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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Request ID: care_mpl1r_wp002

Request Description: We estimated rates of asthma patients treated with inhaled medications, such as inhaled corticosteroids (ICSs), long-acting muscarinic antagonists (LAMAs), long-acting beta agonists (LABAs) inhalers, anti-interleukin (IL)5 and anti-IL4, in the Sentinel Distributed Database (SDD). We examined separate cohorts to compare patients with 1) prevalent asthma with maintenance medications (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4) and without alpha-1 anti-trypsin, Chronic Obstructive Pulmonary Disease (COPD), bronchiectasis, cystic fibrosis, sarcoidosis, interstitial lung disease (ILD) and other lung diseases ("exclusions"); 2) incident asthma identified via diagnoses with or without maintenance medications with exclusions; 3) prevalent asthma identified via diagnoses with or without maintenance medications with exclusions; 4) incident anti-IL5 exposures with a baseline asthma diagnosis and without exclusions; 5) prevalent anti-IL5 exposures with a baseline asthma diagnosis and without exclusions; 6) incident asthma maintenance medication exposures with a baseline asthma diagnosis; 7) prevalent asthma maintenance medication exposures with a baseline asthma diagnosis.

Sentinel Modular Program Tool Used: Cohort Identification and Descriptive Analysis tool, version 8.0.3

Data Source: We included data from 13 Data Partners (DPs) contributing to the SDD in this report, January 1, 2008 through April 30, 2019. We distributed the request on August 14, 2019. See Appendix A for a list of the latest dates of available data for each DP.

Study Design: This request identifed background rates of exposures and diagnoses. We calculated the number of qualifying patients with the exposures overall, by year of exposure and by sex. We also examined the distributions of index drug exposures for the asthma maintenance medication cohorts (6 and 7). Finally, we assessed events (e.g., asthma exacerbations and diagnoses) and dispensings (e.g., oral corticosteroids and antibiotics) 365 days prior to and on the day of the index asthma diagnosis as well as during the 30 day post-index period for all cohorts.

Exposures of Interest: We identified exposures using the 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 and National Drug Codes (NDC). Please see Appendices B and C.1 for the list of codes used to define exposures. We included only the first valid exposure episode (index dispensing) in the given cohort for each qualifying patient for Cohorts 1-5 (see "Request Description" section above). Cohorts 6 and 7 allowed all valid exposure episodes during the query period.

Cohort Eligibility Criteria: We included members' valid exposure(s) that occurred between January 1, 2008 - April 30, 2019. Those included in the cohorts had continuous enrollment in health plans with 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 included the following age groups in the cohorts of interest: 18-64, 65+ years. For the asthma cohort, we defined incidence as no evidence of asthma in the previous 365 days. For the drug exposure cohorts, we defined incident exposure as no evidence of maintenance medication dispensings in the previous 365 days. Exclusion conditions definitions can be viewed on Appendix D.

Baseline Characteristics: For all asthma cohorts, we considered the following demographic and clinical characteristics in the 365 days prior to and including the index date of asthma diagnosis: age, sex, race, year and Charlson/Elixhauser combined comorbidity score, health service and drug utilization. We assessed evidence of smoking, spirometry and obesity during any time prior to index date through 365 days post-index. We examined asthma exacerbations and diagnoses in any and inpatient (IP) only care settings in three separate time windows in relation to the index asthma diagnosis (-365 to 0 days; 1 to 365 days and 1-30 days). Finally, we assessed medical products in any care setting in three separate time windows as well in relation to the index asthma diagnosis (-365 to 0 days; 1 to 365 days and 1-30 days). See Appendices D and E for a list of codes used to define the baseline characteristics of interest.

Limitations: Algorithms used to define the exposure, inclusions, exclusions, and characteristics are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind.
Please see Appendix H for the specifications of parameters used in the analyses for this request.

Notes: Please contact the Sentinel Operations Center Query Fulfillment Team (qf@sentinelsystem.org) for questions and to provide comments/suggestions for future enhancements to this document.

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List of Terms Found in this Report and their Definitions

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.

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.

Evaluation Period - number of days relative to index wherein a member is required to have evidence of a condition (diagnosis/procedure/drug dispensing).

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 before exposure episode that 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 1a. Baseline Characteristics for Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	3,325,710	
Number of unique patients	3,325,710	
Demographics	**Mean**	**Standard Deviation**
Mean Age	57	15.2
	Number	**Percent**
Age		
18-64	1,941,989	58.4%
65+	1,383,721	41.6%
Gender		
Female	2,303,273	69.3%
Male	1,022,411	30.7%
Other	26	0.0%
Year		
2008	202,594	6.1%
2009	205,418	6.2%
2010	145,450	4.4%
2011	494,027	14.9%
2012	308,474	9.3%
2013	296,451	8.9%
2014	358,774	10.8%
2015	390,112	11.7%
2016	376,420	11.3%
2017	370,093	11.1%
2018	174,305	5.2%
2019	3,592	0.1%
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.8	1.8
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	903,965	27.2%
Spirometry (in -365 to 0 days period)	953,567	28.7%
Methacholine (in -365 to 0 days period)	26,877	0.8%
Spirometry or methacholine challenge test (in -365 to 0 days period)	953,595	28.7%
Obesity (anytime in the pre-period to 365 days post)	1,204,787	36.2%
Asthma Exacerbation (in -365 to 0 days period)	663,155	19.9%
Asthma Exacerbation (in 1 to 365 days period)	464,399	14.0%
Asthma Exacerbation (in 1 to 30 days period)	113,991	3.4%
IP Asthma Exacerbation (in -365 to 0 days period)	57,623	1.7%
IP Asthma Exacerbation (in 1 to 365 days period)	64,727	1.9%
ER Asthma Exacerbation (in -365 to 0 days period)	97,731	2.9%
ER Asthma Exacerbation (in 1 to 365 days period)	65,133	2.0%
OP Asthma Exacerbation (in -365 to 0 days period)	606,329	18.2%
OP Asthma Exacerbation (in 1 to 365 days period)	417,401	12.6%
IPP Asthma Diagnosis (in -365 to 0 days period)	33,194	1.0%
IPP Asthma Diagnosis (in 1 to 365 days period)	32,869	1.0%

Table 1a. Baseline Characteristics for Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IPP Asthma Diagnosis (in 1 to 30 days period)	7,314	0.2%
IP Asthma Diagnosis (in -365 to 0 days period)	335,691	10.1%
IP Asthma Diagnosis (in 1 to 365 days period)	354,545	10.7%
ER Asthma Diagnosis (in -365 to 0 days period)	439,269	13.2%
ER Asthma Diagnosis (in 1 to 365 days period)	344,674	10.4%
Corticosteroids in -365 to 0 days period	1,336,634	40.2%
Corticosteroids in 1 to 365 days period	1,260,004	37.9%
Corticosteroids in 1 to 30 days period	593,567	17.8%
Antibiotics in -365 to 0 days period	2,060,356	62.0%
Antibiotics in 1 to 365 days period	1,892,639	56.9%
Antibiotics in 1 to 30 days period	762,850	22.9%
SABA in -365 to 0 days period	2,211,697	66.5%
SABA in 1 to 365 days period	1,954,231	58.8%
SABA in 1 to 30 days period	1,182,778	35.6%
IL5 in 1 to 365 days period	1,591	0.0%
Mepolizumab in 1 to 365 days period	1,291	0.0%
Reslizumab in 1 to 365 days period	156	0.0%
Benralizumab in 1 to 365 days period	165	0.0%
IL4 in 1 to 365 days period	596	0.0%
ICS-containing in -365 to 365 days period (at least 2)	2,069,970	62.2%
LABA-containing in -365 to 365 days period (at least 2)	1,499,845	45.1%
LAMA-containing in -365 to 365 days period (at least 2)	148,624	4.5%
LTRA in -365 to 365 days period (at least 2)	1,237,830	37.2%
Theophylline in -365 to 365 days period (at least 2)	33,800	1.0%
Cromolyn in -365 to 365 days period (at least 2)	2,557	0.1%
Omalizumab in -365 to 365 days period (at least 2)	19,393	0.6%
Corticosteriods in -365 to 365 days period (at least 2)	1,027,837	30.9%
SAMA in -365 to 365 days period (at least 2)	129,296	3.9%
ICS monotherapy in -365 to 365 days period (at least 2)	1,133,282	34.1%
LABA monotherapy in -365 to 365 days period (at least 2)	116,486	3.5%
LAMA monotherapy in -365 to 365 days period (at least 2)	142,977	4.3%
ICS/LABA in -365 to 365 days period (at least 2)	1,455,339	43.8%
Roflumilast in 1 to 365 days period (at least 2)	1,633	0.0%
Azithromycin in 1 to 365 days period (at least 2)	299,607	9.0%
LABA/LAMA in -365 to 365 days period (at least 2)	5,942	0.2%
Trelegy Ellipta in -365 to 365 days period (at least 2)	261	0.0%
ICS monotherapy in 1 to 365 days period (at least 4)	421,676	12.7%
LABA monotherapy (at least 1)	130,450	3.9%
LABA monotherapy (at least 2)	89,930	2.7%
LABA monotherapy (at least 4)	52,576	1.6%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	377,609	11.4%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	11,628	0.3%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	24,508	0.7%
ICS+LABA in -365 to 365 days period (at least 2)	1,474,293	44.3%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	89,406	2.7%

Table 1a. Baseline Characteristics for Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	5,306	0.2%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	4,843	0.1%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	4,184	0.1%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	19	16.4
Mean number of emergency room encounters (ED)	0.6	1.8
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0	0.4
Mean number of other ambulatory encounters (OA)	4	7.5
Mean number of unique drug classes	10.8	5.5
Mean number of generics	11.8	6.5
Mean number of filled prescriptions	42.3	35.5

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

[2]Value represents standard deviation where no % follows the value

Table 1b. Baseline Characteristics for Incident Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 2) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	4,450,281	
Number of unique patients	4,450,281	
Demographics	**Mean**	**Standard Deviation**
Mean Age	56.6	15.8
	Number	**Percent**
Age		
18-64	2,653,989	59.6%
65+	1,796,292	40.4%
Gender		
Female	2,993,794	67.3%
Male	1,456,444	32.7%
Other	43	0.0%
Year		
2008	202,656	4.6%
2009	284,299	6.4%
2010	242,951	5.5%
2011	499,639	11.2%
2012	487,135	10.9%
2013	469,283	10.5%
2014	515,523	11.6%
2015	527,977	11.9%
2016	522,627	11.7%
2017	491,996	11.1%
2018	203,582	4.6%
2019	2,613	0.1%
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.9	2
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	1,347,060	30.3%
Spirometry (in -365 to 0 days period)	685,625	15.4%
Methacholine (in -365 to 0 days period)	20,312	0.5%
Spirometry or methacholine challenge test (in -365 to 0 days period)	685,660	15.4%
Obesity (anytime in the pre-period to 365 days post)	1,652,613	37.1%
Asthma Exacerbation (in -365 to 0 days period)	508,240	11.4%
Asthma Exacerbation (in 1 to 365 days period)	519,895	11.7%
Asthma Exacerbation (in 1 to 30 days period)	174,174	3.9%
IP Asthma Exacerbation (in -365 to 0 days period)	57,644	1.3%
IP Asthma Exacerbation (in 1 to 365 days period)	70,441	1.6%
ER Asthma Exacerbation (in -365 to 0 days period)	55,677	1.3%
ER Asthma Exacerbation (in 1 to 365 days period)	59,577	1.3%
OP Asthma Exacerbation (in -365 to 0 days period)	432,194	9.7%
OP Asthma Exacerbation (in 1 to 365 days period)	459,274	10.3%
IPP Asthma Diagnosis (in -365 to 0 days period)	26,197	0.6%
IPP Asthma Diagnosis (in 1 to 365 days period)	26,936	0.6%
IPP Asthma Diagnosis (in 1 to 30 days period)	8,909	0.2%

Table 1b. Baseline Characteristics for Incident Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 2) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	743,364	16.7%
IP Asthma Diagnosis (in 1 to 365 days period)	473,531	10.6%
ER Asthma Diagnosis (in -365 to 0 days period)	348,656	7.8%
ER Asthma Diagnosis (in 1 to 365 days period)	373,875	8.4%
Corticosteroids in -365 to 0 days period	1,244,105	28.0%
Corticosteroids in 1 to 365 days period	1,525,603	34.3%
Corticosteroids in 1 to 30 days period	800,966	18.0%
Antibiotics in -365 to 0 days period	2,402,089	54.0%
Antibiotics in 1 to 365 days period	2,476,156	55.6%
Antibiotics in 1 to 30 days period	1,119,858	25.2%
SABA in -365 to 0 days period	2,177,478	48.9%
SABA in 1 to 365 days period	2,438,719	54.8%
SABA in 1 to 30 days period	1,624,251	36.5%
IL5 in 1 to 365 days period	294	0.0%
Mepolizumab in 1 to 365 days period	222	0.0%
Reslizumab in 1 to 365 days period	26	0.0%
Benralizumab in 1 to 365 days period	51	0.0%
IL4 in 1 to 365 days period	491	0.0%
ICS-containing in -365 to 365 days period (at least 2)	1,238,342	27.8%
LABA-containing in -365 to 365 days period (at least 2)	890,331	20.0%
LAMA-containing in -365 to 365 days period (at least 2)	89,402	2.0%
LTRA in -365 to 365 days period (at least 2)	764,419	17.2%
Theophylline in -365 to 365 days period (at least 2)	18,310	0.4%
Cromolyn in -365 to 365 days period (at least 2)	1,347	0.0%
Omalizumab in -365 to 365 days period (at least 2)	3,296	0.1%
Corticosteriods in -365 to 365 days period (at least 2)	967,664	21.7%
SAMA in -365 to 365 days period (at least 2)	103,241	2.3%
ICS monotherapy in -365 to 365 days period (at least 2)	666,260	15.0%
LABA monotherapy in -365 to 365 days period (at least 2)	72,208	1.6%
LAMA monotherapy in -365 to 365 days period (at least 2)	83,947	1.9%
ICS/LABA in -365 to 365 days period (at least 2)	863,894	19.4%
Roflumilast in 1 to 365 days period (at least 2)	957	0.0%
Azithromycin in 1 to 365 days period (at least 2)	348,637	7.8%
LABA/LAMA in -365 to 365 days period (at least 2)	5,513	0.1%
Trelegy Ellipta in -365 to 365 days period (at least 2)	206	0.0%
ICS monotherapy in 1 to 365 days period (at least 4)	252,356	5.7%
LABA monotherapy (at least 1)	103,022	2.3%
LABA monotherapy (at least 2)	63,306	1.4%
LABA monotherapy (at least 4)	34,095	0.8%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	244,335	5.5%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	7,904	0.2%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	22,709	0.5%
ICS+LABA in -365 to 365 days period (at least 2)	873,290	19.6%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	43,393	1.0%

Table 1b. Baseline Characteristics for Incident Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 2) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	2,940	0.1%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	2,678	0.1%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	2,309	0.1%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	16.5	15.3
Mean number of emergency room encounters (ED)	0.6	1.6
Mean number of inpatient hospital encounters (IP)	0.3	0.7
Mean number of non-acute institutional encounters (IS)	0	0.5
Mean number of other ambulatory encounters (OA)	4.1	8
Mean number of unique drug classes	8.8	5.3
Mean number of generics	9.6	6.1
Mean number of filled prescriptions	34.4	32.8

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

[2]Value represents standard deviation where no % follows the value

Table 1c. Baseline Characteristics for Prevalent Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 3) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	5,792,096	
Number of unique patients	5,792,096	
Demographics	**Mean**	**Standard Deviation**
Mean Age	56.7	15.7
	Number	**Percent**
Age		
18-64	3,399,954	58.7%
65+	2,392,142	41.3%
Gender		
Female	3,941,204	68.0%
Male	1,850,842	32.0%
Other	50	0.0%
Year		
2008	389,064	6.7%
2009	377,620	6.5%
2010	272,307	4.7%
2011	873,378	15.1%
2012	588,097	10.2%
2013	553,484	9.6%
2014	652,192	11.3%
2015	635,320	11.0%
2016	612,917	10.6%
2017	584,081	10.1%
2018	250,368	4.3%
2019	3,268	0.1%
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.9	2
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	1,681,743	29.0%
Spirometry (in -365 to 0 days period)	1,181,712	20.4%
Methacholine (in -365 to 0 days period)	30,565	0.5%
Spirometry or methacholine challenge test (in -365 to 0 days period)	1,181,758	20.4%
Obesity (anytime in the pre-period to 365 days post)	2,092,565	36.1%
Asthma Exacerbation (in -365 to 0 days period)	881,908	15.2%
Asthma Exacerbation (in 1 to 365 days period)	784,626	13.5%
Asthma Exacerbation (in 1 to 30 days period)	233,514	4.0%
IP Asthma Exacerbation (in -365 to 0 days period)	94,079	1.6%
IP Asthma Exacerbation (in 1 to 365 days period)	110,505	1.9%
ER Asthma Exacerbation (in -365 to 0 days period)	118,137	2.0%
ER Asthma Exacerbation (in 1 to 365 days period)	101,278	1.7%
OP Asthma Exacerbation (in -365 to 0 days period)	777,422	13.4%
OP Asthma Exacerbation (in 1 to 365 days period)	698,813	12.1%
IPP Asthma Diagnosis (in -365 to 0 days period)	47,677	0.8%
IPP Asthma Diagnosis (in 1 to 365 days period)	50,589	0.9%
IPP Asthma Diagnosis (in 1 to 30 days period)	13,720	0.2%

