

## Disclaimer

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

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

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

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

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## Overview for Request: cder\_mpl1r\_wp253

**Request ID:** cder\_mpl1r\_wp253\_nsdv\_v01

**Request Description:** In this report, we characterized dispensing and administration patterns of 22 New Molecular Entities (NMEs) approved from September 1, 2019 to December 31, 2019, stratified by age and sex in the Sentinel Distributed Database (SDD).

**Sentinel Routine Querying Module:** Cohort Identification and Descriptive Analysis module, version 12.1.2

**Data Source:** We distributed this request to 14 Sentinel Data Partners on September 18, 2023. Because of potential overlap in patient populations between two data partners for one year in the query period, we excluded results from one data partner and aggregated the results of the remaining 13 data partners in this report. The study period included available data from January 1, 2019 to most recent available data. Please see Appendix A for a list of dates of available data for each Data Partner.

**Study Design:** We identified individuals initiating any of the 22 NME drugs. We described demographic and clinical characteristics for individuals initiating each NME based on history recorded in the six months prior to initiation of treatment with NME. The analyses characterized dispensing patterns by examining cumulative exposure episode durations, first exposure episode durations, all exposure episode durations, days supplied per dispensing, and lengths of gaps between episodes, overall and stratified by age and sex. This was a Type 5 analysis in the Query Request Package (QRP) documentation.

**Exposures of Interest:** Our exposures of interest were NMEs approved between September 1, 2019, and December 31, 2019, administered or dispensed in any care setting. These were defined using Healthcare Common Procedure Coding System (HCPCS) procedure codes and National Drug Codes (NDCs). Please see Appendix B for a list of non-proprietary and proprietary names of medical products, and Appendix C for a list of procedure codes used to define exposures in this request. All valid exposure episodes were included.

**Cohort Eligibility Criteria:** We defined index exposure as the first qualifying administration or dispensing of a given NME to an individual during the query period. We required individuals to be enrolled in health plans with both medical and drug coverage for at least 183 days prior to their index exposure, during which gaps in coverage of up to 45 days were allowed. The following age groups were included: 0-17, 18-24, 25-40, 41-64, 65+ years.

**Baseline Characteristics:** We described demographic characteristics such as sex, age, and calendar year on the day of each index NME exposure. We also described 31 clinical characteristics based on history recorded in the six months prior to the index exposure. The set of clinical characteristics included 24 chronic conditions and seven lifestyle-related conditions. Chronic conditions were defined using Centers for Medicare and Medicaid Services' (CMS) Chronic Conditions Data Warehouse<sup>1</sup> (CCW) algorithms and included: acute myocardial infarction, Alzheimer's disease and related conditions, atrial fibrillation, diabetes mellitus, heart failure, hyperlipidemia, hypertension, depression, ischemic heart disease, rheumatoid arthritis/osteoarthritis, stroke/transient ischemic attack (TIA), breast cancer, colorectal cancer, prostate cancer, lung cancer, endometrial cancer, acquired hypothyroidism, anemia, asthma, benign prostatic hyperplasia, chronic kidney disease, chronic obstructive pulmonary disease (COPD) and bronchiectasis, glaucoma, and osteoporosis. Lifestyle-related conditions included: obesity, overweight, smoking, alcohol abuse or dependence, drug abuse or dependence, history of cardiac arrest, and history of coronary angioplasty or bypass. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) procedure codes, HCPCS procedure codes, Current Procedural Terminology, Fourth Edition (CPT-4) procedure codes, and NDCs were used to define the clinical characteristics. Please see Appendix D for a list of diagnosis and procedure codes used to define baseline characteristics in this request, and Appendix E for a list of non-proprietary and proprietary names of medical products used to define baseline characteristics in this request.

**Overview for Request: cder\_mpl1r\_wp253**

**Please refer to Appendices F, G, and H for the specifications of parameters used in this request, a design diagram., and baseline characteristics used in this request.**

**Limitations:** Algorithms used to define exposures and inclusion criteria are imperfect; thus, it is possible that there may be misclassification. Therefore, data should be interpreted with this limitation in mind.

**Notes:** Please contact the Sentinel Operations Center ([info@sentinel-system.org](mailto:info@sentinel-system.org)) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel's routine querying modules, please refer to the documentation (<https://dev.sentinel-system.org/projects/SENTINEL/repos/sentinel-routine-querying-tool-documentation/browse>).

