1,431	38.4%	358	36.1%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	667	17.9%	201	20.3%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
Switch:	**Advair Diskus to Breo Ellipta**		**Advair Diskus to Advair AG**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior Asthma)**		**Advair Diskus to Advair AG to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	1,948		1,838	
Days from Index				
Overall	1,954	100.0%	1,839	100.0%
Highest Ease of Generic Substitution	700	35.8%	534	29.0%
Higher Ease of Generic Substitution	667	34.1%	649	35.3%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	359	18.4%	351	19.1%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
1-30	390	100.0%	234	100.0%
Highest Ease of Generic Substitution	149	38.2%	84	35.9%
Higher Ease of Generic Substitution	134	34.4%	74	31.6%
Lower Ease of Generic Substitution	41	10.5%	33	14.1%
Lowest Ease of Generic Substitution	66	16.9%	43	18.4%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	369	100.0%	384	100.0%
Highest Ease of Generic Substitution	110	29.8%	91	23.7%
Higher Ease of Generic Substitution	130	35.2%	168	43.8%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	*****	*****	57	14.8%
Lowest Ease of Generic Substitution	82	22.2%	68	17.7%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
61-90	272	100.0%	287	100.0%
Highest Ease of Generic Substitution	111	40.8%	88	30.7%
Higher Ease of Generic Substitution	85	31.3%	93	32.4%
Lower Ease of Generic Substitution	*****	*****	48	16.7%
Lowest Ease of Generic Substitution	48	17.6%	58	20.2%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
91+	923	100.0%	934	100.0%
Highest Ease of Generic Substitution	330	35.8%	271	29.0%
Higher Ease of Generic Substitution	318	34.5%	314	33.6%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	163	17.7%	182	19.5%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
Switch:	**Advair Diskus to Wixela**		**Advair Diskus to Symbicort**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with Prior COPD)**		**Advair Diskus to Symbicort to Advair Diskus (Incident with Prior COPD)**	
Number of Patients	2,692		1,136	
Days from Index				
Overall	2,694	100.0%	1,136	100.0%
Highest Ease of Generic Substitution	894	33.2%	384	33.8%
Higher Ease of Generic Substitution	974	36.2%	407	35.8%
Lower Ease of Generic Substitution	*****	*****	169	14.9%
Lowest Ease of Generic Substitution	437	16.2%	176	15.5%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
1-30	402	100.0%	282	100.0%
Highest Ease of Generic Substitution	127	31.6%	105	37.2%
Higher Ease of Generic Substitution	161	40.0%	85	30.1%
Lower Ease of Generic Substitution	58	14.4%	45	16.0%
Lowest Ease of Generic Substitution	56	13.9%	47	16.7%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
31-60	410	100.0%	214	100.0%
Highest Ease of Generic Substitution	129	31.5%	72	33.6%
Higher Ease of Generic Substitution	152	37.1%	68	31.8%
Lower Ease of Generic Substitution	*****	*****	33	15.4%
Lowest Ease of Generic Substitution	62	15.1%	41	19.2%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
61-90	469	100.0%	171	100.0%
Highest Ease of Generic Substitution	159	33.9%	55	32.2%
Higher Ease of Generic Substitution	167	35.6%	68	39.8%
Lower Ease of Generic Substitution	*****	*****	24	14.0%
Lowest Ease of Generic Substitution	84	17.9%	24	14.0%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
91+	1,413	0.0%	469	100.0%
Highest Ease of Generic Substitution	479	33.9%	152	32.4%
Higher Ease of Generic Substitution	494	35.0%	186	39.7%
Lower Ease of Generic Substitution	*****	*****	67	14.3%
Lowest Ease of Generic Substitution	235	16.6%	64	13.6%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Switch:	**Advair Diskus to Advair AG**		**Advair Diskus to Wixela**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with Prior COPD)**		**Advair Diskus to Wixela to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	4,182		6,024	
Days from Index				
Overall	4,192	100.0%	6,040	100.0%
Highest Ease of Generic Substitution	1,211	28.9%	1,939	32.1%
Higher Ease of Generic Substitution	1,464	34.9%	2,176	36.0%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	795	19.0%	1,022	16.9%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
1-30	383	100.0%	687	100.0%
Highest Ease of Generic Substitution	129	33.7%	218	31.7%
Higher Ease of Generic Substitution	140	36.6%	255	37.1%
Lower Ease of Generic Substitution	49	12.8%	103	15.0%
Lowest Ease of Generic Substitution	65	17.0%	111	16.2%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	688	100.0%	761	100.0%
Highest Ease of Generic Substitution	184	26.7%	229	30.1%
Higher Ease of Generic Substitution	275	40.0%	282	37.1%
Lower Ease of Generic Substitution	112	16.3%	*****	*****
Lowest Ease of Generic Substitution	117	17.0%	126	16.6%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
61-90	663	100.0%	952	100.0%
Highest Ease of Generic Substitution	200	30.2%	313	32.9%
Higher Ease of Generic Substitution	216	32.6%	349	36.7%
Lower Ease of Generic Substitution	110	16.6%	*****	*****
Lowest Ease of Generic Substitution	137	20.7%	167	17.5%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
91+	2,458	0.0%	3,640	0.0%
Highest Ease of Generic Substitution	698	28.4%	1,179	32.4%
Higher Ease of Generic Substitution	833	33.9%	1,290	35.4%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	476	19.4%	618	17.0%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
Switch:	**Advair Diskus to Symbicort**		**Advair Diskus to Breo Ellipta**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with Prior COPD)**		**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with Prior COPD)**	
Number of Patients	2,109		1,908	
Days from Index				
Overall	2,114	100.0%	1,914	100.0%
Highest Ease of Generic Substitution	713	33.7%	707	36.9%
Higher Ease of Generic Substitution	774	36.6%	602	31.5%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	311	14.7%	279	14.6%
Unknown Ease of Generic Substitution	*****	*****	*****	*****
1-30	442	100.0%	334	100.0%
Highest Ease of Generic Substitution	157	35.5%	134	40.1%
Higher Ease of Generic Substitution	148	33.5%	100	29.9%
Lower Ease of Generic Substitution	62	14.0%	47	14.1%
Lowest Ease of Generic Substitution	75	17.0%	53	15.9%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	356	100.0%	344	100.0%
Highest Ease of Generic Substitution	120	33.7%	132	38.4%
Higher Ease of Generic Substitution	122	34.3%	99	28.8%
Lower Ease of Generic Substitution	*****	*****	59	17.2%
Lowest Ease of Generic Substitution	61	17.1%	54	15.7%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
61-90	306	100.0%	270	100.0%
Highest Ease of Generic Substitution	94	30.7%	90	33.3%
Higher Ease of Generic Substitution	117	38.2%	94	34.8%
Lower Ease of Generic Substitution	*****	*****	49	18.1%
Lowest Ease of Generic Substitution	42	13.7%	37	13.7%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%

Table 3.1b. Frequency Distribution of Time to First Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
91+	1,010	0.0%	966	100.0%
Highest Ease of Generic Substitution	342	33.9%	351	36.3%
Higher Ease of Generic Substitution	387	38.3%	309	32.0%
Lower Ease of Generic Substitution	148	14.7%	*****	*****
Lowest Ease of Generic Substitution	133	13.2%	135	14.0%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Switch:	**Advair AG to Advair Diskus**		**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Incident with prior Asthma)**		**Advair Diskus to Wixela to Advair Diskus (Incident with prior Asthma)**	
Number of Patients	131		256	
Days from Index				
Overall	131	100.0%	256	100.0%
Highest Ease of Generic Substitution	*****	*****	77	30.1%
Higher Ease of Generic Substitution	*****	*****	*****	*****
Lower Ease of Generic Substitution	19	14.5%	*****	*****
Lowest Ease of Generic Substitution	23	17.6%	62	24.2%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
1-30	*****	*****	17	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	*****	*****
Lower Ease of Generic Substitution	0	0.0%	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	17	100.0%	33	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	12	36.4%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	39	100.0%	57	100.0%
Highest Ease of Generic Substitution	13	33.3%	20	35.1%
Higher Ease of Generic Substitution	13	33.3%	16	28.1%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	*****	*****

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
91+	68	100.0%	149	100.0%
Highest Ease of Generic Substitution	16	23.5%	43	28.9%
Higher Ease of Generic Substitution	31	45.6%	45	30.2%
Lower Ease of Generic Substitution	*****	*****	20	13.4%
Lowest Ease of Generic Substitution	*****	*****	41	27.5%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
Switch:	**Symbicort to Advair Diskus**		**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Incident with prior Asthma)**		**Advair Diskus to Advair AG to Advair Diskus (Prevalent with prior Asthma)**	
Number of Patients	38		370	
Days from Index				
Overall	38	100.0%	371	100.0%
Highest Ease of Generic Substitution	19	50.0%	*****	*****
Higher Ease of Generic Substitution	*****	*****	137	36.9%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
1-30	0	0.0%	14	100.0%
Highest Ease of Generic Substitution	0	0.0%	*****	*****
Higher Ease of Generic Substitution	0	0.0%	*****	*****
Lower Ease of Generic Substitution	0	0.0%	0	0.0%
Lowest Ease of Generic Substitution	0	0.0%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	*****	*****	71	100.0%
Highest Ease of Generic Substitution	*****	*****	22	31.0%
Higher Ease of Generic Substitution	0	0.0%	26	36.6%
Lower Ease of Generic Substitution	0	0.0%	12	16.9%
Lowest Ease of Generic Substitution	0	0.0%	11	15.5%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	*****	*****	104	100.0%
Highest Ease of Generic Substitution	*****	*****	32	30.8%
Higher Ease of Generic Substitution	0	0.0%	31	29.8%

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	*****	*****	23	22.1%
Lowest Ease of Generic Substitution	0	0.0%	18	17.3%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
91+	29	100.0%	182	100.0%
Highest Ease of Generic Substitution	*****	*****	44	24.2%
Higher Ease of Generic Substitution	12	41.4%	76	41.8%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	35	19.2%
Unknown Ease of Generic Substitution	0	0.0%	*****	*****
Switch:	**Wixela to Advair Diskus**		**Symbicort to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Prevalent with prior Asthma)**		**Advair Diskus to Symbicort to Advair Diskus (Prevalent with prior Asthma)**	
Number of Patients	732		88	
Days from Index				
Overall	732	100.0%	88	100.0%
Highest Ease of Generic Substitution	238	32.5%	31	35.2%
Higher Ease of Generic Substitution	268	36.6%	*****	*****
Lower Ease of Generic Substitution	*****	*****	12	13.6%
Lowest Ease of Generic Substitution	142	19.4%	16	18.2%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
1-30	49	100.0%	*****	*****
Highest Ease of Generic Substitution	19	38.8%	0	0.0%
Higher Ease of Generic Substitution	17	34.7%	0	0.0%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	100	100.0%	*****	*****
Highest Ease of Generic Substitution	35	35.0%	*****	*****
Higher Ease of Generic Substitution	36	36.0%	*****	*****
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
61-90	171	100.0%	15	100.0%
Highest Ease of Generic Substitution	48	28.1%	*****	*****
Higher Ease of Generic Substitution	66	38.6%	*****	*****
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	32	18.7%	*****	*****
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
91+	412	100.0%	62	100.0%
Highest Ease of Generic Substitution	136	33.0%	17	27.4%
Higher Ease of Generic Substitution	149	36.2%	27	43.5%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	83	20.1%	*****	*****
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
Switch:	**Breo Ellipta to Advair Diskus**		**Advair AG to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with prior Asthma)**		**Advair Diskus to Advair AG to Advair Diskus (Incident with prior COPD)**	
Number of Patients	89		180	
Days from Index				
Overall	89	100.0%	180	100.0%
Highest Ease of Generic Substitution	*****	*****	66	36.7%
Higher Ease of Generic Substitution	37	41.6%	58	32.2%
Lower Ease of Generic Substitution	*****	*****	27	15.0%
Lowest Ease of Generic Substitution	14	15.7%	29	16.1%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
1-30	*****	*****	12	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	0	0.0%	*****	*****
Lower Ease of Generic Substitution	0	0.0%	*****	*****
Lowest Ease of Generic Substitution	0	0.0%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	*****	*****	31	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	*****	*****

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	0	0.0%	*****	*****
Lowest Ease of Generic Substitution	0	0.0%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	16	100.0%	52	100.0%
Highest Ease of Generic Substitution	*****	*****	18	34.6%
Higher Ease of Generic Substitution	*****	*****	18	34.6%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
91+	64	100.0%	85	100.0%
Highest Ease of Generic Substitution	20	31.3%	31	36.5%
Higher Ease of Generic Substitution	26	40.6%	29	34.1%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
Switch:	**Wixela to Advair Diskus**		**Symbicort to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Wixela to Advair Diskus (Incident with prior COPD)**		**Advair Diskus to Symbicort to Advair Diskus (Incident with prior COPD)**	
Number of Patients	268		35	
Days from Index				
Overall	268	100.0%	35	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	12	34.3%
Lower Ease of Generic Substitution	34	12.7%	*****	*****
Lowest Ease of Generic Substitution	48	17.9%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
1-30	20	100.0%	0	0.0%
Highest Ease of Generic Substitution	*****	*****	0	0.0%
Higher Ease of Generic Substitution	*****	*****	0	0.0%
Lower Ease of Generic Substitution	*****	*****	0	0.0%
Lowest Ease of Generic Substitution	*****	*****	0	0.0%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
31-60	45	100.0%	*****	*****
Highest Ease of Generic Substitution	16	35.6%	*****	*****
Higher Ease of Generic Substitution	14	31.1%	0	0.0%
Lower Ease of Generic Substitution	*****	*****	0	0.0%
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	76	100.0%	*****	*****
Highest Ease of Generic Substitution	27	35.5%	*****	*****
Higher Ease of Generic Substitution	29	38.2%	*****	*****
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	0	0.0%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
91+	127	100.0%	27	100.0%
Highest Ease of Generic Substitution	43	33.9%	*****	*****
Higher Ease of Generic Substitution	41	32.3%	*****	*****
Lower Ease of Generic Substitution	18	14.2%	*****	*****
Lowest Ease of Generic Substitution	25	19.7%	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
Switch:	**Advair AG to Advair Diskus**		**Wixela to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Advair AG to Advair Diskus (Prevalent with prior COPD)**		**Advair Diskus to Wixela to Advair Diskus (Prevalent with prior COPD)**	
Number of Patients	464		685	
Days from Index				
Overall	464	100.0%	685	100.0%
Highest Ease of Generic Substitution	160	34.5%	*****	*****
Higher Ease of Generic Substitution	141	30.4%	241	35.2%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
1-30	23	100.0%	36	100.0%
Highest Ease of Generic Substitution	11	47.8%	*****	*****
Higher Ease of Generic Substitution	*****	*****	16	44.4%

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	82	100.0%	108	100.0%
Highest Ease of Generic Substitution	27	32.9%	36	33.3%
Higher Ease of Generic Substitution	23	28.0%	36	33.3%
Lower Ease of Generic Substitution	15	18.3%	21	19.4%
Lowest Ease of Generic Substitution	17	20.7%	15	13.9%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	129	100.0%	191	100.0%
Highest Ease of Generic Substitution	40	31.0%	64	33.5%
Higher Ease of Generic Substitution	41	31.8%	65	34.0%
Lower Ease of Generic Substitution	*****	*****	30	15.7%
Lowest Ease of Generic Substitution	24	18.6%	32	16.8%
Unknown Ease of Generic Substitution	*****	*****	0	0.0%
91+	230	100.0%	350	100.0%
Highest Ease of Generic Substitution	82	35.7%	106	30.3%
Higher Ease of Generic Substitution	72	31.3%	124	35.4%
Lower Ease of Generic Substitution	36	15.7%	41	11.7%
Lowest Ease of Generic Substitution	40	17.4%	79	22.6%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
Switch:	**Symbicort to Advair Diskus**		**Breo Ellipta to Advair Diskus**	
Switch Pattern:	**Advair Diskus to Symbicort to Advair Diskus (Prevalent with prior COPD)**		**Advair Diskus to Breo Ellipta to Advair Diskus (Prevalent with prior COPD)**	
Number of Patients	89		89	
Days from Index				
Overall	89	100.0%	89	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	*****	*****
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%

Table 3.2b. Frequency Distribution of Time to Second Switch (in Days), by Ease of Generic Substitution at State Level in Patients with Prior Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020

	Episodes (Number)	Episodes (Percent)	Episodes (Number)	Episodes (Percent)
1-30	0	0.0%	0	0.0%
Highest Ease of Generic Substitution	0	0.0%	0	0.0%
Higher Ease of Generic Substitution	0	0.0%	0	0.0%
Lower Ease of Generic Substitution	0	0.0%	0	0.0%
Lowest Ease of Generic Substitution	0	0.0%	0	0.0%
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
31-60	*****	*****	*****	*****
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	*****	*****
Lower Ease of Generic Substitution	*****	*****	0	0.0%
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
61-90	20	100.0%	17	100.0%
Highest Ease of Generic Substitution	*****	*****	*****	*****
Higher Ease of Generic Substitution	*****	*****	*****	*****
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%
91+	61	100.0%	63	100.0%
Highest Ease of Generic Substitution	17	27.9%	18	28.6%
Higher Ease of Generic Substitution	23	37.7%	28	44.4%
Lower Ease of Generic Substitution	*****	*****	*****	*****
Lowest Ease of Generic Substitution	*****	*****	*****	*****
Unknown Ease of Generic Substitution	0	0.0%	0	0.0%

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.

Figure 1.1. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Advair Diskus to Advair AG

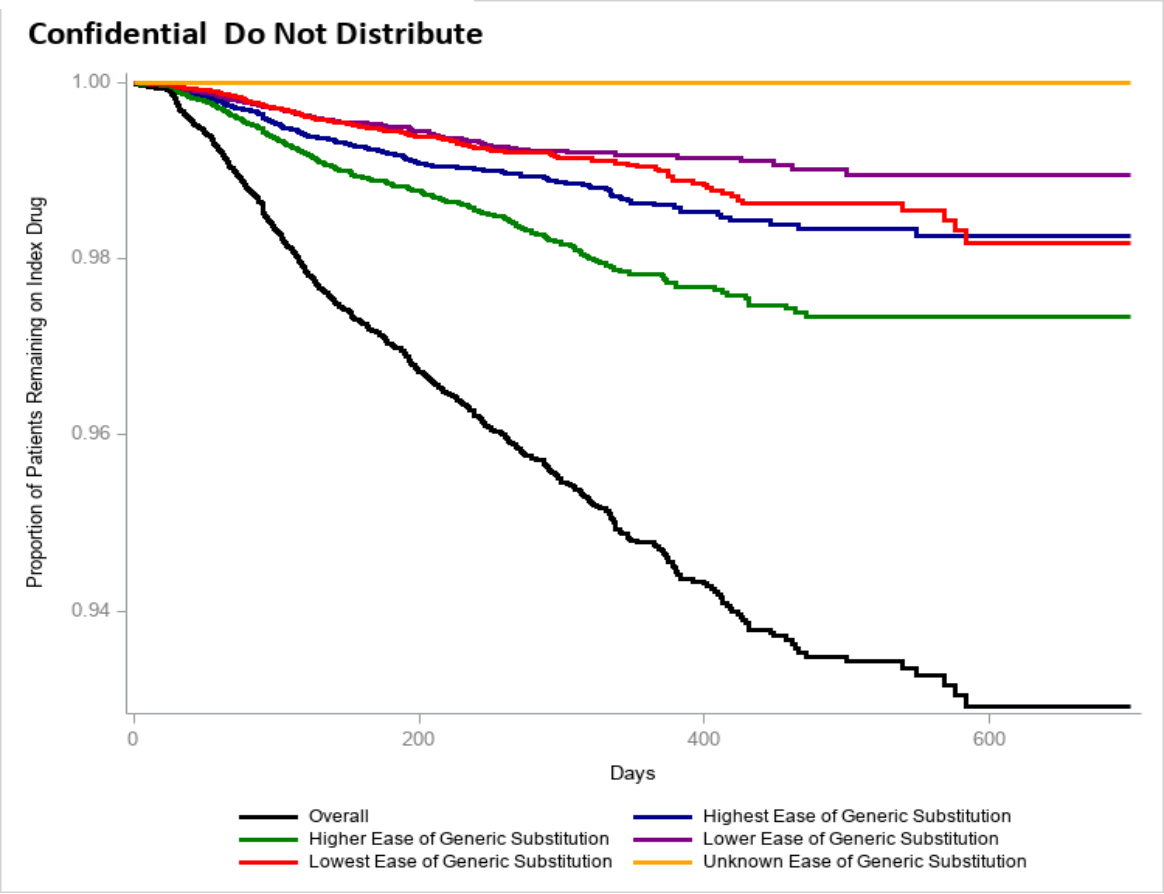


Figure 1.2. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Advair Diskus to Wixela

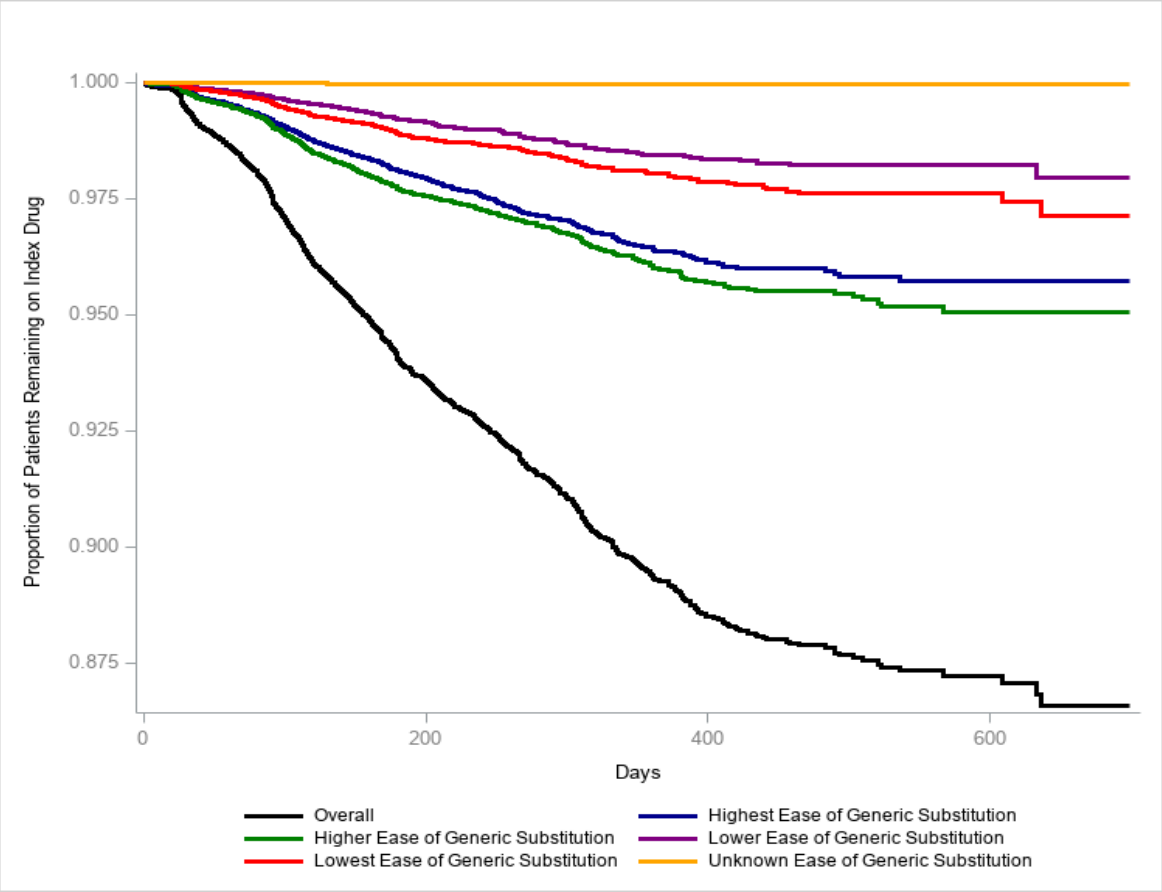


Figure 1.3. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Advair Diskus to Symbicort

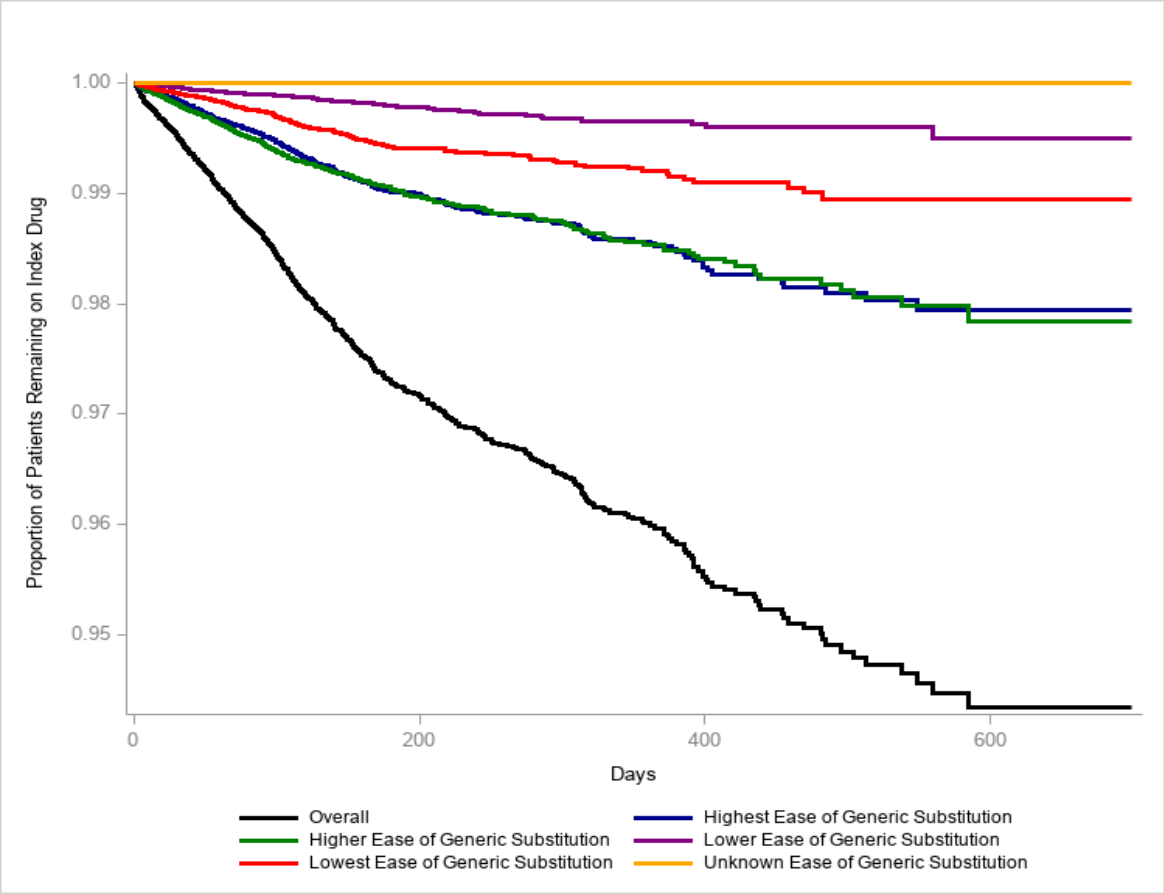


Figure 1.4. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Advair Diskus to Advair AG