Table 1c. Baseline Characteristics for Prevalent Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 3) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	958,647	16.6%
IP Asthma Diagnosis (in 1 to 365 days period)	662,692	11.4%
ER Asthma Diagnosis (in -365 to 0 days period)	602,607	10.4%
ER Asthma Diagnosis (in 1 to 365 days period)	563,248	9.7%
Corticosteroids in -365 to 0 days period	1,842,034	31.8%
Corticosteroids in 1 to 365 days period	2,078,592	35.9%
Corticosteroids in 1 to 30 days period	1,039,070	17.9%
Antibiotics in -365 to 0 days period	3,274,701	56.5%
Antibiotics in 1 to 365 days period	3,290,289	56.8%
Antibiotics in 1 to 30 days period	1,429,917	24.7%
SABA in -365 to 0 days period	3,053,079	52.7%
SABA in 1 to 365 days period	3,227,521	55.7%
SABA in 1 to 30 days period	2,052,865	35.4%
IL5 in 1 to 365 days period	1,455	0.0%
Mepolizumab in 1 to 365 days period	1,188	0.0%
Reslizumab in 1 to 365 days period	143	0.0%
Benralizumab in 1 to 365 days period	143	0.0%
IL4 in 1 to 365 days period	648	0.0%
ICS-containing in -365 to 365 days period (at least 2)	1,956,671	33.8%
LABA-containing in -365 to 365 days period (at least 2)	1,458,168	25.2%
LAMA-containing in -365 to 365 days period (at least 2)	158,628	2.7%
LTRA in -365 to 365 days period (at least 2)	1,195,071	20.6%
Theophylline in -365 to 365 days period (at least 2)	42,431	0.7%
Cromolyn in -365 to 365 days period (at least 2)	3,028	0.1%
Omalizumab in -365 to 365 days period (at least 2)	20,982	0.4%
Corticosteriods in -365 to 365 days period (at least 2)	1,457,945	25.2%
SAMA in -365 to 365 days period (at least 2)	175,599	3.0%
ICS monotherapy in -365 to 365 days period (at least 2)	1,033,103	17.8%
LABA monotherapy in -365 to 365 days period (at least 2)	114,881	2.0%
LAMA monotherapy in -365 to 365 days period (at least 2)	151,630	2.6%
ICS/LABA in -365 to 365 days period (at least 2)	1,413,238	24.4%
Roflumilast in 1 to 365 days period (at least 2)	1,897	0.0%
Azithromycin in 1 to 365 days period (at least 2)	500,575	8.6%
LABA/LAMA in -365 to 365 days period (at least 2)	7,251	0.1%
Trelegy Ellipta in -365 to 365 days period (at least 2)	288	0.0%
ICS monotherapy in 1 to 365 days period (at least 4)	402,284	6.9%
LABA monotherapy (at least 1)	148,003	2.6%
LABA monotherapy (at least 2)	95,235	1.6%
LABA monotherapy (at least 4)	53,523	0.9%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	328,469	5.7%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	11,458	0.2%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	30,443	0.5%
ICS+LABA in -365 to 365 days period (at least 2)	1,431,795	24.7%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	90,726	1.6%

Table 1c. Baseline Characteristics for Prevalent Asthma Patients w/Maintenance Drugs and Exclusion Diagnoses of Interest (definition 3) in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	5,249	0.1%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	4,785	0.1%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	4,117	0.1%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	18	16.1
Mean number of emergency room encounters (ED)	0.7	1.9
Mean number of inpatient hospital encounters (IP)	0.3	0.8
Mean number of non-acute institutional encounters (IS)	0	0.5
Mean number of other ambulatory encounters (OA)	4.3	8.5
Mean number of unique drug classes	9.3	5.5
Mean number of generics	10.2	6.4
Mean number of filled prescriptions	36.9	34

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

[2]Value represents standard deviation where no % follows the value

Table 1d. Baseline Characteristics for Incident users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	2,852	
Number of unique patients	2,852	
Demographics	**Mean**	**Standard Deviation**
Mean Age	57.9	12.5
	Number	**Percent**
Age		
18-64	1,764	61.9%
65+	1,088	38.1%
Gender		
Female	1,875	65.7%
Male	977	34.3%
Other	0	0.0%
Year		
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	0	0.0%
2015	*****	*****
2016	542	19.0%
2017	1,440	50.5%
2018	852	29.9%
2019	*****	*****
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.9	1.7
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	900	31.6%
Spirometry (in -365 to 0 days period)	2,356	82.6%
Methacholine (in -365 to 0 days period)	39	1.4%
Spirometry or methacholine challenge test (in -365 to 0 days period)	2,356	82.6%
Obesity (anytime in the pre-period to 365 days post)	1,416	49.6%
Asthma Exacerbation (in -365 to 0 days period)	1,954	68.5%
Asthma Exacerbation (in 1 to 365 days period)	1,259	44.1%
Asthma Exacerbation (in 1 to 30 days period)	499	17.5%
IP Asthma Exacerbation (in -365 to 0 days period)	285	10.0%
IP Asthma Exacerbation (in 1 to 365 days period)	153	5.4%
ER Asthma Exacerbation (in -365 to 0 days period)	335	11.7%
ER Asthma Exacerbation (in 1 to 365 days period)	174	6.1%
OP Asthma Exacerbation (in -365 to 0 days period)	1,918	67.3%
OP Asthma Exacerbation (in 1 to 365 days period)	1,228	43.1%
IPP Asthma Diagnosis (in -365 to 0 days period)	205	7.2%
IPP Asthma Diagnosis (in 1 to 365 days period)	98	3.4%
IPP Asthma Diagnosis (in 1 to 30 days period)	15	0.5%

Table 1d. Baseline Characteristics for Incident users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	460	16.1%
IP Asthma Diagnosis (in 1 to 365 days period)	300	10.5%
ER Asthma Diagnosis (in -365 to 0 days period)	623	21.8%
ER Asthma Diagnosis (in 1 to 365 days period)	421	14.8%
Corticosteroids in -365 to 0 days period	2,507	87.9%
Corticosteroids in 1 to 365 days period	1,850	64.9%
Corticosteroids in 1 to 30 days period	1,045	36.6%
Antibiotics in -365 to 0 days period	2,294	80.4%
Antibiotics in 1 to 365 days period	1,637	57.4%
Antibiotics in 1 to 30 days period	512	18.0%
SABA in -365 to 0 days period	2,212	77.6%
SABA in 1 to 365 days period	1,654	58.0%
SABA in 1 to 30 days period	1,009	35.4%
IL5 in 1 to 365 days period	2,641	92.6%
Mepolizumab in 1 to 365 days period	2,095	73.5%
Reslizumab in 1 to 365 days period	240	8.4%
Benralizumab in 1 to 365 days period	344	12.1%
IL4 in 1 to 365 days period	11	0.4%
ICS-containing in -365 to 365 days period (at least 2)	2,372	83.2%
LABA-containing in -365 to 365 days period (at least 2)	2,187	76.7%
LAMA-containing in -365 to 365 days period (at least 2)	804	28.2%
LTRA in -365 to 365 days period (at least 2)	1,926	67.5%
Theophylline in -365 to 365 days period (at least 2)	105	3.7%
Cromolyn in -365 to 365 days period (at least 2)	*****	*****
Omalizumab in -365 to 365 days period (at least 2)	550	19.3%
Corticosteriods in -365 to 365 days period (at least 2)	2,368	83.0%
SAMA in -365 to 365 days period (at least 2)	274	9.6%
ICS monotherapy in -365 to 365 days period (at least 2)	1,594	55.9%
LABA monotherapy in -365 to 365 days period (at least 2)	552	19.4%
LAMA monotherapy in -365 to 365 days period (at least 2)	762	26.7%
ICS/LABA in -365 to 365 days period (at least 2)	2,153	75.5%
Roflumilast in 1 to 365 days period (at least 2)	*****	*****
Azithromycin in 1 to 365 days period (at least 2)	274	9.6%
LABA/LAMA in -365 to 365 days period (at least 2)	37	1.3%
Trelegy Ellipta in -365 to 365 days period (at least 2)	12	0.4%
ICS monotherapy in 1 to 365 days period (at least 4)	640	22.4%
LABA monotherapy (at least 1)	539	18.9%
LABA monotherapy (at least 2)	403	14.1%
LABA monotherapy (at least 4)	237	8.3%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	0	0.0%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	0	0.0%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	0	0.0%
ICS+LABA in -365 to 365 days period (at least 2)	2,177	76.3%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	716	25.1%

Table 1d. Baseline Characteristics for Incident users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	30.2	18.8
Mean number of emergency room encounters (ED)	0.8	2.4
Mean number of inpatient hospital encounters (IP)	0.3	0.8
Mean number of non-acute institutional encounters (IS)	0	0.4
Mean number of other ambulatory encounters (OA)	5.2	7.5
Mean number of unique drug classes	14	6.2
Mean number of generics	15.6	7.4
Mean number of filled prescriptions	52.9	35.8

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

[2]Value represents standard deviation where no % follows the value

*****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 1e. Baseline Characteristics for Prevalent users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	3,875	
Number of unique patients	3,875	
Demographics	**Mean**	**Standard Deviation**
Mean Age	58.4	12.4
	Number	**Percent**
Age		
18-64	2,312	59.7%
65+	1,563	40.3%
Gender		
Female	2,530	65.3%
Male	1,345	34.7%
Other	0	0.0%
Year		
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	0	0.0%
2015	*****	*****
2016	616	15.9%
2017	1,949	50.3%
2018	1,290	33.3%
2019	*****	*****
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.9	1.7
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	1,263	32.6%
Spirometry (in -365 to 0 days period)	3,143	81.1%
Methacholine (in -365 to 0 days period)	50	1.3%
Spirometry or methacholine challenge test (in -365 to 0 days period)	3,143	81.1%
Obesity (anytime in the pre-period to 365 days post)	1,933	49.9%
Asthma Exacerbation (in -365 to 0 days period)	2,622	67.7%
Asthma Exacerbation (in 1 to 365 days period)	1,678	43.3%
Asthma Exacerbation (in 1 to 30 days period)	668	17.2%
IP Asthma Exacerbation (in -365 to 0 days period)	377	9.7%
IP Asthma Exacerbation (in 1 to 365 days period)	205	5.3%
ER Asthma Exacerbation (in -365 to 0 days period)	458	11.8%
ER Asthma Exacerbation (in 1 to 365 days period)	224	5.8%
OP Asthma Exacerbation (in -365 to 0 days period)	2,576	66.5%
OP Asthma Exacerbation (in 1 to 365 days period)	1,635	42.2%
IPP Asthma Diagnosis (in -365 to 0 days period)	273	7.0%
IPP Asthma Diagnosis (in 1 to 365 days period)	130	3.4%
IPP Asthma Diagnosis (in 1 to 30 days period)	19	0.5%

Table 1e. Baseline Characteristics for Prevalent users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	615	15.9%
IP Asthma Diagnosis (in 1 to 365 days period)	401	10.3%
ER Asthma Diagnosis (in -365 to 0 days period)	852	22.0%
ER Asthma Diagnosis (in 1 to 365 days period)	554	14.3%
Corticosteroids in -365 to 0 days period	3,360	86.7%
Corticosteroids in 1 to 365 days period	2,446	63.1%
Corticosteroids in 1 to 30 days period	1,376	35.5%
Antibiotics in -365 to 0 days period	3,065	79.1%
Antibiotics in 1 to 365 days period	2,181	56.3%
Antibiotics in 1 to 30 days period	699	18.0%
SABA in -365 to 0 days period	2,904	74.9%
SABA in 1 to 365 days period	2,191	56.5%
SABA in 1 to 30 days period	1,331	34.3%
IL5 in 1 to 365 days period	3,589	92.6%
Mepolizumab in 1 to 365 days period	2,932	75.7%
Reslizumab in 1 to 365 days period	327	8.4%
Benralizumab in 1 to 365 days period	390	10.1%
IL4 in 1 to 365 days period	18	0.5%
ICS-containing in -365 to 365 days period (at least 2)	3,154	81.4%
LABA-containing in -365 to 365 days period (at least 2)	2,908	75.0%
LAMA-containing in -365 to 365 days period (at least 2)	1,127	29.1%
LTRA in -365 to 365 days period (at least 2)	2,577	66.5%
Theophylline in -365 to 365 days period (at least 2)	153	3.9%
Cromolyn in -365 to 365 days period (at least 2)	14	0.4%
Omalizumab in -365 to 365 days period (at least 2)	668	17.2%
Corticosteriods in -365 to 365 days period (at least 2)	3,157	81.5%
SAMA in -365 to 365 days period (at least 2)	381	9.8%
ICS monotherapy in -365 to 365 days period (at least 2)	2,112	54.5%
LABA monotherapy in -365 to 365 days period (at least 2)	751	19.4%
LAMA monotherapy in -365 to 365 days period (at least 2)	1,071	27.6%
ICS/LABA in -365 to 365 days period (at least 2)	2,859	73.8%
Roflumilast in 1 to 365 days period (at least 2)	13	0.3%
Azithromycin in 1 to 365 days period (at least 2)	363	9.4%
LABA/LAMA in -365 to 365 days period (at least 2)	50	1.3%
Trelegy Ellipta in -365 to 365 days period (at least 2)	16	0.4%
ICS monotherapy in 1 to 365 days period (at least 4)	823	21.2%
LABA monotherapy (at least 1)	719	18.6%
LABA monotherapy (at least 2)	544	14.0%
LABA monotherapy (at least 4)	321	8.3%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	0	0.0%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	0	0.0%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	0	0.0%
ICS+LABA in -365 to 365 days period (at least 2)	2,893	74.7%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	1,000	25.8%

Table 1e. Baseline Characteristics for Prevalent users of Anti-IL5 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	0	0.0%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	31.7	19.3
Mean number of emergency room encounters (ED)	0.8	2.3
Mean number of inpatient hospital encounters (IP)	0.3	0.8
Mean number of non-acute institutional encounters (IS)	0	0.4
Mean number of other ambulatory encounters (OA)	5.3	8.2
Mean number of unique drug classes	13.9	6.4
Mean number of generics	15.6	7.5
Mean number of filled prescriptions	54	36.9

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

[2]Value represents standard deviation where no % follows the value

*****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 1f. Baseline Characteristics for Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	1,503,840	
Number of unique patients	1,337,067	
Demographics	**Mean**	**Standard Deviation**
Mean Age	55.4	15.7
	Number	**Percent**
Age		
18-64	949,754	63.2%
65+	554,086	36.8%
Gender		
Female	932,368	69.7%
Male	404,682	30.3%
Other	17	0.0%
Year		
2008	47,542	3.2%
2009	72,887	4.8%
2010	68,489	4.6%
2011	128,562	8.5%
2012	136,748	9.1%
2013	144,128	9.6%
2014	172,190	11.5%
2015	231,338	15.4%
2016	197,073	13.1%
2017	206,292	13.7%
2018	96,038	6.4%
2019	2,553	0.2%
Recorded history of:	**Mean**	**Standard Deviation**
Prior combined comorbidity raw score	1.8	1.8
	Number	**Percent**
Smoking (anytime in the pre-period to 365 days post)	466,580	31.0%
Spirometry (in -365 to 0 days period)	395,080	26.3%
Methacholine (in -365 to 0 days period)	12,091	0.8%
Spirometry or methacholine challenge test (in -365 to 0 days period)	395,091	26.3%
Obesity (anytime in the pre-period to 365 days post)	637,776	42.4%
Asthma Exacerbation (in -365 to 0 days period)	345,196	23.0%
Asthma Exacerbation (in 1 to 365 days period)	209,402	13.9%
Asthma Exacerbation (in 1 to 30 days period)	54,873	3.6%
IP Asthma Exacerbation (in -365 to 0 days period)	35,004	2.3%
IP Asthma Exacerbation (in 1 to 365 days period)	23,273	1.5%
ER Asthma Exacerbation (in -365 to 0 days period)	58,337	3.9%
ER Asthma Exacerbation (in 1 to 365 days period)	31,957	2.1%
OP Asthma Exacerbation (in -365 to 0 days period)	306,770	20.4%
OP Asthma Exacerbation (in 1 to 365 days period)	190,203	12.6%
IPP Asthma Diagnosis (in -365 to 0 days period)	19,790	1.3%
IPP Asthma Diagnosis (in 1 to 365 days period)	11,576	0.8%
IPP Asthma Diagnosis (in 1 to 30 days period)	2,349	0.2%

Table 1f. Baseline Characteristics for Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	157,656	10.5%
IP Asthma Diagnosis (in 1 to 365 days period)	126,721	8.4%
ER Asthma Diagnosis (in -365 to 0 days period)	236,104	15.7%
ER Asthma Diagnosis (in 1 to 365 days period)	163,868	10.9%
Corticosteroids in -365 to 0 days period	641,716	42.7%
Corticosteroids in 1 to 365 days period	574,342	38.2%
Corticosteroids in 1 to 30 days period	288,450	19.2%
Antibiotics in -365 to 0 days period	945,977	62.9%
Antibiotics in 1 to 365 days period	841,289	55.9%
Antibiotics in 1 to 30 days period	358,995	23.9%
SABA in -365 to 0 days period	1,053,805	70.1%
SABA in 1 to 365 days period	979,247	65.1%
SABA in 1 to 30 days period	728,295	48.4%
IL5 in 1 to 365 days period	394	0.0%
Mepolizumab in 1 to 365 days period	301	0.0%
Reslizumab in 1 to 365 days period	36	0.0%
Benralizumab in 1 to 365 days period	62	0.0%
IL4 in 1 to 365 days period	598	0.0%
ICS-containing in -365 to 365 days period (at least 2)	658,568	43.8%
LABA-containing in -365 to 365 days period (at least 2)	408,824	27.2%
LAMA-containing in -365 to 365 days period (at least 2)	33,662	2.2%
LTRA in -365 to 365 days period (at least 2)	280,735	18.7%
Theophylline in -365 to 365 days period (at least 2)	7,574	0.5%
Cromolyn in -365 to 365 days period (at least 2)	633	0.0%
Omalizumab in -365 to 365 days period (at least 2)	4,821	0.3%
Corticosteriods in -365 to 365 days period (at least 2)	466,722	31.0%
SAMA in -365 to 365 days period (at least 2)	43,084	2.9%
ICS monotherapy in -365 to 365 days period (at least 2)	421,644	28.0%
LABA monotherapy in -365 to 365 days period (at least 2)	38,402	2.6%
LAMA monotherapy in -365 to 365 days period (at least 2)	30,691	2.0%
ICS/LABA in -365 to 365 days period (at least 2)	400,725	26.6%
Roflumilast in 1 to 365 days period (at least 2)	342	0.0%
Azithromycin in 1 to 365 days period (at least 2)	123,014	8.2%
LABA/LAMA in -365 to 365 days period (at least 2)	2,890	0.2%
Trelegy Ellipta in -365 to 365 days period (at least 2)	116	0.0%
ICS monotherapy in 1 to 365 days period (at least 4)	164,796	11.0%
LABA monotherapy (at least 1)	69,068	4.6%
LABA monotherapy (at least 2)	38,399	2.6%
LABA monotherapy (at least 4)	18,750	1.2%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	195,903	13.0%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	2,556	0.2%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	9,729	0.6%
ICS+LABA in -365 to 365 days period (at least 2)	402,519	26.8%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	13,777	0.9%

