

## 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\_mpl1r\_wp181

**Request ID:** cder\_mpl1r\_wp181\_nsdv\_v02

**Request Description:** In this report we tabulated the duration of first use among new users of dry powder inhalers (DPI) and metered dose inhalers (MDI) containing corticosteroid and long acting beta agonists (LABA) with asthma or chronic obstructive pulmonary disease (COPD).

**Sentinel Routine Querying Module:** Cohort Identification and Descriptive Analysis (CIDA) module, version 9.3.0

**Data Source:** We distributed this request to 16 Sentinel Data Partners on April 3, 2020. The study period included data from May 10, 2013 through September 30, 2019. Please see Appendix A for a list of dates of available data for each Data Partner.

**Exposures of Interest:** The exposures of interest were Advair Diskus, Breo Ellipta, Symbicort, Airduo Respiclick, Advair HFA, and Dulera. Advair HFA and Dulera were grouped into a single exposure. We defined the exposures using outpatient pharmacy dispensing records and National Drug Codes (NDCs). Please see Appendix B for a list of generic and brand names of medical products used to define exposures in this request.

**Cohort Eligibility Criteria:** We required members to be enrolled in health plans with both medical and drug coverage for at least 365 days prior to their index date, during which gaps in coverage of up to 45 days were allowed. We excluded patients aged less than 4 years old on the index date. For each exposure group, we created two mutually exclusive cohorts. The first cohort required that patients had a recorded asthma or asthma exacerbation diagnosis and no evidence of COPD or COPD exacerbation in the year prior to the start of exposure. The second cohort required a COPD or COPD exacerbation diagnosis and no evidence of asthma or asthma exacerbation in the year prior to the start of exposure.

See Appendix C for a list of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes used to define asthma and COPD.

**Duration of Incident Use:** We evaluated the duration of first use among new users of each exposure of interest. New use was defined as not having a prior dispensing for the exposure of interest in the preceding 365 days. We only considered the first valid index date for each patient. Duration of exposure was based on the number of days supplied in the outpatient pharmacy dispensing records. We bridged together episodes less than 30 days apart, and applied a 30-day episode extension to the final dispensing. Patients were censored upon discontinuation of the index exposure, disenrollment from the health plan, death, or the end of available data from that Data Partner.

**Please see Appendix D for the specifications used to define parameters in this request.**

**Limitations:** As with all observational studies, this evaluation was limited in its ability to control for all sources of potential bias. Algorithms used to define exposures, event outcomes, inclusion and exclusion criteria, and covariates are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

**Notes:** Please contact the Sentinel Operations Center ([info@sentinelssystem.org](mailto:info@sentinelssystem.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.sentinelssystem.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse>).

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**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.

**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: Summary of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Inhaler Use among Members with a History of Asthma or Chronic Obstructive Pulmonary Disease (COPD) in the Sentinel Distributed Database (SDD) between May 10, 2013 to September 30, 2019, Overall**

	New Users	Days At Risk	Years at Risk
<b>May 10, 2013 - September 30, 2019</b>			
New Users of Advair Diskus with Asthma	314,478	37,788,487	103,459.2
New Users of Breo Ellipta with Asthma	185,603	30,382,464	83,182.7
New Users of Symbicort with Asthma	304,889	35,760,310	97,906.4
New Users of Airduo Respiclick with Asthma	228	19,925	54.6
New Users of Advair HFA or Dulera with Asthma	169,825	19,231,480	52,652.9
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	643,097	92,505,330	253,265.8
New Users of Breo Ellipta with COPD	369,649	67,417,292	184,578.5
New Users of Symbicort with COPD	751,622	113,857,724	311,725.5
New Users of Airduo Respiclick with COPD	153	11,147	30.5
New Users of Advair HFA or Dulera with COPD	219,658	30,632,348	83,866.8