<sup>1</sup>Chronic Conditions Data Warehouse. Condition Categories -Chronic Conditions Data Warehouse.  
<https://www.ccwdata.org/web/guest/condition-categories>

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

**Amount Supplied** - number of units (pills, tablets, vials) dispensed. Net amount per NDC per dispensing.

**Blackout Period** - number of days at the beginning of a treatment episode that events are to be ignored. If an event occurs during the blackout period, the episode is excluded.

**Care Setting** - type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Unknown or Missing (U). The Care Setting, along with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.

**Ambulatory Visit (AV)** - includes visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

**Emergency Department (ED)** - includes ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.

**Inpatient Hospital Stay (IP)** - includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.

**Non-Acute Institutional Stay (IS)** - includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

**Other Ambulatory Visit (OA)** - includes other non overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone and email consultations.

**Charlson/Elixhauser Combined Comorbidity Score** - calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).

**Code Days** - the minimum number of times the diagnosis must be found during the evaluation period in order to fulfill the algorithm to identify the corresponding patient characteristic.

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

**Computed Start Marketing Date** - represents the first observed dispensing date among all valid users within a GROUP (scenario) within each Data Partner site.

**Days Supplied** - number of days supplied for all dispensings in qualifying treatment episodes.

**Eligible Members** - number of members eligible for an incident treatment episode (defined by the drug/exposure and event washout periods) with drug and medical coverage during the query period.

**Enrollment Gap** - number of days allowed between two consecutive enrollment periods without breaking a "continuously enrolled" sequence.

**Episodes** - treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.

**Episode Gap** - number of days allowed between two (or more) consecutive exposures (dispensings/procedures) to be considered the same treatment episode.

**Event Deduplication** - specifies how events are counted by the Modular Program (MP) algorithm: 0: Counts all occurrences of a health outcome of interest (HOI) during an exposure episode; 1: de-duplicates occurrences of the same HOI code and code type on the same day; 2: de-duplicates occurrences of the same HOI group on the same day (e.g., de-duplicates at the group level).

**Exposure Episode Length** - number of days after exposure initiation that is considered "exposed time."

**Exposure Extension Period** - number of days post treatment period in which the outcomes/events are counted for a treatment episode. Extensions are added after any episode gaps have been bridged.

**Lookback Period** - number of days wherein a member is required to have evidence of pre-existing condition (diagnosis/procedure/drug dispensing).



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

**Maximum Episode Duration** - truncates exposure episodes after a requester-specified number of exposed days. Applied after any gaps are bridged and extension days added to the length of the exposure episode.

**Member-Years** - sum of all days of enrollment with medical and drug coverage in the query period preceded by an exposure washout period all divided by 365.25.

**Minimum Days Supplied** - specifies a minimum number of days in length of the days supplied for the episode to be considered.

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

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

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

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

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

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

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

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

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

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

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

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

\*all terms may not be used in this report

**Table 1a. Aggregated Characteristics of Tenapanor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	1,273	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	57.5	14.8
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	161	12.6%
41-64 years	576	45.2%
≥ 65 years	478	37.5%
Sex		
Female	1,037	81.5%
Male	236	18.5%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	49	3.8%
Black or African American	90	7.1%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	607	47.7%
White	509	40.0%
Hispanic origin		
Yes	38	3.0%
No	524	41.2%
Unknown	711	55.9%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
2022	1,068	83.9%
2023	205	16.1%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease and related conditions	42	3.3%
Atrial Fibrillation	60	4.7%
Diabetes Mellitus	280	22.0%
Heart Failure	100	7.9%

**Table 1a. Aggregated Characteristics of Tenapanor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	446	35.0%
Hypertension	481	37.8%
Depression	501	39.4%
Ischemic Heart Disease	213	16.7%
Rheumatoid Arthritis/Osteoarthritis	340	26.7%
Stroke/TIA <sup>4</sup>	22	1.7%
Breast Cancer	33	2.6%
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	213	16.7%
Anemia	334	26.2%
Asthma	134	10.5%
Benign Prostatic Hyperplasia	53	4.2%
Chronic Kidney Disease	136	10.7%
COPD <sup>5</sup> and Bronchiectasis	102	8.0%
Glaucoma	134	10.5%
Osteoporosis	95	7.5%
Obesity: diagnosed or identified by weight management procedures	287	22.5%
Obesity: identified by weight management-related prescriptions	15	1.2%
Overweight	163	12.8%
Smoking: diagnosed or identified by smoking cessation procedures	230	18.1%
Smoking: identified by smoking-related prescriptions	14	1.1%
Alcohol Abuse or Dependence	26	2.0%
Drug Abuse or Dependence	64	5.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	50	3.9%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	21.0	17.5
Mean number of emergency room encounters	0.6	1.3
Mean number of inpatient hospital encounters	0.1	0.5
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	5.4	10.2
Mean number of filled prescriptions	34.9	27.9
Mean number of generics dispensed	13.5	7.4