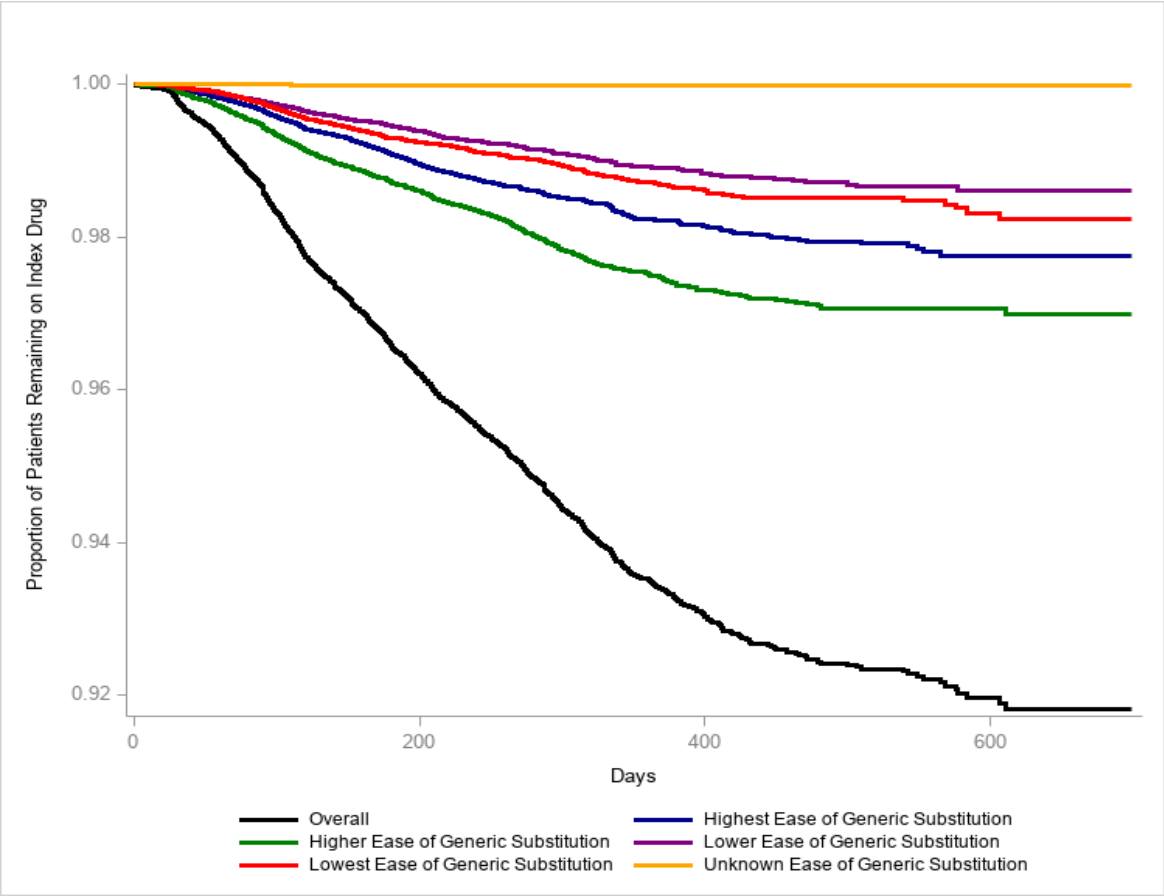


Figure 1.5. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Advair Diskus to Wixela

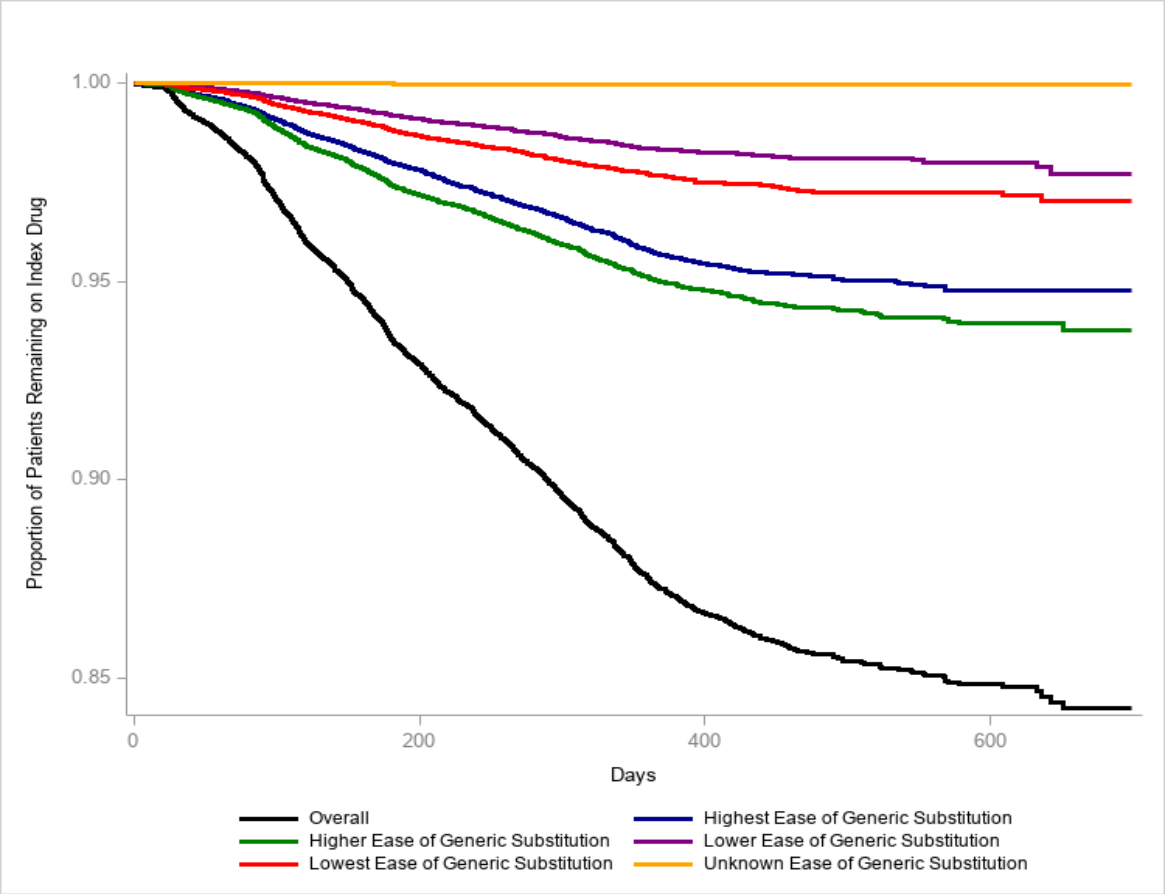


Figure 1.6. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Advair Diskus to Symbicort

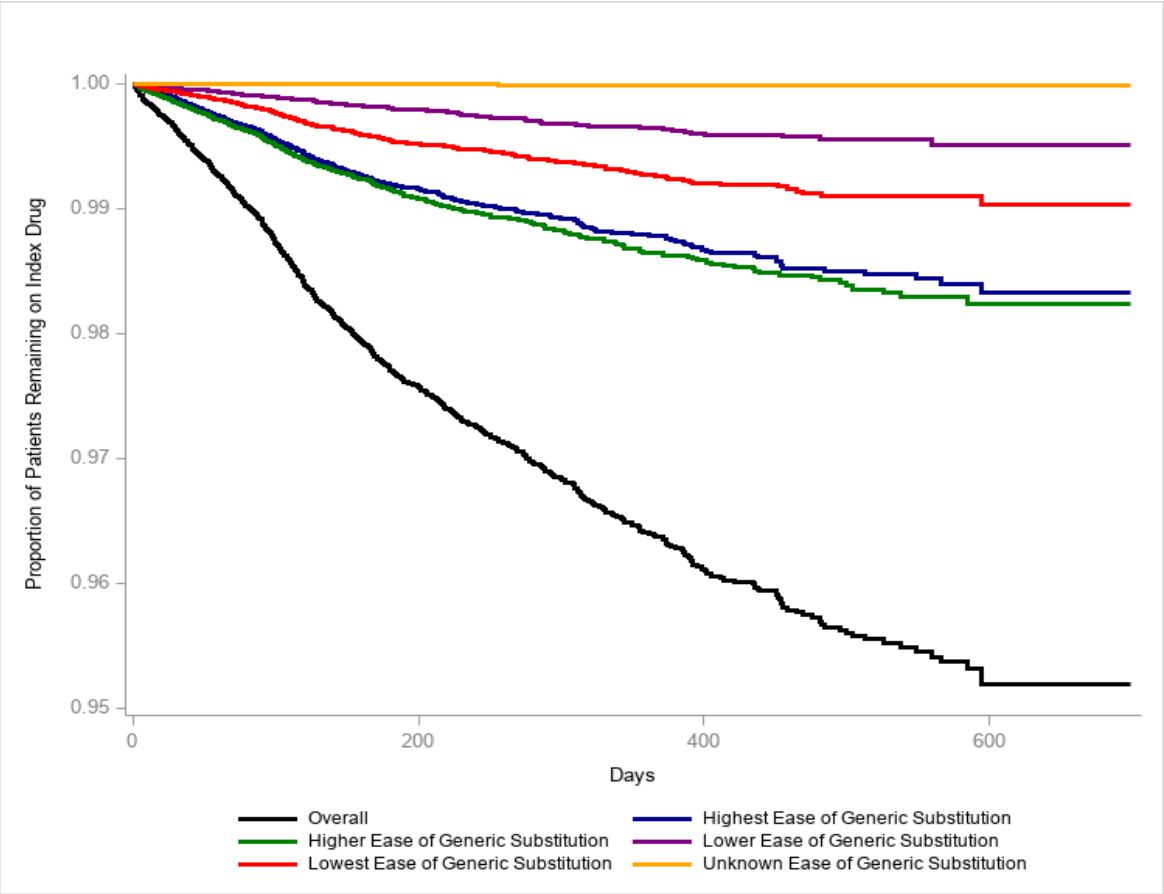


Figure 1.7. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Advair Diskus to Breo Ellipta

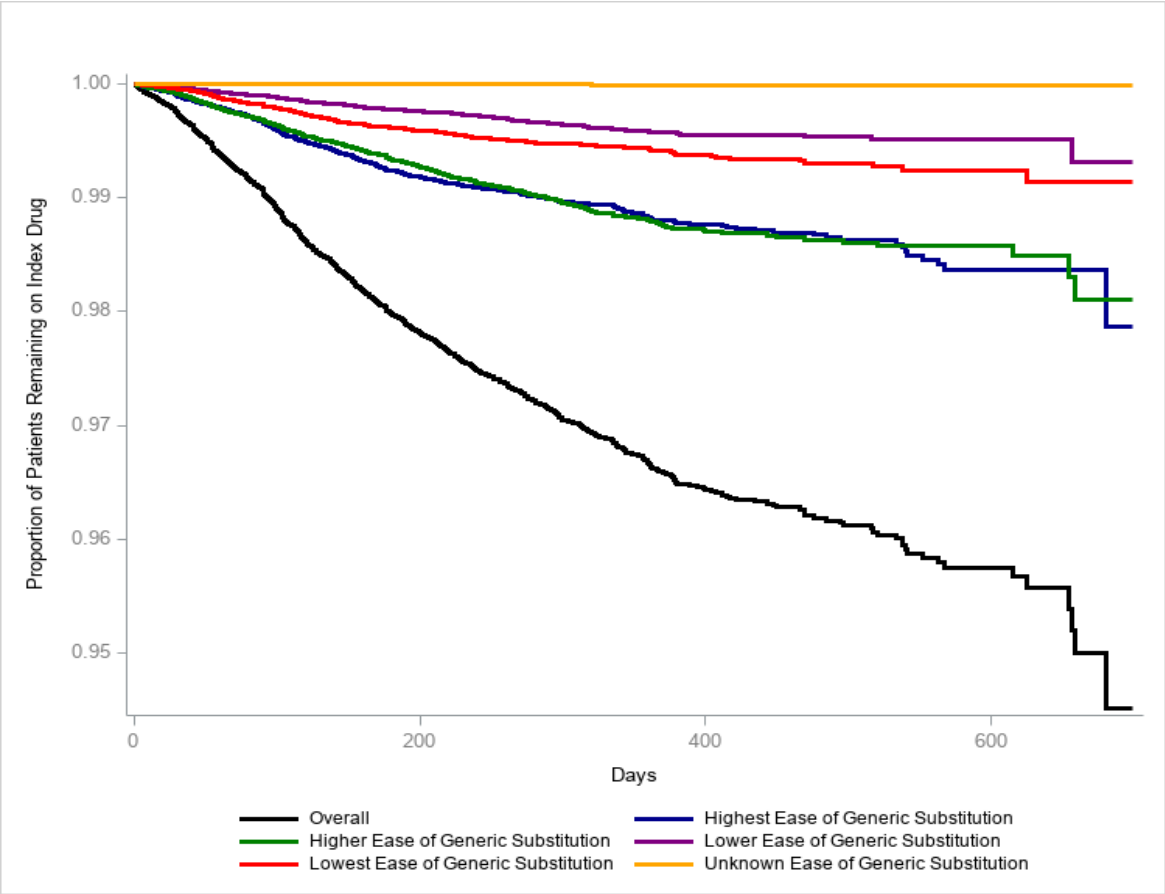


Figure 1.8. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Advair Diskus to Advair AG

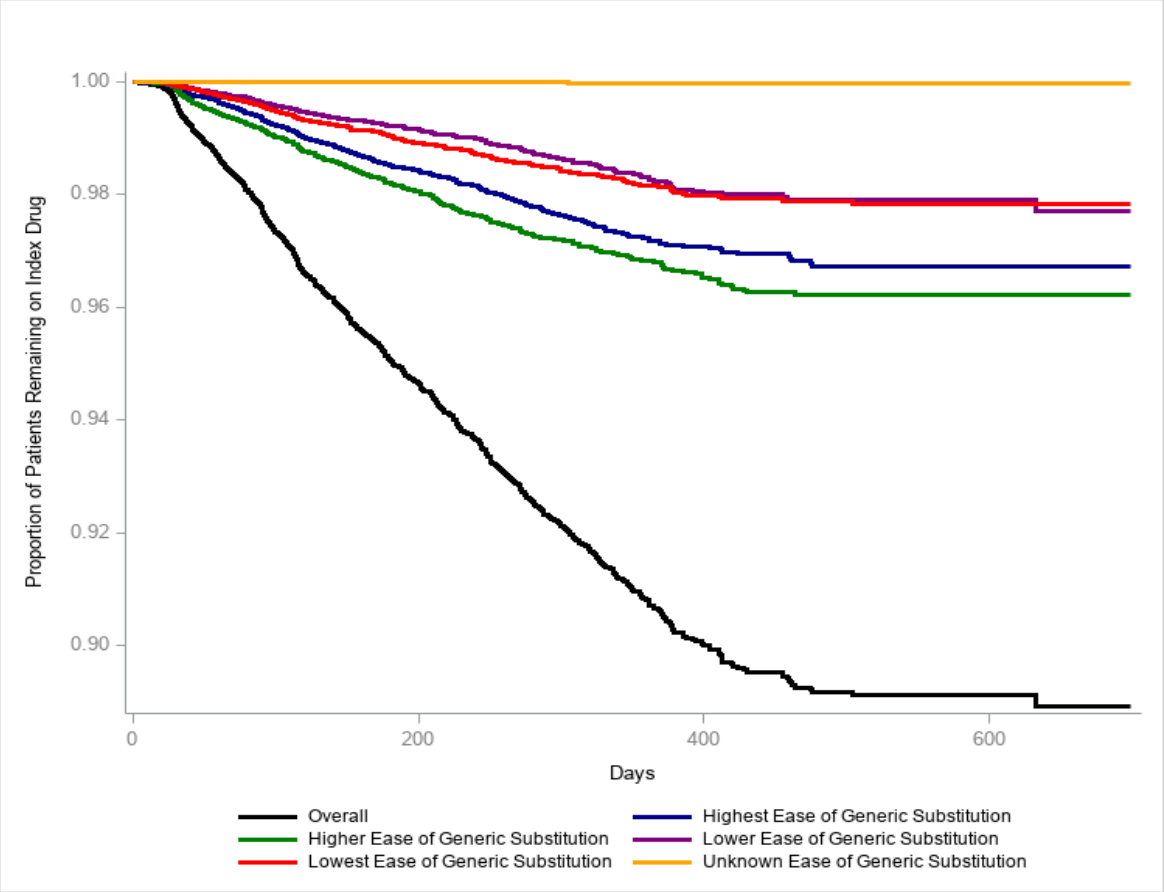


Figure 1.9. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Advair Diskus to Wixela

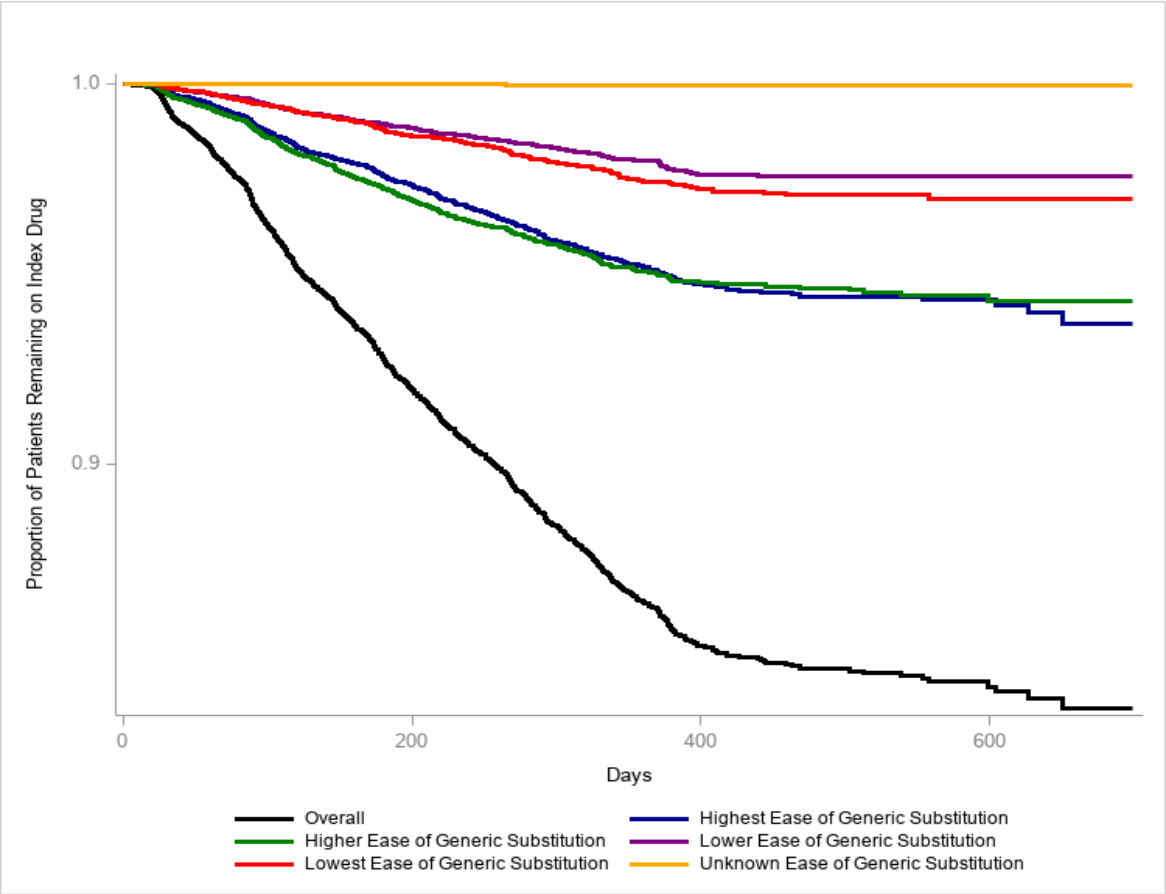


Figure 1.10. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Advair Diskus to Symbicort

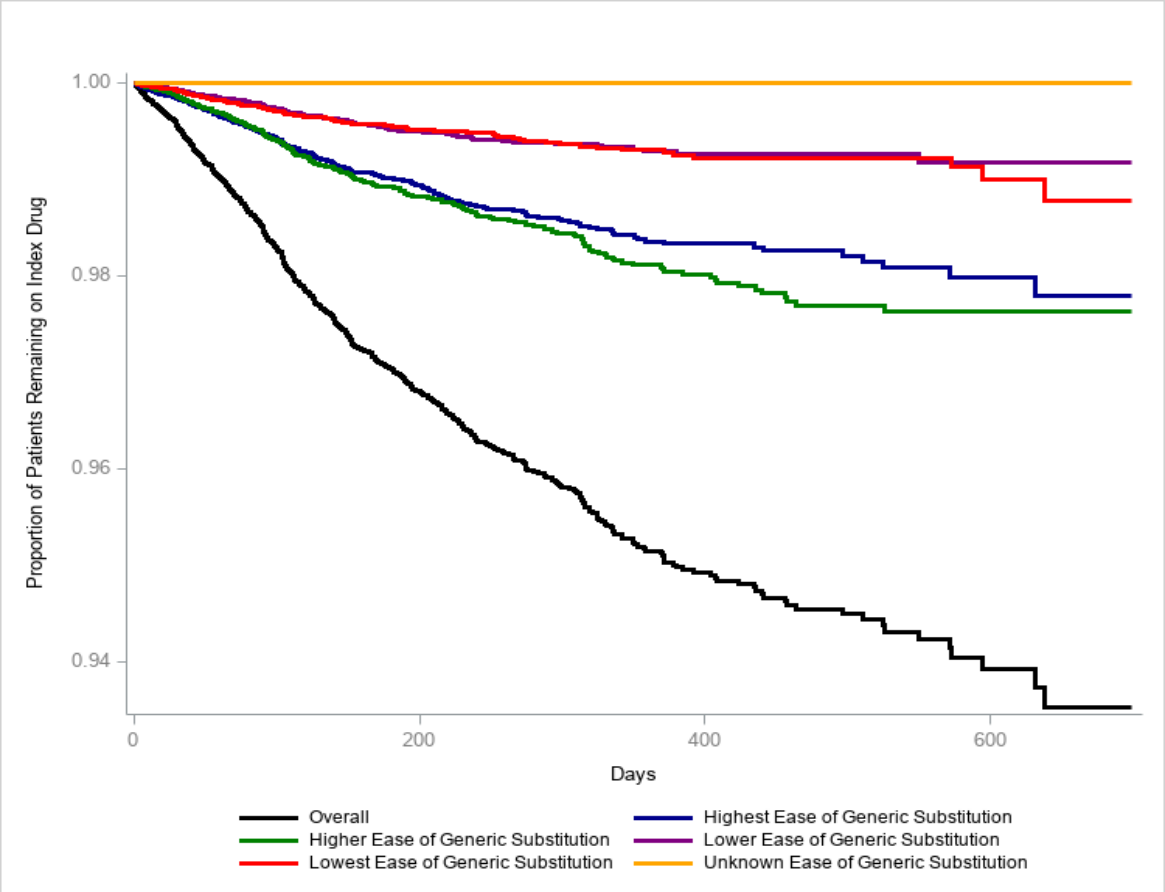


Figure 1.11. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Advair Diskus to Advair AG