**Table 2. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Number of Episodes by Duration of Incident Use										
	0-30 days		31-90 days		91-270 days		271-360 days		361+ days		
	Total Number of Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	314,478	7,887	2.5%	190,510	60.6%	91,165	29.0%	8,358	2.7%	16,558	5.3%
New Users of Breo Ellipta with Asthma	185,603	6,729	3.6%	90,103	48.5%	58,792	31.7%	9,090	4.9%	20,889	11.3%
New Users of Symbicort with Asthma	304,889	10,730	3.5%	187,915	61.6%	83,278	27.3%	8,083	2.7%	14,883	4.9%
New Users of Airduo Respiclick with Asthma	228	11	4.8%	160	70.2%	*****	*****	*****	*****	*****	*****
New Users of Advair HFA or Dulera with Asthma	169,825	4,354	2.6%	107,682	63.4%	46,368	27.3%	4,233	2.5%	7,188	4.2%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	643,097	14,553	2.3%	368,092	57.2%	190,159	29.6%	20,895	3.2%	49,398	7.7%
New Users of Breo Ellipta with COPD	369,649	11,714	3.2%	174,573	47.2%	116,091	31.4%	18,438	5.0%	48,833	13.2%
New Users of Symbicort with COPD	751,622	20,197	2.7%	423,198	56.3%	217,474	28.9%	26,150	3.5%	64,603	8.6%
New Users of Airduo Respiclick with COPD	153	*****	*****	116	75.8%	*****	*****	*****	*****	0	0.0%
New Users of Advair HFA or Dulera with COPD	219,658	4,999	2.3%	129,109	58.8%	62,478	28.4%	7,174	3.3%	15,898	7.2%

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

**Distribution of Duration of Incident Use in Days, by Episode**

	<b>Minimum</b>	<b>Q1</b>	<b>Median</b>	<b>Q3</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
New Users of Advair Diskus with Asthma	1	60	60	120	2,239	120	143
New Users of Breo Ellipta with Asthma	1	60	90	180	1,936	164	190
New Users of Symbicort with Asthma	1	60	60	120	2,237	117	141
New Users of Airduo Respiclick with Asthma	1	60	60	91	488	87	70
New Users of Advair HFA or Dulera with Asthma	1	60	60	120	2,245	113	134
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	1	60	60	123	2,329	144	201
New Users of Breo Ellipta with COPD	1	60	90	203	2,059	182	228
New Users of Symbicort with COPD	1	60	60	140	2,279	151	215
New Users of Airduo Respiclick with COPD	10	60	60	70	339	73	42
New Users of Advair HFA or Dulera with COPD	1	60	60	123	2,304	139	189

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations



**Table 3a. Summary of Reasons for Censoring in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Total Number of Episodes	Treatment Discontinuation		Disenrollment		Death		Data Partner End Date	
		Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	314,478	277,924	88.4%	32,795	10.4%	1,322	0.4%	19,897	6.3%
New Users of Breo Ellipta with Asthma	185,603	140,119	75.5%	44,219	23.8%	1,132	0.6%	32,170	17.3%
New Users of Symbicort with Asthma	304,889	257,602	84.5%	46,330	15.2%	1,299	0.4%	29,438	9.7%
New Users of Airduo Respiclick with Asthma	228	200	87.7%	26	11.4%	0	0.0%	17	7.5%
New Users of Advair HFA or Dulera with Asthma	169,825	151,676	89.3%	17,373	10.2%	467	0.3%	9,149	5.4%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	643,097	572,320	89.0%	42,251	6.6%	28,329	4.4%	20,679	3.2%
New Users of Breo Ellipta with COPD	369,649	289,617	78.3%	62,152	16.8%	18,913	5.1%	45,393	12.3%
New Users of Symbicort with COPD	751,622	646,167	86.0%	76,467	10.2%	31,010	4.1%	46,211	6.1%
New Users of Airduo Respiclick with COPD	153	134	87.6%	12	7.8%	*****	*****	*****	*****
New Users of Advair HFA or Dulera with COPD	219,658	196,727	89.6%	15,014	6.8%	8,276	3.8%	7,166	3.3%

<sup>1</sup>An episode may be censored due to more than one reason if they occur on the same date. Therefore, the sum of the reasons for censoring may be greater than the total number of episodes.