Table 1f. Baseline Characteristics for Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	655	0.0%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	513	0.0%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	361	0.0%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	18.5	16.2
Mean number of emergency room encounters (ED)	0.8	2
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0	0.4
Mean number of other ambulatory encounters (OA)	4.6	7.7
Mean number of unique drug classes	10.5	5.3
Mean number of generics	11.5	6.2
Mean number of filled prescriptions	34.6	30

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

[2]Value represents standard deviation where no % follows the value

Table 1g. Baseline Characteristics for Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
Number of episodes	33,992,665	
Number of unique patients	3,513,079	

Demographics	Mean	Standard Deviation
Mean Age	59.7	14.8

	Number	Percent
Age		
18-64	18,828,650	55.4%
65+	15,164,015	44.6%
Gender		
Female	2,410,249	68.6%
Male	1,102,798	31.4%
Other	32	0.0%
Year		
2008	910,726	2.7%
2009	1,380,797	4.1%
2010	1,358,370	4.0%
2011	3,171,008	9.3%
2012	3,296,262	9.7%
2013	3,563,058	10.5%
2014	3,981,561	11.7%
2015	4,505,516	13.3%
2016	4,637,802	13.6%
2017	4,885,802	14.4%
2018	2,265,951	6.7%
2019	35,812	0.1%

Recorded history of:	Mean	Standard Deviation
Prior combined comorbidity raw score	1.8	1.8

	Number	Percent
Smoking (anytime in the pre-period to 365 days post)	9,764,871	28.7%
Spirometry (in -365 to 0 days period)	10,662,113	31.4%
Methacholine (in -365 to 0 days period)	195,849	0.6%
Spirometry or methacholine challenge test (in -365 to 0 days period)	10,662,233	31.4%
Obesity (anytime in the pre-period to 365 days post)	13,771,696	40.5%
Asthma Exacerbation (in -365 to 0 days period)	7,181,835	21.1%
Asthma Exacerbation (in 1 to 365 days period)	5,331,997	15.7%
Asthma Exacerbation (in 1 to 30 days period)	903,695	2.7%
IP Asthma Exacerbation (in -365 to 0 days period)	618,604	1.8%
IP Asthma Exacerbation (in 1 to 365 days period)	646,219	1.9%
ER Asthma Exacerbation (in -365 to 0 days period)	953,900	2.8%
ER Asthma Exacerbation (in 1 to 365 days period)	672,572	2.0%
OP Asthma Exacerbation (in -365 to 0 days period)	6,720,908	19.8%
OP Asthma Exacerbation (in 1 to 365 days period)	4,919,420	14.5%
IPP Asthma Diagnosis (in -365 to 0 days period)	334,594	1.0%
IPP Asthma Diagnosis (in 1 to 365 days period)	312,188	0.9%
IPP Asthma Diagnosis (in 1 to 30 days period)	36,817	0.1%

Table 1g. Baseline Characteristics for Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
IP Asthma Diagnosis (in -365 to 0 days period)	3,515,936	10.3%
IP Asthma Diagnosis (in 1 to 365 days period)	3,377,941	9.9%
ER Asthma Diagnosis (in -365 to 0 days period)	4,667,566	13.7%
ER Asthma Diagnosis (in 1 to 365 days period)	3,750,295	11.0%
Corticosteroids in -365 to 0 days period	14,322,091	42.1%
Corticosteroids in 1 to 365 days period	12,216,348	35.9%
Corticosteroids in 1 to 30 days period	3,508,962	10.3%
Antibiotics in -365 to 0 days period	20,899,876	61.5%
Antibiotics in 1 to 365 days period	18,360,889	54.0%
Antibiotics in 1 to 30 days period	4,778,559	14.1%
SABA in -365 to 0 days period	23,290,433	68.5%
SABA in 1 to 365 days period	20,606,459	60.6%
SABA in 1 to 30 days period	10,957,203	32.2%
IL5 in 1 to 365 days period	70,724	0.2%
Mepolizumab in 1 to 365 days period	59,648	0.2%
Reslizumab in 1 to 365 days period	6,282	0.0%
Benralizumab in 1 to 365 days period	6,040	0.0%
IL4 in 1 to 365 days period	16,591	0.0%
ICS-containing in -365 to 365 days period (at least 2)	26,562,278	78.1%
LABA-containing in -365 to 365 days period (at least 2)	20,951,876	61.6%
LAMA-containing in -365 to 365 days period (at least 2)	2,552,082	7.5%
LTRA in -365 to 365 days period (at least 2)	20,377,617	59.9%
Theophylline in -365 to 365 days period (at least 2)	546,515	1.6%
Cromolyn in -365 to 365 days period (at least 2)	32,968	0.1%
Omalizumab in -365 to 365 days period (at least 2)	401,577	1.2%
Corticosteriods in -365 to 365 days period (at least 2)	11,508,176	33.9%
SAMA in -365 to 365 days period (at least 2)	1,729,239	5.1%
ICS monotherapy in -365 to 365 days period (at least 2)	14,597,698	42.9%
LABA monotherapy in -365 to 365 days period (at least 2)	2,088,313	6.1%
LAMA monotherapy in -365 to 365 days period (at least 2)	2,471,063	7.3%
ICS/LABA in -365 to 365 days period (at least 2)	20,190,518	59.4%
Roflumilast in 1 to 365 days period (at least 2)	27,386	0.1%
Azithromycin in 1 to 365 days period (at least 2)	2,887,446	8.5%
LABA/LAMA in -365 to 365 days period (at least 2)	95,763	0.3%
Trelegy Ellipta in -365 to 365 days period (at least 2)	5,478	0.0%
ICS monotherapy in 1 to 365 days period (at least 4)	8,018,979	23.6%
LABA monotherapy (at least 1)	2,157,428	6.3%
LABA monotherapy (at least 2)	1,718,956	5.1%
LABA monotherapy (at least 4)	1,190,094	3.5%
ICS alone in -365 to 365 days period, excluding ICS combo and other maintenance drugs	2,692,263	7.9%
LABA alone in -365 to 365 days period, excluding LABA combo and other maintenance drugs	101,268	0.3%
LAMA alone in -365 to 365 days period, excluding LAMA combo and other maintenance drugs	163,736	0.5%
ICS+LABA in -365 to 365 days period (at least 2)	20,666,334	60.8%
ICS+LABA+LAMA in -365 to 365 days period (at least 2)	1,901,844	5.6%

Table 1g. Baseline Characteristics for Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Characteristic[1]	Number	Percent
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or	135,587	0.4%
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or	130,131	0.4%
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or	118,066	0.3%
Health Service Utilization Intensity:	**Mean**	**Standard Deviation**
Mean number of ambulatory encounters (AV)	20.7	17.9
Mean number of emergency room encounters (ED)	0.6	1.6
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0	0.4
Mean number of other ambulatory encounters (OA)	4.4	8.2
Mean number of unique drug classes	11.9	5.8
Mean number of generics	13	6.9
Mean number of filled prescriptions	59	45.2

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

[2]Value represents standard deviation where no % follows the value

Table 2. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, Overall

Level	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
Prevalence								
Asthma with maintenance drugs and exclusion diagnoses of interest								
000	3,325,710	3,325,710	1.00	3,680,502	36,137	9,202,940	2,760,460,089	7,557,728
Prevalent Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 3)								
000	5,792,096	5,792,096	1.00	8,101,322	6,033	96,007,338	103,687,722,245	283,881,512
Prevalent users of Anti-IL5								
000	3,875	3,875	1.00	3,962	33	11,631,992	6,554,057,454	17,944,031
Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
000	3,513,079	33,992,665	9.68	45,238,671	33,853	10,377,486	5,803,415,843	15,888,887
Incidence								
Incident Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 2)								
000	4,450,281	4,450,281	1.00	5,988,961	4,700	94,691,702	103,523,956,958	283,433,147
Incident users of Anti-IL5								
000	2,852	2,852	1.00	2,909	25	11,631,359	6,554,007,241	17,943,894
Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
000	1,337,067	1,503,840	1.12	1,631,952	16,762	7,976,912	3,316,046,850	9,078,842

[1]Eligible Members, Member-Days, and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

Table 3. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Year

Year	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
Prevalence								
Asthma with maintenance drugs and exclusion diagnoses of interest								
2008	202,594	202,594	1.00	222,499	23,660	856,286	102,915,744	281,768
2009	205,418	205,418	1.00	221,754	25,303	811,822	137,560,425	376,620
2010	145,450	145,450	1.00	158,298	21,221	685,391	119,258,388	326,512
2011	494,027	494,027	1.00	547,589	28,671	1,723,098	274,044,101	750,292
2012	308,474	308,474	1.00	341,752	19,750	1,561,889	238,909,693	654,099
2013	296,451	296,451	1.00	327,635	19,471	1,522,554	253,705,079	694,607
2014	358,774	358,774	1.00	396,561	19,884	1,804,316	300,935,936	823,918
2015	390,112	390,112	1.00	431,042	19,227	2,028,952	349,985,434	958,208
2016	376,420	376,420	1.00	420,090	16,422	2,292,203	383,092,462	1,048,850
2017	370,093	370,093	1.00	414,301	16,627	2,225,833	401,769,346	1,099,985
2018	174,305	174,305	1.00	195,185	11,227	1,552,578	195,994,857	536,605
2019	3,592	3,592	1.00	3,796	10,069	35,675	2,288,624	6,266
Prevalent Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 3)								
2008	389,064	389,064	1.00	543,820	1,792	21,710,511	4,367,660,870	11,958,004
2009	377,620	377,620	1.00	522,350	1,769	21,343,136	6,282,434,209	17,200,367
2010	272,307	272,307	1.00	365,017	1,334	20,406,689	6,097,832,154	16,694,955
2011	873,378	873,378	1.00	1,273,141	2,548	34,270,540	10,311,474,944	28,231,280
2012	588,097	588,097	1.00	820,109	1,609	36,547,277	10,369,767,601	28,390,876
2013	553,484	553,484	1.00	767,960	1,595	34,698,334	10,551,959,718	28,889,691
2014	652,192	652,192	1.00	923,077	1,720	37,922,322	11,546,334,579	31,612,141
2015	635,320	635,320	1.00	893,242	1,607	39,524,718	12,091,305,293	33,104,190
2016	612,917	612,917	1.00	858,513	1,393	43,999,853	12,540,727,706	34,334,641
2017	584,081	584,081	1.00	805,656	1,422	41,078,553	12,666,776,254	34,679,743
2018	250,368	250,368	1.00	324,527	712	35,166,190	6,751,571,899	18,484,796
2019	3,268	3,268	1.00	3,910	239	1,369,902	109,877,018	300,827
Prevalent users of Anti-IL5								
2008	0	0	-	0	0	1,337,649	221,086,301	605,301
2009	0	0	-	0	0	1,510,905	318,968,779	873,289
2010	0	0	-	0	0	1,499,007	327,456,072	896,526
2011	0	0	-	0	0	2,984,792	632,846,806	1,732,640
2012	0	0	-	0	0	3,195,208	652,426,334	1,786,246
2013	0	0	-	0	0	3,186,661	686,527,554	1,879,610
2014	0	0	-	0	0	3,540,130	765,527,163	2,095,899
2015	*****	*****	1.00	*****	0	*****	820,481,884	2,246,357
2016	616	616	1.00	622	15	3,987,580	837,144,980	2,291,978
2017	1,949	1,949	1.00	1,996	50	3,878,319	869,193,911	2,379,723
2018	1,290	1,290	1.00	1,324	44	2,903,606	414,204,172	1,134,029
2019	*****	*****	1.00	*****	11	*****	8,193,498	22,433
Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
2008	235,171	910,726	3.87	1,188,487	19,576	1,201,342	197,442,773	540,569
2009	353,573	1,380,797	3.91	1,789,403	26,027	1,358,461	279,428,098	765,032

Table 3. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Year

Year	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
2010	348,346	1,358,370	3.90	1,754,853	25,808	1,349,751	287,420,802	786,915
2011	740,032	3,171,008	4.28	4,189,090	28,166	2,627,435	549,084,556	1,503,312
2012	765,867	3,296,262	4.30	4,361,106	27,142	2,821,736	570,118,692	1,560,900
2013	818,981	3,563,058	4.35	4,731,375	29,055	2,818,756	601,038,408	1,645,554
2014	946,408	3,981,561	4.21	5,316,242	30,111	3,143,045	674,373,744	1,846,335
2015	1,089,994	4,505,516	4.13	6,048,377	32,705	3,332,758	730,929,223	2,001,175
2016	1,118,791	4,637,802	4.15	6,236,397	31,192	3,586,766	748,616,350	2,049,600
2017	1,165,698	4,885,802	4.19	6,615,891	33,309	3,499,651	782,695,848	2,142,904
2018	783,617	2,265,951	2.89	2,964,670	29,867	2,623,656	374,360,843	1,024,944
2019	24,151	35,812	1.48	42,780	21,354	113,100	7,906,506	21,647
Incidence								
Incident Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 2)								
2008	202,656	202,656	1.00	265,910	952	21,282,547	4,313,176,109	11,808,833
2009	284,299	284,299	1.00	377,301	1,340	21,218,659	6,257,056,349	17,130,887
2010	242,951	242,951	1.00	319,217	1,192	20,383,725	6,095,502,133	16,688,575
2011	499,639	499,639	1.00	676,321	1,479	33,775,457	10,235,373,041	28,022,924
2012	487,135	487,135	1.00	659,065	1,340	36,354,380	10,360,131,672	28,364,495
2013	469,283	469,283	1.00	632,924	1,355	34,621,225	10,552,710,116	28,891,746
2014	515,523	515,523	1.00	702,278	1,364	37,790,688	11,537,050,464	31,586,723
2015	527,977	527,977	1.00	721,304	1,339	39,432,659	12,089,801,916	33,100,074
2016	522,627	522,627	1.00	713,656	1,192	43,847,307	12,546,798,283	34,351,262
2017	491,996	491,996	1.00	660,193	1,199	41,033,785	12,674,076,693	34,699,731
2018	203,582	203,582	1.00	257,696	579	35,164,816	6,752,502,591	18,487,345
2019	2,613	2,613	1.00	3,096	191	1,369,078	109,777,591	300,555
Incident users of Anti-IL5								
2008	0	0	-	0	0	1,337,649	221,086,301	605,301
2009	0	0	-	0	0	1,510,905	318,968,779	873,289
2010	0	0	-	0	0	1,499,007	327,456,072	896,526
2011	0	0	-	0	0	2,984,792	632,846,806	1,732,640
2012	0	0	-	0	0	3,195,208	652,426,334	1,786,246
2013	0	0	-	0	0	3,186,661	686,527,554	1,879,610
2014	0	0	-	0	0	3,540,130	765,527,163	2,095,899
2015	*****	*****	1.00	*****	0	*****	820,481,788	2,246,357
2016	542	542	1.00	547	14	3,987,427	837,142,143	2,291,970
2017	1,440	1,440	1.00	1,476	37	3,877,699	869,170,323	2,379,659
2018	852	852	1.00	868	29	2,903,005	414,180,658	1,133,965
2019	*****	*****	1.00	*****	*****	*****	8,193,320	22,432
Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
2008	47,542	47,542	1.00	52,213	5,761	825,202	126,132,876	345,333
2009	72,887	72,887	1.00	79,505	7,622	956,313	171,007,017	468,192
2010	68,489	68,489	1.00	74,389	7,210	949,897	177,132,797	484,963
2011	128,562	128,562	1.00	139,200	7,222	1,780,230	325,217,818	890,398
2012	136,748	136,748	1.00	148,105	7,147	1,913,241	340,198,259	931,412

Table 3. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Year

Year	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
2013	144,128	144,128	1.00	156,322	7,578	1,901,890	354,704,327	971,128
2014	172,190	172,190	1.00	186,445	8,218	2,095,306	392,254,524	1,073,934
2015	231,338	231,338	1.00	249,946	10,658	2,170,469	403,609,216	1,105,022
2016	197,073	197,073	1.00	214,167	8,722	2,259,405	400,001,688	1,095,145
2017	206,292	206,292	1.00	224,542	9,363	2,203,166	416,428,440	1,140,119
2018	96,038	96,038	1.00	104,439	6,065	1,583,485	205,168,439	561,721
2019	2,553	2,553	1.00	2,679	3,988	64,025	4,191,449	11,476