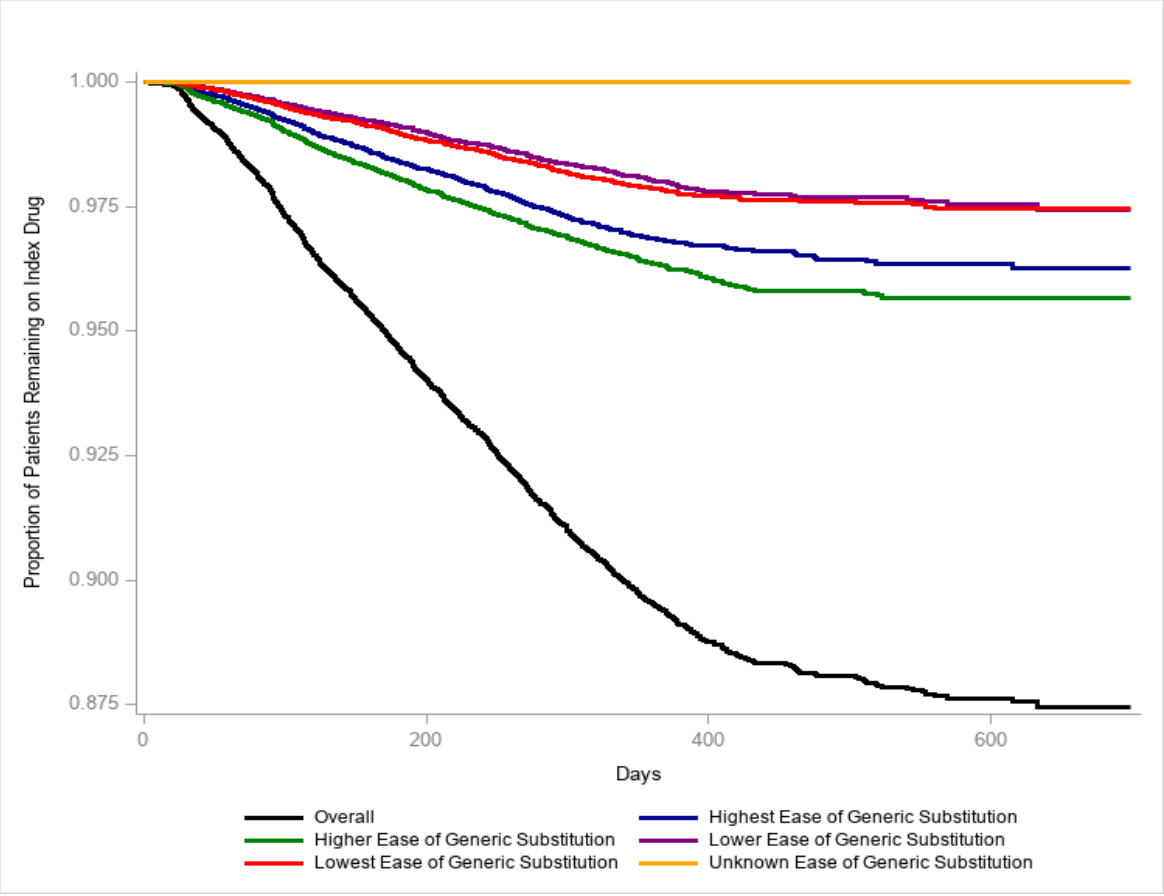


Figure 1.12. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Advair Diskus to Wixela

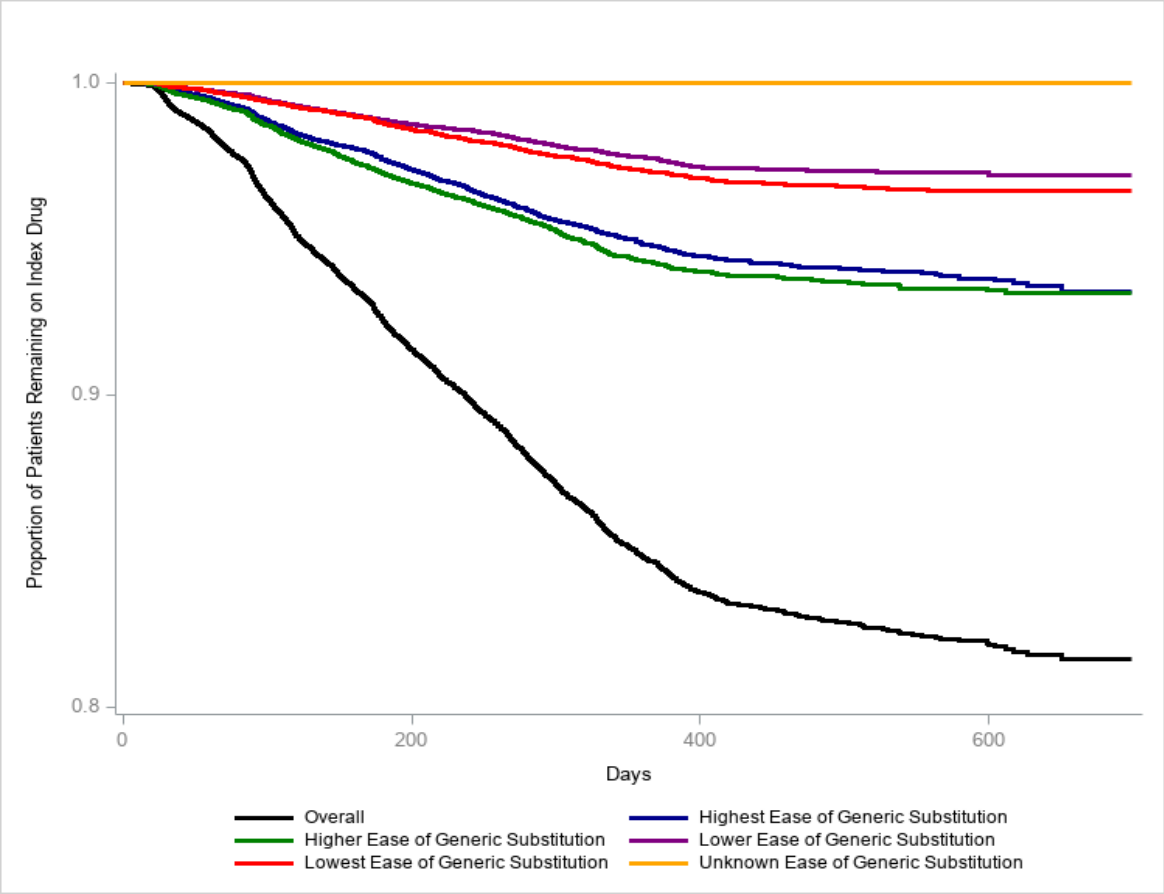


Figure 1.13. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Advair Diskus to Symbicort

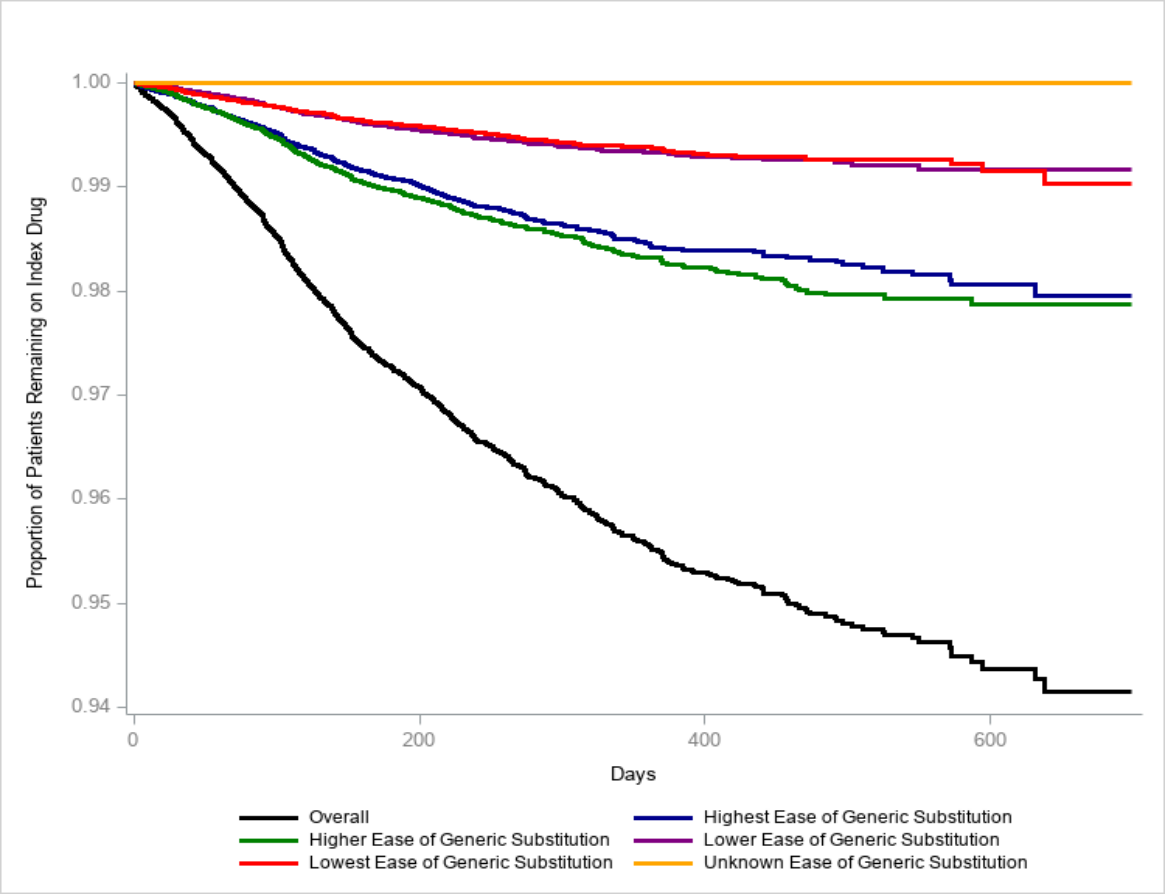


Figure 1.14. Kaplan Meier curve for time to First Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Advair Diskus to Breo Ellipta

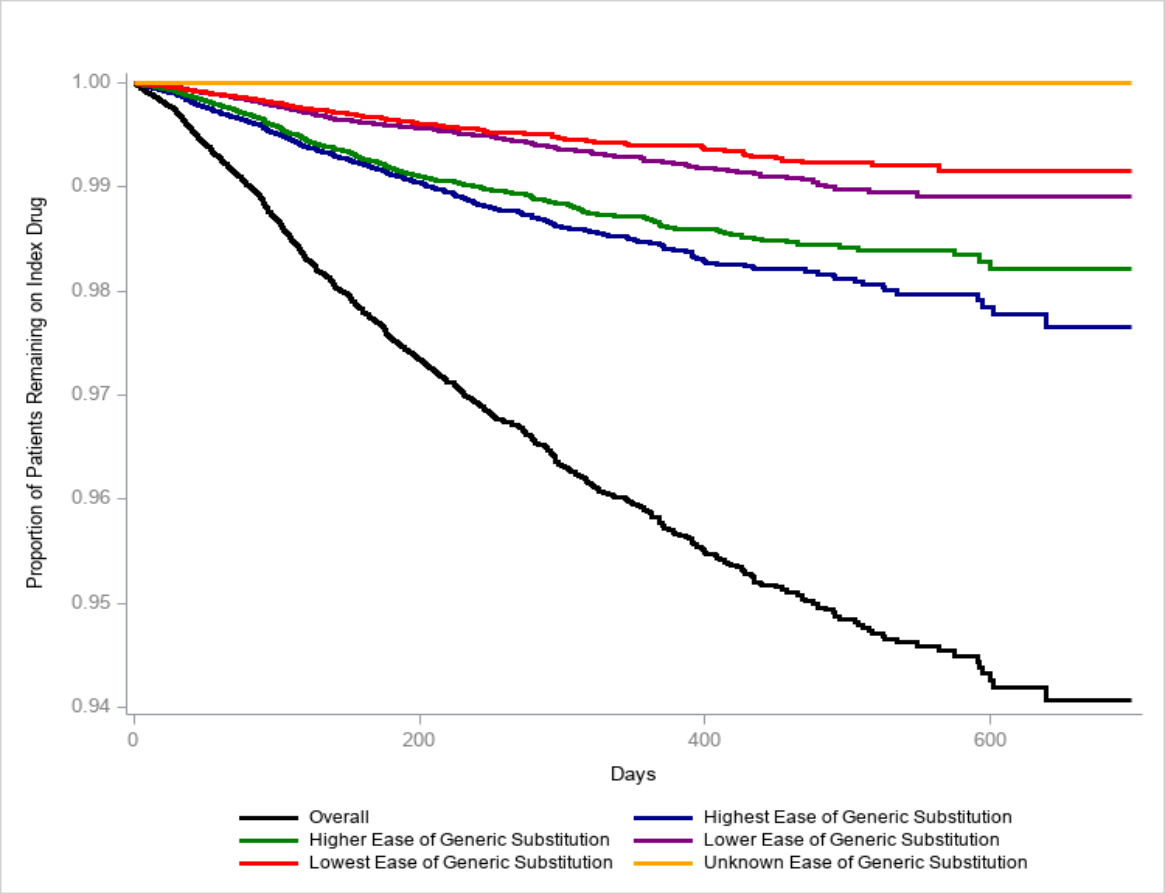


Figure 2.1. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Advair AG to Advair Diskus

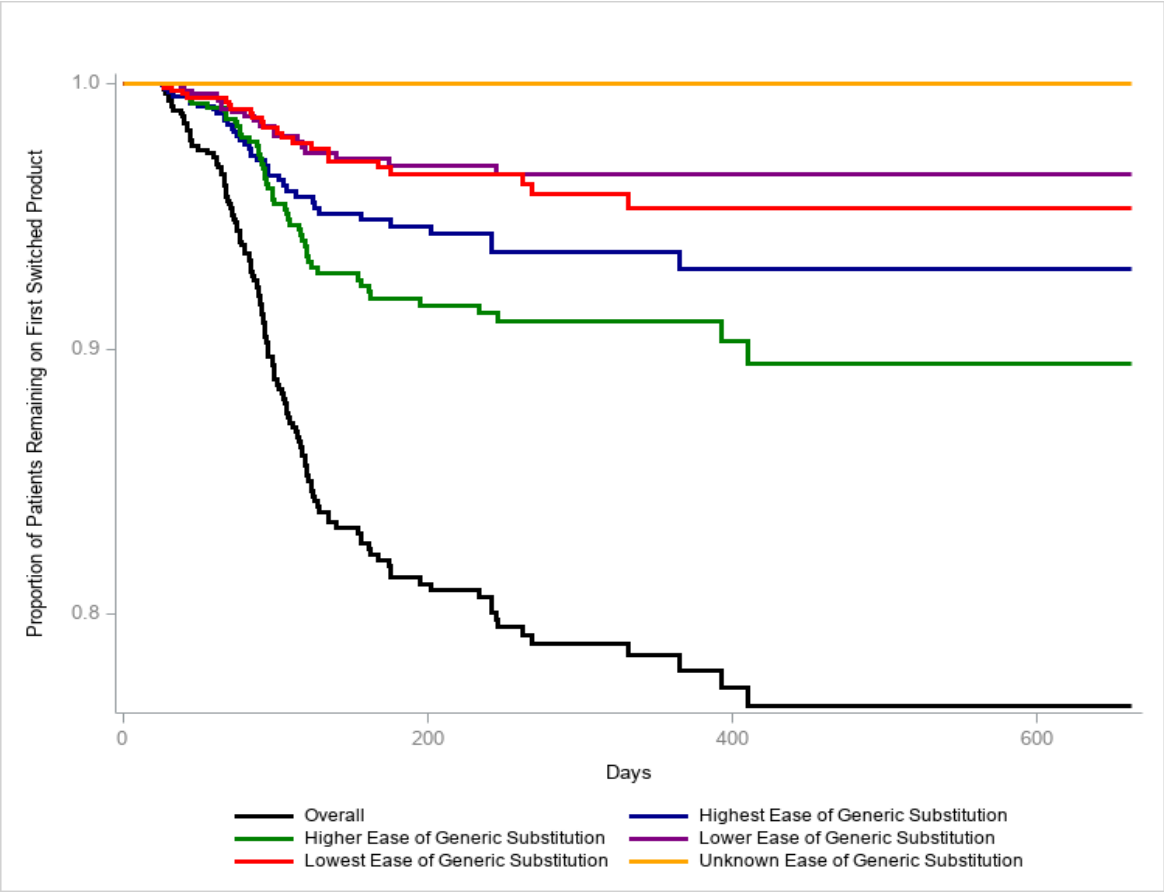


Figure 2.2. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Wixela to Advair Diskus

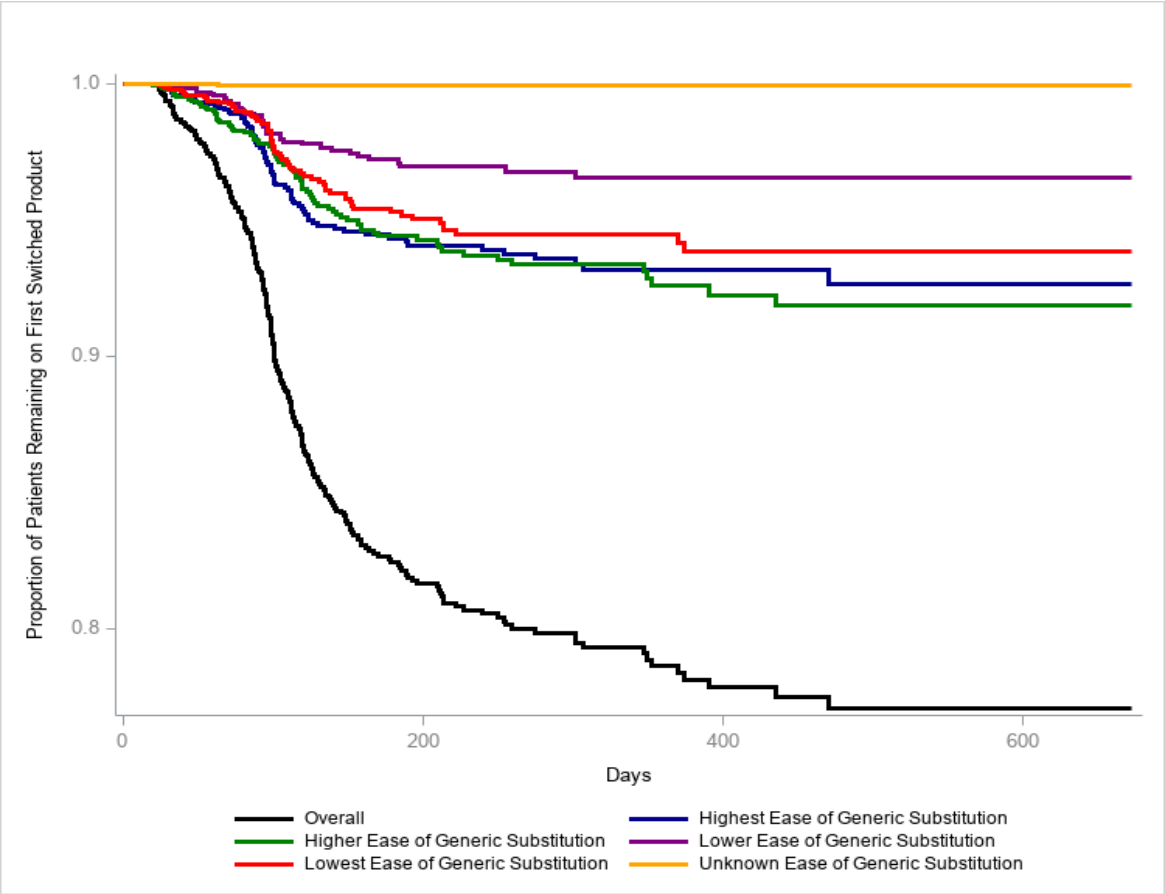


Figure 2.3. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with Asthma), Symbicort to Advair Diskus

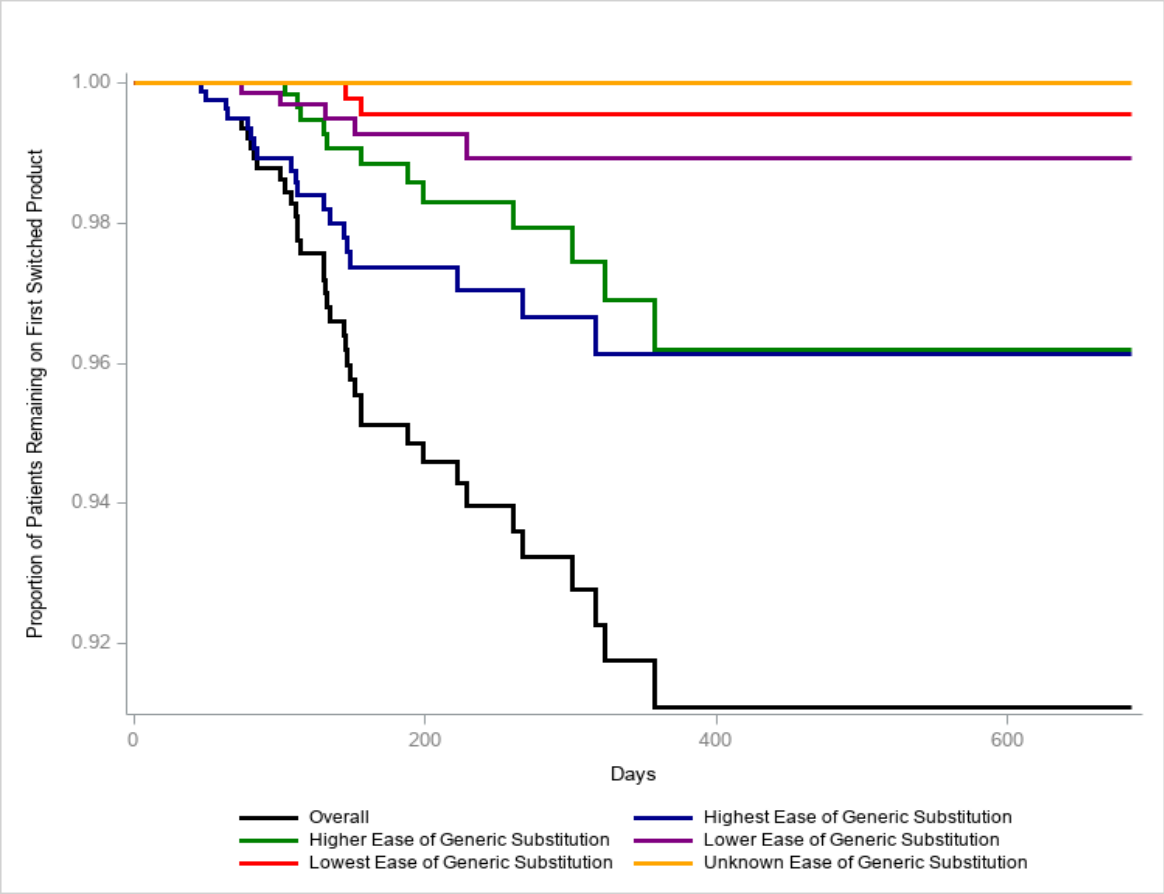


Figure 2.4. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Advair AG to Advair Diskus

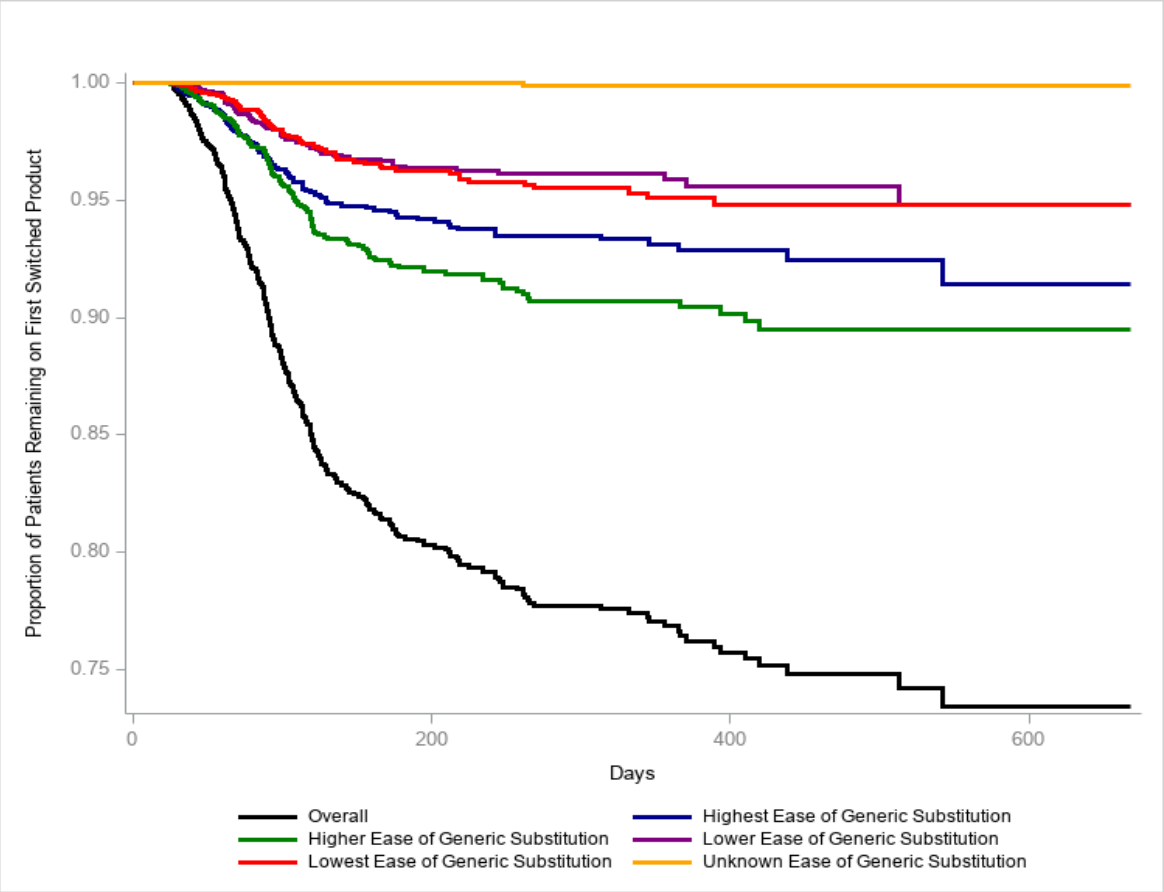


Figure 2.5. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Wixela to Advair Diskus