**Table 1a. Aggregated Characteristics of Tenapanor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	12.5	6.6

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1b. Aggregated Characteristics of Trifarotene in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	21,437	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	24.1	10.9
Age		
0-17 years	8,457	39.5%
18-24 years	5,727	26.7%
25-40 years	5,223	24.4%
41-64 years	1,908	8.9%
≥ 65 years	122	0.6%
Sex		
Female	15,890	74.1%
Male	5,547	25.9%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	247	1.2%
Black or African American	292	1.4%
Multi-racial	369	1.7%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	18,950	88.4%
White	1,568	7.3%
Hispanic origin		
Yes	335	1.6%
No	383	1.8%
Unknown	20,719	96.7%
Year		
2019	113	0.5%
2020	5,556	25.9%
2021	7,446	34.7%
2022	7,408	34.6%
2023	914	4.3%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease and related conditions	*****	*****
Atrial Fibrillation	18	0.1%
Diabetes Mellitus	201	0.9%
Heart Failure	29	0.1%

**Table 1b. Aggregated Characteristics of Trifarotene in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	363	1.7%
Hypertension	332	1.5%
Depression	2,393	11.2%
Ischemic Heart Disease	82	0.4%
Rheumatoid Arthritis/Osteoarthritis	245	1.1%
Stroke/TIA <sup>4</sup>	14	0.1%
Breast Cancer	41	0.2%
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	309	1.4%
Anemia	604	2.8%
Asthma	348	1.6%
Benign Prostatic Hyperplasia	17	0.1%
Chronic Kidney Disease	82	0.4%
COPD <sup>5</sup> and Bronchiectasis	31	0.1%
Glaucoma	171	0.8%
Osteoporosis	24	0.1%
Obesity: diagnosed or identified by weight management procedures	782	3.6%
Obesity: identified by weight management-related prescriptions	79	0.4%
Overweight	517	2.4%
Smoking: diagnosed or identified by smoking cessation procedures	275	1.3%
Smoking: identified by smoking-related prescriptions	16	0.1%
Alcohol Abuse or Dependence	131	0.6%
Drug Abuse or Dependence	140	0.7%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	11	0.1%

**Health Service Utilization Intensity Metrics**

Mean number of ambulatory encounters	6.6	8.3
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**Table 1b. Aggregated Characteristics of Trifarotene in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of emergency room encounters	0.1	0.4
Mean number of inpatient hospital encounters	0.0	0.1
Mean number of non-acute institutional encounters	0.0	0.0
Mean number of other ambulatory encounters	1.4	3.5
Mean number of filled prescriptions	6.2	8.1
Mean number of generics dispensed	3.3	3.3
Mean number of unique drug classes dispensed	3.1	3.0

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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



**Table 1c. Aggregated Characteristics of Brolucizumab–dbll in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	17,358	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	80.6	8.0
Age		
0-17 years	0	0.0%
18-24 years	0	0.0%
25-40 years	11	0.1%
41-64 years	316	1.8%
≥ 65 years	17,031	98.1%
Sex		
Female	10,178	58.6%
Male	7,180	41.4%
Race <sup>3</sup>		
American Indian or Alaska Native	42	0.2%
Asian	195	1.1%
Black or African American	142	0.8%
Multi-racial	11	0.1%
Native Hawaiian or Other Pacific Islander	13	0.1%
Unknown	1,722	9.9%
White	15,233	87.8%
Hispanic origin		
Yes	89	0.5%
No	15,192	87.5%
Unknown	2,077	12.0%
Year		
2019	208	1.2%
2020	14,654	84.4%
2021	1,704	9.8%
2022	772	4.4%
2023	20	0.1%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	73	0.4%
Alzheimer’s Disease and related conditions	816	4.7%
Atrial Fibrillation	2,256	13.0%
Diabetes Mellitus	3,398	19.6%
Heart Failure	1,873	10.8%
Hyperlipidemia	6,762	39.0%
Hypertension	9,067	52.2%
Depression	2,147	12.4%
Ischemic Heart Disease	4,117	23.7%
Rheumatoid Arthritis/Osteoarthritis	3,084	17.8%
Stroke/TIA <sup>4</sup>	429	2.5%
Breast Cancer	551	3.2%
Colorectal Cancer	159	0.9%
Prostate Cancer	600	3.5%