[1]Eligible Members, Member-Days, and Member-

Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

*****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 4. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Sex

Sex	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
Prevalence								
Asthma with maintenance drugs and exclusion diagnoses of interest								
Female	2,303,273	2,303,273	1.00	2,554,934	39,226	5,871,828	1,739,123,199	4,761,460
Male	1,022,411	1,022,411	1.00	1,125,540	30,694	3,331,018	1,021,303,400	2,796,176
Other	26	26	1.00	28	27,660	94	33,490	92
Prevalent Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 3)								
Female	3,941,204	3,941,204	1.00	5,552,311	7,676	51,344,735	56,005,390,115	153,334,401
Male	1,850,842	1,850,842	1.00	2,548,941	4,144	44,660,889	47,680,760,274	130,542,807
Other	50	50	1.00	70	2,917	1,714	1,571,856	4,304
Prevalent users of Anti-IL5								
Female	2,530	2,530	1.00	2,585	34	7,480,044	4,411,061,533	12,076,828
Male	1,345	1,345	1.00	1,377	32	4,151,832	2,142,925,220	5,867,010
Other	0	0	-	0	0	116	70,701	194
Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
Female	2,410,249	23,907,893	9.92	31,955,481	35,574	6,775,327	3,957,789,076	10,835,836
Male	1,102,798	10,084,569	9.14	13,282,954	30,616	3,602,047	1,845,562,462	5,052,875
Other	32	203	6.34	236	28,571	112	64,305	176
Incidence								
Incident Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 2)								
Female	2,993,794	2,993,794	1.00	4,052,946	5,937	50,422,281	55,898,989,089	153,043,091
Male	1,456,444	1,456,444	1.00	1,935,958	3,290	44,267,718	47,623,394,135	130,385,747
Other	43	43	1.00	57	2,525	1,703	1,573,734	4,309
Incident users of Anti-IL5								
Female	1,875	1,875	1.00	1,913	25	7,479,650	4,411,027,124	12,076,734
Male	977	977	1.00	996	24	4,151,593	2,142,909,416	5,866,966
Other	0	0	-	0	0	116	70,701	194
Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
Female	932,368	1,057,308	1.13	1,148,818	18,012	5,176,417	2,225,978,139	6,094,396
Male	404,682	446,510	1.10	483,111	14,451	2,800,406	1,090,028,963	2,984,337
Other	17	22	1.29	23	19,101	89	39,748	109

[1]Eligible Members, Member-Days, and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

Table 5. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Race

Race	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
Prevalence								
Asthma with maintenance drugs and exclusion diagnoses of interest								
American Indian or Alaska Native	16,857	16,857	1.00	18,835	42,164	39,980	11,031,730	30,203
Asian	97,966	97,966	1.00	105,855	37,530	261,035	82,476,512	225,808
Black or African American	294,107	294,107	1.00	332,706	44,190	665,554	177,795,828	486,778
Native Hawaiian or Other Pacific Islander	10,529	10,529	1.00	11,382	45,665	23,057	6,163,021	16,873
Unknown	1,178,666	1,178,666	1.00	1,312,565	34,657	3,400,938	1,035,105,187	2,833,964
White	1,727,585	1,727,585	1.00	1,899,159	35,899	4,812,376	1,447,887,811	3,964,101
Prevalent Asthma with or without maintenance drugs and exclusion diagnoses of interest (definition 3)								
American Indian or Alaska	30,687	30,687	1.00	42,615	10,043	305,549	374,124,736	1,024,298
Asian	168,484	168,484	1.00	233,685	6,967	2,418,204	3,289,794,493	9,006,966
Black or African American	542,806	542,806	1.00	751,440	9,627	5,638,512	6,434,616,324	17,617,019
Native Hawaiian or Other	20,551	20,551	1.00	26,500	8,772	234,271	328,692,694	899,912
Unknown	2,033,933	2,033,933	1.00	2,808,874	4,219	48,204,944	44,809,753,440	122,682,419
White	2,995,635	2,995,635	1.00	4,238,208	7,641	39,205,858	48,450,740,558	132,650,898
Prevalent users of Anti-IL5								
American Indian or Alaska	12	12	1.00	12	21	56,857	36,522,830	99,994
Asian	63	63	1.00	65	21	304,044	215,778,411	590,769
Black or African American	295	295	1.00	302	30	973,215	596,495,268	1,633,115
Native Hawaiian or Other	14	14	1.00	16	37	37,571	29,789,534	81,559
Unknown	1,681	1,681	1.00	1,724	38	4,448,874	2,271,529,740	6,219,110
White	1,810	1,810	1.00	1,843	31	5,811,431	3,403,941,671	9,319,484
Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
American Indian or Alaska	17,708	180,245	10.18	236,904	34,145	51,861	33,331,170	91,256
Asian	102,841	926,537	9.01	1,279,005	37,231	276,227	194,965,438	533,786
Black or African American	300,200	2,840,793	9.46	3,774,661	33,350	900,137	550,913,922	1,508,320
Native Hawaiian or Other	10,880	81,385	7.48	103,974	30,025	36,237	28,556,395	78,183
Unknown	1,263,948	11,313,657	8.95	14,890,403	31,169	4,055,106	1,999,204,352	5,473,523
White	1,817,502	18,650,048	10.26	24,953,724	35,934	5,057,918	2,996,444,566	8,203,818
Incidence								
Incident Asthma with and without maintenance drugs and exclusion diagnoses of interest (definition 2)								
American Indian or Alaska	24,121	24,121	1.00	32,246	8,052	299,583	373,606,065	1,022,878
Asian	138,655	138,655	1.00	186,097	5,796	2,392,129	3,288,051,588	9,002,195
Black or African American	390,396	390,396	1.00	515,321	7,104	5,495,189	6,421,216,434	17,580,333
Native Hawaiian or Other	17,216	17,216	1.00	21,653	7,446	231,211	328,528,548	899,462
Unknown	1,584,380	1,584,380	1.00	2,114,769	3,320	47,721,758	44,729,870,795	122,463,712
White	2,295,513	2,295,513	1.00	3,118,875	5,954	38,551,832	48,382,683,528	132,464,568
Incident users of Anti-IL5								
American Indian or Alaska	*****	*****	1.00	*****	11	*****	36,522,669	99,994
Asian	47	47	1.00	48	15	304,035	215,777,648	590,767

Table 5. Summary of Asthma and Maintenance Treatments in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019, by Race

Race	Patients	Episodes	Episodes per Patient	Adjusted Dispensings	Number of Exposed Members per 100K Eligible Members	Eligible Members[1]	Eligible Member-Days[1]	Eligible Member Years[1]
Black or African American	223	223	1.00	226	23	973,164	596,490,074	1,633,101
Native Hawaiian or Other	*****	*****	1.00	*****	27	*****	29,789,261	81,559
Unknown	1,292	1,292	1.00	1,321	29	4,448,618	2,271,508,244	6,219,051
White	1,274	1,274	1.00	1,297	22	5,811,116	3,403,919,345	9,319,423
Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4								
American Indian or Alaska Native	7,645	8,737	1.14	9,436	18,331	41,705	20,218,355	55,355
Asian	46,982	54,588	1.16	59,622	22,017	213,388	115,647,481	316,626
Black or African American	130,078	150,363	1.16	163,623	18,007	722,372	337,004,296	922,668
Native Hawaiian or Other	6,422	7,655	1.19	8,158	20,478	31,360	19,505,304	53,403
Unknown	486,925	540,291	1.11	590,166	15,496	3,142,346	1,142,053,884	3,126,773
White	659,015	742,206	1.13	800,947	17,226	3,825,741	1,681,617,530	4,604,018

[1]Eligible Members, Member-Days, and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period

*****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 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA	333,628	NA
Fluticasone propionate/salmeterol	RX	NA	325,809	NA
Beclomethasone dipropionate	RX	NA	182,418	NA
Fluticasone propionate	RX	NA	179,966	NA
Budesonide/formoterol fumarate	RX	NA	165,858	NA
mometasone furoate/formoterol fumarate	RX	NA	69,066	NA
mometasone furoate	RX	NA	59,858	NA
Budesonide	RX	NA	40,783	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	36,013	NA
Tiotropium bromide	RX	NA	23,538	NA
Montelukast sodium	RX	NA	16,694	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA	9,299	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA	6,612	NA
Ciclesonide	RX	NA	5,528	NA
Montelukast sodium	RX	NA	5,455	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate	RX	NA	5,357	NA
Montelukast sodium	RX	NA	4,779	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA	3,663	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA	2,604	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	2,521	NA
Zafirlukast	RX	NA	2,322	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	2,321	NA
Montelukast sodium	RX	NA	1,991	NA
mometasone furoate	RX	NA		NA
Montelukast sodium	RX	NA	1,728	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Formoterol fumarate	RX	NA	1,384	NA
Montelukast sodium	RX	NA	1,283	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA	1,209	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	852	NA
Umeclidinium bromide	RX	NA	822	NA
Tiotropium bromide	RX	NA	804	NA
Montelukast sodium	RX	NA		NA
Aclidinium bromide	RX	NA	677	NA
Tiotropium bromide/Olodaterol HCl	RX	NA	674	NA
Tiotropium bromide	RX	NA	507	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA	450	NA
Fluticasone propionate	RX	NA		NA
Dupilumab	RX	NA	432	NA
Fluticasone propionate/salmeterol	RX	NA	324	NA
Fluticasone propionate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	316	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA	304	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA	268	NA
Montelukast sodium	RX	NA		NA
Salmeterol xinafoate	RX	NA	243	NA
mometasone furoate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	218	NA
Fluticasone propionate/salmeterol	RX	NA	199	NA
Budesonide/formoterol fumarate	RX	NA		NA
Arformoterol tartrate	RX	NA	189	NA
Tiotropium bromide	RX	NA	189	NA
mometasone furoate	RX	NA		NA
Montelukast sodium	RX	NA	167	NA
Ciclesonide	RX	NA		NA
Zileuton	RX	NA	162	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	157	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA	152	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA	151	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	143	NA
Budesonide	RX	NA		NA
Umeclidinium bromide	RX	NA	131	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	130	NA
Fluticasone furoate	RX	NA		NA
mometasone furoate	RX	NA	122	NA
Formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA	114	NA
Budesonide	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	110	NA
mometasone furoate/formoterol fumarate	RX	NA	102	NA
Beclomethasone dipropionate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	101	AV
Budesonide	RX	NA	101	NA
Arformoterol tartrate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	92	NA
Budesonide	RX	NA		NA
Fluticasone propionate	RX	NA	91	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA	88	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Salmeterol xinafoate	RX	NA	83	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA	79	NA
Budesonide	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone propionate/salmeterol	RX	NA	79	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA	65	NA
Budesonide	RX	NA		NA
Fluticasone propionate	RX	NA	63	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA	58	NA
Formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA	58	NA
Salmeterol xinafoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	57	NA
Beclomethasone dipropionate	RX	NA		NA
Formoterol fumarate	RX	NA	51	NA
Fluticasone propionate	RX	NA		NA
Fluticasone propionate	RX	NA	47	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	47	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	45	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	43	NA
Zafirlukast	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	43	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	42	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Indacaterol maleate	RX	NA	42	NA
mometasone furoate	RX	NA	40	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA	39	NA
Formoterol fumarate	RX	NA		NA
Olodaterol HCl	RX	NA	37	NA
mometasone furoate/formoterol fumarate	RX	NA	35	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	35	NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	32	NA
Budesonide	RX	NA		NA
mometasone furoate	RX	NA	31	NA
Fluticasone propionate	RX	NA		NA
mometasone furoate	RX	NA	29	NA
Budesonide/formoterol fumarate	RX	NA		NA
Mepolizumab	RX	NA	29	NA
Fluticasone propionate/salmeterol	RX	NA	28	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA	28	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	28	NA
Fluticasone propionate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate	RX	NA	27	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	27	NA
Fluticasone propionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	27	NA
mometasone furoate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	26	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	26	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	24	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	24	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	23	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	22	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA	21	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	20	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	20	NA
Fluticasone propionate/salmeterol	RX	NA		NA
mometasone furoate	RX	NA	18	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	18	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide	RX	NA	18	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	17	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	17	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	16	NA
Aclidinium bromide	RX	NA		NA
Ciclesonide	RX	NA	16	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	16	NA
Ciclesonide	RX	NA		NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	15	AV
Umeclidinium bromide/vilanterol trifenatate	RX	NA	15	NA
Fluticasone furoate	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	15	AV
Tiotropium bromide	RX	NA	14	NA
Ciclesonide	RX	NA		NA

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Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	14	NA
mometasone furoate	RX	NA		NA
Benralizumab	RX	NA	13	NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	12	NA
Budesonide	RX	NA		NA
Umeclidinium bromide	RX	NA	12	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	11	NA
Beclomethasone dipropionate	RX	NA		NA
Formoterol fumarate	RX	NA	11	NA
Ciclesonide	RX	NA		NA
Fluticasone propionate	RX	NA	11	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	11	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	11	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	11	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Indacaterol maleate/glycopyrrolate	RX	NA	*****	NA
Zileuton	RX	NA	*****	NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC	*****	AV
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA

*****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 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone propionate and salmeterol	RX	NA	*****	NA
Montelukast sodium	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA

*****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 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Tiotropium bromide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Arformoterol tartrate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Glycopyrrolate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	IS
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA

*****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 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA	*****	NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate				
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA

*****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 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Dupilumab	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA

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Table 6a. Full Code Distribution of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Olodaterol HCl	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Salmeterol xinafoate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Salmeterol xinafoate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Salmeterol xinafoate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Tiotropium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA

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Table 6b. Total Code Counts of Incident users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts
Montelukast sodium	RX	NA	381,070
Fluticasone propionate/salmeterol	RX	NA	346,594
Beclomethasone dipropionate	RX	NA	187,884
Fluticasone propionate	RX	NA	187,023
Budesonide/formoterol fumarate	RX	NA	177,304
mometasone furoate/formoterol fumarate	RX	NA	73,647
mometasone furoate	RX	NA	62,685
Budesonide	RX	NA	42,968
Fluticasone furoate/vilanterol trifenatate	RX	NA	38,195
Tiotropium bromide	RX	NA	30,332
Salmeterol xinafoate	RX	NA	7,899
Ciclesonide	RX	NA	5,789
Fluticasone furoate	RX	NA	5,558
Beclomethasone dipropionate HFA	RX	NA	2,631
Zafirlukast	RX	NA	2,447
Umeclidinium bromide/vilanterol trifenatate	RX	NA	2,418
Formoterol fumarate	RX	NA	1,840
Umeclidinium bromide	RX	NA	1,069
Zafirlukast	RX	NA	878
Aclidinium bromide	RX	NA	826
Tiotropium bromide/Olodaterol HCl	RX	NA	707
Dupilumab	RX	NA	434
Arformoterol tartrate	RX	NA	318
Glycopyrrolate/formoterol fumarate	RX	NA	230
Zileuton	RX	NA	181
fluticasone furoate/umeclidinium bromide/vilanterol trifenatate	RX	NA	118
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	103
Indacaterol maleate	RX	NA	44
Olodaterol HCl	RX	NA	39
Mepolizumab	RX	NA	29
J2786 (Injection, reslizumab, 1 mg)	PX	HC	16
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	15
Benralizumab	RX	NA	13
Zileuton	RX	NA	*****
Indacaterol maleate/glycopyrrolate	RX	NA	*****
C9466 (Injection, benralizumab, 1 mg)	PX	HC	*****
Fluticasone propionate and salmeterol	RX	NA	*****
Glycopyrrolate	RX	NA	*****