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**Table 3b. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Treatment Discontinuation in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Total Number of Episodes Censored due to Treatment Discontinuation	Number of Episodes by Duration of Incident Use									
		0-30 days		31-90 days		91-270 days		271-360 days		361+ days	
		Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	277,924	0	0.0%	178,862	64.4%	82,994	29.9%	6,536	2.4%	9,532	3.4%
New Users of Breo Ellipta with Asthma	140,119	0	0.0%	79,090	56.4%	46,234	33.0%	5,817	4.2%	8,978	6.4%
New Users of Symbicort with Asthma	257,602	0	0.0%	171,757	66.7%	71,604	27.8%	5,935	2.3%	8,306	3.2%
New Users of Airduo Respiclick with Asthma	200	0	0.0%	146	73.0%	*****	*****	*****	*****	*****	*****
New Users of Advair HFA or Dulera with Asthma	151,676	0	0.0%	101,233	66.7%	42,039	27.7%	3,418	2.3%	4,986	3.3%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	572,320	0	0.0%	346,722	60.6%	174,191	30.4%	17,290	3.0%	34,117	6.0%
New Users of Breo Ellipta with COPD	289,617	0	0.0%	155,283	53.6%	95,843	33.1%	13,132	4.5%	25,359	8.8%
New Users of Symbicort with COPD	646,167	0	0.0%	392,429	60.7%	192,170	29.7%	20,523	3.2%	41,045	6.4%
New Users of Airduo Respiclick with COPD	134	0	0.0%	106	79.1%	*****	*****	*****	*****	0	0.0%
New Users of Advair HFA or Dulera with COPD	196,727	0	0.0%	121,712	61.9%	57,065	29.0%	6,021	3.1%	11,929	6.1%

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

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**Table 3b. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Treatment Discontinuation in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

Distribution of Duration of Incident Use in Days, by Episode							
	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
New Users of Advair Diskus with Asthma	31	60	60	120	2,158	110	112
New Users of Breo Ellipta with Asthma	31	60	90	148	1,642	133	132
New Users of Symbicort with Asthma	31	60	60	120	2,018	107	106
New Users of Airduo Respiclick with Asthma	31	60	60	102	488	92	70
New Users of Advair HFA or Dulera with Asthma	31	60	60	120	1,997	107	111
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	31	60	60	120	2,250	131	166
New Users of Breo Ellipta with COPD	31	60	90	159	1,909	151	171
New Users of Symbicort with COPD	31	60	60	120	2,178	133	160
New Users of Airduo Respiclick with COPD	31	60	60	90	339	77	42
New Users of Advair HFA or Dulera with COPD	31	60	60	120	2,163	130	159

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

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**Table 3c. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Disenrollment in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Total Number of Episodes Censored due to Disenrollment	Number of Episodes by Duration of Incident Use									
		0-30 days		31-90 days		91-270 days		271-360 days		361+ days	
		Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	32,795	7,232	22.1%	10,876	33.2%	7,269	22.2%	1,438	4.4%	5,980	18.2%
New Users of Breo Ellipta with Asthma	44,219	6,504	14.7%	10,720	24.2%	12,217	27.6%	3,163	7.2%	11,615	26.3%
New Users of Symbicort with Asthma	46,330	10,463	22.6%	15,974	34.5%	11,408	24.6%	2,083	4.5%	6,402	13.8%
New Users of Airduo Respiclick with Asthma	26	*****	*****	14	53.8%	*****	*****	*****	*****	0	0.0%
New Users of Advair HFA or Dulera with Asthma	17,373	4,164	24.0%	6,243	35.9%	4,135	23.8%	772	4.4%	2,059	11.9%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	42,251	7,909	18.7%	11,914	28.2%	9,455	22.4%	2,064	4.9%	10,909	25.8%
New Users of Breo Ellipta with COPD	62,152	8,232	13.2%	13,955	22.5%	15,497	24.9%	4,202	6.8%	20,266	32.6%
New Users of Symbicort with COPD	76,467	13,611	17.8%	21,432	28.0%	18,667	24.4%	4,107	5.4%	18,650	24.4%
New Users of Airduo Respiclick with COPD	12	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
New Users of Advair HFA or Dulera with COPD	15,014	2,999	20.0%	4,637	30.9%	3,677	24.5%	790	5.3%	2,911	19.4%

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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 3c. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Disenrollment in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

**Distribution of Duration of Incident Use in Days, by Episode**

	<b>Minimum</b>	<b>Q1</b>	<b>Median</b>	<b>Q3</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
New Users of Advair Diskus with Asthma	1	34	76	235	2,239	195	272
New Users of Breo Ellipta with Asthma	1	52	139	381	1,936	259	286
New Users of Symbicort with Asthma	1	33	71	187	2,237	171	253
New Users of Airduo Respiclick with Asthma	1	21	48	67	312	59	63
New Users of Advair HFA or Dulera with Asthma	1	32	63	168	2,202	160	249
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	1	41	103	382	2,329	293	416
New Users of Breo Ellipta with COPD	1	55	169	479	2,059	322	362
New Users of Symbicort with COPD	1	42	107	349	2,279	293	424
New Users of Airduo Respiclick with COPD	10	16	39	48	67	35	19
New Users of Advair HFA or Dulera with COPD	1	38	88	265	2,256	245	377