**Table 1c. Aggregated Characteristics of Brolucizumab–dbll in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Lung Cancer	177	1.0%
Endometrial Cancer	46	0.3%
Acquired Hypothyroidism	2,351	13.5%
Anemia	2,854	16.4%
Asthma	540	3.1%
Benign Prostatic Hyperplasia	1,027	5.9%
Chronic Kidney Disease	2,385	13.7%
COPD <sup>5</sup> and Bronchiectasis	1,593	9.2%
Glaucoma	3,286	18.9%
Osteoporosis	1,024	5.9%
Obesity: diagnosed or identified by weight management procedures	2,444	14.1%
Obesity: identified by weight management-related prescriptions	70	0.4%
Overweight	1,677	9.7%
Smoking: diagnosed or identified by smoking cessation procedures	3,098	17.8%
Smoking: identified by smoking-related prescriptions	37	0.2%
Alcohol Abuse or Dependence	127	0.7%
Drug Abuse or Dependence	171	1.0%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	1,146	6.6%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	15.1	11.4
Mean number of emergency room encounters	0.2	0.6
Mean number of inpatient hospital encounters	0.1	0.4
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	2.9	6.3
Mean number of filled prescriptions	15.8	14.3
Mean number of generics dispensed	7.0	4.4
Mean number of unique drug classes dispensed	6.7	4.1

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1d. Aggregated Characteristics of Afamelanotide in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	40	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	46.9	13.6
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	11	27.5%
41-64 years	18	45.0%
≥ 65 years	*****	*****
Sex		
Female	18	45.0%
Male	22	55.0%
Race <sup>3</sup>		
American Indian or Alaska Native	0	0.0%
Asian	0	0.0%
Black or African American	0	0.0%
Multi-racial	0	0.0%
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	24	60.0%
White	16	40.0%
Hispanic origin		
Yes	0	0.0%
No	14	35.0%
Unknown	26	65.0%
Year		
2019	0	0.0%
2020	*****	*****
2021	20	50.0%
2022	*****	*****
2023	*****	*****
<b>Health Characteristics</b>		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease and related conditions	*****	*****
Atrial Fibrillation	*****	*****
Diabetes Mellitus	*****	*****
Heart Failure	*****	*****

**Table 1d. Aggregated Characteristics of Afamelanotide in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Depression	*****	*****
Ischemic Heart Disease	*****	*****
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/TIA <sup>4</sup>	0	0.0%
Breast Cancer	0	0.0%
Colorectal Cancer	0	0.0%
Prostate Cancer	0	0.0%
Lung Cancer	0	0.0%
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	*****	*****
Anemia	*****	*****
Asthma	0	0.0%
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	*****	*****
COPD <sup>5</sup> and Bronchiectasis	*****	*****
Glaucoma	*****	*****
Osteoporosis	*****	*****
Obesity: diagnosed or identified by weight management procedures	*****	*****
Obesity: identified by weight management-related prescriptions	0	0.0%
Overweight	*****	*****
Smoking: diagnosed or identified by smoking cessation procedures	*****	*****
Smoking: identified by smoking-related prescriptions	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	8.9	7.3
Mean number of emergency room encounters	0.1	0.4
Mean number of inpatient hospital encounters	0.0	0.2
Mean number of non-acute institutional encounters	0.0	NaN
Mean number of other ambulatory encounters	4.0	3.5
Mean number of filled prescriptions	8.9	10.0
Mean number of generics dispensed	4.5	3.8

**Table 1d. Aggregated Characteristics of Afamelanotide in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	4.3	3.7

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1e. Aggregated Characteristics of Fluorodopa F-18 in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	*****	*****
<b>Demographic Characteristics</b>		
Age (years)	*****	*****
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	*****	*****
≥ 65 years	*****	*****
Sex		
Female	*****	*****
Male	*****	*****
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	*****	*****
White	*****	*****
Hispanic origin		
Yes	*****	*****
No	*****	*****
Unknown	*****	*****
Year		
2019	*****	*****
2020	*****	*****
2021	*****	*****
2022	*****	*****
2023	*****	*****
<b>Health Characteristics</b>		
Acute Myocardial Infarction	*****	*****
Alzheimer’s Disease and related conditions	*****	*****
Atrial Fibrillation	*****	*****
Diabetes Mellitus	*****	*****
Heart Failure	*****	*****