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Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA	13,102,799	NA
Fluticasone propionate/salmeterol	RX	NA	8,386,506	NA
Budesonide/formoterol fumarate	RX	NA	2,912,669	NA
Fluticasone propionate	RX	NA	2,274,346	NA
mometasone furoate/formoterol fumarate	RX	NA	1,090,957	NA
Beclomethasone dipropionate	RX	NA	1,028,301	NA
mometasone furoate	RX	NA	932,368	NA
Tiotropium bromide	RX	NA	824,782	NA
Budesonide	RX	NA	608,278	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	588,004	NA
Montelukast sodium	RX	NA	531,476	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Salmeterol xinafoate	RX	NA	300,871	NA
Montelukast sodium	RX	NA	178,436	NA
Budesonide/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	110,327	NA
Zafirlukast	RX	NA	99,887	NA
Montelukast sodium	RX	NA	90,290	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate	RX	NA	78,177	NA
Formoterol fumarate	RX	NA	75,817	NA
Tiotropium bromide	RX	NA	72,747	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA	61,157	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA	42,441	NA
Montelukast sodium	RX	NA		NA
Montelukast sodium	RX	NA	36,406	NA
mometasone furoate	RX	NA		NA
Montelukast sodium	RX	NA	35,827	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA	34,270	NA
Zafirlukast	RX	NA	32,727	NA
Beclomethasone dipropionate HFA	RX	NA	27,680	NA
Montelukast sodium	RX	NA	27,451	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	27,067	NA
Tiotropium bromide	RX	NA	26,899	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	23,543	NA
Salmeterol xinafoate	RX	NA	22,640	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA	21,831	NA
Budesonide	RX	NA		NA
Aclidinium bromide	RX	NA	17,104	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	15,881	NA
Fluticasone propionate/salmeterol	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	13,082	AV
Tiotropium bromide	RX	NA	12,142	NA
mometasone furoate/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	11,722	NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	11,563	NA
Mepolizumab	RX	NA	9,680	NA
Dupilumab	RX	NA	9,550	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	8,720	NA
Tiotropium bromide/Olodaterol HCl	RX	NA	8,564	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	6,925	NA
Arformoterol tartrate	RX	NA	6,852	NA
Salmeterol xinafoate	RX	NA		NA
Budesonide	RX	NA	5,504	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	5,418	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	4,530	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zafirlukast	RX	NA	4,501	NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	4,196	NA
Salmeterol xinafoate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	3,988	NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	3,954	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	3,948	NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	3,658	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	3,612	NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	3,280	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	3,170	NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	3,142	NA
Tiotropium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA	2,676	NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	2,535	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Beclomethasone dipropionate	RX	NA	2,453	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	2,413	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	2,363	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	2,331	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zileuton	RX	NA	2,318	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	2,293	AV
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	2,128	NA
Fluticasone propionate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	2,050	NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	1,890	NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	1,878	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	1,874	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	1,813	NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	1,723	NA
Olodaterol HCl	RX	NA	1,591	NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	1,550	NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	1,548	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	1,509	NA
Fluticasone propionate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	1,494	NA
Indacaterol maleate	RX	NA	1,491	NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA	1,391	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	1,313	NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	1,200	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	1,119	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Aclidinium bromide	RX	NA	1,051	NA
Montelukast sodium	RX	NA		AV
Beclomethasone dipropionate HFA	RX	NA	1,012	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	1,009	NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	998	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	970	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	957	NA
Umeclidinium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	956	NA
Budesonide/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA	914	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	870	AV
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	867	NA
Fluticasone propionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide	RX	NA	858	NA
Benralizumab	RX	NA	838	NA
Salmeterol xinafoate	RX	NA		NA
Ciclesonide	RX	NA	806	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA	768	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	758	NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	748	NA
mometasone furoate	RX	NA		NA
mometasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	741	NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	732	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	729	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	682	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	681	NA
Budesonide	RX	NA		NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA	647	NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	645	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	618	NA
mometasone furoate	RX	NA		NA
Ciclesonide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	602	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA	592	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	587	NA
Montelukast sodium	RX	NA		NA
Aclidinium bromide	RX	NA	584	NA
Tiotropium bromide	RX	NA		NA
Ciclesonide	RX	NA	569	NA
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	537	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	528	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	496	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	479	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	476	NA
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	461	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA	458	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	449	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	438	NA
mometasone furoate	RX	NA		NA
Budesonide	RX	NA	421	NA
Zafirlukast	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	408	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	377	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	371	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	370	NA
Formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	367	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Zafirlukast	RX	NA	365	NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	365	NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	359	NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	354	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC	350	AV
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA	337	NA
Tiotropium bromide	RX	NA		NA
Zafirlukast	RX	NA	317	NA
Formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	299	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	297	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	296	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	282	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA	280	NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate	RX	NA	280	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	280	NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	273	NA
Budesonide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	272	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	271	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA	264	NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	248	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	245	NA
mometasone furoate	RX	NA		NA
Zafirlukast	RX	NA	242	NA
mometasone furoate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	242	NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	235	NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	231	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	229	NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	228	NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	225	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	215	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	212	NA
Fluticasone propionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	205	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Zafirlukast	RX	NA	199	NA
Zileuton	RX	NA		NA
Budesonide	RX	NA	199	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate	RX	NA	194	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate	RX	NA	191	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	187	NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA	184	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	171	NA
Budesonide	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	170	OA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	170	NA
Fluticasone propionate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	167	NA
Montelukast sodium	RX	NA		NA
Arformoterol tartrate	RX	NA	156	NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	156	NA
Montelukast sodium	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate	RX	NA	154	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	149	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate and salmeterol	RX	NA	148	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Aclidinium bromide	RX	NA	147	NA
Zafirlukast	RX	NA		NA
Beclomethasone dipropionate	RX	NA	143	NA
Salmeterol xinafoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	142	NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	140	NA
Montelukast sodium	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	138	AV
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	137	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	137	NA
Formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Ciclesonide	RX	NA		NA
Budesonide	RX	NA	133	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	131	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	131	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	131	NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	129	NA
Zafirlukast	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	123	NA
Reslizumab	RX	NA	123	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Beclomethasone dipropionate	RX	NA	122	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	119	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	117	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	112	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	107	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	106	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Olodaterol HCl	RX	NA		NA
Beclomethasone dipropionate	RX	NA	104	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	104	NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	104	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	101	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	101	NA
Zafirlukast	RX	NA		NA
Beclomethasone dipropionate	RX	NA	99	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zafirlukast	RX	NA	96	NA
Indacaterol maleate/glycopyrrolate	RX	NA	95	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	93	NA
Formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate	RX	NA	93	NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	92	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	92	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	91	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	89	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	85	NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	85	NA
mometasone furoate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	83	NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	82	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	80	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	79	NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	77	NA
Zafirlukast	RX	NA		NA
Budesonide	RX	NA	76	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	76	NA
Salmeterol xinafoate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	75	NA
Umeclidinium bromide	RX	NA		NA
Budesonide	RX	NA	74	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate	RX	NA	74	NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	73	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	72	NA
Budesonide/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zileuton	RX	NA		NA
Ciclesonide	RX	NA	72	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	70	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
mometasone furoate	RX	NA	70	NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA	69	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone furoate	RX	NA	69	NA
Montelukast sodium fluticasone furoate/umeclidinium	RX	NA		NA
bromide/vilanterol trifenat	RX	NA	68	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	68	NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	67	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	67	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	64	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	64	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	63	NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	62	AV
Formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	62	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	62	NA
Budesonide	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	62	NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	62	NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate	RX	NA	62	NA
mometasone furoate	RX	NA		NA
Aclidinium bromide	RX	NA	61	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	60	NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	59	NA
mometasone furoate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	58	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA	57	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	57	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	57	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	55	NA
Arformoterol tartrate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	55	NA
Fluticasone propionate	RX	NA		NA
Ciclesonide	RX	NA	54	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone propionate	RX	NA	54	NA
Montelukast sodium	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	54	NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	53	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	52	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	52	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	50	NA
mometasone furoate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	50	NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	48	NA
Zafirlukast	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA	48	NA
Fluticasone propionate	RX	NA		NA
Aclidinium bromide	RX	NA	47	NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate	RX	NA	47	NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	46	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	46	NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Olodaterol HCl	RX	NA		NA
mometasone furoate	RX	NA	46	NA
Budesonide	RX	NA		NA
Aclidinium bromide	RX	NA	45	NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	45	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	45	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	45	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	45	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	45	NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	45	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	45	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	45	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
mometasone furoate	RX	NA	45	NA
Budesonide/formoterol fumarate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	44	AV
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	44	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	43	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	42	AV
Fluticasone propionate	RX	NA		NA
Fluticasone furoate	RX	NA	42	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	42	NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate	RX	NA	41	NA
Zafirlukast	RX	NA		NA
Ciclesonide	RX	NA		NA
Aclidinium bromide	RX	NA	41	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Budesonide	RX	NA	41	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA	41	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	40	NA
Budesonide	RX	NA		NA
C9481 (Injection, reslizumab, 1 mg)	PX	HC	39	AV
Tiotropium bromide	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	38	AV
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	38	NA
Formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Ciclesonide	RX	NA	37	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	37	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone furoate	RX	NA	36	NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	36	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Aclidinium bromide	RX	NA	35	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	35	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	35	NA
Budesonide/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA	35	NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	35	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	35	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zileuton	RX	NA		NA
Formoterol fumarate	RX	NA	35	NA
Montelukast sodium	RX	NA		NA
Dupilumab	RX	NA	35	NA
Umeclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA	34	NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	34	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	33	NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate/formoterol fumarate	RX	NA	33	NA
Formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	32	NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	31	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	31	NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	31	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	30	NA
Zileuton	RX	NA		NA
Zileuton	RX	NA	30	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	29	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Budesonide	RX	NA	29	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	29	NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	29	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA		NA
Beclomethasone dipropionate	RX	NA	29	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	29	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Mepolizumab	RX	NA	29	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	28	IS
Olodaterol HCl	RX	NA	28	NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate	RX	NA	27	NA
Budesonide	RX	NA		NA
Glycopyrrolate	RX	NA	27	NA
Salmeterol xinafoate	RX	NA	26	NA
Aclidinium bromide	RX	NA		NA
Fluticasone furoate	RX	NA	26	NA
Budesonide	RX	NA		NA
Mepolizumab	RX	NA	26	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	26	NA
Ciclesonide	RX	NA		NA
Indacaterol maleate	RX	NA	26	NA
Ciclesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	26	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	25	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	25	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	25	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	25	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	25	NA
Budesonide	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	24	AV
Budesonide	RX	NA		NA
Zileuton	RX	NA	24	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	24	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	24	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	24	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Ciclesonide	RX	NA	24	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	24	NA
Fluticasone furoate	RX	NA		NA
Mepolizumab	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	24	NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	24	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Arformoterol tartrate	RX	NA	23	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Ciclesonide	RX	NA	23	NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	23	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA	23	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	22	NA
Zafirlukast	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone furoate	RX	NA	22	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	22	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	22	NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA	22	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	22	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	22	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA	22	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	22	NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	21	NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	21	NA
Arformoterol tartrate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	21	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA	21	NA
Ciclesonide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	21	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	21	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	20	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	20	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	20	NA
Beclomethasone dipropionate	RX	NA		NA
Mepolizumab	RX	NA	19	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	19	NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	19	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	19	NA
Fluticasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Dupilumab	RX	NA	19	NA
Tiotropium bromide	RX	NA		NA
Ciclesonide	RX	NA	18	NA
Budesonide/formoterol fumarate	RX	NA		NA
Indacaterol maleate	RX	NA		NA
Beclomethasone dipropionate	RX	NA	18	NA
Olodaterol HCl	RX	NA		NA
Ciclesonide	RX	NA	18	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone furoate	RX	NA	18	NA
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA	18	NA
mometasone furoate	RX	NA		NA
Indacaterol maleate	RX	NA	18	NA
Umeclidinium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	18	NA
Montelukast sodium	RX	NA		NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	17	AV
Montelukast sodium	RX	NA		NA
Zileuton	RX	NA	17	NA
Mepolizumab	RX	NA		NA
Budesonide	RX	NA	17	NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	17	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	17	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Mepolizumab	RX	NA	17	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	16	NA
Indacaterol maleate	RX	NA		NA
Aclidinium bromide	RX	NA	16	NA
mometasone furoate	RX	NA		NA
Arformoterol tartrate	RX	NA	16	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	16	NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	16	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	16	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	16	NA
Fluticasone furoate	RX	NA		NA
Mepolizumab	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	16	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	16	NA
mometasone furoate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	16	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	15	NA
Budesonide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	15	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	15	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	15	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Indacaterol maleate	RX	NA	15	NA
Zafirlukast	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	15	NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	14	NA
Arformoterol tartrate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Arformoterol tartrate	RX	NA	14	NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	14	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	14	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	14	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone furoate	RX	NA	14	NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	14	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Zileuton	RX	NA		NA
Mepolizumab	RX	NA	14	NA
Fluticasone propionate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	13	AV
Budesonide/formoterol fumarate	RX	NA		NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	13	AV
Salmeterol xinafoate	RX	NA		NA
Budesonide	RX	NA	13	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	13	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	13	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	13	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Olodaterol HCl	RX	NA	13	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	13	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	13	NA
Umeclidinium bromide	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	12	AV
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	12	NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	12	NA
Budesonide	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	12	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	12	NA
mometasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	12	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA	12	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	12	NA
Fluticasone furoate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	12	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	12	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	12	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	12	NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	12	NA
Montelukast sodium	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Olodaterol HCl	RX	NA	12	NA
Umeclidinium bromide	RX	NA		NA
Zafirlukast	RX	NA	11	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Arformoterol tartrate	RX	NA	11	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	11	NA
Budesonide	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	11	NA
Budesonide	RX	NA		NA
Olodaterol HCl	RX	NA		NA
Budesonide	RX	NA	11	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	11	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	11	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	11	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	11	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	11	NA
Fluticasone propionate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	11	NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	11	NA
Fluticasone propionate/salmeterol	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	11	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	11	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	11	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	11	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	OA
Zafirlukast	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
J0517 (Injection, benralizumab, 1 mg)	PX	HC	*****	AV
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Zileuton	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Dupilumab	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	IS
Zileuton	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Indacaterol maleate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate and salmeterol	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	IP
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Zileuton	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Zileuton	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Ciclesonide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Aclidinium bromide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Benralizumab	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Budesonide	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Arformoterol tartrate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Zileuton	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Glycopyrrolate/nebulizer and accesories	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate/glycopyrrolate	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	ED
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Zileuton	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate HFA	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Zileuton	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Aclidinium bromide	RX	NA		AV
Tiotropium bromide	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Zileuton	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Indacaterol maleate/glycopyrrolate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
mometasone furoate	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Dupilumab	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Salmeterol xinafoate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Zafirlukast	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Montelukast sodium	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	OA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	IP
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	ED
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Budesonide	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate HFA	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Zafirlukast	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Zileuton	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zileuton	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Arformoterol tartrate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Ciclesonide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Zileuton	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone propionate	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Benralizumab	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Glycopyrrolate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Zileuton	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Glycopyrrolate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Dupilumab	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Reslizumab	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Zileuton	RX	NA	*****	NA
Olodaterol HCl	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Salmeterol xinafoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
C9466 (Injection, benralizumab, 1 mg)	PX	HC	*****	OA
Zafirlukast	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Aclidinium bromide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Fluticasone propionate/salmeterol	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Mepolizumab	RX	NA		NA
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate HFA	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Zileuton	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		AV
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		OA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		OA
Tiotropium bromide	RX	NA	*****	NA
J2182 (Injection, mepolizumab, 1 mg)	PX	HC		OA
J2786 (Injection, reslizumab, 1 mg)	PX	HC	*****	IS
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Zileuton	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Fluticasone propionate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Indacaterol maleate	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Zileuton	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		AV
Reslizumab	RX	NA	*****	NA
J2786 (Injection, reslizumab, 1 mg)	PX	HC		OA
Zileuton	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zileuton	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zileuton	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Zileuton	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Zileuton	RX	NA		NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide				
Tiotropium bromide				
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Indacaterol maleate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Indacaterol maleate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Olodaterol HCl	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Arformoterol tartrate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Benralizumab	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Benralizumab	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Budesonide	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide	RX	NA		NA
Fluticasone propionate and salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Budesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Budesonide	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Budesonide	RX	NA	*****	NA
C9481 (Injection, reslizumab, 1 mg)	PX	HC		AV
Fluticasone propionate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate				
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate				
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Glycopyrrolate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Reslizumab	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Zafirlukast	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Budesonide	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Aclidinium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Aclidinium bromide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Benralizumab	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide				
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Budesonide	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Budesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Mepolizumab	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Budesonide/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Budesonide/formoterol fumarate	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Ciclesonide	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
mometasone furoate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Dupilumab	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Beclomethasone dipropionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Ciclesonide	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Zileuton	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Ciclesonide	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Zafirlukast	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Ciclesonide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Zafirlukast	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Indacaterol maleate/glycopyrrolate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
mometasone furoate	RX	NA		NA
Fluticasone propionate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Indacaterol maleate/glycopyrrolate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Zafirlukast	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
Formoterol fumarate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
mometasone furoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Montelukast sodium	RX	NA		NA
Glycopyrrolate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zileuton	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Fluticasone propionate	RX	NA		NA
Fluticasone propionate	RX	NA		NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	AV
Salmeterol xinafoate	RX	NA		NA
Formoterol fumarate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Indacaterol maleate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Umeclidinium bromide	RX	NA		NA
Mepolizumab	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Umeclidinium bromide	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Zafirlukast	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Zafirlukast	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Fluticasone propionate/salmeterol	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA		NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC	*****	AV
Mepolizumab	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Formoterol fumarate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Glycopyrrolate	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
fluticasone furoate/umeclidinium bromide/vilanterol trifenat	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Fluticasone furoate/vilanterol trifenatate	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Montelukast sodium	RX	NA		NA
Fluticasone furoate/vilanterol trifenatate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Beclomethasone dipropionate HFA	RX	NA		NA
Fluticasone propionate and salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Fluticasone propionate/salmeterol	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Indacaterol maleate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Olodaterol HCl	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
Tiotropium bromide	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Beclomethasone dipropionate HFA	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide	RX	NA	*****	NA
Glycopyrrolate/formoterol fumarate	RX	NA		NA
Glycopyrrolate/nebulizer accessories	RX	NA	*****	NA
Tiotropium bromide	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Indacaterol maleate	RX	NA		NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Indacaterol maleate/glycopyrrolate	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Mepolizumab	RX	NA		NA
Salmeterol xinafoate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA
mometasone furoate	RX	NA		NA
Olodaterol HCl	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Zafirlukast	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
mometasone furoate	RX	NA		NA
mometasone furoate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Zileuton	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Montelukast sodium	RX	NA	*****	NA
mometasone furoate/formoterol fumarate	RX	NA		NA

Table 7a. Full Code Distribution of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts	Encounter Care Setting
Montelukast sodium	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		OA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Tiotropium bromide	RX	NA		NA
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
mometasone furoate/formoterol fumarate	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
Montelukast sodium	RX	NA		NA
Salmeterol xinafoate	RX	NA	*****	NA
Olodaterol HCl	RX	NA		NA
Zafirlukast	RX	NA	*****	NA
Olodaterol HCl	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
Salmeterol xinafoate	RX	NA		NA
Tiotropium bromide	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Zileuton	RX	NA	*****	NA
Tiotropium bromide/Olodaterol HCl	RX	NA		NA
Tiotropium bromide/Olodaterol HCl	RX	NA	*****	NA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide	RX	NA	*****	NA
Dupilumab	RX	NA		NA
Zileuton	RX	NA	*****	NA
Umeclidinium bromide	RX	NA		NA
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC		AV
Umeclidinium bromide/vilanterol trifenatate	RX	NA	*****	NA
Dupilumab	RX	NA		NA
C9466 (Injection, benralizumab, 1 mg)	PX	HC	*****	AV
C9466 (Injection, benralizumab, 1 mg)	PX	HC		OA
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	ED
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	*****	OA
C9481 (Injection, reslizumab, 1 mg)	PX	HC	*****	IS