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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 3d. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Death in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Total Number of Episodes Censored due to Death	Number of Episodes by Duration of Incident Use									
		0-30 days		31-90 days		91-270 days		271-360 days		361+ days	
		Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	1,322	302	22.8%	432	32.7%	300	22.7%	80	6.1%	208	15.7%
New Users of Breo Ellipta with Asthma	1,132	180	15.9%	338	29.9%	314	27.7%	88	7.8%	212	18.7%
New Users of Symbicort with Asthma	1,299	269	20.7%	454	34.9%	329	25.3%	66	5.1%	181	13.9%
New Users of Airduo Respiclick with Asthma	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
New Users of Advair HFA or Dulera with Asthma	467	107	22.9%	178	38.1%	104	22.3%	18	3.9%	60	12.8%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	28,329	6,791	24.0%	9,931	35.1%	6,432	22.7%	1,342	4.7%	3,833	13.5%
New Users of Breo Ellipta with COPD	18,913	3,610	19.1%	5,765	30.5%	5,044	26.7%	1,159	6.1%	3,335	17.6%
New Users of Symbicort with COPD	31,010	6,864	22.1%	10,221	33.0%	7,153	23.1%	1,614	5.2%	5,158	16.6%
New Users of Airduo Respiclick with COPD	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
New Users of Advair HFA or Dulera with COPD	8,276	2,058	24.9%	2,976	36.0%	1,803	21.8%	380	4.6%	1,059	12.8%

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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 3d. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Death in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

**Distribution of Duration of Incident Use in Days, by Episode**

	<b>Minimum</b>	<b>Q1</b>	<b>Median</b>	<b>Q3</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
New Users of Advair Diskus with Asthma	1	34	77	224	1,955	182	255
New Users of Breo Ellipta with Asthma	1	45	109	287	1,423	196	217
New Users of Symbicort with Asthma	1	35	73	200	1,917	174	244
New Users of Airduo Respiclick with Asthma							
New Users of Advair HFA or Dulera with Asthma	2	34	70	162	1,445	160	239
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	1	32	63	186	2,065	171	261
New Users of Breo Ellipta with COPD	1	39	92	258	1,934	198	250
New Users of Symbicort with COPD	1	34	74	228	2,194	198	293
New Users of Airduo Respiclick with COPD	23	24	40	59	134	50	39
New Users of Advair HFA or Dulera with COPD	1	31	59	177	2,031	160	241

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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 3e. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Data Partner End Date in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

	Total Number of Episodes Censored due to Data Partner End Date	Number of Episodes by Duration of Incident Use									
		0-30 days		31-90 days		91-270 days		271-360 days		361+ days	
		Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes	Number of Episodes	% Total Episodes
New Users of Advair Diskus with Asthma	19,897	3,260	16.4%	5,542	27.9%	4,422	22.2%	1,029	5.2%	5,644	28.4%
New Users of Breo Ellipta with Asthma	32,170	4,149	12.9%	7,321	22.8%	8,515	26.5%	2,220	6.9%	9,965	31.0%
New Users of Symbicort with Asthma	29,438	5,837	19.8%	9,749	33.1%	7,362	25.0%	1,356	4.6%	5,134	17.4%
New Users of Airduo Respiclick with Asthma	17	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
New Users of Advair HFA or Dulera with Asthma	9,149	1,709	18.7%	3,076	33.6%	2,339	25.6%	444	4.9%	1,581	17.3%
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	20,679	2,822	13.6%	4,650	22.5%	4,057	19.6%	1,013	4.9%	8,137	39.3%
New Users of Breo Ellipta with COPD	45,393	5,370	11.8%	9,547	21.0%	10,612	23.4%	2,894	6.4%	16,970	37.4%
New Users of Symbicort with COPD	46,211	7,266	15.7%	12,149	26.3%	10,772	23.3%	2,303	5.0%	13,721	29.7%
New Users of Airduo Respiclick with COPD	*****	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
New Users of Advair HFA or Dulera with COPD	7,166	1,220	17.0%	2,056	28.7%	1,656	23.1%	359	5.0%	1,875	26.2%