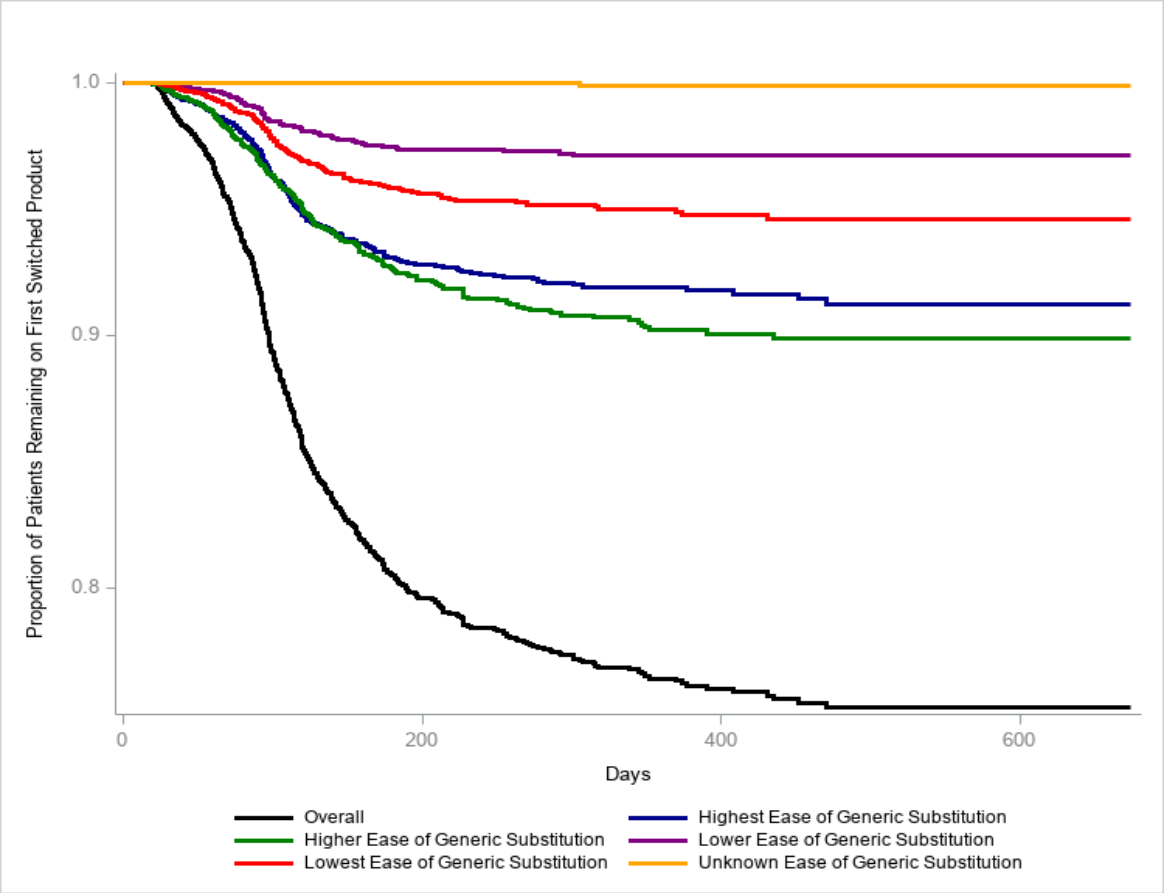


Figure 2.6. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Symbicort to Advair Diskus

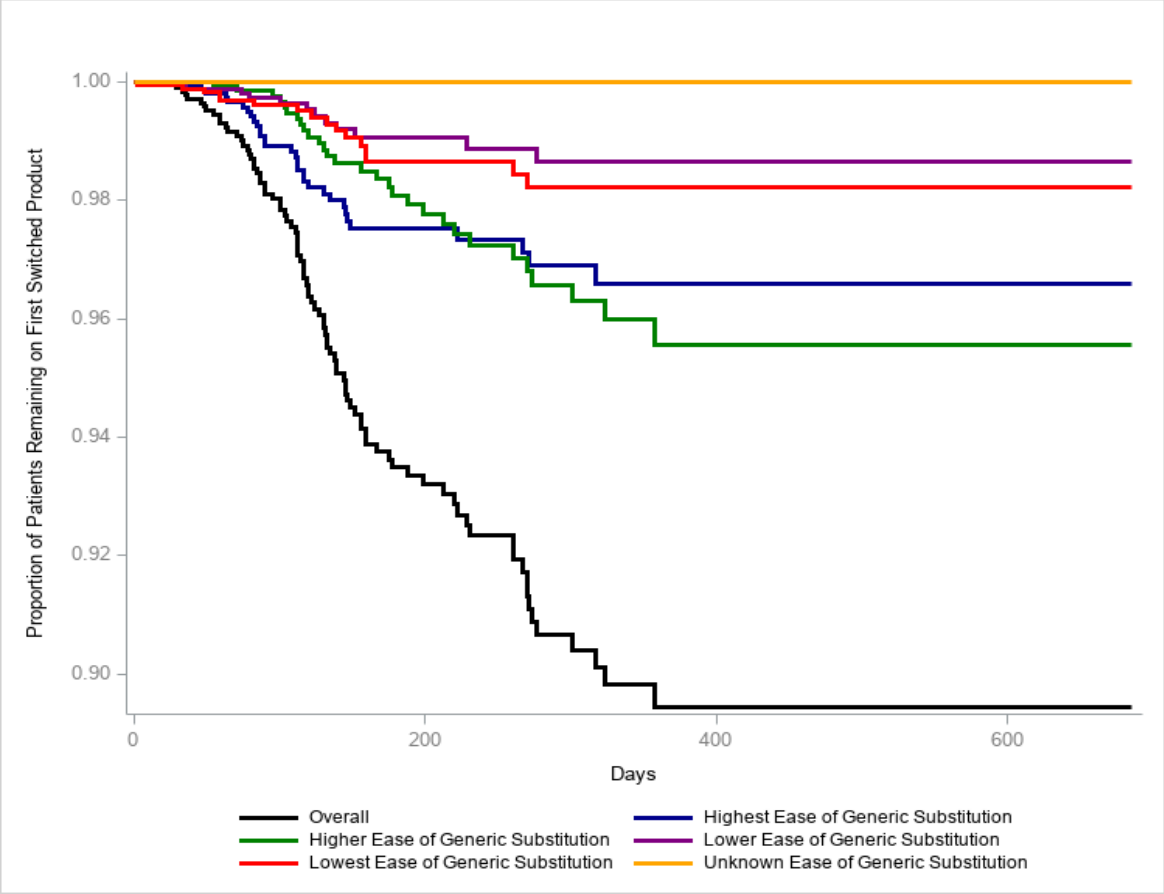


Figure 2.7. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with Asthma), Breo Ellipta to Advair Diskus

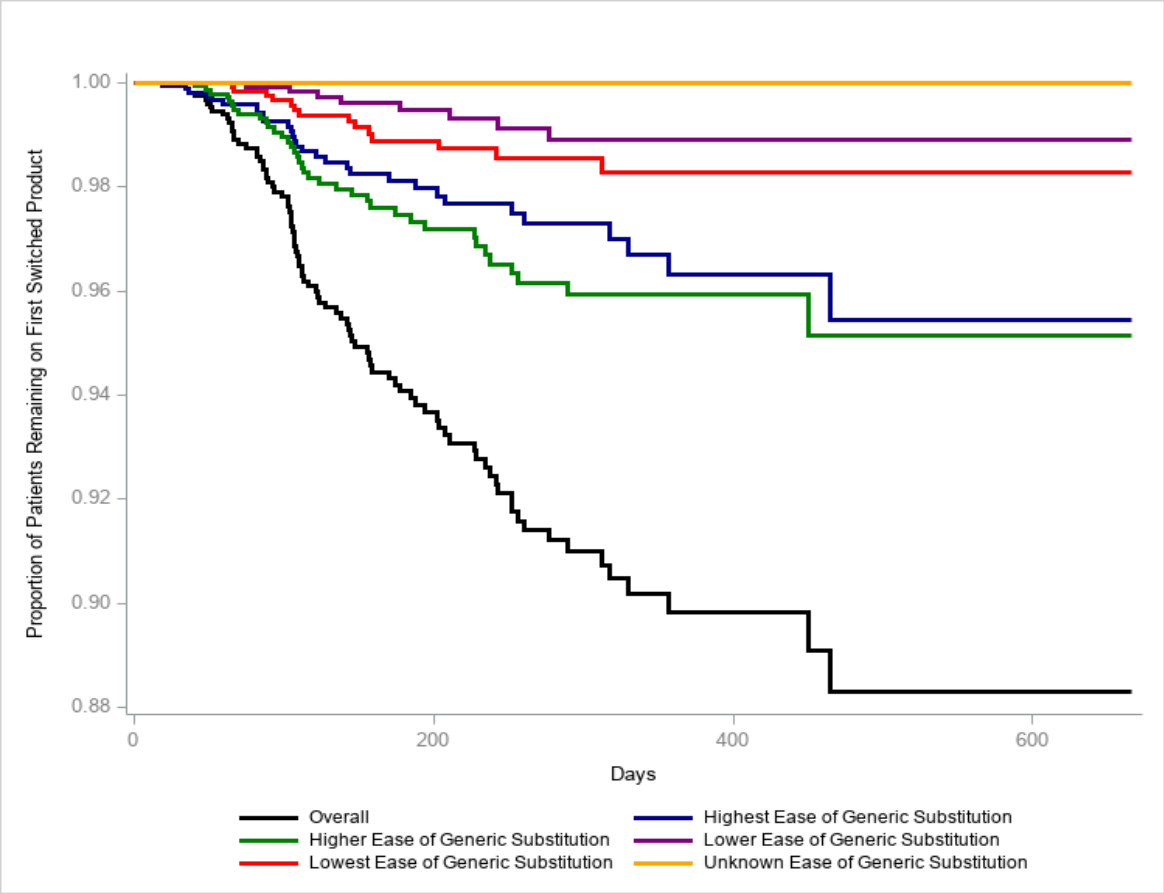


Figure 2.8. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Advair AG to Advair Diskus

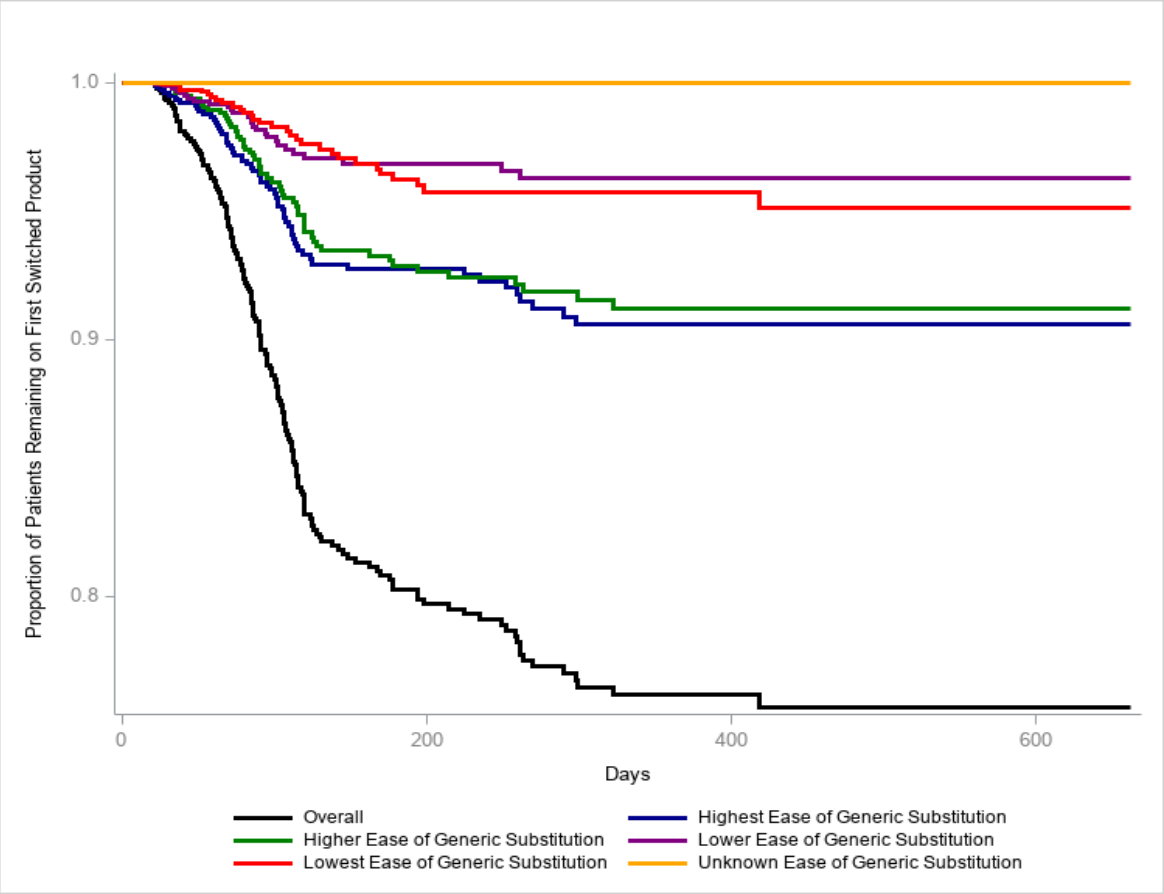


Figure 2.9. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Wixela to Advair Diskus

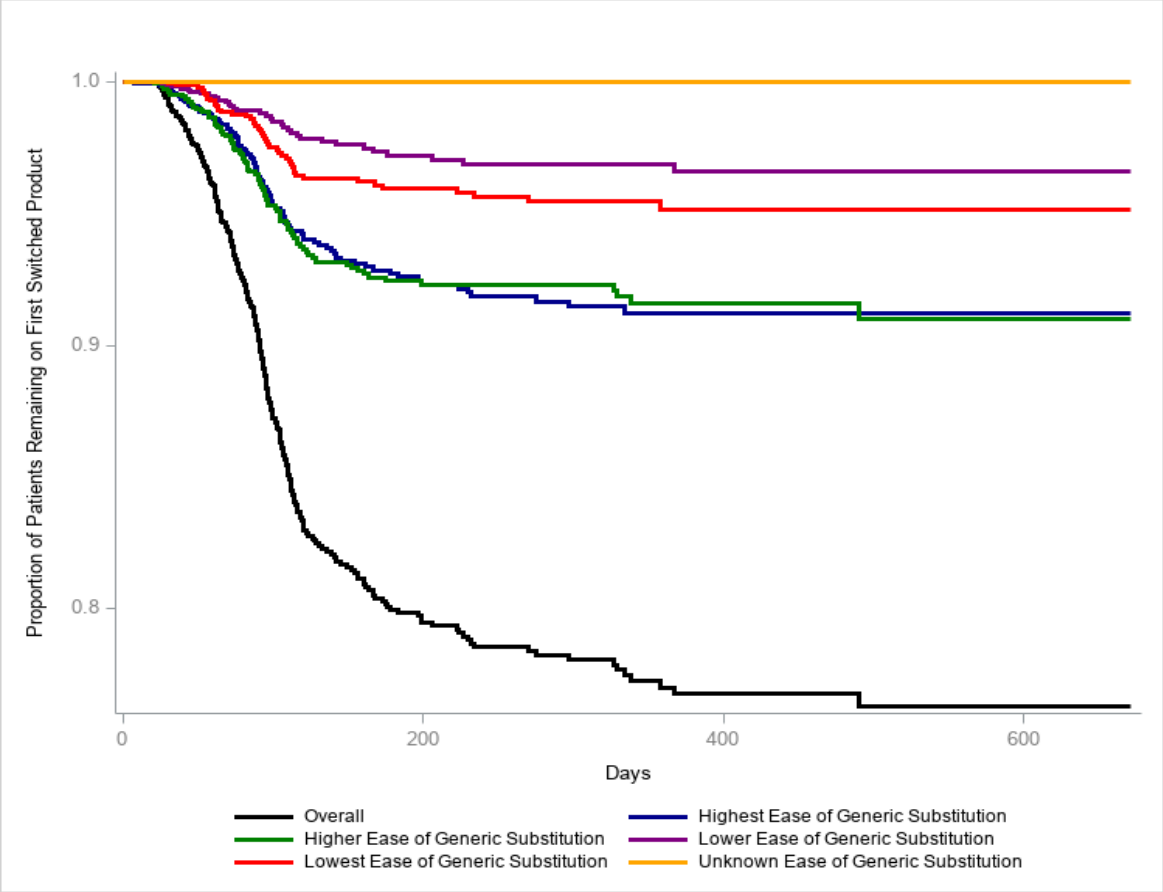


Figure 2.10. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Incident with COPD), Symbicort to Advair Diskus

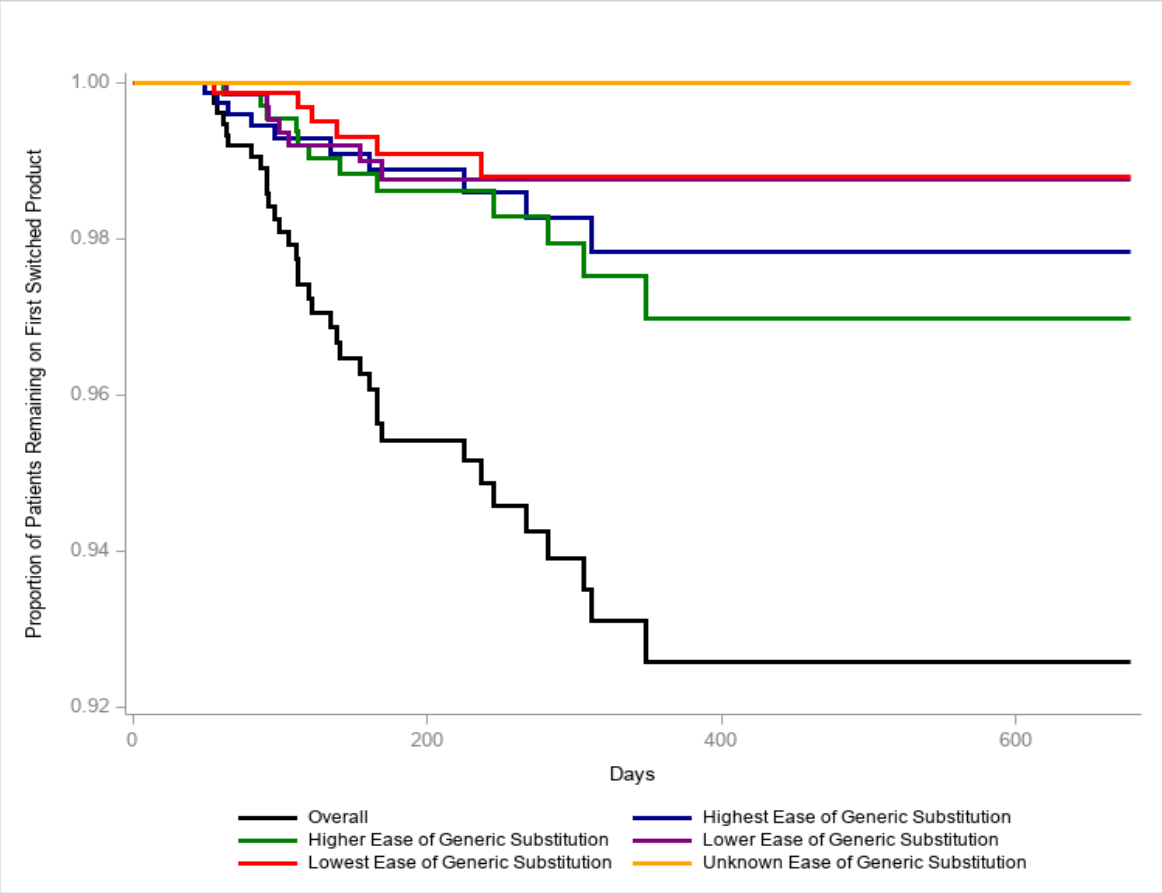


Figure 2.11. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Advair AG to Advair Diskus

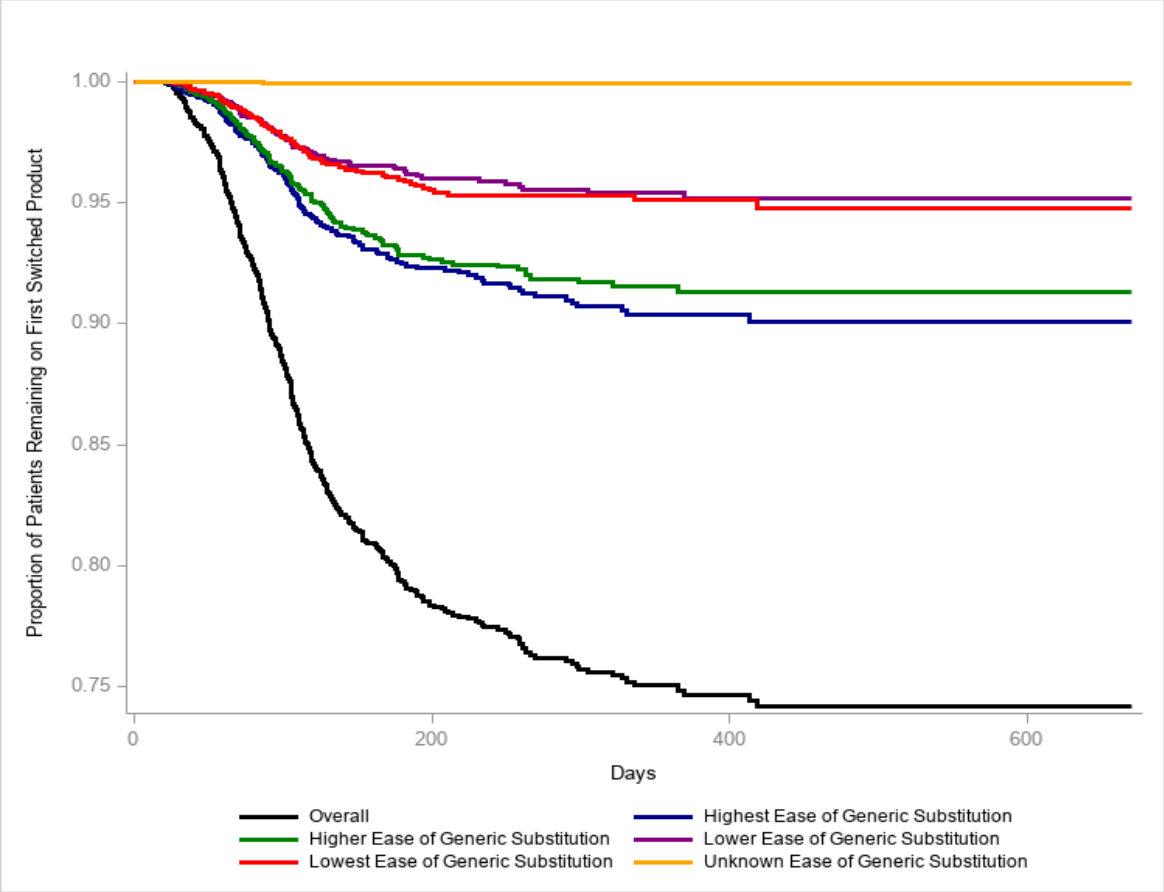


Figure 2.12. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Wixela to Advair Diskus

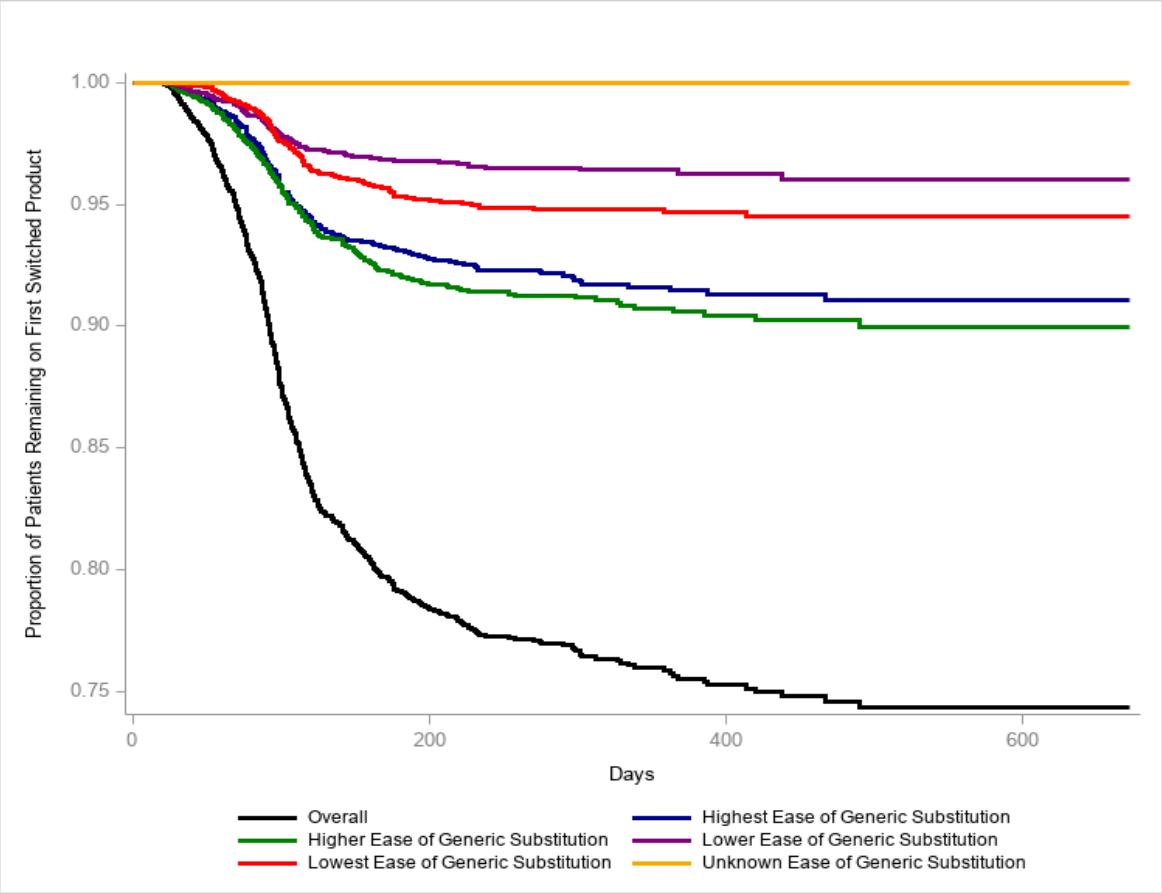


Figure 2.13. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Symbicort to Advair Diskus