*****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 7b. Total Code Counts of Prevalent users of ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4 in the Sentinel Distributed Database (SDD) between January 1, 2008 and April 30, 2019

Code Description	Code Category	Code Type	Overall Counts
Montelukast sodium	RX	NA	14,194,878
Fluticasone propionate/salmeterol	RX	NA	9,045,310
Budesonide/formoterol fumarate	RX	NA	3,144,942
Fluticasone propionate	RX	NA	2,419,437
mometasone furoate/formoterol fumarate	RX	NA	1,176,780
Beclomethasone dipropionate	RX	NA	1,082,440
Tiotropium bromide	RX	NA	1,032,269
mometasone furoate	RX	NA	996,777
Budesonide	RX	NA	655,619
Fluticasone furoate/vilanterol trifenatate	RX	NA	627,206
Salmeterol xinafoate	RX	NA	364,586
Ciclesonide	RX	NA	118,984
Zafirlukast	RX	NA	108,756
Formoterol fumarate	RX	NA	91,099
Fluticasone furoate	RX	NA	82,137
Umeclidinium bromide	RX	NA	42,999
Zafirlukast	RX	NA	35,206
Beclomethasone dipropionate HFA	RX	NA	29,223
Umeclidinium bromide/vilanterol trifenatate	RX	NA	29,127
Zileuton	RX	NA	26,480
Aclidinium bromide	RX	NA	21,036
J2182 (Injection, mepolizumab, 1 mg)	PX	HC	13,804
Mepolizumab	RX	NA	10,006
Dupilumab	RX	NA	9,652
Tiotropium bromide/Olodaterol HCl	RX	NA	9,468
Arformoterol tartrate	RX	NA	8,627
Zileuton	RX	NA	2,512
J2786 (Injection, reslizumab, 1 mg)	PX	HC	2,384
fluticasone furoate/umeclidinium bromide/vilanterol trifenatate	RX	NA	1,905
Olodaterol HCl	RX	NA	1,847
Indacaterol maleate	RX	NA	1,703
Glycopyrrolate/formoterol fumarate	RX	NA	1,635
C9473 (Injection, mepolizumab, 1 mg)	PX	HC	905
Benralizumab	RX	NA	866
C9466 (Injection, benralizumab, 1 mg)	PX	HC	365
Fluticasone propionate and salmeterol	RX	NA	156
Reslizumab	RX	NA	127
Indacaterol maleate/glycopyrrolate	RX	NA	105
C9481 (Injection, reslizumab, 1 mg)	PX	HC	41
Glycopyrrolate	RX	NA	33
J0517 (Injection, benralizumab, 1 mg)	PX	HC	*****
Glycopyrrolate/nebulizer and accesories	RX	NA	*****
Beclomethasone dipropionate	RX	NA	*****
Glycopyrrolate/nebulizer accessories	RX	NA	*****

*****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 8a. Events and Dispensings of Interest in the 365 days prior to and including the index date for Asthma Patients with Maintenance Medications*, no Evidence of Exclusion Conditions and at least 365 days of Continuous Enrollment between January 1, 2008 and April 30, 2019

Group	ExacCode	AsthmaDiag	Corticosteroids	SABA	Antibiotics	Number of Patients	Percent
asthma_1	0	1	0	0	0	363,843	10.9%
asthma_1	0	1	0	0	1	332,082	10.0%
asthma_1	0	1	0	1	0	531,368	16.0%
asthma_1	0	1	0	1	1	540,971	16.3%
asthma_1	0	1	1	0	0	68,421	2.1%
asthma_1	0	1	1	0	1	203,846	6.1%
asthma_1	0	1	1	1	0	132,954	4.0%
asthma_1	0	1	1	1	1	489,070	14.7%
asthma_1	1	1	0	0	0	28,435	0.9%
asthma_1	1	1	0	0	1	39,217	1.2%
asthma_1	1	1	0	1	0	58,320	1.8%
asthma_1	1	1	0	1	1	94,840	2.9%
asthma_1	1	1	1	0	0	14,603	0.4%
asthma_1	1	1	1	0	1	63,566	1.9%
asthma_1	1	1	1	1	0	67,410	2.0%
asthma_1	1	1	1	1	1	296,764	8.9%
Total						**3,325,710**	**100.0%**

*ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4.

Table 8b. Events and Dispensings of Interest in the 30 days post-index for Asthma Patients with Maintenance Medications*, no Evidence of Exclusion Conditions and at least 365 days of Continuous Enrollment between January 1, 2008 and April 30, 2019

Group	ExacCode	AsthmaDiag	Corticosteroids	SABA	Antibiotics	Number of Patients	Percent
asthma_1	0	0	0	0	0	1,299,525	39.1%
asthma_1	0	0	0	0	1	215,915	6.5%
asthma_1	0	0	0	1	0	557,530	16.8%
asthma_1	0	0	0	1	1	130,283	3.9%
asthma_1	0	0	1	0	0	103,914	3.1%
asthma_1	0	0	1	0	1	86,429	2.6%
asthma_1	0	0	1	1	0	87,689	2.6%
asthma_1	0	0	1	1	1	87,680	2.6%
asthma_1	0	1	0	0	0	259,403	7.8%
asthma_1	0	1	0	0	1	58,952	1.8%
asthma_1	0	1	0	1	0	127,492	3.8%
asthma_1	0	1	0	1	1	41,132	1.2%
asthma_1	0	1	1	0	0	35,449	1.1%
asthma_1	0	1	1	0	1	35,061	1.1%
asthma_1	0	1	1	1	0	37,968	1.1%
asthma_1	0	1	1	1	1	47,297	1.4%
asthma_1	1	1	0	0	0	16,257	0.5%
asthma_1	1	1	0	0	1	7,004	0.2%
asthma_1	1	1	0	1	0	11,445	0.3%
asthma_1	1	1	0	1	1	7,205	0.2%
asthma_1	1	1	1	0	0	9,361	0.3%
asthma_1	1	1	1	0	1	15,662	0.5%
asthma_1	1	1	1	1	0	16,827	0.5%
asthma_1	1	1	1	1	1	30,230	0.9%
Total						**3,325,710**	**100.0%**

*ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4.

Appendix A. Dates of Available Data for Each Data Partner (DP)

Data Partner ID	Start Date	End Date[1]
DP01	01/01/2005	07/31/2018
DP02	01/01/2000	12/31/2017
DP03	01/01/2008	11/30/2018
DP04	01/01/2000	06/30/2018
DP05	01/01/2006	12/31/2018
DP06	01/01/2004	03/31/2019
DP07	01/01/2000	01/31/2019
DP08	01/01/2000	02/28/2019
DP09	01/01/2000	04/30/2019
DP10	01/01/2000	12/31/2017
DP11	01/01/2000	03/31/2018
DP12	06/01/2007	10/31/2018
DP13	01/01/2010	03/31/2018

[1]End Date represents the earlier of: (1) query end date, or (2) most recent year-month of data for which all of a Data Partner's data tables (enrollment, dispensing, etc) have at least 80% of the record count relative to the prior month.

Appendix B. 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 in this Request

Code	Description	Code Category	Code Type
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
493.00	Extrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.10	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
493.90	Asthma, unspecified, unspecified status	Diagnosis	ICD-9-CM
493.82	Cough variant asthma	Diagnosis	ICD-9-CM
493.20	Chronic obstructive asthma, unspecified ICD-9-CM	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus ICD-9-CM	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation ICD-9-CM	Diagnosis	ICD-9-CM

Appendix C. List of Generic and Brand Drug Names Used to Define Asthma Maintenance Medication (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4) Exposures in this Request

Generic Name	Brand Name
budesonide	budesonide
Symbicort	budesonide/formoterol fumarate
Pulmicort Flexhaler	budesonide
Pulmicort	budesonide
Alvesco	ciclesonide
Flovent Diskus	fluticasone propionate
Flovent HFA	fluticasone propionate
Arnuity Ellipta	fluticasone furoate
ArmonAir RespiClick	fluticasone propionate
Asmanex Twisthaler	mometasone furoate
Asmanex HFA	mometasone furoate
ASMANEX	Mometasone Furoate
Budesonide Inhalation	Budesonide
FLOVENT	fluticasone propionate
QVAR	Beclomethasone Dipropionate
QVAR REDIHALER	Beclomethasone Dipropionate HFA
Dulera	mometasone furoate/formoterol fumarate
Symbicort	budesonide/formoterol fumarate
fluticasone-salmeterol	fluticasone propionate/salmeterol xinafoate
Advair Diskus	fluticasone propionate/salmeterol xinafoate
Advair HFA	fluticasone propionate/salmeterol xinafoate
AirDuo RespiClick	fluticasone propionate/salmeterol xinafoate
Dulera	mometasone furoate/formoterol fumarate
Wixela InHub	fluticasone propionate/salmeterol
Breo Ellipta	fluticasone furoate/vilanterol trifenatate
ADVAIR	SALMETEROL XINAFOATE; FLUTICASONE PROPIONATE
ADVAIR HFA	FLUTICASONE PROPIONATE; SALMETEROL XINAFOATE
AirDuo RespiClick	FLUTICASONE PROPIONATE; SALMETEROL XINAFOATE
Breo Ellipta	FLUTICASONE FUROATE; VILANTEROL TRIFENATATE
Fluticasone Propionate and Salmeterol	FLUTICASONE PROPIONATE; SALMETEROL XINAFOATE
SYMBICORT	BUDESONIDE; FORMOTEROL FUMARATE
Wixela Inhub	FLUTICASONE PROPIONATE; SALMETEROL XINAFOATE

Appendix C.1. List of Healthcare Common Procedure Coding System (HCPCS) Used to Define Asthma Maintenance Medication (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4) Exposures in this Request

Code	Description	Code Category	Code Type
IL-5			
C9466	Injection, benralizumab, 1 mg	Procedure	HCPCS
J0517	Injection, benralizumab, 1 mg	Procedure	HCPCS
C9473	Injection, mepolizumab, 1 mg	Procedure	HCPCS
J2182	Injection, mepolizumab, 1 mg	Procedure	HCPCS
C9481	Injection, reslizumab, 1 mg	Procedure	HCPCS
J2786	Injection, reslizumab, 1 mg	Procedure	HCPCS

Code	Description	Code Category	Code Type
	Alpha-1 anti-trypsin		
273.4	Alpha-1-antitrypsin deficiency	Diagnosis	ICD-9-CM
E88.01	Alpha-1-antitrypsin deficiency	Diagnosis	ICD-10-CM
	COPD		
491.0	Simple chronic bronchitis	Diagnosis	ICD-9-CM
491.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-9-CM
491.20	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
492.0	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
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
	Bronchiectasis		
J47	Bronchiectasis	Diagnosis	ICD-10-CM
J47.0	Bronchiectasis with acute lower respiratory infection	Diagnosis	ICD-10-CM
J47.1	Bronchiectasis with (acute) exacerbation	Diagnosis	ICD-10-CM
J47.9	Bronchiectasis, uncomplicated	Diagnosis	ICD-10-CM
Q33.4	Congenital bronchiectasis	Diagnosis	ICD-10-CM
A15.0	Tuberculous bronchiectasis (current disease)	Diagnosis	ICD-10-CM
494.0	Bronchiectasis without acute exacerbation	Diagnosis	ICD-9-CM
494.1	Bronchiectasis with acute exacerbation	Diagnosis	ICD-9-CM
748.61	Congenital bronchiectasis	Diagnosis	ICD-9-CM
011.90	Unspecified pulmonary tuberculosis, confirmation unspecified	Diagnosis	ICD-9-CM
011.00	Tuberculosis of lung, infiltrative, confirmation unspecified	Diagnosis	ICD-9-CM
011.01	Tuberculosis of lung, infiltrative, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.02	Tuberculosis of lung, infiltrative, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.03	Tuberculosis of lung, infiltrative, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.04	Tuberculosis of lung, infiltrative, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.05	Tuberculosis of lung, infiltrative, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.06	Tuberculosis of lung, infiltrative, tubercle bacilli not found bacteriological or histological examination, but tuberculosis confirmed by other methods (inoculation of animals)	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
011.10	Tuberculosis of lung, nodular, confirmation unspecified	Diagnosis	ICD-9-CM
011.11	Tuberculosis of lung, nodular, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.12	Tuberculosis of lung, nodular, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.13	Tuberculosis of lung, nodular, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.14	Tuberculosis of lung, nodular, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.15	Tuberculosis of lung, nodular, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.16	Tuberculosis of lung, nodular, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.20	Tuberculosis of lung with cavitation, confirmation unspecified	Diagnosis	ICD-9-CM
011.21	Tuberculosis of lung with cavitation, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.22	Tuberculosis of lung with cavitation, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.23	Tuberculosis of lung with cavitation, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.24	Tuberculosis of lung with cavitation, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.25	Tuberculosis of lung with cavitation, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.26	Tuberculosis of lung with cavitation, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.40	Tuberculous fibrosis of lung, confirmation unspecified	Diagnosis	ICD-9-CM
011.41	Tuberculous fibrosis of lung, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.42	Tuberculous fibrosis of lung, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.43	Tuberculous fibrosis of lung, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.44	Tuberculous fibrosis of lung, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.45	Tuberculous fibrosis of lung, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.46	Tuberculous fibrosis of lung, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.50	Tuberculous bronchiectasis, confirmation unspecified	Diagnosis	ICD-9-CM
011.51	Tuberculous bronchiectasis, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.52	Tuberculous bronchiectasis, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.53	Tuberculous bronchiectasis, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.54	Tuberculous bronchiectasis, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.55	Tuberculous bronchiectasis, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.56	Tuberculous bronchiectasis, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.60	Tuberculous pneumonia (any form), confirmation unspecified	Diagnosis	ICD-9-CM
011.61	Tuberculous pneumonia (any form), bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.62	Tuberculous pneumonia (any form), bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.63	Tuberculous pneumonia (any form), tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
011.64	Tuberculous pneumonia (any form), tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.65	Tuberculous pneumonia (any form), tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.66	Tuberculous pneumonia (any form), tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.70	Tuberculous pneumothorax, confirmation unspecified	Diagnosis	ICD-9-CM
011.71	Tuberculous pneumothorax, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.72	Tuberculous pneumothorax, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.73	Tuberculous pneumothorax, tubercle bacilli not found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.74	Tuberculous pneumothorax, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.75	Tuberculous pneumothorax, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.76	Tuberculous pneumothorax, tubercle bacilli not found by bacteriological or histological examination but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.80	Other specified pulmonary tuberculosis, confirmation unspecified	Diagnosis	ICD-9-CM
011.81	Other specified pulmonary tuberculosis, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.82	Other specified pulmonary tuberculosis, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.83	Other specified pulmonary tuberculosis, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.84	Other specified pulmonary tuberculosis, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.85	Other specified pulmonary tuberculosis, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.86	Other specified pulmonary tuberculosis, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
011.91	Unspecified pulmonary tuberculosis, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
011.92	Unspecified pulmonary tuberculosis, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
011.93	Unspecified pulmonary tuberculosis, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
011.94	Unspecified pulmonary tuberculosis, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
011.95	Unspecified pulmonary tuberculosis, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
011.96	Unspecified pulmonary tuberculosis, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
Cystic fibrosis			
E84	Cystic fibrosis	Diagnosis	ICD-10-CM
E84.0	Cystic fibrosis with pulmonary manifestations	Diagnosis	ICD-10-CM
E84.1	Cystic fibrosis with intestinal manifestations	Diagnosis	ICD-10-CM
E84.11	Meconium ileus in cystic fibrosis	Diagnosis	ICD-10-CM
E84.19	Cystic fibrosis with other intestinal manifestations	Diagnosis	ICD-10-CM
E84.8	Cystic fibrosis with other manifestations	Diagnosis	ICD-10-CM
E84.9	Cystic fibrosis, unspecified	Diagnosis	ICD-10-CM
277.00	Cystic fibrosis without mention of meconium ileus	Diagnosis	ICD-9-CM