**Table 1e. Aggregated Characteristics of Fluorodopa F-18 in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Depression	*****	*****
Ischemic Heart Disease	*****	*****
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/TIA <sup>4</sup>	*****	*****
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	*****	*****
Anemia	*****	*****
Asthma	*****	*****
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	*****	*****
COPD <sup>5</sup> and Bronchiectasis	*****	*****
Glaucoma	*****	*****
Osteoporosis	*****	*****
Obesity: diagnosed or identified by weight management procedures	*****	*****
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	*****	*****
Smoking: diagnosed or identified by smoking cessation procedures	*****	*****
Smoking: identified by smoking-related prescriptions	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	*****	*****
<b>Health Service Utilization Intensity Metrics</b>		
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	*****	*****
Mean number of filled prescriptions	*****	*****
Mean number of generics dispensed	*****	*****



**Table 1e. Aggregated Characteristics of Fluorodopa F-18 in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	*****	*****

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1f. Aggregated Characteristics of Lasmiditan in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	6,734	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	49.5	12.8
Age		
0-17 years	29	0.4%
18-24 years	262	3.9%
25-40 years	1,593	23.7%
41-64 years	3,814	56.6%
≥ 65 years	1,036	15.4%
Sex		
Female	5,746	85.3%
Male	988	14.7%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	29	0.4%
Black or African American	216	3.2%
Multi-racial	60	0.9%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	3,444	51.1%
White	2,960	44.0%
Hispanic origin		
Yes	105	1.6%
No	2,708	40.2%
Unknown	3,921	58.2%
Year		
2019	0	0.0%
2020	2,578	38.3%
2021	2,115	31.4%
2022	1,854	27.5%
2023	187	2.8%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	24	0.4%
Alzheimer's Disease and related conditions	97	1.4%
Atrial Fibrillation	165	2.5%
Diabetes Mellitus	851	12.6%
Heart Failure	281	4.2%

**Table 1f. Aggregated Characteristics of Lasmiditan in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,388	20.6%
Hypertension	1,781	26.4%
Depression	2,963	44.0%
Ischemic Heart Disease	670	9.9%
Rheumatoid Arthritis/Osteoarthritis	1,507	22.4%
Stroke/TIA <sup>4</sup>	279	4.1%
Breast Cancer	107	1.6%
Colorectal Cancer	13	0.2%
Prostate Cancer	31	0.5%
Lung Cancer	16	0.2%
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	835	12.4%
Anemia	1,010	15.0%
Asthma	631	9.4%
Benign Prostatic Hyperplasia	61	0.9%
Chronic Kidney Disease	436	6.5%
COPD <sup>5</sup> and Bronchiectasis	373	5.5%
Glaucoma	323	4.8%
Osteoporosis	220	3.3%
Obesity: diagnosed or identified by weight management procedures	1,671	24.8%
Obesity: identified by weight management-related prescriptions	107	1.6%
Overweight	540	8.0%
Smoking: diagnosed or identified by smoking cessation procedures	1,155	17.2%
Smoking: identified by smoking-related prescriptions	101	1.5%
Alcohol Abuse or Dependence	110	1.6%
Drug Abuse or Dependence	502	7.5%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	168	2.5%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	18.1	14.5
Mean number of emergency room encounters	0.9	2.8
Mean number of inpatient hospital encounters	0.1	0.5
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	5.0	10.5
Mean number of filled prescriptions	39.7	28.1
Mean number of generics dispensed	14.2	7.8

**Table 1f. Aggregated Characteristics of Lasmiditan in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	12.8	6.7

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	9,638	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	27.0	11.9
Age		
0-17 years	2,812	29.2%
18-24 years	2,226	23.1%
25-40 years	3,292	34.2%
41-64 years	1,061	11.0%
≥ 65 years	247	2.6%
Sex		
Female	4,711	48.9%
Male	4,927	51.1%
Race <sup>3</sup>		
American Indian or Alaska Native	47	0.5%
Asian	*****	*****
Black or African American	202	2.1%
Multi-racial	44	0.5%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	4,593	47.7%
White	4,732	49.1%
Hispanic origin		
Yes	438	4.5%
No	4,696	48.7%
Unknown	4,504	46.7%
Year		
2019	3,352	34.8%
2020	4,034	41.9%
2021	1,299	13.5%
2022	871	9.0%
2023	82	0.9%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease and related conditions	12	0.1%
Atrial Fibrillation	51	0.5%
Diabetes Mellitus	2,297	23.8%
Heart Failure	182	1.9%

**Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	207	2.1%
Hypertension	572	5.9%
Depression	2,127	22.1%
Ischemic Heart Disease	113	1.2%
Rheumatoid Arthritis/Osteoarthritis	177	1.8%
Stroke/TIA <sup>4</sup>	27	0.3%
Breast Cancer	17	0.2%
Colorectal Cancer	18	0.2%
Prostate Cancer	12	0.1%
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	224	2.3%
Anemia	879	9.1%
Asthma	1,502	15.6%
Benign Prostatic Hyperplasia	32	0.3%
Chronic Kidney Disease	601	6.2%
COPD <sup>5</sup> and Bronchiectasis	2,258	23.4%
Glaucoma	121	1.3%
Osteoporosis	290	3.0%
Obesity: diagnosed or identified by weight management procedures	250	2.6%
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	206	2.1%
Smoking: diagnosed or identified by smoking cessation procedures	370	3.8%
Smoking: identified by smoking-related prescriptions	33	0.3%
Alcohol Abuse or Dependence	169	1.8%
Drug Abuse or Dependence	372	3.9%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	24	0.2%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	9.2	11.3
Mean number of emergency room encounters	0.3	1.1
Mean number of inpatient hospital encounters	0.5	0.9
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	11.7	22.6
Mean number of filled prescriptions	29.5	23.1
Mean number of generics dispensed	10.0	6.0

**Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	9.5	5.5

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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



**Table 1h. Aggregated Characteristics of Air Polymer-Type A in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	25	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	33.4	4.3
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	*****	*****
≥ 65 years	0	0.0%
Sex		
Female	25	100.0%
Male	0	0.0%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	0	0.0%
Black or African American	0	0.0%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	*****	*****
White	*****	*****
Hispanic origin		
Yes	*****	*****
No	0	0.0%
Unknown	*****	*****
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
2022	13	52.0%
2023	12	48.0%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease and related conditions	0	0.0%
Atrial Fibrillation	0	0.0%
Diabetes Mellitus	0	0.0%
Heart Failure	0	0.0%

**Table 1h. Aggregated Characteristics of Air Polymer-Type A in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	*****	*****
Hypertension	0	0.0%
Depression	*****	*****
Ischemic Heart Disease	0	0.0%
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/TIA <sup>4</sup>	0	0.0%
Breast Cancer	0	0.0%
Colorectal Cancer	0	0.0%
Prostate Cancer	0	0.0%
Lung Cancer	0	0.0%
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	*****	*****
Anemia	*****	*****
Asthma	0	0.0%
Benign Prostatic Hyperplasia	0	0.0%
Chronic Kidney Disease	0	0.0%
COPD <sup>5</sup> and Bronchiectasis	0	0.0%
Glaucoma	0	0.0%
Osteoporosis	0	0.0%
Obesity: diagnosed or identified by weight management procedures	*****	*****
Obesity: identified by weight management-related prescriptions	0	0.0%
Overweight	*****	*****
Smoking: diagnosed or identified by smoking cessation procedures	0	0.0%
Smoking: identified by smoking-related prescriptions	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	0	0.0%
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	9.5	10.2
Mean number of emergency room encounters	0.3	0.7
Mean number of inpatient hospital encounters	0.0	NaN
Mean number of non-acute institutional encounters	0.0	NaN
Mean number of other ambulatory encounters	0.9	0.9
Mean number of filled prescriptions	5.5	5.8
Mean number of generics dispensed	3.0	3.2

**Table 1h. Aggregated Characteristics of Air Polymer-Type A in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	3.0	3.2

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 1i. Aggregated Characteristics of Luspatercept–amt in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	4,619	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	76.7	10.2
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	84	1.8%
41-64 years	261	5.7%
≥ 65 years	4,246	91.9%
Sex		
Female	2,011	43.5%
Male	2,608	56.5%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	122	2.6%
Black or African American	201	4.4%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	673	14.6%
White	3,605	78.0%
Hispanic origin		
Yes	43	0.9%
No	3,746	81.1%
Unknown	830	18.0%
Year		
2019	*****	*****
2020	1,673	36.2%
2021	1,443	31.2%
2022	1,450	31.4%
2023	*****	*****
<b>Health Characteristics</b>		
Acute Myocardial Infarction	101	2.2%
Alzheimer’s Disease and related conditions	301	6.5%
Atrial Fibrillation	956	20.7%
Diabetes Mellitus	1,148	24.9%
Heart Failure	1,253	27.1%