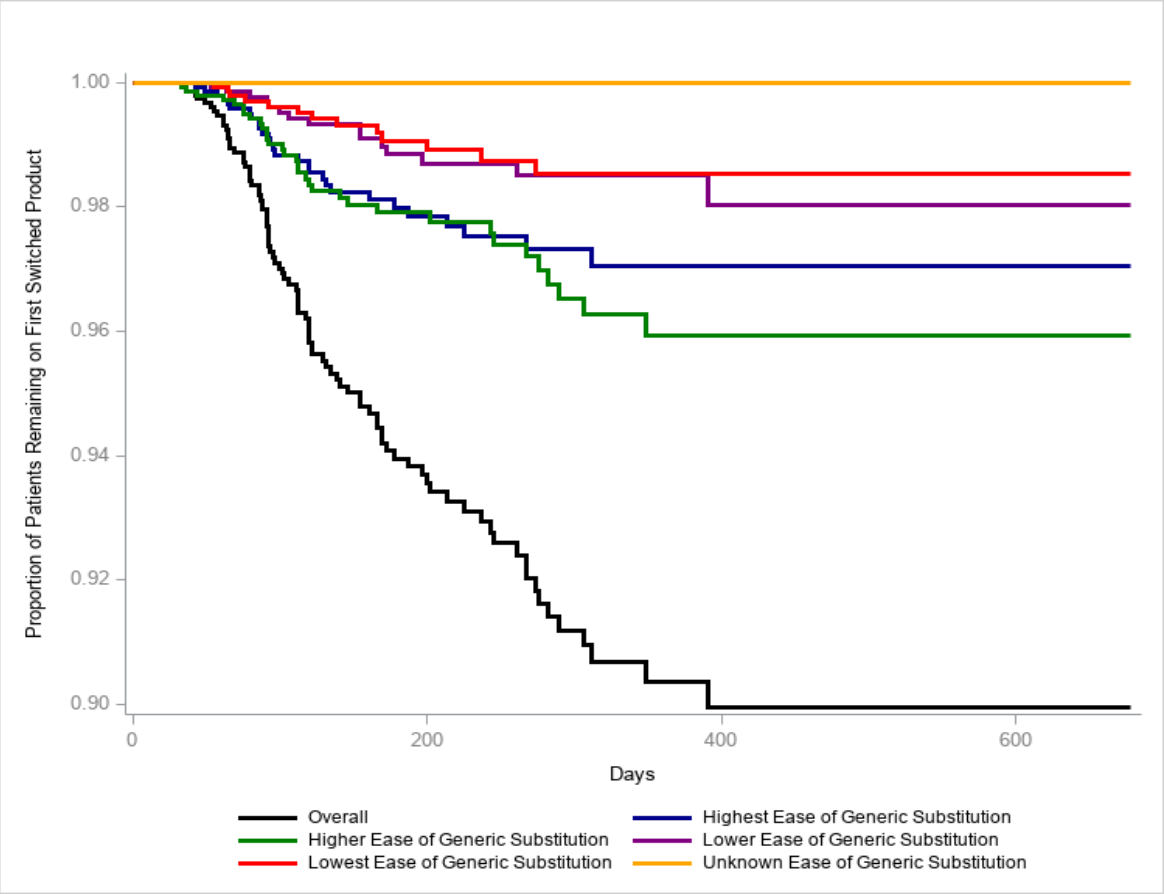


Figure 2.14. Kaplan Meier curve for time to Second Switch (in Days) Overall and by Ease of Generic Substitution at State Level: (Prevalent with COPD), Breo Ellipta to Advair Diskus

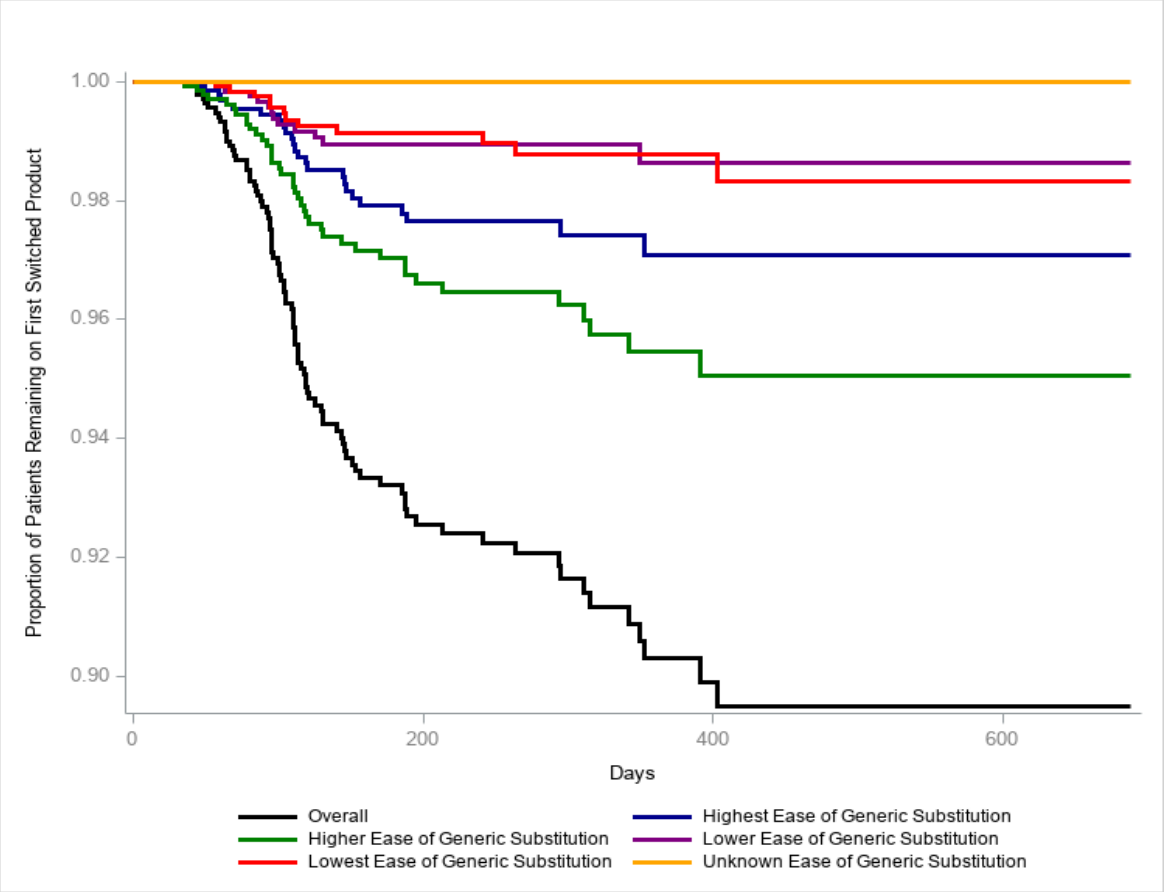
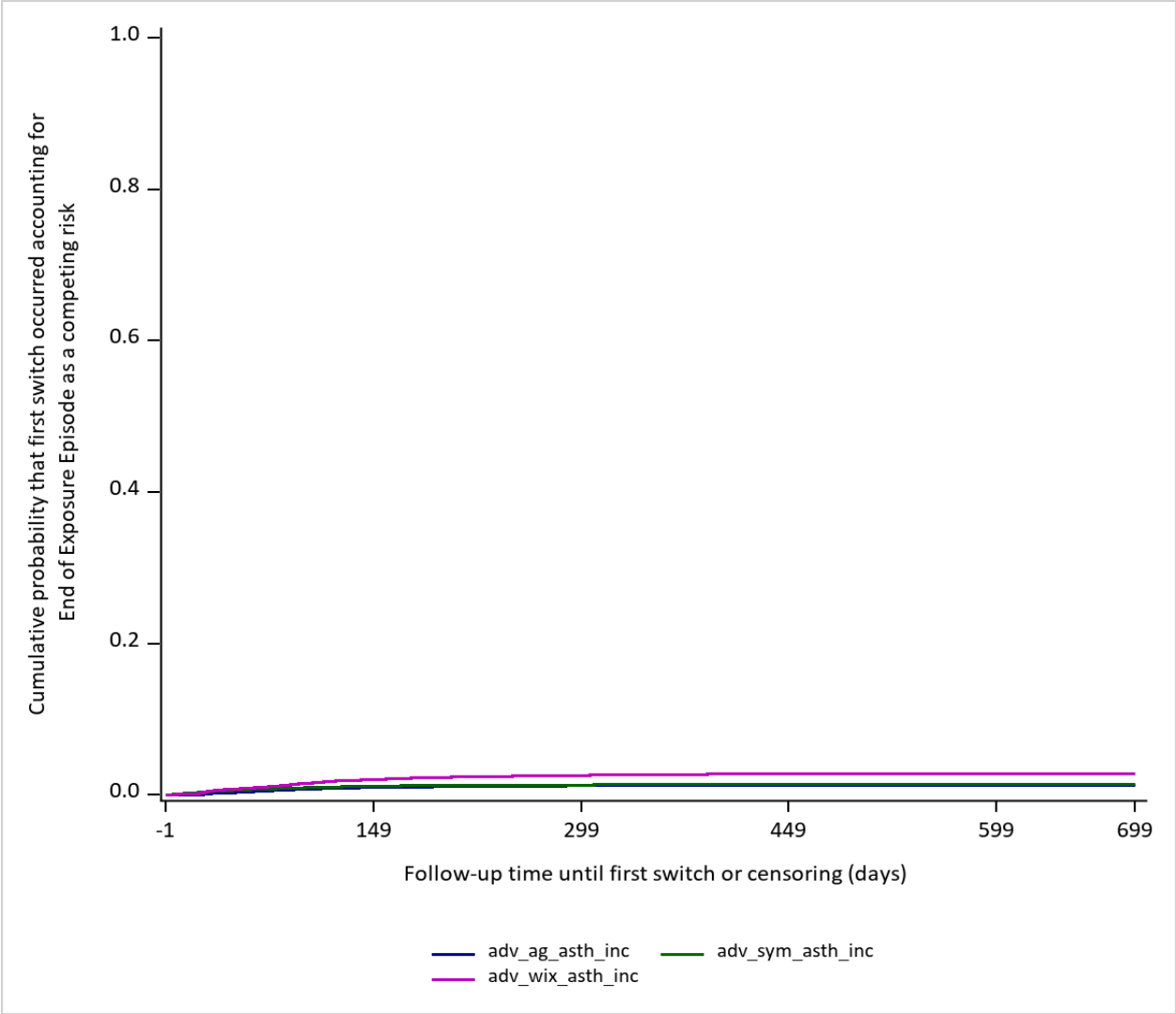
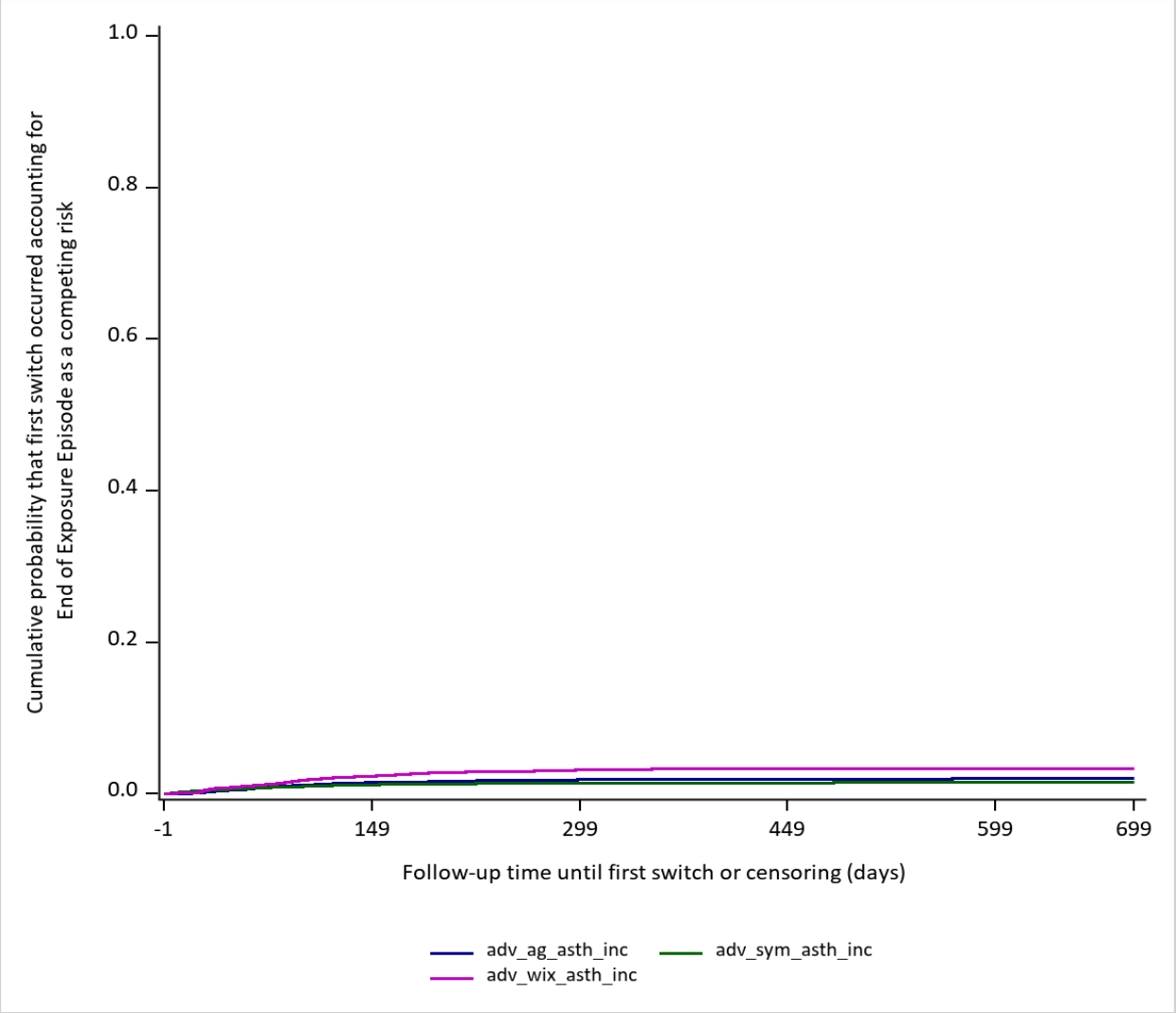


Figure 3. Cumulative Incidence of First Switch Among Incident Asthma cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



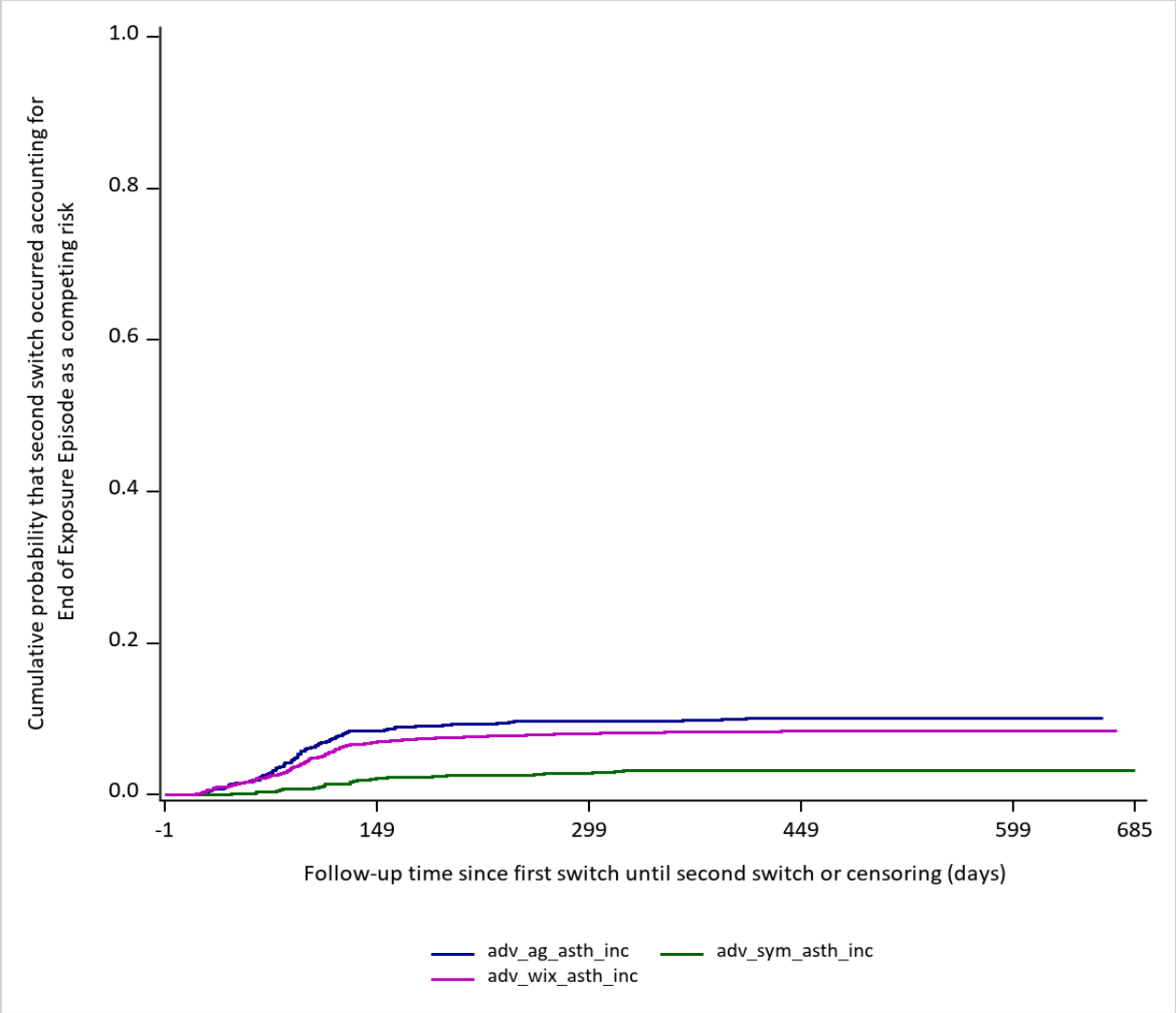
*Accounting for treatment cessation as a competing risk

Figure 4. Cumulative Incidence of First Switch Among Incident Asthma cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



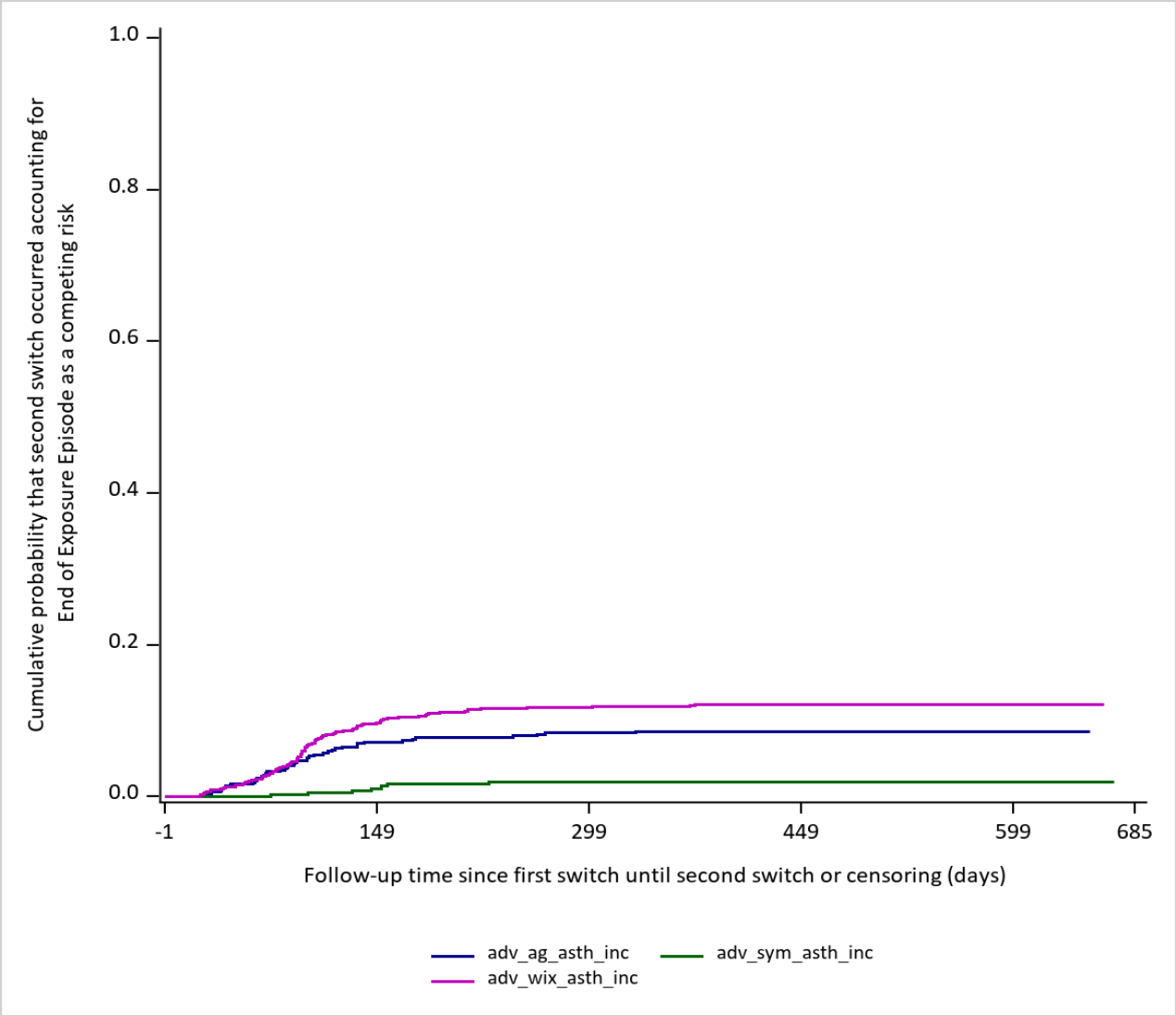
*Accounting for treatment cessation as a competing risk

Figure 5. Cumulative Incidence of Second Switch Among Incident Asthma cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



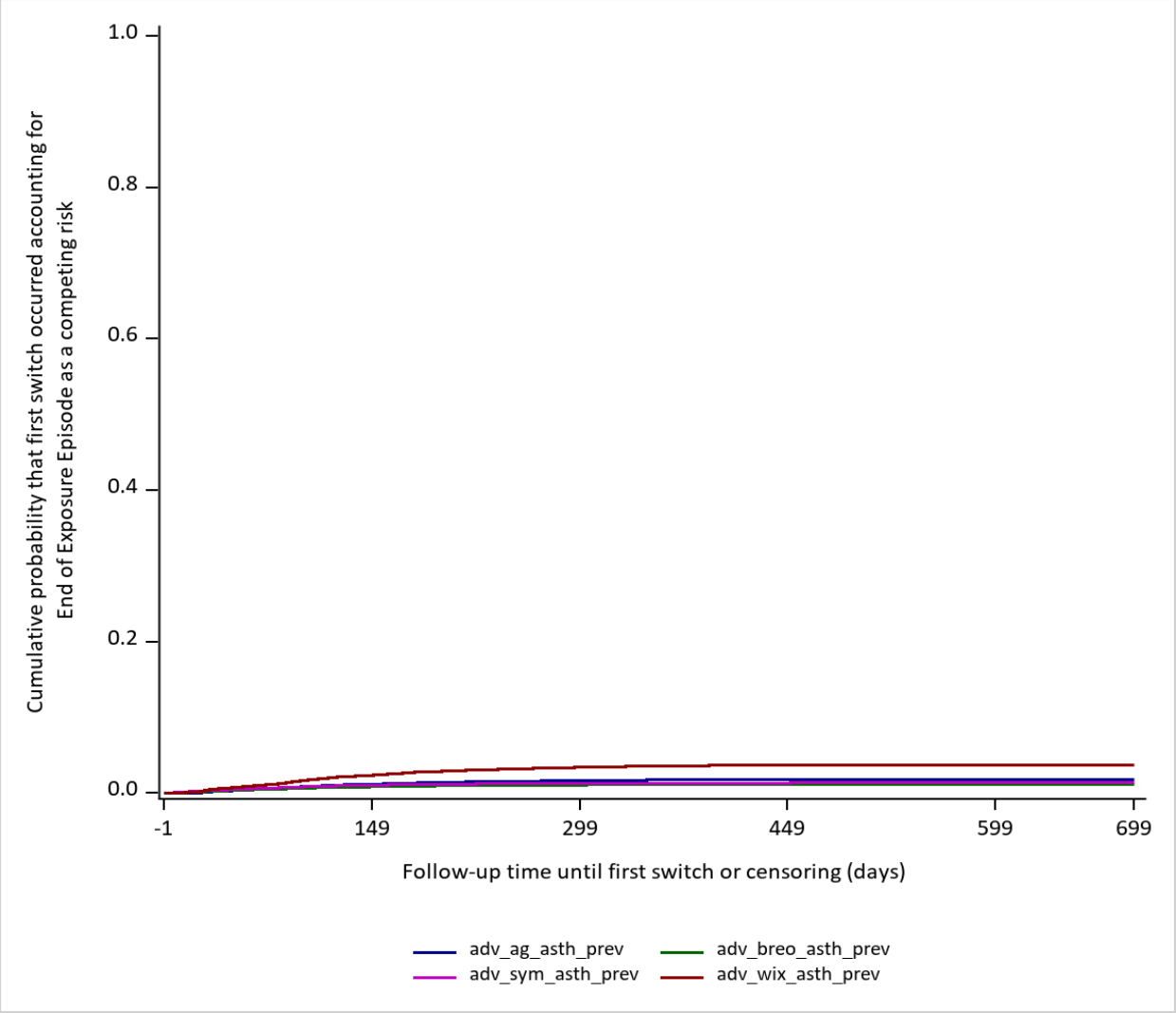
*Accounting for treatment cessation as a competing risk