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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 3e. Summary of Duration of Incident Inhaled Corticosteroid/Long-acting Beta-Agonist (ICS/LABA) Use among Users Censored due to Data Partner End Date in the Sentinel Distributed Database (SDD) between May 10, 2013 and September 30, 2019<sup>1</sup>**

**Distribution of Duration of Incident Use in Days, by Episode**

	<b>Minimum</b>	<b>Q1</b>	<b>Median</b>	<b>Q3</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
New Users of Advair Diskus with Asthma	1	45	114	442	2,239	262	311
New Users of Breo Ellipta with Asthma	1	56	160	445	1,936	291	307
New Users of Symbicort with Asthma	1	38	83	229	2,237	199	284
New Users of Airduo Respiclick with Asthma	10	21	33	56	173	44	38
New Users of Advair HFA or Dulera with Asthma	1	40	84	228	2,245	208	305
New Users of Advair Diskus with Chronic Obstructive Pulmonary Disease (COPD)	1	54	186	585	2,329	417	500
New Users of Breo Ellipta with COPD	1	61	202	542	2,059	360	386
New Users of Symbicort with COPD	1	47	124	457	2,279	355	486
New Users of Airduo Respiclick with COPD	10	12	31	41	67	31	19
New Users of Advair HFA or Dulera with COPD	1	42	108	396	2,304	330	476

<sup>1</sup>A 30-day exposure extension was applied to each dispensing and included in duration of use calculations

\*\*\*\*\*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.

**Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (April 3, 2020)**

Masked ID	DP Start Date <sup>1</sup>	DP End Date <sup>1</sup>
DP01	06/01/2007	07/31/2019
DP02	01/01/2000	02/28/2019
DP03	01/01/2000	04/30/2019
DP04	01/01/2008	09/30/2019
DP05	01/01/2006	06/30/2019
DP06	01/01/2000	12/31/2017
DP07	01/01/2010	06/30/2019
DP08	01/01/2005	07/31/2018
DP09	01/01/2000	04/30/2018
DP10	01/01/2000	03/31/2019
DP11	01/01/2000	01/31/2019
DP12	01/01/2000	07/31/2019
DP13	01/01/2004	08/31/2019
DP14	01/01/2008	03/31/2019
DP15	01/01/2000	06/30/2019
DP16	01/01/2012	06/30/2018

<sup>1</sup>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 Index Exposure in this Request**

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<b>Generic Name</b>	<b>Brand Name</b>
fluticasone propionate/salmeterol xinafoate	Advair Diskus
budesonide/formoterol fumarate	Symbicort
mometasone furoate/formoterol fumarate	Dulera
fluticasone propionate/salmeterol xinafoate	Advair HFA
fluticasone furoate/vilanterol trifenate	Breo Ellipta
fluticasone propionate/salmeterol xinafoate	Airduo RespiClick

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion and Exclusion Criteria in this Request**

Code	Description	Code Category	Code Type
<b>Asthma</b>			
493	Extrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.1	Intrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.02	Extrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.12	Intrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.01	Extrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.11	Intrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.92	Asthma, unspecified, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.91	Asthma, unspecified with status asthmaticus	Diagnosis	ICD-9-CM
493.9	Asthma, unspecified, unspecified status	Diagnosis	ICD-9-CM
493.82	Cough variant asthma	Diagnosis	ICD-9-CM
493.2	Chronic obstructive asthma, unspecified	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
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
493.91	Asthma, unspecified with status asthmaticus	Diagnosis	ICD-9-CM
493.92	Asthma, unspecified, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.01	Extrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.02	Extrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.11	Intrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.12	Intrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-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
J45.31	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

**Appendix C. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion and Exclusion Criteria in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
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
<b>Chronic Obstructive Pulmonary Disease (COPD)</b>			
490	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-9-CM
491	Simple chronic bronchitis	Diagnosis	ICD-9-CM
491.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-9-CM
491.2	Obstructive chronic bronchitis, without exacerbation	Diagnosis	ICD-9-CM
491.21	Obstructive chronic bronchitis, with (acute) exacerbation	Diagnosis	ICD-9-CM
491.22	Obstructive chronic bronchitis with acute bronchitis	Diagnosis	ICD-9-CM
491.8	Other chronic bronchitis	Diagnosis	ICD-9-CM
491.9	Unspecified chronic bronchitis	Diagnosis	ICD-9-CM
492	Emphysematous bleb	Diagnosis	ICD-9-CM
492.8	Other emphysema	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
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
491.22	Obstructive chronic bronchitis with acute bronchitis	Diagnosis	ICD-9-CM
491.21	Obstructive chronic bronchitis, with (acute) exacerbation	Diagnosis	ICD-9-CM