**Table 1i. Aggregated Characteristics of Luspatercept–amt in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,889	40.9%
Hypertension	2,684	58.1%
Depression	847	18.3%
Ischemic Heart Disease	1,586	34.3%
Rheumatoid Arthritis/Osteoarthritis	987	21.4%
Stroke/TIA <sup>4</sup>	163	3.5%
Breast Cancer	194	4.2%
Colorectal Cancer	109	2.4%
Prostate Cancer	300	6.5%
Lung Cancer	100	2.2%
Endometrial Cancer	16	0.3%
Acquired Hypothyroidism	838	18.1%
Anemia	4,586	99.3%
Asthma	194	4.2%
Benign Prostatic Hyperplasia	494	10.7%
Chronic Kidney Disease	1,622	35.1%
COPD <sup>5</sup> and Bronchiectasis	737	16.0%
Glaucoma	486	10.5%
Osteoporosis	390	8.4%
Obesity: diagnosed or identified by weight management procedures	692	15.0%
Obesity: identified by weight management-related prescriptions	15	0.3%
Overweight	556	12.0%
Smoking: diagnosed or identified by smoking cessation procedures	1,699	36.8%
Smoking: identified by smoking-related prescriptions	12	0.3%
Alcohol Abuse or Dependence	125	2.7%
Drug Abuse or Dependence	97	2.1%
History of Cardiac Arrest	12	0.3%
History of Coronary Angioplasty or Bypass	594	12.9%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	34.7	18.7
Mean number of emergency room encounters	0.7	1.5
Mean number of inpatient hospital encounters	0.5	0.9
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	8.8	12.6
Mean number of filled prescriptions	18.4	14.9
Mean number of generics dispensed	8.2	5.1

**Table 1i. Aggregated Characteristics of Luspatercept–amt in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	7.7	4.7

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1j. Aggregated Characteristics of Zanubrutinib in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	3,050	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	75.6	8.5
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	*****	*****
≥ 65 years	2,754	90.3%
Sex		
Female	1,211	39.7%
Male	1,839	60.3%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	41	1.3%
Black or African American	100	3.3%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	495	16.2%
White	2,401	78.7%
Hispanic origin		
Yes	36	1.2%
No	2,409	79.0%
Unknown	605	19.8%
Year		
2019	0	0.0%
2020	198	6.5%
2021	929	30.5%
2022	1,775	58.2%
2023	148	4.9%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	40	1.3%
Alzheimer's Disease and related conditions	152	5.0%
Atrial Fibrillation	570	18.7%
Diabetes Mellitus	544	17.8%
Heart Failure	517	17.0%

**Table 1j. Aggregated Characteristics of Zanubrutinib in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,127	37.0%
Hypertension	1,565	51.3%
Depression	524	17.2%
Ischemic Heart Disease	819	26.9%
Rheumatoid Arthritis/Osteoarthritis	514	16.9%
Stroke/TIA <sup>4</sup>	110	3.6%
Breast Cancer	103	3.4%
Colorectal Cancer	56	1.8%
Prostate Cancer	205	6.7%
Lung Cancer	56	1.8%
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	449	14.7%
Anemia	1,746	57.2%
Asthma	130	4.3%
Benign Prostatic Hyperplasia	406	13.3%
Chronic Kidney Disease	762	25.0%
COPD <sup>5</sup> and Bronchiectasis	301	9.9%
Glaucoma	381	12.5%
Osteoporosis	200	6.6%
Obesity: diagnosed or identified by weight management procedures	439	14.4%
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	294	9.6%
Smoking: diagnosed or identified by smoking cessation procedures	854	28.0%
Smoking: identified by smoking-related prescriptions	*****	*****
Alcohol Abuse or Dependence	41	1.3%
Drug Abuse or Dependence	67	2.2%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	227	7.4%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	21.2	14.6
Mean number of emergency room encounters	0.4	1.0
Mean number of inpatient hospital encounters	0.4	0.9
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	8.3	10.8
Mean number of filled prescriptions	17.9	13.1
Mean number of generics dispensed	8.6	5.1