Figure 6. Cumulative Incidence of Second Switch Among Incident Asthma cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



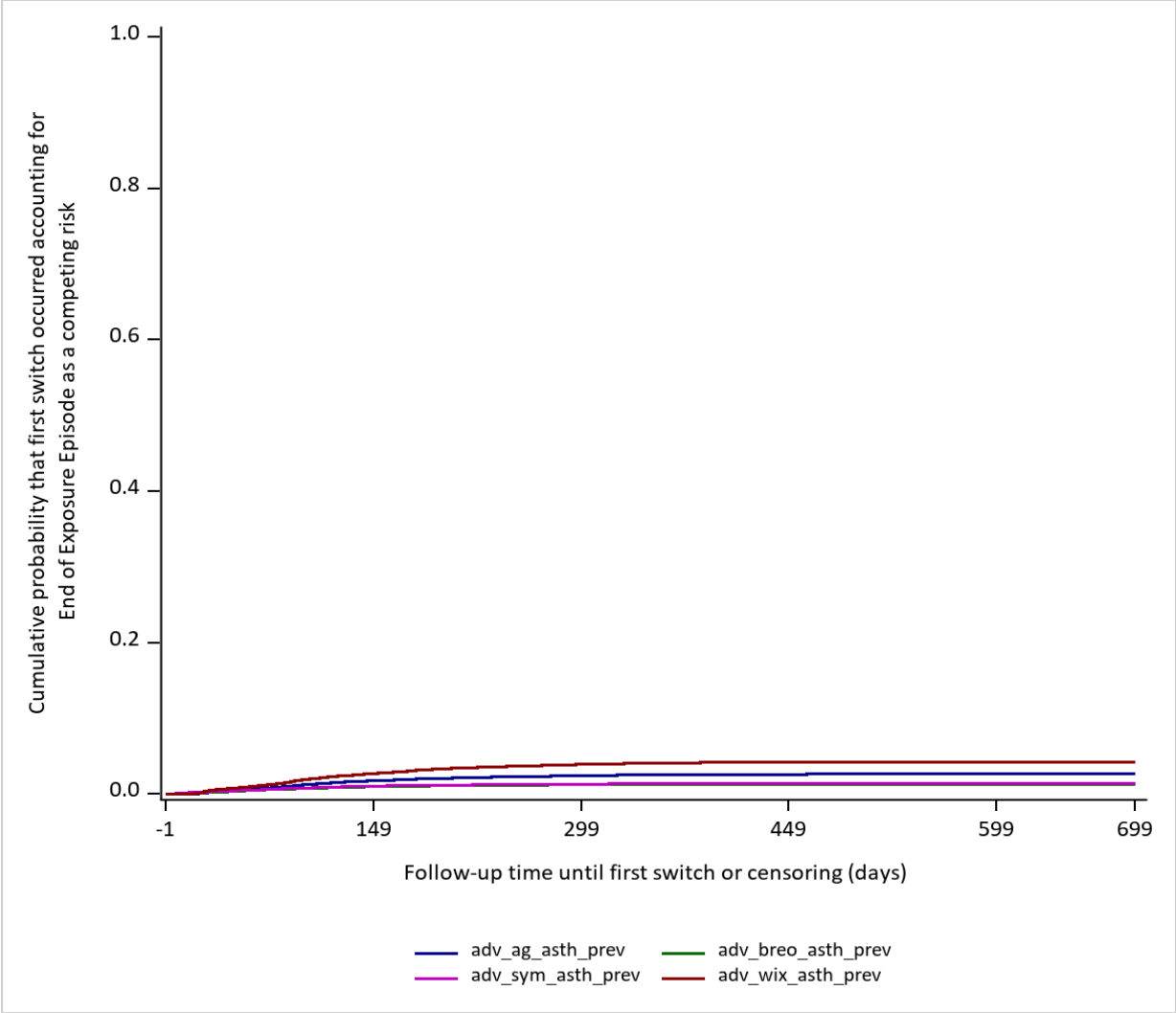
*Accounting for treatment cessation as a competing risk

Figure 7. Cumulative Incidence of First Switch Prevalent Asthma cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



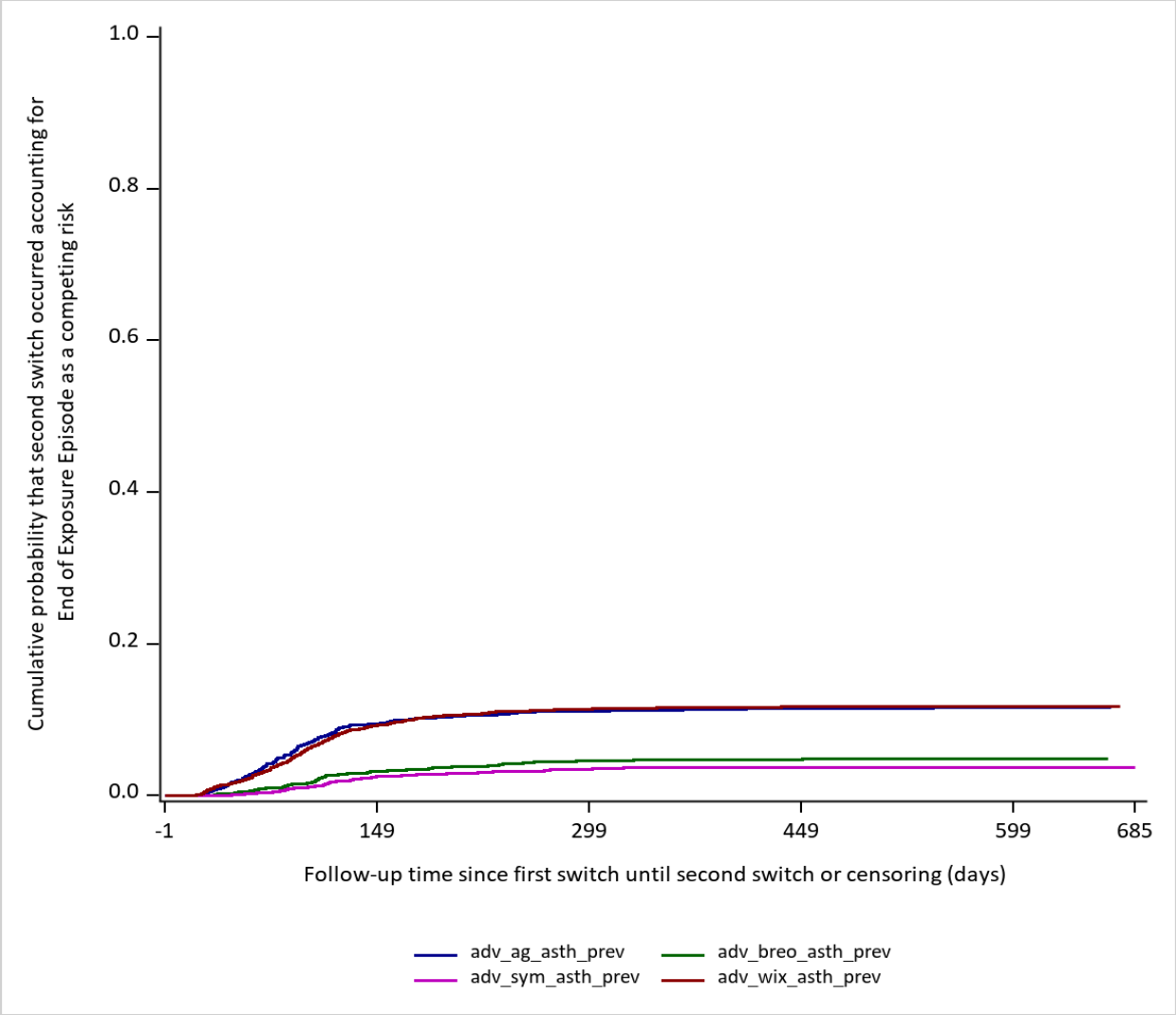
*Accounting for treatment cessation as a competing risk

Figure 8. Cumulative Incidence of First Switch Prevalent Asthma cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



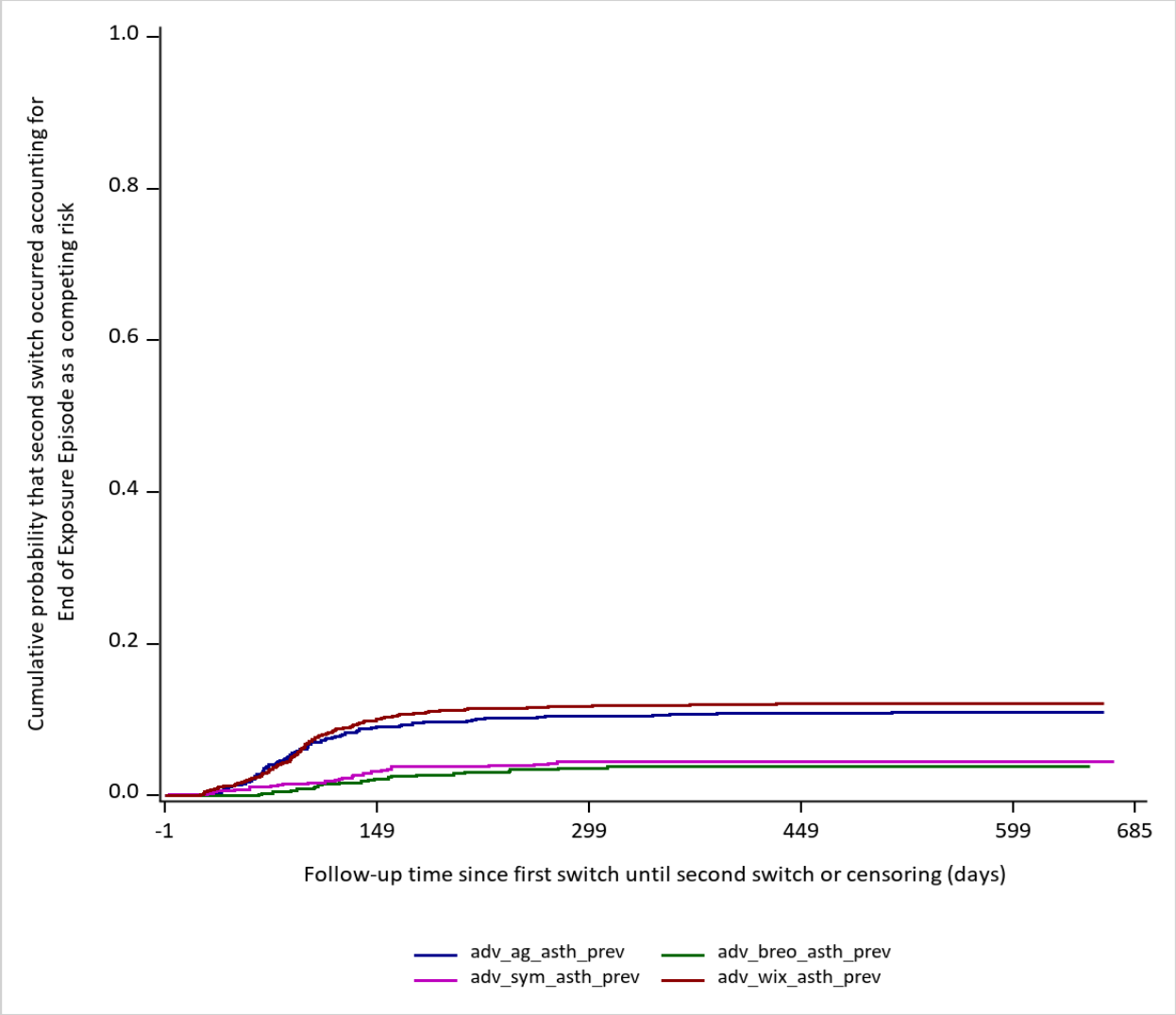
*Accounting for treatment cessation as a competing risk

Figure 9. Cumulative Incidence of Second Switch Among Prevalent Asthma cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



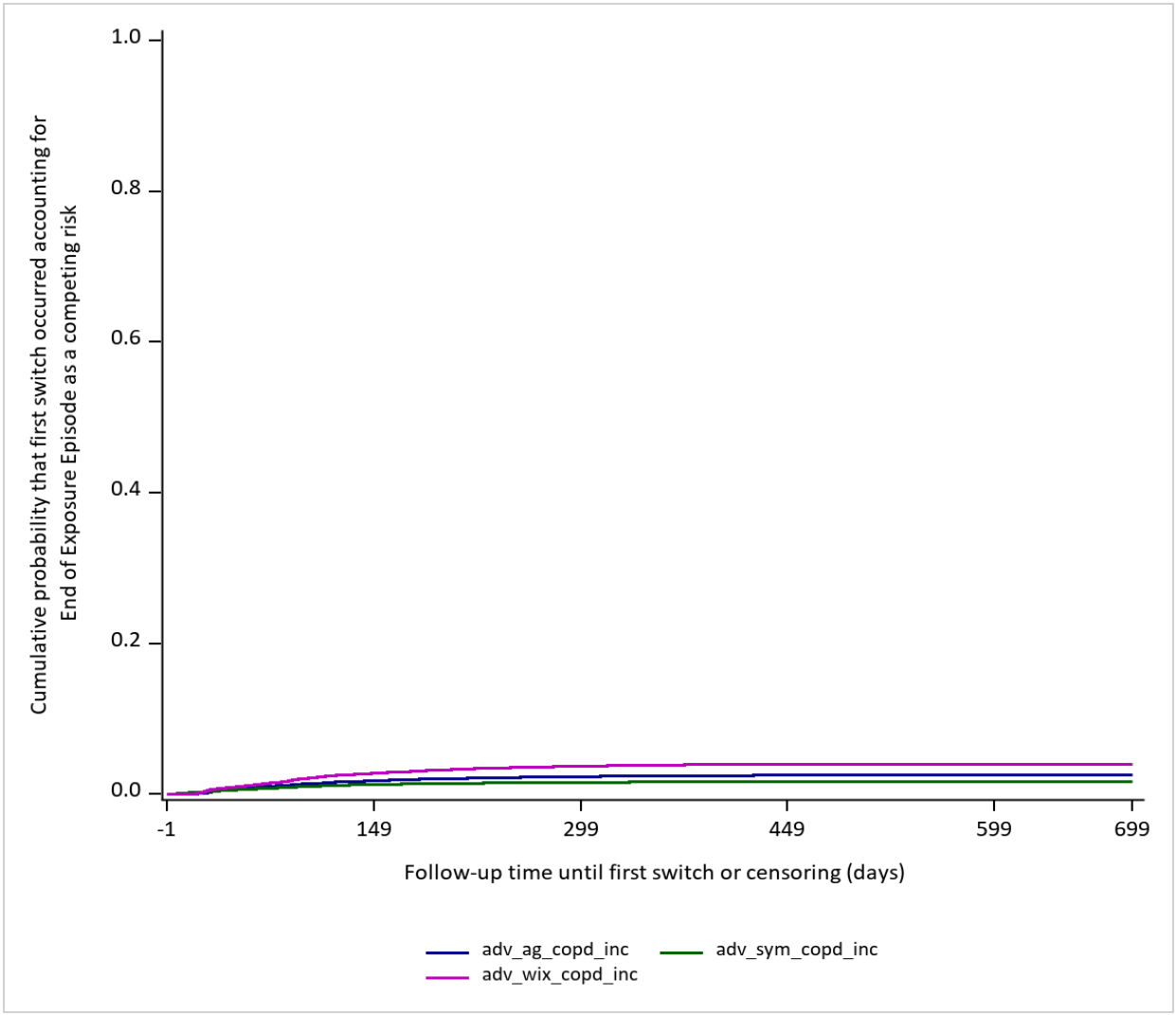
*Accounting for treatment cessation as a competing risk

Figure 10. Cumulative Incidence of Second Switch Among Prevalent Asthma cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



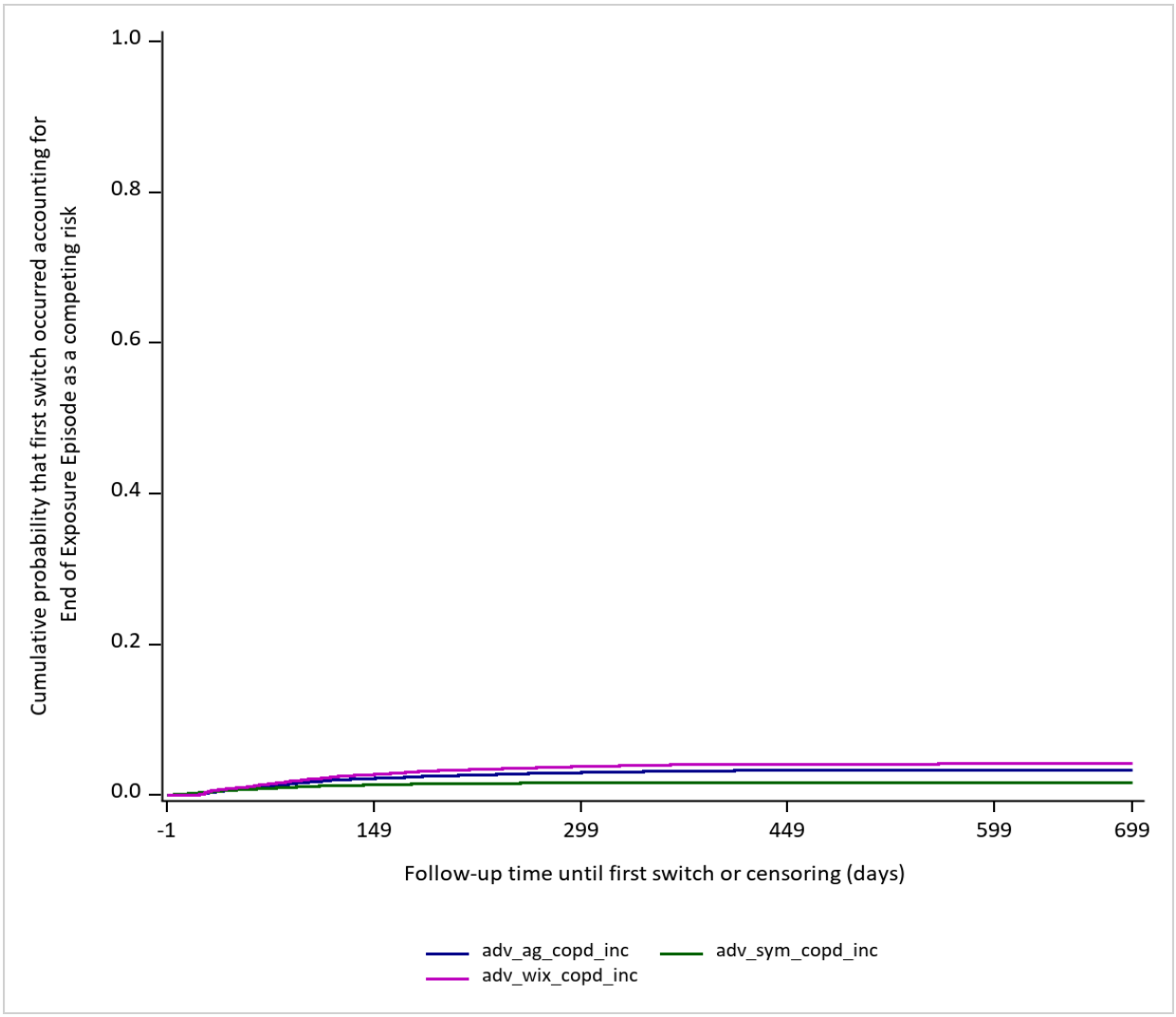
*Accounting for treatment cessation as a competing risk

Figure 11. Cumulative Incidence of First Switch Among Incident COPD cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



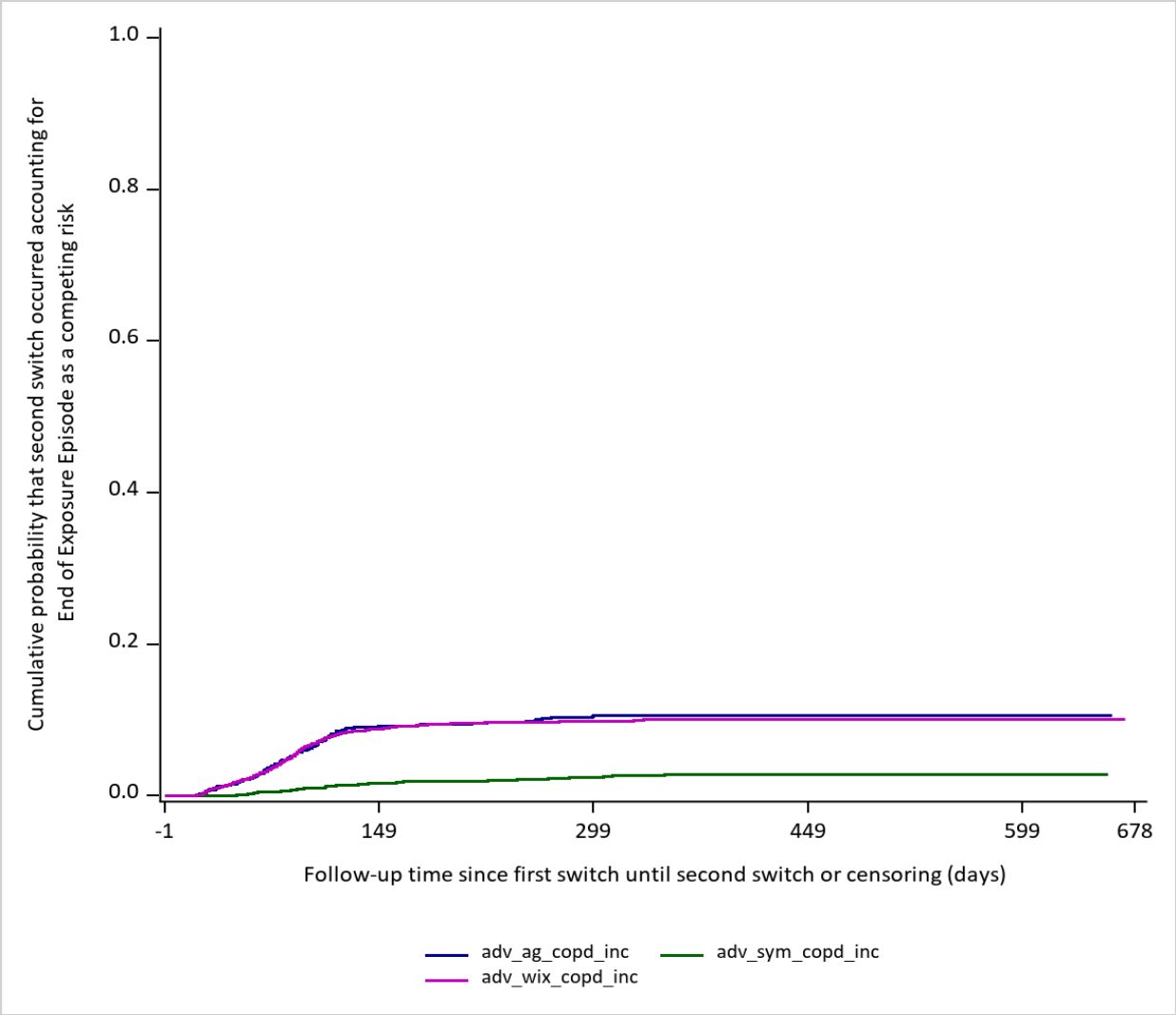
*Accounting for treatment cessation as a competing risk

Figure 12. Cumulative Incidence of First Switch Among Incident COPD cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