Code	Description	Code Category	Code Type
277.01	Cystic fibrosis with meconium ileus	Diagnosis	ICD-9-CM
277.02	Cystic fibrosis with pulmonary manifestations	Diagnosis	ICD-9-CM
277.03	Cystic fibrosis with gastrointestinal manifestations	Diagnosis	ICD-9-CM
277.09	Cystic fibrosis with other manifestations	Diagnosis	ICD-9-CM
277.00	Cystic fibrosis without mention of meconium ileus	Diagnosis	ICD-9-CM
277.01	Cystic fibrosis with meconium ileus	Diagnosis	ICD-9-CM
277.02	Cystic fibrosis with pulmonary manifestations	Diagnosis	ICD-9-CM
277.03	Cystic fibrosis with gastrointestinal manifestations	Diagnosis	ICD-9-CM
277.09	Cystic fibrosis with other manifestations	Diagnosis	ICD-9-CM
Sarcoidosis			
D86	Sarcoidosis	Diagnosis	ICD-10-CM
D860	Sarcoidosis of lung	Diagnosis	ICD-10-CM
D861	Sarcoidosis of lymph nodes	Diagnosis	ICD-10-CM
D862	Sarcoidosis of lung with sarcoidosis of lymph nodes	Diagnosis	ICD-10-CM
D863	Sarcoidosis of skin	Diagnosis	ICD-10-CM
D868	Sarcoidosis of other sites	Diagnosis	ICD-10-CM
D8681	Sarcoid meningitis	Diagnosis	ICD-10-CM
D8682	Multiple cranial nerve palsies in sarcoidosis	Diagnosis	ICD-10-CM
D8683	Sarcoid iridocyclitis	Diagnosis	ICD-10-CM
D8684	Sarcoid pyelonephritis	Diagnosis	ICD-10-CM
D8685	Sarcoid myocarditis	Diagnosis	ICD-10-CM
D8686	Sarcoid arthropathy	Diagnosis	ICD-10-CM
D8687	Sarcoid myositis	Diagnosis	ICD-10-CM
D8689	Sarcoidosis of other sites	Diagnosis	ICD-10-CM
D869	Sarcoidosis, unspecified	Diagnosis	ICD-10-CM
135	Sarcoidosis	Diagnosis	ICD-9-CM
Interstitial Lung Diseases, Pneumoconioses, and Miscellaneous Lung Diseases (ILD)			
J84	Other interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.0	Alveolar and pareto-alveolar conditions	Diagnosis	ICD-10-CM
J84.01	Alveolar proteinosis	Diagnosis	ICD-10-CM
J84.02	Pulmonary alveolar microlithiasis	Diagnosis	ICD-10-CM
J84.03	Idiopathic pulmonary hemosiderosis	Diagnosis	ICD-10-CM
J84.09	Other alveolar and parieto-alveolar conditions	Diagnosis	ICD-10-CM
J84.1	Other interstitial pulmonary diseases with fibrosis	Diagnosis	ICD-10-CM
J84.11	Idiopathic interstitial pneumonia	Diagnosis	ICD-10-CM
J84.111	… not otherwise specified	Diagnosis	ICD-10-CM
J84.112	Idiopathic pulmonary fibrosis	Diagnosis	ICD-10-CM
J84.113	Idiopathic non-specific interstitial pneumonitis	Diagnosis	ICD-10-CM
J84.114	Acute interstitial pneumonitis	Diagnosis	ICD-10-CM
J84115	Respiratory bronchiolitis interstitial lung disease	Diagnosis	ICD-10-CM
J84.116	Cryptogenic organizing pneumonia	Diagnosis	ICD-10-CM
J84.117	Desquamative interstitial pneumonia	Diagnosis	ICD-10-CM
J84.17	… in diseases classified elsewhere	Diagnosis	ICD-10-CM
J84.2	Lymphoid interstitial pneumonia	Diagnosis	ICD-10-CM
J84.8	Other specified interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.81	Lymphangioleiomyomatosis	Diagnosis	ICD-10-CM
J84.82	Adult pulmonary Langerhans cell histiocytosis	Diagnosis	ICD-10-CM
J84.83	Surfactant mutations of the lung	Diagnosis	ICD-10-CM
J8484	Other interstitial lung diseases of childhood	Diagnosis	ICD-10-CM
J84.841	Neuroendocrine cell hyperplasia of infancy	Diagnosis	ICD-10-CM

Code	Description	Code Category	Code Type
J84.842	Pulmonary interstitial glycogenosis	Diagnosis	ICD-10-CM
J84.843	Alveolar capillary dysplasia with vein misalignment	Diagnosis	ICD-10-CM
J84848	Other interstitial lung diseases of childhood	Diagnosis	ICD-10-CM
J84.89	Other specified interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.9	Interstitial Pulmonary Disease, unspecified	Diagnosis	ICD-10-CM
J60	Coalworker's pneumoconiosis	Diagnosis	ICD-10-CM
J61	Pneumoconiosis due to asbestos and other mineral fibers	Diagnosis	ICD-10-CM
J62	Pneumoconiosis due to dust containing silica	Diagnosis	ICD-10-CM
J63	Pneumoconiosis due to other inorganic dusts	Diagnosis	ICD-10-CM
J64	Unspecified pneumoconiosis	Diagnosis	ICD-10-CM
J65	Pneumoconiosis associated with tuberculosis	Diagnosis	ICD-10-CM
J66	Airway disease due to specific organic dust	Diagnosis	ICD-10-CM
J67	Hypersensitivity pneumonitis due to organic dust	Diagnosis	ICD-10-CM
J68	Respiratory conditions due to inhalation of chemicals, gases, fumes and vapors	Diagnosis	ICD-10-CM
J69	Pneumonitis due to solids and liquids	Diagnosis	ICD-10-CM
J70	Respiratory conditions due to other external agents	Diagnosis	ICD-10-CM
J70.0	Acute pulmonary manifestations due to radiation	Diagnosis	ICD-10-CM
J70.1	Chronic and other pulmonary manifestations due to radiation	Diagnosis	ICD-10-CM
J70.2	Acute drug-induced interstitial lung disorders	Diagnosis	ICD-10-CM
J70.3	Chronic drug-induced interstitial lung disorders	Diagnosis	ICD-10-CM
J70.4	Drug-induced interstitial lung disorders, unspecified	Diagnosis	ICD-10-CM
J70.5	Respiratory conditions due to smoke inhalation	Diagnosis	ICD-10-CM
J70.8	Respiratory conditions due to other specified external agents	Diagnosis	ICD-10-CM
J70.9	Respiratory conditions due to unspecified external agent	Diagnosis	ICD-10-CM
516.34	Respiratory bronchiolitis interstitial lung disease	Diagnosis	ICD-9-CM
516.69	Other interstitial lung diseases of childhood	Diagnosis	ICD-9-CM
516.0	Pulmonary alveolar proteinosis	Diagnosis	ICD-9-CM
516.2	Pulmonary alveolar microlithiasis	Diagnosis	ICD-9-CM
516.1	Idiopathic pulmonary hemosiderosis	Diagnosis	ICD-9-CM
516.8	Other specified alveolar and parietoalveolar pneumonopathies	Diagnosis	ICD-9-CM
516.30	Idiopathic interstitial pneumonia, not otherwise specified	Diagnosis	ICD-9-CM
516.31	Idiopathic pulmonary fibrosis	Diagnosis	ICD-9-CM
516.32	Idiopathic non-specific interstitial pneumonitis	Diagnosis	ICD-9-CM
516.33	Acute interstitial pneumonitis	Diagnosis	ICD-9-CM
516.36	Cryptogenic organizing pneumonia	Diagnosis	ICD-9-CM
516.37	Desquamative interstitial pneumonia	Diagnosis	ICD-9-CM
515	Postinflammatory pulmonary fibrosis	Diagnosis	ICD-9-CM
516.35	Idiopathic lymphoid interstitial pneumonia	Diagnosis	ICD-9-CM
516.4	Lymphangioleiomyomatosis	Diagnosis	ICD-9-CM
516.5	Adult pulmonary Langerhans cell histiocytosis	Diagnosis	ICD-9-CM
516.63	Surfactant mutations of the lung	Diagnosis	ICD-9-CM
516.61	Neuroendocrine cell hyperplasia of infancy	Diagnosis	ICD-9-CM
516.62	Pulmonary interstitial glycogenosis	Diagnosis	ICD-9-CM
516.64	Alveolar capillary dysplasia with vein misalignment	Diagnosis	ICD-9-CM
516.9	Unspecified alveolar and parietoalveolar pneumonopathy	Diagnosis	ICD-9-CM
500	Coal workers' pneumoconiosis	Diagnosis	ICD-9-CM
501	Asbestosis	Diagnosis	ICD-9-CM
505	Unspecified pneumoconiosis	Diagnosis	ICD-9-CM
508.0	Acute pulmonary manifestations due to radiation	Diagnosis	ICD-9-CM
508.1	Chronic and other pulmonary manifestations due to radiation	Diagnosis	ICD-9-CM

Code	Description	Code Category	Code Type
508.8	Respiratory conditions due to other specified external agents	Diagnosis	ICD-9-CM
508.2	Respiratory conditions due to smoke inhalation	Diagnosis	ICD-9-CM
508.9	Respiratory conditions due to unspecified external agent	Diagnosis	ICD-9-CM
500	Coal workers' pneumoconiosis	Diagnosis	ICD-9-CM
502	Pneumoconiosis due to other silica or silicates	Diagnosis	ICD-9-CM
503	Pneumoconiosis due to other inorganic dust	Diagnosis	ICD-9-CM
505	Unspecified pneumoconiosis	Diagnosis	ICD-9-CM
Other Lung Diseases			
011	Pulmonary tuberculosis	Diagnosis	ICD-9-CM
012	Other respiratory tuberculosis	Diagnosis	ICD-9-CM
495	Extrinsic allergic alveolitis	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
510	Empyea	Diagnosis	ICD-9-CM
511	Pleurisy	Diagnosis	ICD-9-CM
512	Pneumothorax and air leak	Diagnosis	ICD-9-CM
513	Abscess of lung and mediastinum	Diagnosis	ICD-9-CM
514	Pulmonary congestion and hypostasis	Diagnosis	ICD-9-CM
515	Postinflammatory pulmonary fibrosis	Diagnosis	ICD-9-CM
516	Other alveolar and parietoalveolar pneumonopathy	Diagnosis	ICD-9-CM
517	Lung involvement in conditions classified elsewhere	Diagnosis	ICD-9-CM
518	Other diseases of lung	Diagnosis	ICD-9-CM
519	Other diseases of respiratory system	Diagnosis	ICD-9-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
J18.2	Hypostatic pneumonia, unspecified organism	Diagnosis	ICD-10-CM
J81.1	Chronic pulmonary edema	Diagnosis	ICD-10-CM
J84.10	Pulmonary fibrosis, unspecified	Diagnosis	ICD-10-CM
J84.89	Other specified interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.17	Other interstitial pulmonary diseases with fibrosis in diseases classified elsewhere	Diagnosis	ICD-10-CM

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS) and Current Procedural Terminology, 4th Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
Methacholine Test			
94070	Bronchospasm provocation evaluation, multiple spirometric determinations as in 94010, with administered agents (eg, antigen[s], cold air, methacholine)	Procedure	CPT-4
95070	Inhalation bronchial challenge testing (not including necessary pulmonary function tests); with histamine, methacholine, or similar compounds	Procedure	CPT-4
J7674	Methacholine chloride administered as inhalation solution through a nebulizer, per 1 mg	Procedure	HCPCS
Smoking			
1034F	Current tobacco smoker (CAD, CAP, COPD, PV) (DM)	Procedure	CPT-4
1035F	Current smokeless tobacco user (eg, chew, snuff) (PV)	Procedure	CPT-4
305.1	Tobacco use disorder		ICD-9-CM
4000F	Tobacco use cessation intervention, counseling (COPD, CAP, CAD, Asthma) (DM) (PV)	Procedure	CPT-4
4001F	Tobacco use cessation intervention, pharmacologic therapy (COPD, CAD, CAP, PV, Asthma) (DM) (PV)	Procedure	CPT-4
4004F	Patient screened for tobacco use and received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (PV, CAD)	Procedure	CPT-4
649.0	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium	Diagnosis	ICD-9-CM
649.00	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable	Diagnosis	ICD-9-CM
649.01	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	Diagnosis	ICD-9-CM
649.02	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	Diagnosis	ICD-9-CM
649.03	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication	Diagnosis	ICD-9-CM
649.04	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diagnosis	ICD-9-CM
83887	Nicotine	Procedure	CPT-4
989.84	Toxic effect of tobacco	Diagnosis	ICD-9-CM
99406	Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes	Procedure	CPT-4
99407	Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes	Procedure	CPT-4
C9801	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes, up to 10 minutes	Procedure	HCPCS
C9802	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intensive, greater than 10 minutes	Procedure	HCPCS
D1320	tobacco counseling for the control and prevention of oral disease	Procedure	HCPCS
F17	Nicotine dependence	Diagnosis	ICD-10-CM
F17.2	Nicotine dependence	Diagnosis	ICD-10-CM
F17.20	Nicotine dependence, unspecified	Diagnosis	ICD-10-CM
F17.200	Nicotine dependence, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F17.201	Nicotine dependence, unspecified, in remission	Diagnosis	ICD-10-CM
F17.203	Nicotine dependence unspecified, with withdrawal	Diagnosis	ICD-10-CM
F17.208	Nicotine dependence, unspecified, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.209	Nicotine dependence, unspecified, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.21	Nicotine dependence, cigarettes	Diagnosis	ICD-10-CM
F17.210	Nicotine dependence, cigarettes, uncomplicated	Diagnosis	ICD-10-CM
F17.211	Nicotine dependence, cigarettes, in remission	Diagnosis	ICD-10-CM
F17.213	Nicotine dependence, cigarettes, with withdrawal	Diagnosis	ICD-10-CM
F17.218	Nicotine dependence, cigarettes, with other nicotine-induced disorders	Diagnosis	ICD-10-CM

Code	Description	Code Category	Code Type
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.220	Nicotine dependence, chewing tobacco, uncomplicated	Diagnosis	ICD-10-CM
F17.221	Nicotine dependence, chewing tobacco, in remission	Diagnosis	ICD-10-CM
F17.290	Nicotine dependence, other tobacco product, uncomplicated	Diagnosis	ICD-10-CM
F17.291	Nicotine dependence, other tobacco product, in remission	Diagnosis	ICD-10-CM
G0375	Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes	Procedure	HCPCS
G0376	Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes	Procedure	HCPCS
G0436	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes, up to 10 minutes	Procedure	HCPCS
G0437	Smoking and tobacco cessation counseling visit for the asymptomatic patient; intensive, greater than 10 minutes	Procedure	HCPCS
G8093	Newly diagnosed chronic obstructive pulmonary disease (COPD) patient documented to have received smoking cessation intervention, within 3 months of diagnosis	Procedure	HCPCS
G8094	Newly diagnosed chronic obstructive pulmonary disease (COPD) patient not documented to have received smoking cessation intervention, within 3 months of diagnosis	Procedure	HCPCS
G8402	Tobacco (smoke) use cessation intervention, counseling	Procedure	HCPCS
G8403	Tobacco (smoke) use cessation intervention not counseled	Procedure	HCPCS
G8453	Tobacco use cessation intervention, counseling	Procedure	HCPCS
G8454	Tobacco use cessation intervention not counseled, reason not specified	Procedure	HCPCS
G8455	Current tobacco smoker	Procedure	HCPCS
G8456	Current smokeless tobacco user	Procedure	HCPCS
G8688	Currently a smokeless tobacco user (e.g., chew, snuff) and no exposure to secondhand smoke	Procedure	HCPCS
G8690	Current tobacco smoker or current exposure to secondhand smoke	Procedure	HCPCS
G8692	Current smokeless tobacco user (e.g., chew, snuff) and no exposure to secondhand smoke	Procedure	HCPCS
G9016	Smoking cessation counseling, individual, in the absence of or in addition to any other evaluation and management service, per session (6-10 minutes) [demo project code only]	Procedure	HCPCS
G9276	Documentation that patient is a current tobacco user	Procedure	HCPCS
G9458	Patient documented as tobacco user and received tobacco cessation intervention (must include at least one of the following: advice given to quit smoking or tobacco use, counseling on the benefits of quitting smoking or tobacco use, assistance with or referral to external smoking or tobacco cessation support programs, or current enrollment in smoking or tobacco use cessation program) if identified as a tobacco user	Procedure	HCPCS
O99.33	Tobacco use disorder complicating pregnancy, childbirth, and the puerperium	Diagnosis	ICD-10-CM
O99.330	Smoking (tobacco) complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.331	Smoking (tobacco) complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.332	Smoking (tobacco) complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.333	Smoking (tobacco) complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.334	Smoking (tobacco) complicating childbirth	Diagnosis	ICD-10-CM
O99.335	Smoking (tobacco) complicating the puerperium	Diagnosis	ICD-10-CM
S4990	Nicotine patches, legend	Procedure	HCPCS
S4991	Nicotine patches, non-legend	Procedure	HCPCS
S4995	Smoking cessation gum	Procedure	HCPCS
S9075	Smoking cessation treatment	Procedure	HCPCS
S9453	Smoking cessation classes, non-physician provider, per session	Procedure	HCPCS
T65.211A	Toxic effect of chewing tobacco, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.212A	Toxic effect of chewing tobacco, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.213A	Toxic effect of chewing tobacco, assault, initial encounter	Diagnosis	ICD-10-CM
T65.214A	Toxic effect of chewing tobacco, undetermined, initial encounter	Diagnosis	ICD-10-CM

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS) and Current Procedural Terminology, 4th Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
T65.221A	Toxic effect of tobacco cigarettes, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.222A	Toxic effect of tobacco cigarettes, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.223A	Toxic effect of tobacco cigarettes, assault, initial encounter	Diagnosis	ICD-10-CM
T65.224A	Toxic effect of tobacco cigarettes, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.291A	Toxic effect of other tobacco and nicotine, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.292A	Toxic effect of other tobacco and nicotine, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.293A	Toxic effect of other tobacco and nicotine, assault, initial encounter	Diagnosis	ICD-10-CM
T65.294A	Toxic effect of other tobacco and nicotine, undetermined, initial encounter	Diagnosis	ICD-10-CM
V15.82	Personal history of tobacco use, presenting hazards to health	Diagnosis	ICD-9-CM
Z72.0	Tobacco use	Diagnosis	ICD-10-CM
Z87.891	Personal history of nicotine dependence	Diagnosis	ICD-10-CM
292.0	Drug withdrawal	Diagnosis	ICD-9-CM
292.89	Other specified drug-induced mental disorder	Diagnosis	ICD-9-CM
292.9	Unspecified drug-induced mental disorder	Diagnosis	ICD-9-CM
V69.8	Other problems related to lifestyle	Diagnosis	ICD-9-CM
E866.8	Accidental poisoning by other specified solid or liquid substances	Diagnosis	ICD-9-CM
E950.9	Suicide and self-inflicted poisoning by other and unspecified solid and liquid substances	Diagnosis	ICD-9-CM
E962.1	Assault by other solid and liquid substances	Diagnosis	ICD-9-CM
E980.9	Poisoning by other and unspecified solid and liquid substances, undetermined whether accidentally or purposely inflicted	Diagnosis	ICD-9-CM