**Appendix D. Specifications Defining Parameters in this Request**

This report executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 9.3.0 to evaluate duration of first use among new users of dry powder inhalers (DPI) and metered dose inhalers (MDI) containing corticosteroid and long acting  $\beta$ 2 agonists (LABA) with asthma or chronic obstructive pulmonary disease (COPD) in the Sentinel Distributed Database (SDD).

**Query period:** May 10, 2013 - September 30, 2019  
**Coverage requirement:** Medical and Drug Coverage  
**Pre-index enrollment requirement:** 365 days  
**Post-index enrollment requirement:** 0 days  
**Enrollment gap:** 45 days  
**Age groups:** 4-11, 12-18, 19-39, 40-64, 65+  
**Tensor output categorization:** 0-30, 31-90, 91-270, 271-360, 361+  
**Stratifications:** None

Switching Groups					Inclusion Criteria								
Exposure group	Cohort definition	Treatment episode gap and type	Exposure episode extension	Censoring criteria	Criteria	Inclusion group	Care setting	Principal diagnosis position	Evaluation period start (days)	Evaluation period end (days)	Exclusion reference date for dispensings	Number of instances the criteria should be found in evaluation period	Forced days supply to attached to dispensings
1 Advair Diskus (with prior asthma)	Include the first valid exposure per patient	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Advair Diskus	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
2 Breo Ellipta (with prior asthma)	Include the first valid exposure per patient	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Breo Ellipta	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A

Appendix D. Specifications Defining Parameters in this Request

Switching Groups					Inclusion Criteria									
Exposure Group	Cohort definition	Treatment episode gap and type	Exposure episode extension	Censoring Criteria	Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclusion reference date for dispensings	Number of instances the criteria should be found in evaluation period	Forced Days supply to attached to dispensings	
3	Symbicort (with prior asthma)	Include the first valid exposure per patient	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
						Exclusion	COPD	Any	Any	-365	0	N/A	1	N/A
						Exclusion	Symbicort	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
4	Airduo Respiclick (with prior asthma)	Include the first valid exposure per patient	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
						Exclusion	COPD	Any	Any	-365	0	N/A	1	N/A
						Exclusion	Airduo Respiclick	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
5	Other ICS/LABA (Advair HFA or Dulera - with prior asthma)	Include the first valid exposure per patient	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
						Exclusion	COPD	Any	Any	-365	0	N/A	1	N/A
						Exclusion	Other ICS/LABA (Advair HFA or Dulera)	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A

Appendix D. Specifications Defining Parameters in this Request

Switching Groups					Inclusion Criteria								
Exposure Group	Cohort definition	Treatment episode gap and type	Exposure episode extension	Censoring Criteria	Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclusion reference date for dispensings	Number of instances the criteria should be found in evaluation period	Forced Days supply to attached to dispensings
6	Advair Diskus (with prior COPD)	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Advair Diskus	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
7	Breo Ellipta (with prior COPD)	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Breo Ellipta	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
8	Symbicort (with prior COPD)	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Symbicort	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A



Appendix D. Specifications Defining Parameters in this Request

Switching Groups					Inclusion Criteria								
Exposure Group	Cohort definition	Treatment episode gap and type	Exposure episode extension	Censoring Criteria	Criteria	Inclusion group	Care setting	Principal Diagnosis Position	Evaluation period start	Evaluation period end	Exclusion reference date for dispensings	Number of instances the criteria should be found in evaluation period	Forced Days supply to attached to dispensings
9	Airduo Resplick (with prior COPD)	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Airduo Resplick	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A
10	Other ICS/LABA (Advair HFA or Dulera - with prior COPD)	30 days	30 days	Disenrollment, Death, Query End Date, DP End Date	Inclusion	COPD	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Asthma	Any	Any	-365	0	N/A	1	N/A
					Exclusion	Other ICS/LABA (Advair HFA or Dulera)	N/A	N/A	-365	-1	Evaluation period should search for only evidence of a dispensing date	1	N/A

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