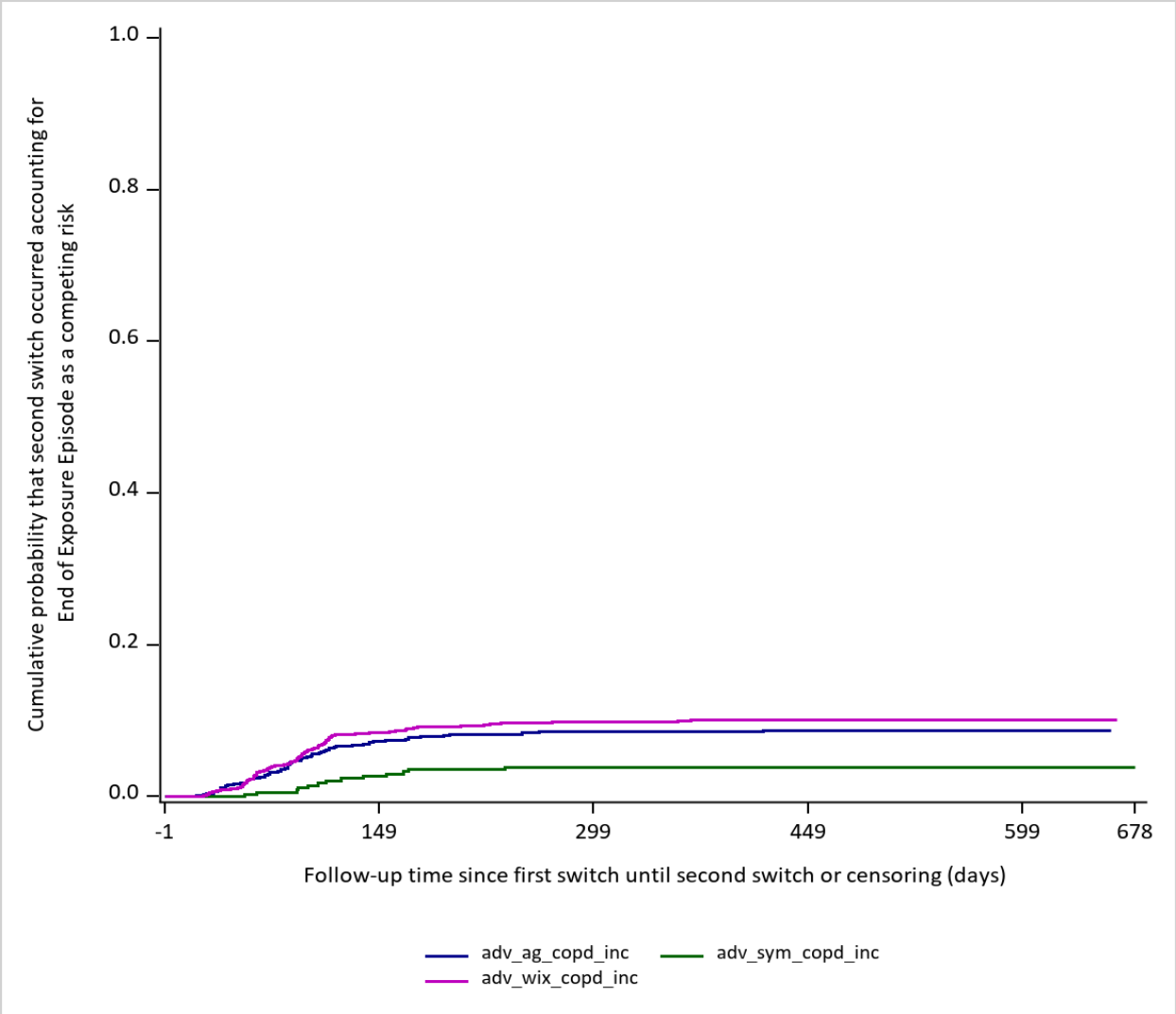
*Accounting for treatment cessation as a competing risk

Figure 13. Cumulative Incidence of Second Switch Among Incident COPD cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



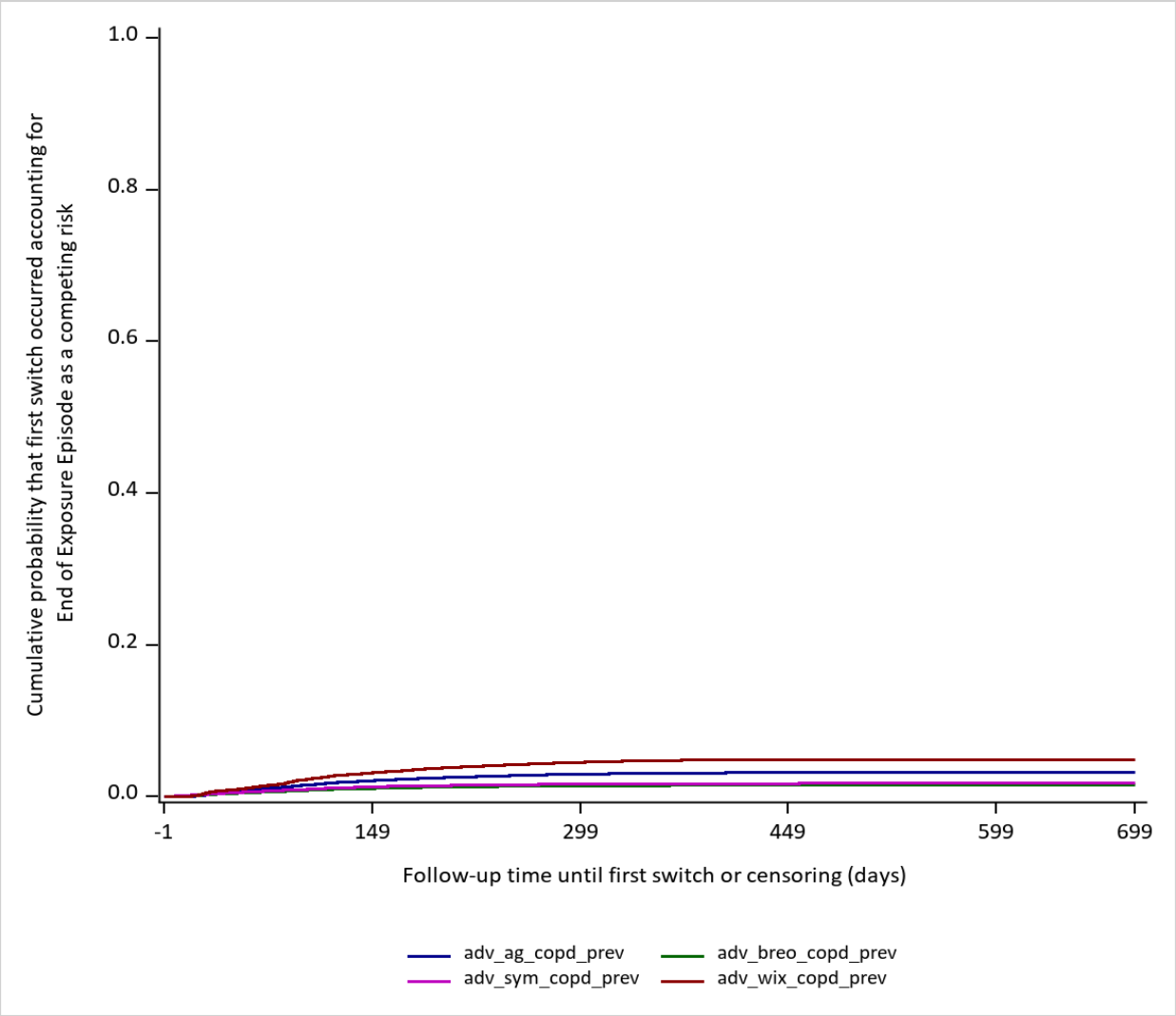
*Accounting for treatment cessation as a competing risk

Figure 14. Cumulative Incidence of Second Switch Among Incident COPD cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



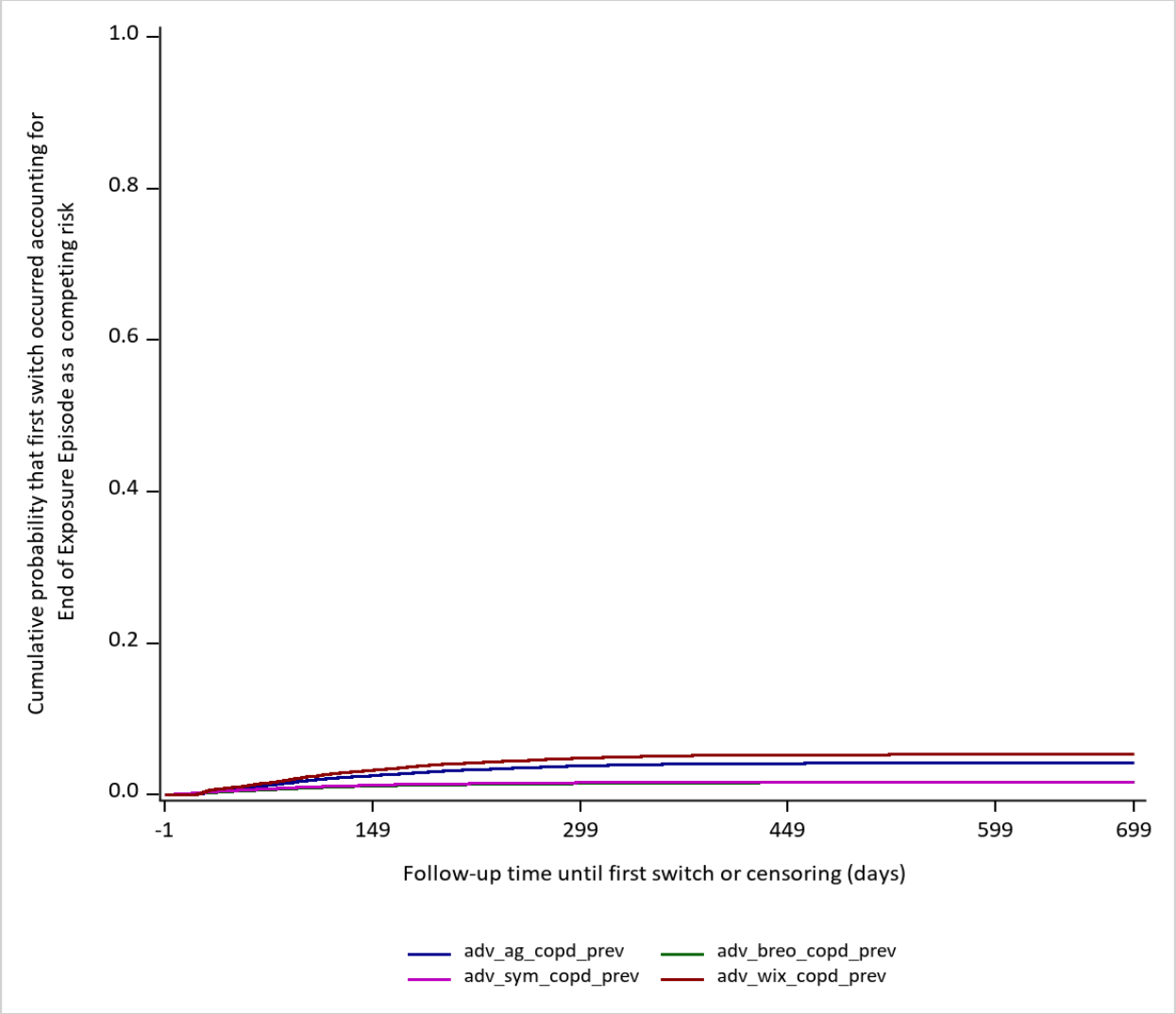
*Accounting for treatment cessation as a competing risk

Figure 15. Cumulative Incidence of First Switch Prevalent COPD cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



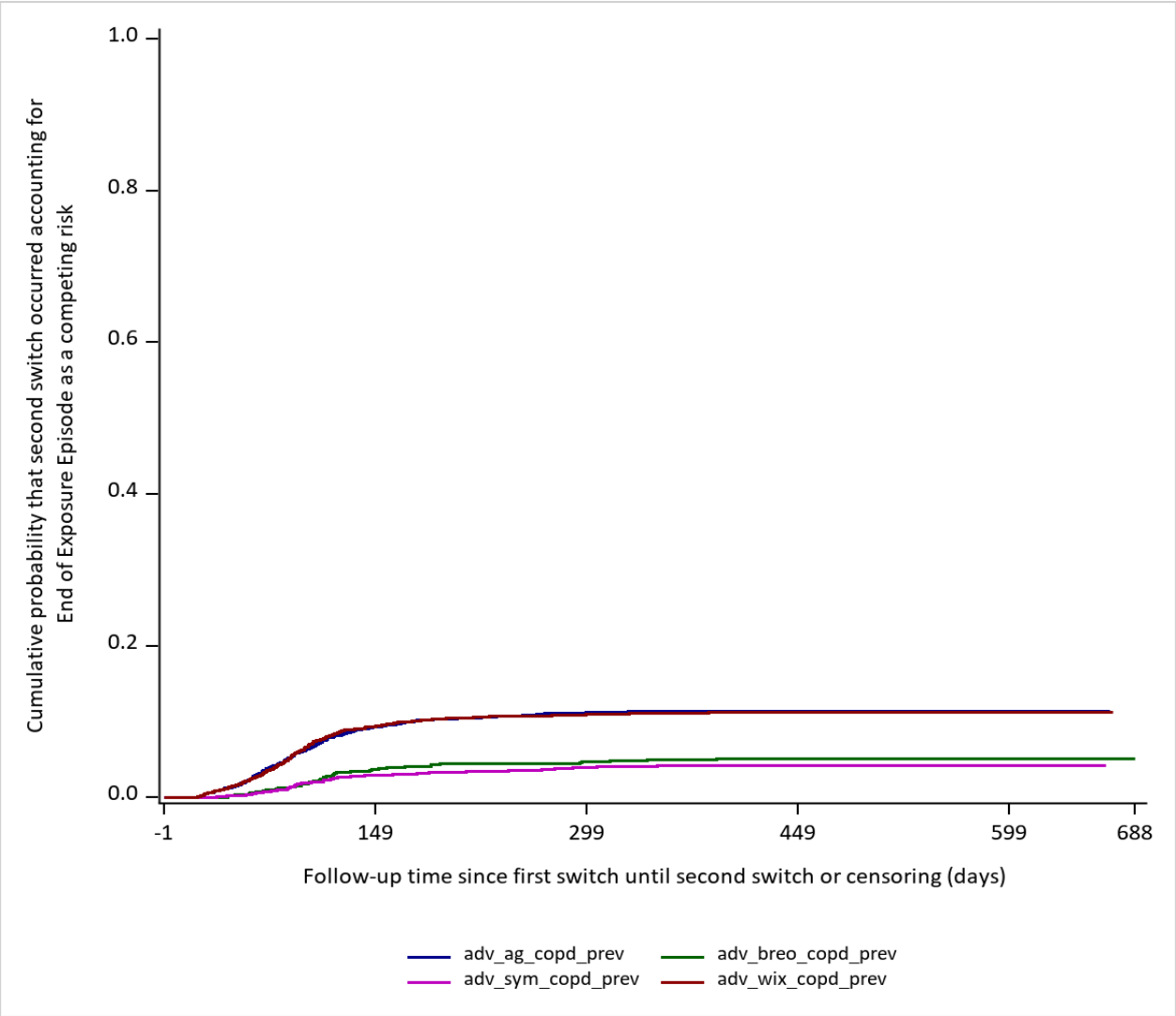
*Accounting for treatment cessation as a competing risk

Figure 16. Cumulative Incidence of First Switch Among Prevalent COPD cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



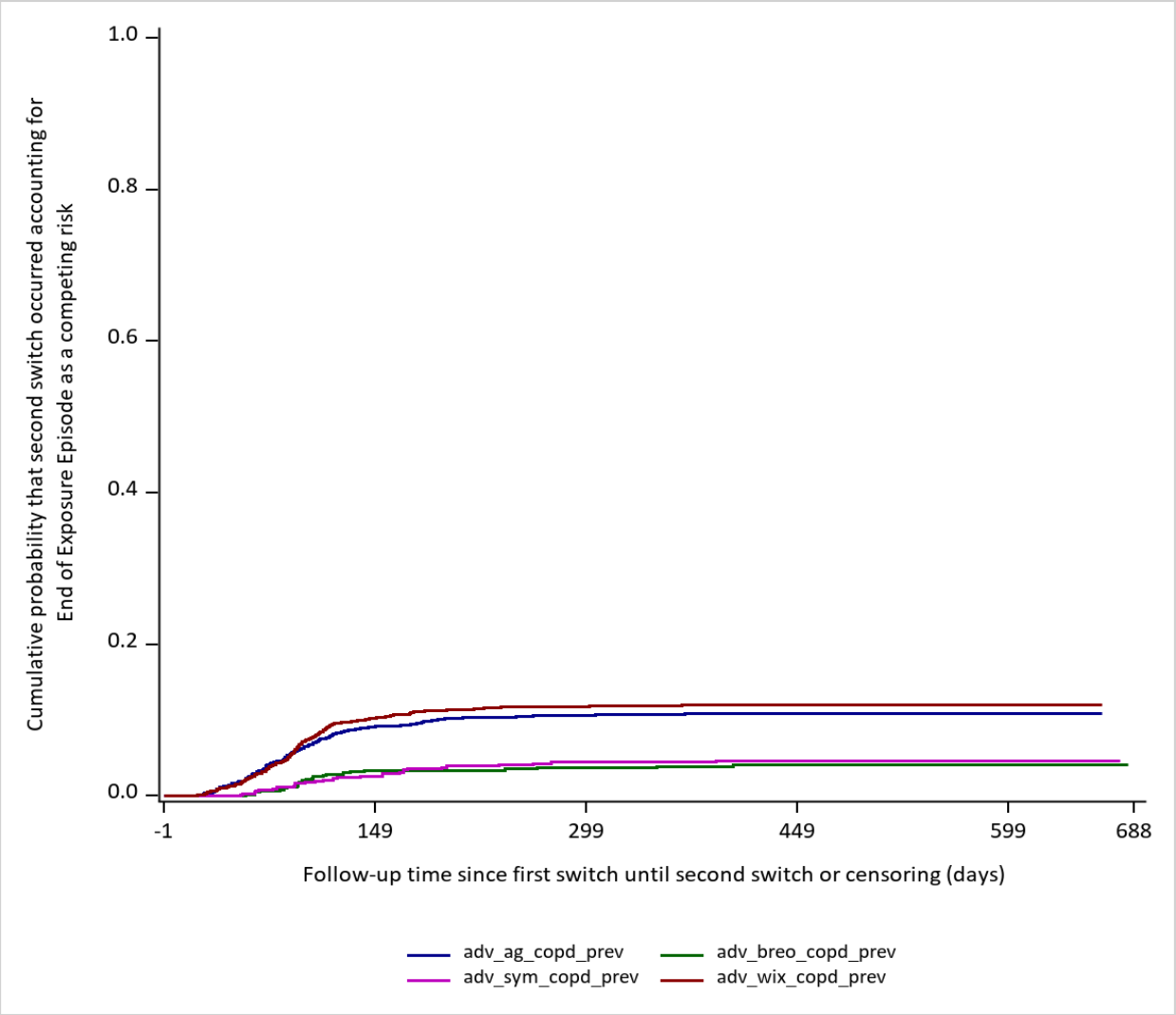
*Accounting for treatment cessation as a competing risk

Figure 17. Cumulative Incidence of Second Switch Among Prevalent COPD cohort (high ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



*Accounting for treatment cessation as a competing risk

Figure 18. Cumulative Incidence of Second Switch Among Prevalent COPD cohort (low ease of substitution) in the Sentinel Distributed Database (SDD) from February 1, 2019 up to December 31, 2020



*Accounting for treatment cessation as a competing risk

Appendix A. Start and End Dates for Each Data Partner (DP) up to Request End Date (December 31, 2020)

DP ID	Start Date[1]	End Date[1]
DP01	01/01/2008	12/31/2020
DP02	01/01/2007	10/31/2020
DP03	01/01/2006	08/31/2020
DP04	01/01/2000	12/31/2019
DP05	01/01/2000	07/31/2019
DP06	01/01/2008	12/31/2020
DP07	01/01/2010	12/31/2020

[1]The start and end dates are based on the minimum and maximum dates within each DP. The month with the maximum date must have at least 80% of the number of records in the previous month.

Appendix B. List of Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
Advair Diskus	
fluticasone propionate/salmeterol xinafoate	Advair Diskus
Advair Approved Generic (AG)	
fluticasone propion-salmeterol	fluticasone propionate/salmeterol xinafoate
Symbicort	
budesonide/formoterol fumarate	Symbicort
budesonide/formoterol fumarate	budesonide-formoterol
Breo Ellipta	
fluticasone furoate/vilanterol trifenatate	Breo Ellipta
Wixela	
fluticasone propionate/salmeterol xinafoate	Wixela Inhub

Appendix C. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusions in this Request

Code	Description	Code Category	Code Type
	Asthma		
J45	Asthma	Diagnosis	ICD-10-CM
J45.2	Mild intermittent asthma	Diagnosis	ICD-10-CM
J45.20	Mild intermittent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.21	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.22	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.3	Mild persistent asthma	Diagnosis	ICD-10-CM
J45.30	Mild persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.31	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.32	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.4	Moderate persistent asthma	Diagnosis	ICD-10-CM
J45.40	Moderate persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.41	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.42	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.5	Severe persistent asthma	Diagnosis	ICD-10-CM
J45.50	Severe persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.51	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.52	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.9	Other and unspecified asthma	Diagnosis	ICD-10-CM
J45.90	Unspecified asthma	Diagnosis	ICD-10-CM
J45.901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.909	Unspecified asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.99	Other asthma	Diagnosis	ICD-10-CM
J45.991	Cough variant asthma	Diagnosis	ICD-10-CM
J45.998	Other asthma	Diagnosis	ICD-10-CM
	Chronic Obstructive Pulmonary Disease (COPD)		
J40	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-10-CM
J41	Simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J41.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.8	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J43	Emphysema	Diagnosis	ICD-10-CM
J43.1	Panlobular emphysema	Diagnosis	ICD-10-CM
J43.2	Centrilobular emphysema	Diagnosis	ICD-10-CM
J43.8	Other emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44	Other chronic obstructive pulmonary disease	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with acute lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM

Appendix D. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
	Pneumonia		
J12.0	Adenoviral Pneumonia	Diagnosis	ICD-10-CM
J12.1	Respiratory Syncytial Virus Pneumonia	Diagnosis	ICD-10-CM
J12.2	Parainfluenza virus Pneumonia	Diagnosis	ICD-10-CM
J12.3	Human metapneumovirus pneumonia	Diagnosis	ICD-10-CM
J12.89	Other viral pneumonia	Diagnosis	ICD-10-CM
J12.9	Viral pneumonia, unspecified	Diagnosis	ICD-10-CM
J13	Pneumonia due to Streptococcus pneumoniae	Diagnosis	ICD-10-CM
J14	Pneumonia due to Hemophilus influenzae	Diagnosis	ICD-10-CM
J15.0	Pneumonia due to Klebsiella pneumoniae	Diagnosis	ICD-10-CM
J15.1	Pneumonia due to Pseudomonas	Diagnosis	ICD-10-CM
J15.20	Pneumonia due to staphylococcus, unspecified	Diagnosis	ICD-10-CM
J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus	Diagnosis	ICD-10-CM
J15.29	Pneumonia due to other staphylococcus	Diagnosis	ICD-10-CM
J15.3	Pneumonia due to streptococcus, group B	Diagnosis	ICD-10-CM
J15.4	Pneumonia due to other streptococci	Diagnosis	ICD-10-CM
J15.5	Pneumonia due to Escherichia coli	Diagnosis	ICD-10-CM
J15.6	Pneumonia due to other Gram-negative bacteria	Diagnosis	ICD-10-CM
J15.7	Pneumonia due to Mycoplasma pneumoniae	Diagnosis	ICD-10-CM
J15.8	Pneumonia due to other specified bacteria	Diagnosis	ICD-10-CM
J15.9	Unspecified bacterial pneumonia	Diagnosis	ICD-10-CM
J16.0	Chlamydial pneumonia	Diagnosis	ICD-10-CM
J16.8	Pneumonia due to other specified infectious organisms	Diagnosis	ICD-10-CM
B37.1	candidial pneumonia	Diagnosis	ICD-10-CM
A54.84	gonorrheal pneumonia	Diagnosis	ICD-10-CM
B39.0	histoplasmosis pneumonia	Diagnosis	ICD-10-CM
B39.1	histoplasmosis pneumonia	Diagnosis	ICD-10-CM
B39.2	histoplasmosis pneumonia	Diagnosis	ICD-10-CM
B05.2	measles pneumonia	Diagnosis	ICD-10-CM
A43.0	nocardiosis pneumonia	Diagnosis	ICD-10-CM
B59	pneumonia due to Pneumocystis carinii	Diagnosis	ICD-10-CM
A42.0	pneumonia in actinomycosis	Diagnosis	ICD-10-CM
A22.1	pneumonia in anthrax	Diagnosis	ICD-10-CM
B77.81	pneumonia in ascariasis	Diagnosis	ICD-10-CM
B44.0	pneumonia in aspergillosis	Diagnosis	ICD-10-CM
B44.1	pneumonia in aspergillosis	Diagnosis	ICD-10-CM
B38.0	pneumonia in coccidioidomycosis	Diagnosis	ICD-10-CM
B38.1	pneumonia in coccidioidomycosis	Diagnosis	ICD-10-CM
B38.2	pneumonia in coccidioidomycosis	Diagnosis	ICD-10-CM
B25.0	pneumonia in cytomegalovirus disease	Diagnosis	ICD-10-CM
B58.3	pneumonia in toxoplasmosis	Diagnosis	ICD-10-CM
B06.81	rubella pneumonia	Diagnosis	ICD-10-CM
A02.22	salmonella pneumonia	Diagnosis	ICD-10-CM
A69.8	Spirochetal infection not elsewhere classified with pneumonia	Diagnosis	ICD-10-CM
A21.2	tularemia pneumonia	Diagnosis	ICD-10-CM

Appendix D. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusions in this Request

Code	Description	Code Category	Code Type
A01.03	typhoid fever with pneumonia	Diagnosis	ICD-10-CM
B01.2	varicella pneumonia	Diagnosis	ICD-10-CM
A37	whooping cough with pneumonia	Diagnosis	ICD-10-CM
J18.0	bronchopneumonia, unspecified organism	Diagnosis	ICD-10-CM
J18.1	lobar pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J18.8	other pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J18.9	Pneumonia, unspecified organism	Diagnosis	ICD-10-CM