	Spirometry		
94010	Spirometry, including graphic record, total and timed vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation	Procedure	CPT-4
94014	Patient-initiated spirometric recording per 30-day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis of transmitted data, periodic recalibration and review and interpretation by a physician or other qualified health care professional	Procedure	CPT-4
94015	Patient-initiated spirometric recording per 30-day period of time; recording (includes hook-up, reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)	Procedure	CPT-4
94016	Patient-initiated spirometric recording per 30-day period of time; review and interpretation only by a physician or other qualified health care professional	Procedure	CPT-4
94060	Bronchodilation responsiveness, spirometry as in 94010, pre- and post-bronchodilator administration	Procedure	CPT-4
94617	Exercise test for bronchospasm, including pre- and post-spirometry, electrocardiographic recording(s), and pulse oximetry	Procedure	CPT-4
94620	Pulmonary stress testing; simple (eg, 6-minute walk test, prolonged exercise test for bronchospasm with pre- and post-spirometry and oximetry)	Procedure	CPT-4
94070	Bronchospasm provocation evaluation, multiple spirometric determinations as in 94010, with administered agents (eg, antigen[s], cold air, methacholine)	Procedure	CPT-4
94375	Respiratory flow volume loop	Procedure	CPT-4
3027F	Spirometry test results demonstrate FEV1/FVC greater than or equal to 70% or patient does not have COPD symptoms (COPD)	Procedure	CPT-2
95070	Inhalation bronchial challenge testing (not including necessary pulmonary function tests); with histamine, methacholine, or similar compounds	Procedure	CPT-4
	Obesity		
278.00	Obesity, unspecified	Diagnosis	ICD-9-CM

Appendix E. List of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes, Healthcare Common Procedure Coding System (HCPCS) and Current Procedural Terminology, 4th Edition (CPT-4) Codes Used to Define Baseline Characteristics in this Request

Code	Description	Code Category	Code Type
278.01	Morbid obesity	Diagnosis	ICD-9-CM
278.03	Obesity hypoventilation syndrome	Diagnosis	ICD-9-CM
649.1	Obesity complicating pregnancy, childbirth, or the puerperium	Diagnosis	ICD-9-CM
649.10	Obesity complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable	Diagnosis	ICD-9-CM
649.11	Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	Diagnosis	ICD-9-CM
649.12	Obesity complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	Diagnosis	ICD-9-CM
649.13	Obesity complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication	Diagnosis	ICD-9-CM
649.14	Obesity complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diagnosis	ICD-9-CM
E65	Localized adiposity	Diagnosis	ICD-10-CM
E66	Overweight and obesity	Diagnosis	ICD-10-CM
E66.0	Obesity due to excess calories	Diagnosis	ICD-10-CM
E66.01	Morbid (severe) obesity due to excess calories	Diagnosis	ICD-10-CM
E66.09	Other obesity due to excess calories	Diagnosis	ICD-10-CM
E66.1	Drug-induced obesity	Diagnosis	ICD-10-CM
E66.2	Morbid (severe) obesity with alveolar hypoventilation	Diagnosis	ICD-10-CM
E66.3	Overweight	Diagnosis	ICD-10-CM
E66.8	Other obesity	Diagnosis	ICD-10-CM
E66.9	Obesity, unspecified	Diagnosis	ICD-10-CM
O99.21	Obesity complicating pregnancy, childbirth, and the puerperium	Diagnosis	ICD-10-CM
O99.210	Obesity complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.211	Obesity complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.212	Obesity complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.213	Obesity complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.214	Obesity complicating childbirth	Diagnosis	ICD-10-CM
O99.215	Obesity complicating the puerperium	Diagnosis	ICD-10-CM
V85.3	Body Mass Index between 30-39, adult	Diagnosis	ICD-9-CM
V85.30	Body Mass Index 30.0-30.9, adult	Diagnosis	ICD-9-CM
V85.31	Body Mass Index 31.0-31.9, adult	Diagnosis	ICD-9-CM
V85.32	Body Mass Index 32.0-32.9, adult	Diagnosis	ICD-9-CM
V85.33	Body Mass Index 33.0-33.9, adult	Diagnosis	ICD-9-CM
V85.34	Body Mass Index 34.0-34.9, adult	Diagnosis	ICD-9-CM
V85.35	Body Mass Index 35.0-35.9, adult	Diagnosis	ICD-9-CM
V85.36	Body Mass Index 36.0-36.9, adult	Diagnosis	ICD-9-CM
V85.37	Body Mass Index 37.0-37.9, adult	Diagnosis	ICD-9-CM
V85.38	Body Mass Index 38.0-38.9, adult	Diagnosis	ICD-9-CM
V85.39	Body Mass Index 39.0-39.9, adult	Diagnosis	ICD-9-CM
V85.4	Body Mass Index 40 and over, adult	Diagnosis	ICD-9-CM
V85.41	Body Mass Index 40.0-44.9, adult	Diagnosis	ICD-9-CM
V85.42	Body Mass Index 45.0-49.9, adult	Diagnosis	ICD-9-CM
V85.43	Body Mass Index 50.0-59.9, adult	Diagnosis	ICD-9-CM
V85.44	Body Mass Index 60.0-69.9, adult	Diagnosis	ICD-9-CM
V85.45	Body Mass Index 70 and over, adult	Diagnosis	ICD-9-CM
Z68.30	Body mass index (BMI) 30.0-30.9, adult	Diagnosis	ICD-10-CM
Z68.31	Body mass index (BMI) 31.0-31.9, adult	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Z68.32	Body mass index (BMI) 32.0-32.9, adult	Diagnosis	ICD-10-CM
Z68.33	Body mass index (BMI) 33.0-33.9, adult	Diagnosis	ICD-10-CM
Z68.34	Body mass index (BMI) 34.0-34.9, adult	Diagnosis	ICD-10-CM
Z68.35	Body mass index (BMI) 35.0-35.9, adult	Diagnosis	ICD-10-CM
Z68.36	Body mass index (BMI) 36.0-36.9, adult	Diagnosis	ICD-10-CM
Z68.37	Body mass index (BMI) 37.0-37.9, adult	Diagnosis	ICD-10-CM
Z68.38	Body mass index (BMI) 38.0-38.9, adult	Diagnosis	ICD-10-CM
Z68.39	Body mass index (BMI) 39.0-39.9, adult	Diagnosis	ICD-10-CM
Z68.41	Body mass index (BMI) 40.0-44.9, adult	Diagnosis	ICD-10-CM
Z68.42	Body mass index (BMI) 45.0-49.9, adult	Diagnosis	ICD-10-CM
Z68.43	Body mass index (BMI) 50-59.9, adult	Diagnosis	ICD-10-CM
Z68.44	Body mass index (BMI) 60.0-69.9, adult	Diagnosis	ICD-10-CM
Z68.45	Body mass index (BMI) 70 or greater, adult	Diagnosis	ICD-10-CM
278.1	Localized adiposity	Diagnosis	ICD-9-CM
278.02	Overweight	Diagnosis	ICD-9-CM
278.2	Hypervitaminosis A	Diagnosis	ICD-9-CM
278.3	Hypercarotinemia	Diagnosis	ICD-9-CM
278.8	Other hyperalimentation	Diagnosis	ICD-9-CM
278.4	Hypervitaminosis D	Diagnosis	ICD-9-CM
E67	Other hyperalimentation	Diagnosis	ICD-10-CM
E67.0	Hypervitaminosis A	Diagnosis	ICD-10-CM
E67.1	Hypercarotenemia	Diagnosis	ICD-10-CM
E67.2	Megavitamin-B6 syndrome	Diagnosis	ICD-10-CM
E67.3	Hypervitaminosis D	Diagnosis	ICD-10-CM
E67.8	Other specified hyperalimentation	Diagnosis	ICD-10-CM
E68	Sequelae of hyperalimentation	Diagnosis	ICD-10-CM
Asthma Exacerbation			
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
493.91	Asthma, unspecified with status asthmaticus	Diagnosis	ICD-9-CM
493.92	Asthma, unspecified, 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
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
Omalizumab			
S0107	Injection, omalizumab, 25 mg	Procedure	HCPCS
J2357	Injection, omalizumab, 5 mg	Procedure	HCPCS
C9217	Injection, omalizumab, per 5 mg	Procedure	HCPCS

Appendix F. Specifications for Type 1 Request: care_mpl1r_wp002

The CDER has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool **version 8.0.3** to estimate rates of asthma patients treated with inhaled and non-inhaled medications, such as inhaled corticosteroids (ICSs), short acting beta agonists (SABAs) inhalers, long acting beta agonists (LABAs) inhalers, leukotriene receptor antagonists (LTRAs), interleukin-5 (IL-5) inhibitors with inclusion/exclusion criteria specified below in the Sentinel Distributed Database (SDD).

Query period:	1/1/2008 - most recent
Coverage requirement:	Medical & Drug Coverage
Pre-index enrollment requirement:	365 days
Post-index enrollment requirement:	0 days
Enrollment gap:	45 days
Age groups:	18 to 64, and ≥ 65.
Stratifications:	Age group, Sex, Calendar year, Race

Exposure Episode Parameters

Scenario	Index Exposure	Cohort definition	Incident exposure washout period	Incident w/ respect to:	Exposure episode length	Care setting	Principal diagnosis position	Censor treatment episode at evidence of:
1	Any asthma diagnosis	First valid exposure episode during query period (01)	0	-	365	Any	N/A	Death, DP end date, Query end date, Disenrollment
2	Asthma definition 2 [at least 1 IP dx **OR** at least 2 OP dx **OR** 1 any diagnosis + asthma maintenance medication (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4)]	First valid exposure episode during query period (01)	365	Asthma	365	Any	N/A	Death, DP end date, Query end date, Disenrollment
3	Asthma definition 3 [at least 1 IP dx **OR** at least 2 OP dx **OR** 1 any diagnosis + asthma maintenance medication (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4)]	First valid exposure episode during query period (01)	0	-	365	Any	N/A	Death, DP end date, Query end date, Disenrollment

Appendix F. Specifications for Type 1 Request: care_mpl1r_wp002

Scenario	Index Exposure	Cohort definition	Incident exposure washout period	Incident w/ respect to:	Exposure episode length	Care setting	Principal diagnosis position	Censor treatment episode at evidence of:
			Exposure Episode Parameters					
4	Anti-IL5 treatment	First valid exposure episode during query period (01)	365	Anti-IL5 treatment	365	Any	N/A	Death, DP end date, Query end date, Disenrollment
5	Anti-IL5 treatment	First valid exposure episode during query period (01)	0	-	365	Any	N/A	Death, DP end date, Query end date, Disenrollment
6	Incident ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4	All valid exposure episodes during query period	365	ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4	365	Any	N/A	Death, DP end date, Query end date, Disenrollment
7	Prevalent ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4	All valid exposure episodes during query period	0	-	365	Any	N/A	Death, DP end date, Query end date, Disenrollment

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."

Inclusion/Exclusion Criteria

Inclusion/ Exclusion group	Criteria	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the criteria should be found in evaluation period
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Asthma maintenance medication (ICS-containing, LABA-containing, LAMA-containing, Trelegy, LTRA, IL-5, IL-4)	Inclusion	Any	Any	-365	-1	1
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Asthma	Inclusion	Any	Any	-365	-1	1
ICS, LABA	Inclusion	Any	Any	-365	0	1

Inclusion/Exclusion Criteria

Inclusion/ Exclusion group	Criteria	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the criteria should be found in evaluation period
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Asthma	Inclusion	Any	Any	-365	-1	1
ICS, LABA	Inclusion	Any	Any	-365	0	1
Asthma	Inclusion	Any	Any	-365	-1	1
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1
Asthma	Inclusion	Any	Any	-365	-1	1
Alpha-1 anti-trypsin	Exclusion	Any	Any	-365	0	1
COPD	Exclusion	Any	Any	-365	0	1
Bronchiectasis	Exclusion	Any	Any	-365	0	1
Cystic fibrosis	Exclusion	Any	Any	-365	0	1
Sarcoidosis	Exclusion	Any	Any	-365	0	1
ILD	Exclusion	Any	Any	-365	0	1
Other lung disease	Exclusion	Any	Any	-365	0	1

Baseline Characteristics					
Characteristics	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the covariate should be found in evaluation
Tests/ Risk Factors					
Spirometry or methacholine challenge test	Any	Any	-365	0	at least 1
Spirometry test	Any	Any	-365	0	at least 1
Methacholine challenge test	Any	Any	-365	0	at least 1
Evidence of smoking	Any	Any	EVER	365	at least 1
Obesity	Any	Any	EVER	365	at least 1
Asthma Exacerbation					
Exacerbation code (ExacCode)	Any	Any	-365	0	at least 1
Exacerbation code (ExacCode)	Any	Any	1	365	at least 1
Exacerbation code (ExacCode)	Any	Any	1	30	at least 1
Inpt ExacCode	IP	Any	-365	0	at least 1
Inpt ExacCode	IP	Any	1	365	at least 1
ER ExacCode	ER	Any	-365	0	at least 1
ER ExacCode	ER	Any	1	365	at least 1
OT ExatCode	OT	Any	-365	0	at least 1
OT ExatCode	OT	Any	1	365	at least 1
Primary diagnosis code (Asthma DX)	IP	Principal	-365	0	at least 1
Primary diagnosis code (Asthma DX)	IP	Principal	1	365	at least 1
Primary diagnosis code (Asthma DX)	IP	Principal	1	30	at least 1
IP Asthma DX	IP	Any	-365	0	at least 1
IP Asthma DX	IP	Any	1	365	at least 1
ER Asthma DX	ER	Any	-365	0	at least 1
ER Asthma DX	ER	Any	1	365	at least 1
Medical Products					
Corticosteroid dispensing (OCS)	Any	Any	-365	0	at least 1
Corticosteroid dispensing (OCS)	Any	Any	1	365	at least 1
Corticosteroid dispensing (OCS)	Any	Any	1	30	at least 1
Antibiotics dispensing (Abx)	Any	Any	-365	0	at least 1
Antibiotics dispensing (Abx)	Any	Any	1	365	at least 1
Antibiotics dispensing (Abx)	Any	Any	1	30	at least 1
SABA dispensing (SABA)	Any	Any	-365	0	at least 1
SABA dispensing (SABA)	Any	Any	1	365	at least 1
SABA dispensing (SABA)	Any	Any	1	30	at least 1
IL-5 inhibitors administration (inclusive Mepo, Resli, Benra)	Any	Any	1	365	at least 1
Mepolizumab administration	Any	Any	1	365	at least 1
Reslizumab administration	Any	Any	1	365	at least 1
Benralizumab administration	Any	Any	1	365	at least 1
IL-4 inhibitors administration (ie. dupilumab)	Any	Any	1	365	at least 1
ICS mono product and LABA mono product alone					
≥ 4 fill of ICS mono product AND >=1 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	Any	Any	1	365	at least 1

	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the covariate should be found in evaluation
Baseline Characteristics					
Characteristics					
≥ 4 fill of ICS mono product AND >=2 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	Any	Any	1	365	at least 2
≥ 4 fill of ICS mono product AND >=4 fill of LABA mono product AND no fill of any other maintenance medications (LAMA containing product or LTRA or cromolyn or theophylline or IL4 or IL5)	Any	Any	1	365	at least 4
ICS mono (1 active ingredient)	Any	Any	-365	+365	at least 2 times
ICS-containing (ICS mono or ICS/LABA or ICS/LABA/LAMA)	Any	Any	-365	+365	at least 2 times
LABA mono (1 active ingredient)	Any	Any	-365	+365	at least 2 times
LABA- containing (LABA mono or ICS/LABA or	Any	Any	-365	+365	at least 2 times
LAMA mono (1 active ingredient)	Any	Any	-365	+365	at least 2 times
LAMA-containing (LAMA mono or LAMA/LABA or ICS/LABA/LAMA)	Any	Any	-365	+365	at least 2 times
LTRA	Any	Any	-365	+365	at least 2 times
Theophylline	Any	Any	-365	+365	at least 2 times
Cromolyn	Any	Any	-365	+365	at least 2 times
Omalizumab	Any	Any	-365	+365	at least 2 times
OCS	Any	Any	-365	+365	at least 2 times
SAMA	Any	Any	-365	+365	at least 2 times
ICS and LABA	Any	Any	-365	+365	at least 2 times
ICS and LABA and LAMA includes: ICS and LABA and LAMA ICS and LABA/LAMA ICS/LABA and LAMA Trelegy Ellipta (ICS/LABA/LAMA)	Any	Any	-365	+365	at least 2 times
Roflumilast dispensing	Any	Any	1	+365	at least 2 times
Azithromycin dispensing	Any	Any	1	+365	at least 2 times
LABA/LAMA in -365 to 365 days period (at least 2)	Any	Any	-365	+365	at least 2 times
Trelegy Ellipta in -365 to 365 days period (at least 2)	Any	Any	-365	+365	at least 2 times
ICS alone	Any	Any	-365	+365	at least 2 times
LABA alone	Any	Any	-365	+365	at least 2 times
LAMA alone	Any	Any	-365	+365	at least 2 times
Utilization					
Prior combined comorbidity score					
Mean number of ambulatory encounters					
Mean number of emergency room encounters					
Mean number of inpatient hospital encounters					
Mean number of non-acute institutional encounters					
Mean number of other ambulatory encounters					

Baseline Characteristics

Characteristics	Care setting	Principal diagnosis position	Evaluation period start	Evaluation period end	Number of instances the covariate should be found in evaluation
Mean number of unique drug classes					
Mean number of generics					
Mean number of filled prescriptions					