Appendix E. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes and Healthcare Common Procedure Coding System (HCPCS) Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
	Respiratory Failure		
J96.00	Acute respiratory failure, unspecified whether with hypoxia or hypercapnia	Diagnosis	ICD-10-CM
J96.01	Acute respiratory failure with hypoxia	Diagnosis	ICD-10-CM
J96.02	Acute respiratory failure with hypercapnia	Diagnosis	ICD-10-CM
J96.10	Chronic respiratory failure, unspecified whether with hypoxia or hypercapnia	Diagnosis	ICD-10-CM
J96.11	Chronic respiratory failure with hypoxia	Diagnosis	ICD-10-CM
J96.12	Chronic respiratory failure with hypercapnia	Diagnosis	ICD-10-CM
J96.20	Acute and chronic respiratory failure, unspecified whether with hypoxia or hypercapnia	Diagnosis	ICD-10-CM
J96.21	Acute and chronic respiratory failure with hypoxia	Diagnosis	ICD-10-CM
J96.22	Acute and chronic respiratory failure with hypercapnia	Diagnosis	ICD-10-CM
J96.90	Respiratory failure, unspecified, unspecified whether with hypoxia or hypercapnia	Diagnosis	ICD-10-CM
J96.91	Respiratory failure, unspecified with hypoxia	Diagnosis	ICD-10-CM
J96.92	Respiratory failure, unspecified with hypercapnia	Diagnosis	ICD-10-CM
	Acute Bronchospasm		
J98.01	Acute bronchospasm	Diagnosis	ICD-10-CM
	Asthma Exacerbation		
J45.21	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.22	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.31	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.32	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.41	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.42	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.51	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.52	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM
	COPD Exacerbation		
J44.0	Chronic obstructive pulmonary disease with acute lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J1094	Injection, dexamethasone acetate, 1 mg	Procedure	HCPCS
J1100	Injection, dexamethasone sodium phosphate, 1 mg	Procedure	HCPCS
J8540	Dexamethasone, oral, 0.25 mg	Procedure	HCPCS
J7637	Dexamethasone, inhalation solution, compounded product, administered through dme, concentrated form, per milligram	Procedure	HCPCS
J7638	Dexamethasone, inhalation solution, compounded product, administered through dme, unit dose form, per milligram	Procedure	HCPCS
J7512	Prednisone, immediate release or delayed release, oral, 1 mg	Procedure	HCPCS
J2650	Injection, prednisolone acetate, up to 1 ml	Procedure	HCPCS
J7510	Prednisolone oral, per 5 mg	Procedure	HCPCS
J1020	Injection, methylprednisolone acetate, 20 mg	Procedure	HCPCS
J1030	Injection, methylprednisolone acetate, 40 mg	Procedure	HCPCS
J1040	Injection, methylprednisolone acetate, 80 mg	Procedure	HCPCS
J2920	Injection, methylprednisolone sodium succinate, up to 40 mg	Procedure	HCPCS
J2930	Injection, methylprednisolone sodium succinate, up to 125 mg	Procedure	HCPCS
J7509	Methylprednisolone oral, per 4 mg	Procedure	HCPCS
J1700	Injection, hydrocortisone acetate, up to 25 mg	Procedure	HCPCS
J1710	Injection, hydrocortisone sodium phosphate, up to 50 mg	Procedure	HCPCS
J1720	Injection, hydrocortisone sodium succinate, up to 100 mg	Procedure	HCPCS

Appendix E. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes and Healthcare Common Procedure Coding System (HCPCS) Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
J0702	INJECTION, BETAMETHASONE ACETATE AND BETAMETHASONE SODIUM PHOSPHATE, PER 3 MG	Procedure	HCPCS
J7624	BETAMETHASONE, INHALATION SOLUTION ADMINISTERED THROUGH DME, UNIT DOSE FORM, PER MILLIGRAM	Procedure	HCPCS
J3300	Injection, triamcinolone acetonide, preservative free, 1 mg	Procedure	HCPCS
J3301	Injection, triamcinolone acetonide, not otherwise specified, 10 mg	Procedure	HCPCS
J3302	Injection, triamcinolone diacetate, per 5 mg	Procedure	HCPCS
J3303	Injection, triamcinolone hexacetonide, per 5 mg	Procedure	HCPCS
J3304	Injection, triamcinolone acetonide, preservative-free, extended-release, microsphere formulation, 1 mg	Procedure	HCPCS
J7683	Triamcinolone, inhalation solution, compounded product, administered through dme, concentrated form, per milligram	Procedure	HCPCS
J7684	Triamcinolone, inhalation solution, compounded product, administered through dme, unit dose form, per milligram	Procedure	HCPCS

Appendix F. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Asthma Exacerbation	
prednisone	prednisone
prednisone	Sterapred
prednisone	Sterapred DS
prednisone	Deltasone
prednisone	Liquid Pred
prednisone	Rayos
prednisone	Prednisone Intensol
methylprednisolone	methylprednisolone
methylprednisolone	Medrol (Pak)
methylprednisolone	Medrol
methylprednisolone	Methylpred DP
methylprednisolone	Meprolone Unipak
methylprednisolone	Methylpred
Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	
dexamethasone	Dexamethasone Intensol
prednisone	prednisone
prednisone	Sterapred
prednisone	Sterapred DS
prednisone	Deltasone
prednisone	Liquid Pred
prednisone	Rayos
prednisone	Prednisone Intensol
prednisolone sodium phosphate	prednisolone sodium phosphate
prednisolone acetate	prednisolone acetate
prednisolone sodium phosphate	Orapred
prednisolone	Prelone
prednisolone	prednisolone
prednisolone sodium phosphate	Pediapred
prednisolone sodium phosphate	Orapred ODT
prednisolone acetate	Predicort-50
prednisolone acetate	Key-Pred
prednisolone	Millipred DP
prednisolone sodium phosphate	Bubbli-Pred
prednisolone acetate	Flo-Pred
Prednisolone Sodium Phosphate/Peak Flow Meter	Asmalpred
Prednisolone Sodium Phosphate/Peak Flow Meter	Asmalpred Plus
prednisolone sodium phosphate	Veripred 20
prednisolone sodium phosphate	Millipred
prednisolone	Millipred
methylprednisolone	methylprednisolone
methylprednisolone acetate	Depo-Medrol
methylprednisolone	Medrol (Pak)
methylprednisolone sodium succinate/PF	Solu-Medrol (PF)
methylprednisolone	Medrol
methylprednisolone sodium succinate	A-Methapred
methylprednisolone acetate	methylprednisolone acetate
methylprednisolone sodium succinate	methylprednisolone sodium succ
methylprednisolone	Methylpred DP
methylprednisolone sodium succinate	Solu-Medrol
methylprednisolone acetate/bupivacaine HCl in sterile water	methylprednisol ac-bupivac-wat
methylprednisolone acetate in sodium chloride,iso-osmotic/PF	methylpred ac(PF)-NaCl,iso-osm
methylprednisolone acetate in sterile water for injection	methylprednisolone acet-water

Appendix F. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
methylprednisolone	Meprolone Unipak
methylprednisolone	Methylpred
hydrocortisone sod succinate	Solu-Cortef Act-O-Vial
hydrocortisone sod succinate	Solu-Cortef
hydrocortisone sod succinate	A-Hydrocort
hydrocortisone	hydrocortisone
hydrocortisone sodium succinate/PF	Solu-Cortef Act-O-Vial (PF)
hydrocortisone	Cortef
hydrocortisone sod succinate	hydrocortisone sod succinate
hydrocortisone	Alkindi Sprinkle
hydrocortisone sod phosphate	Hydrocortone
hydrocortisone	Hydrocortone
cortisone acetate	cortisone
betamethasone sodium phosphate	Celestone
betamethasone acetate/betamethasone sodium phosphate	Celestone Soluspan
betamethasone acetate/betamethasone sodium phosphate	betamethasone acet,sod phos
betamethasone acetate and sodium phos in sterile water/PF	betameth ac,sod phos(PF)-water
betamethasone acetate/betamethasone sodium phosphate/water	betamethasone ace,sod phos-wtr
betamethasone sodium phosph in sterile water for injection	betamethasone sod phosph-water
betamethasone	Celestone
triamcinolone diacetate	Aristocort Forte
triamcinolone diacetate	triamcinolone diacetate
triamcinolone hexacetonide	Aristospan Intra-Articular
triamcinolone acetonide	Kenalog
triamcinolone acetonide	triamcinolone acetonide
triamcinolone	Aristocort
triamcinolone acetonide	Kenalog-80
triamcinolone acetonide	Cenocort A-40
triamcinolone diacetate	Cenocort Forte Suspension
triamcinolone acetonide	Kenalog-40
triamcinolone acetonide/bupivacaine/in 0.9% sodium chloride	triamcinol ace-bupiv-0.9% NaCl
triamcinolone diacetate in 0.9 % sodium chloride/PF	triamcinolone dia(PF)-0.9%NaCl
triamcinolone diacetate in 0.9 % sodium chloride	triamcinolone diacet-0.9% NaCl
triamcinolone acetonide/0.9% sodium chloride/PF	triamcinol ac (PF) in 0.9%NaCl
triamcinolone acetonide in 0.9 % sodium chloride	triamcinolone aceton-0.9% NaCl
triamcinolone diacetate	Triam Forte
triamcinolone acetonide	Triam-A
triamcinolone acetonide/lidocaine HCl	Lidocilone I
triamcinolone diacetate	Aristocort Intralesional
triamcinolone hexacetonide	Aristospan Intralesional
Short-Acting Beta Agonists	
albuterol sulfate	Proventil HFA
albuterol sulfate	albuterol sulfate
levalbuterol HCl	levalbuterol HCl
albuterol sulfate	Ventolin HFA
levalbuterol tartrate	levalbuterol tartrate
levalbuterol HCl	Xopenex Concentrate
levalbuterol HCl	Xopenex
albuterol sulfate	ProAir HFA
albuterol sulfate	AccuNeb
levalbuterol tartrate	Xopenex HFA
albuterol sulfate	ProAir RespiClick
albuterol sulfate	Vospire ER

Appendix F. List of Generic and Brand Names of Medical Products Used to Define Baseline Characteristics in this Request

Generic Name	Brand Name
Long-Acting Beta Agonists	
indacaterol maleate	Arcapta Neohaler
formoterol fumarate	Foradil Aerolizer
olodaterol HCl	Striverdi Respimat
formoterol fumarate	Perforomist
arformoterol tartrate	Brovana
Short-Acting Antimuscarinic Agents	
ipratropium bromide	ipratropium bromide
ipratropium bromide	Atrovent HFA
ipratropium bromide	Atrovent
Long-Acting Antimuscarinic Agents	
glycopyrrolate	Seebri Neohaler
umeclidinium bromide	Incruse Ellipta
aclidinium bromide	Tudorza Pressair
tiotropium bromide	Spiriva with HandiHaler
tiotropium bromide	Spiriva Respimat
glycopyrrolate/nebulizer and accessories	Lonhala Magnair Starter
glycopyrrolate/nebulizer accessories	Lonhala Magnair Refill
glycopyrrolate	glycopyrrolate
glycopyrrolate	Robinul
glycopyrrolate/PF	Glyrx-PF
glycopyrrolate in sterile water/PF	glycopyrrolate (PF) in water
glycopyrrolate in sterile water	glycopyrrolate in water
glycopyrrolate	Cuvposa
glycopyrrolate	Glycate
glycopyrrolate	Robinul Forte
Leukotriene Modifiers	
montelukast sodium	Singulair
montelukast sodium	montelukast
zafirlukast	Accolate
zafirlukast	zafirlukast
zileuton	Zyflo
zileuton	Zyflo CR
zileuton	zileuton
Immunomodulators	
reslizumab	Cinqair
mepolizumab	Nucala
omalizumab	Xolair
Mast Cell Stabilizers	
cromolyn sodium	cromolyn
cromolyn sodium	Nasal Allergy Symptom Control
cromolyn sodium	Nasalcrom
cromolyn sodium	Gastrocrom

Appendix G. List of States Used to Define Ease of Generic Substitution in this Request

Highest
Arizona
Illinois
Kentucky
Massachusetts
New Jersey
New York
North Carolina
Oklahoma
Rhode Island
Tennessee
Washington
Wisconsin
Wyoming

Higher
Alabama
California
Colorado
Florida
Georgia
Hawaii
Idaho
Maine
Maryland
Minnesota
Mississipppi
Missouri
Nebraska
Nevada
New Mexico
Oregon
Pennsylvania
Vermont
West Virginia

Lower
Delaware
Indiana
Kansas
Michigan
Montana
New Hampshire
North Dakota
Ohio
South Dakota

Lowest
Alaska
Arkansas
Connecticut
District of Columbia
Iowa
Louisiana

Appendix G. List of States Used to Define Ease of Generic Substitution in this Request

South Carolina
Texas
Utah
Virginia

Appendix H. Specifications Defining Parameters for this Request

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool [10.3.2] to assess switching patterns among Inhaled Corticosteriod/Long-Acting Beta-Agonist (ICS/LABA) users with prior asthma or Chronic Obstructive Pulmonary Disease (COPD) and without recent history of pneumonia in the Sentinel Distributed Database (SDD).

Query period: February 1, 2019 - December 31, 2020
Coverage requirement: Medical & Drug Coverage
Pre-Index Enrollment Requirement (Days): 365
Post-Index Enrollment Requirement (Days): 0
Enrollment Gap (Days): 45
Age Groups (Years): 4-11, 12-18, 19-39, 40-64, 65+
Stratifications: Age, Sex, Race, Year, Geographic Region

Switching Groups

	Exposure Group	Cohort Definition	Washout Period	Episode Gap and Type	Uptake Date	Product Approval Date	Product Marketing Date	Other Product Date	Censoring Criteria
1	Advair Diskus	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days	0	8/24/2000	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
2	Advair Diskus	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days	0	8/24/2000	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
3	Advair Diskus AG	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days	0	8/24/2000	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
4	Wixela	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days	0	N/A	2/8/2019	N/A	Disenrollment, Death, Query End Date, DP End Date
5	Symbicort	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days	0	7/21/2006	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
6	Breo Ellipta	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days	0	5/10/2013	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date

Appendix H. Specifications Defining Parameters for this Request

	Switching Groups								
	Exposure Group	Cohort Definition	Washout Period	Episode Gap and Type	Uptake Date	Product Approval Date	Product Marketing Date	Other Product Date	Censoring Criteria
7	Other ICS/LABA (Advair HFA, Dulera, or Airduo Respiclick)	02: Cohort includes all valid treatment episodes during the query period	0 days	60 days	0	N/A	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
12	Other ICS/LABA (Advair HFA, Dulera, or Airduo Respiclick - with prior COPD)	02: Cohort includes all valid treatment episodes during the query period	0 days	60 days	0	N/A	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
13	Advair Diskus (with prior asthma)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	8/24/2000	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
14	Advair Diskus AG (with prior asthma)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	N/A	2/8/2019	N/A	Disenrollment, Death, Query End Date, DP End Date
15	Wixela (with prior asthma)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	1/30/2019	2/12/2019	N/A	Disenrollment, Death, Query End Date, DP End Date
16	Advair Diskus (with prior COPD)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	N/A	N/A	N/A	Disenrollment, Death, Query End Date, DP End Date
17	Advair Diskus AG (with prior COPD)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	N/A	2/8/2019	N/A	Disenrollment, Death, Query End Date, DP End Date
18	Wixela (with prior COPD)	02: Cohort includes all valid treatment episodes during the query period	-183 days	60 days	0	1/30/2019	2/12/2019	N/A	Disenrollment, Death, Query End Date, DP End Date

Appendix H. Specifications Defining Parameters for this Request

	Switching Groups								
	Exposure Group	Cohort Definition	Washout Period	Episode Gap and Type	Uptake Date	Product Approval Date	Product Marketing Date	Other Product Date	Censoring Criteria
1	With asthma and incident Advair, Advair AG, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
2	With asthma and incident Advair, Wixela, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
3	With asthma and incident Advair, Symbicort, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
4	With COPD and incident Advair, Advair AG, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
5	With COPD and incident Advair, Wixela, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
6	With COPD and incident Advair, Symbicort, Advair	02: Cohort includes all valid treatment episodes during the query period	-183 days	90 days					Disenrollment, Death, Query End Date, DP End Date
7	With asthma and Prevalent Advair, Advair AG, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
8	With asthma and Prevalent Advair, Wixela, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
9	With asthma and Prevalent Advair, Symbicort, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date

Appendix H. Specifications Defining Parameters for this Request

	Switching Groups								
	Exposure Group	Cohort Definition	Washout Period	Episode Gap and Type	Uptake Date	Product Approval Date	Product Marketing Date	Other Product Date	Censoring Criteria
10	With asthma and Prevalent Advair, Breo Ellipta, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
11	With COPD and Prevalent Advair, Advair AG, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
12	With COPD and Prevalent Advair, Wixela, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
13	With COPD and Prevalent Advair, Symbicort, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date
14	With COPD and Prevalent Advair, Breo Ellipta, Advair	02: Cohort includes all valid treatment episodes during the query period	0 days	90 days					Disenrollment, Death, Query End Date, DP End Date

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360. National Drug Codes (NDCs) are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool [10.3.2] to assess switching patterns among Inhaled Corticosteriod/Long-Acting Beta-Agonist (ICS/LABA) users with prior asthma or Chronic Obstructive Pulmonary Disease (COPD) and without recent history of pneumonia in the Sentinel Distributed Database (SDD).

Query period: February 1, 2019 - December 31, 2020
Coverage requirement: Medical & Drug Coverage
Pre-Index Enrollment Requirement (Days): 365
Post-Index Enrollment Requirement (Days): 0
Enrollment Gap (Days): 45
Age Groups (Years): 4-11, 12-18, 19-39, 40-64, 65+
Stratifications: Age, Sex, Race, Year, Geographic Region

Treatment Pathways

		Switch Evaluation Step Value	Switch Groups	Pre-Index Enrollment Criteria in Switch Episodes	Post-Index Enrollment Criteria in Switch Episodes	Switch Cohort Definition	Switch Pattern Cohort Inclusion Date	Switch Pattern Cohort Inclusion Strategy Indicator	Gap Tolerance	Overlap Tolerance and Type	Switch Gap Inclusion Indicator
Incident (Advair AG, Wixela, Symbicort) Asthma	1	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Advair AG								
		2	Advair_inc								
	2	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Wixela								
		2	Advair_inc								
	3	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Symbicort								
		2	Advair_inc								

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request

		Treatment Pathways									
		Switch Evaluation Step Value	Switch Groups	Pre-Index Enrollment Criteria in Switch Episodes	Post-Index Enrollment Criteria in Switch Episodes	Switch Cohort Definition	Switch Pattern Cohort Inclusion Date	Switch Pattern Cohort Inclusion Strategy Indicator	Gap Tolerance	Overlap Tolerance and Type	Switch Gap Inclusion Indicator
Incident (Advair AG, Wixela, Symbicort) COPD	4	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Advair AG								
		2	Advair_inc								
	5	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Wixela								
		2	Advair_inc								
	6	0	Advair_inc	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Symbicort								
		2	Advair_inc								

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request

		Treatment Pathways									
		Switch Evaluation Step Value	Switch Groups	Pre-Index Enrollment Criteria in Switch Episodes	Post-Index Enrollment Criteria in Switch	Switch Cohort Definition	Switch Pattern Cohort Inclusion Date	Switch Pattern Cohort Inclusion Strategy Indicator	Gap Tolerance	Overlap Tolerance and Type	Switch Gap Inclusion Indicator
Prevalent use, asthma	7	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Advair AG								
		2	Advair_prev								
	8	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Wixela								
		2	Advair_prev								
	9	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Symbicort								
		2	Advair_prev								
	10	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Breo Ellipta								
		2	Advair_prev								

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request

					Treatment Pathways						
		Switch Evaluation Step Value	Switch Groups	Pre-Index Enrollment Criteria in Switch Episodes	Post-Index Enrollment Criteria in Switch	Switch Cohort Definition	Switch Pattern Cohort Inclusion Date	Switch Pattern Cohort Inclusion Strategy Indicator	Gap Tolerance	Overlap Tolerance and Type	Switch Gap Inclusion Indicator
Prevalent use, COPD	11	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Advair AG								
		2	Advair_prev								
	12	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Wixela								
		2	Advair_prev								
	13	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Symbicort								
		2	Advair_prev								
	14	0	Advair_prev	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	90 days	99%	Yes
		1	Breo Ellipta								
		2	Advair_prev								

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request											
		Treatment Pathways									
		Switch Evaluation Step Value	Switch Groups	Pre-Index Enrollment Criteria in Switch Episodes	Post-Index Enrollment Criteria in Switch	Switch Cohort Definition	Switch Pattern Cohort Inclusion Date	Switch Pattern Cohort Inclusion Strategy Indicator	Gap Tolerance	Overlap Tolerance and Type	Switch Gap Inclusion Indicator
Prevalent Use, Other (60 day gap)	9	0	Advair	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	60 days	99%	Yes
		1	Other ICS/LABA (Advair HFA, Dulera, or Airduo Respiclick)								
		2	Advair								
	10	0	Advair	365	None	02: All switch pattern episodes during the query period	None (use product dispensing date)	02: used as switch cohort entry date and as initial switch step index date for computing time to first switch	60 days	99%	Yes
		1	Other ICS/LABA (Advair HFA, Dulera, or Airduo Respiclick)								
		2	Advair								
ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."											

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request

		Inclusion Criteria								
		Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclude evidence of a dispensing date or days supply if evaluation period includes dispensings	Minimum number of instances the criteria should be found in evaluation period	Forced supply to attach to dispensings
Incident (Advair AG, Wixela, Symbicort) Asthma	1	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a
	2	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a
	3	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request											
		Inclusion Criteria									
		Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclude evidence of a dispensing date or days supply if evaluation period includes dispensings	Minimum number of instances the criteria should be found in evaluation period	Forced supply to attach to dispensings
Incident (Advair AG, Wixela, Symbicort) COPD	4	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a
	5	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a
	6	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	ICS/LABA (Advair, Advair AG, Wixela, Symbicort, Breo Ellipta)	Any	Any	-183	-1	N (search for days supply)	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Wixela, & Breo Ellipta	Any	Any	-183	0	n/a	1	n/a

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request											
		Inclusion Criteria									
		Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclude evidence of a dispensing date or days supply if evaluation period includes dispensings	Minimum number of instances the criteria should be found in evaluation period	Forced supply to attach to dispensings
Prevalent use, asthma	7	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	8	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	9	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	10	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request										
		Inclusion Criteria								
		Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclude evidence of a dispensing date or days supply if evaluation period includes dispensings	Minimum number of instances the criteria should be found in evaluation period	Forced supply to attach to dispensings
Prevalent use, COPD	11	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	12	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	13	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	14	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	penumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a

Appendix I. Specifications Defining Switch Patterns and Inclusion/Exclusion Criteria for this Request										
		Inclusion Criteria								
		Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclude evidence of a dispensing date or days supply if evaluation period includes dispensings	Minimum number of instances the criteria should be found in evaluation period	Forced supply to attach to dispensings
Prevalent Use, Other (60 day gap)	9	Inclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
	10	Inclusion	COPD	Any	Any	-365	0	n/a	1	n/a
		Exclusion	Asthma	Any	Any	-365	0	n/a	1	n/a
		Exclusion	pneumonia	Any	Any	-90	0	n/a	1	n/a
		Exclusion	Advair Diskus, Advair Diskus AG, Advair HFA, Symbicort, Dulera, Breo Ellipta, Airduo Respiclick and Wixela	Any	Any	-183	0	n/a	1	n/a
ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's "National Drug Data File (NDDF®) Plus."										

Appendix J. Specifications Defining Baseline Characteristics for this Request

Covariates

Covariate	Diagnosis	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Minimum number of instances the covariate should be found in evaluation period
Respiratory failure	Respiratory failure	Any care setting	Any	-365	-1	N/A	1
Acute Bronchospasm	Acute bronchospasm	Any	Any	-365	-1	N/A	1
Asthma Exacerbation	Asthma Exacerbation	Any	Any	-365	-1	N/A	1
	OR						
	Asthma	IP	Primary	-365	-1	N/A	1
	OR						
	Asthma	ED	Any	-365	-1	N/A	1
	OR						
	Oral corticosteroid dispensing	N/A	Any	-365	-1	N/A	1
COPD Exacerbation	COPD Exacerbation	N/A	Any	-365	-1	N/A	1
	OR						
	COPD	IP	Primary	-365	-1	N/A	1
	OR						
	COPD	ED	Any	-365	-1	N/A	1
	OR						
	Oral corticosteroid dispensing	N/A	Any	-365	-1	N/A	1

Appendix J. Specifications Defining Baseline Characteristics for this Request

Covariates							
Covariate	**Diagnosis**	**Care setting**	**Principal diagnosis position**	**Evaluation period start**	**Evaluation period end**	**Exclude evidence of days supply if covariate includes dispensings**	**Minimum number of instances the covariate should be found in evaluation period**
Short-Acting Beta Agonists	Albuterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Levalbuterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
Long-Acting Beta Agonists	Arformoterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Formoterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Indacaterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Olodaterol	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
Short-Acting Antimuscarinic Agents	Ipratropium	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1

Appendix J. Specifications Defining Baseline Characteristics for this Request

Covariates

Covariate	Diagnosis	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensings	Minimum number of instances the covariate should be found in evaluation period
Long-Acting Antimuscarinic Agents	Aclidinium bromide	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Glycopyrrolate	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Tiotropium bromide	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Umeclidinium bromide	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
Leukotriene Modifiers	Montelukast	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Zafirlukast	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Zileuton	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1

Appendix J. Specifications Defining Baseline Characteristics for this Request

Covariates							
Covariate	**Diagnosis**	**Care setting**	**Principal diagnosis position**	**Evaluation period start**	**Evaluation period end**	**Exclude evidence of days supply if covariate includes dispensings**	**Minimum number of instances the covariate should be found in evaluation period**
Immunomodulators	Omalizumab	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Mepolizumab	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
	Reslizumab	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1
Mast Cell Stabilizers	cromolyn sodium	N/A	NA	-365	-1	Evaluation period should search for only evidence of a dispensing date	1