**Table 1j. Aggregated Characteristics of Zanubrutinib in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	8.1	4.7

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1k. Aggregated Characteristics of Cefiderocol in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	962	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	65.5	14.4
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	299	31.1%
≥ 65 years	585	60.8%
Sex		
Female	413	42.9%
Male	549	57.1%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	199	20.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	186	19.3%
White	545	56.7%
Hispanic origin		
Yes	42	4.4%
No	737	76.6%
Unknown	183	19.0%
Year		
2019	0	0.0%
2020	27	2.8%
2021	391	40.6%
2022	525	54.6%
2023	19	2.0%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	90	9.4%
Alzheimer's Disease and related conditions	246	25.6%
Atrial Fibrillation	316	32.8%
Diabetes Mellitus	539	56.0%
Heart Failure	500	52.0%

**Table 1k. Aggregated Characteristics of Cefiderocol in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	563	58.5%
Hypertension	786	81.7%
Depression	376	39.1%
Ischemic Heart Disease	469	48.8%
Rheumatoid Arthritis/Osteoarthritis	251	26.1%
Stroke/TIA <sup>4</sup>	201	20.9%
Breast Cancer	40	4.2%
Colorectal Cancer	18	1.9%
Prostate Cancer	33	3.4%
Lung Cancer	23	2.4%
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	232	24.1%
Anemia	759	78.9%
Asthma	128	13.3%
Benign Prostatic Hyperplasia	168	17.5%
Chronic Kidney Disease	627	65.2%
COPD <sup>5</sup> and Bronchiectasis	379	39.4%
Glaucoma	62	6.4%
Osteoporosis	85	8.8%
Obesity: diagnosed or identified by weight management procedures	367	38.1%
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	118	12.3%
Smoking: diagnosed or identified by smoking cessation procedures	371	38.6%
Smoking: identified by smoking-related prescriptions	*****	*****
Alcohol Abuse or Dependence	62	6.4%
Drug Abuse or Dependence	101	10.5%
History of Cardiac Arrest	48	5.0%
History of Coronary Angioplasty or Bypass	128	13.3%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	27.1	27.6
Mean number of emergency room encounters	1.8	5.9
Mean number of inpatient hospital encounters	2.1	1.9
Mean number of non-acute institutional encounters	1.0	1.4
Mean number of other ambulatory encounters	52.4	45.6
Mean number of filled prescriptions	34.9	34.5
Mean number of generics dispensed	13.0	8.1

**Table 1k. Aggregated Characteristics of Cefiderocol in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	11.8	7.0

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1I. Aggregated Characteristics of Crizanlizumab-tmca in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	1,798	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	34.5	10.9
Age		
0-17 years	72	4.0%
18-24 years	296	16.5%
25-40 years	997	55.5%
41-64 years	396	22.0%
≥ 65 years	37	2.1%
Sex		
Female	1,066	59.3%
Male	732	40.7%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	1,222	68.0%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	517	28.8%
White	45	2.5%
Hispanic origin		
Yes	74	4.1%
No	1,218	67.7%
Unknown	506	28.1%
Year		
2019	*****	*****
2020	1,024	57.0%
2021	400	22.2%
2022	343	19.1%
2023	*****	*****
<b>Health Characteristics</b>		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease and related conditions	*****	*****
Atrial Fibrillation	34	1.9%
Diabetes Mellitus	100	5.6%
Heart Failure	204	11.3%

**Table 1I. Aggregated Characteristics of Crizanlizumab-tmca in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	77	4.3%
Hypertension	507	28.2%
Depression	613	34.1%
Ischemic Heart Disease	156	8.7%
Rheumatoid Arthritis/Osteoarthritis	158	8.8%
Stroke/TIA <sup>4</sup>	80	4.4%
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	0	0.0%
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	56	3.1%
Anemia	1,792	99.7%
Asthma	440	24.5%
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	311	17.3%
COPD <sup>5</sup> and Bronchiectasis	99	5.5%
Glaucoma	37	2.1%
Osteoporosis	31	1.7%
Obesity: diagnosed or identified by weight management procedures	292	16.2%
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	118	6.6%
Smoking: diagnosed or identified by smoking cessation procedures	493	27.4%
Smoking: identified by smoking-related prescriptions	18	1.0%
Alcohol Abuse or Dependence	20	1.1%
Drug Abuse or Dependence	584	32.5%
History of Cardiac Arrest	13	0.7%
History of Coronary Angioplasty or Bypass	24	1.3%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	22.9	20.4
Mean number of emergency room encounters	4.5	9.2
Mean number of inpatient hospital encounters	2.5	2.9
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	20.7	25.9
Mean number of filled prescriptions	24.5	18.6
Mean number of generics dispensed	8.1	4.9

**Table 1I. Aggregated Characteristics of Crizanlizumab-tmca in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	7.1	4.3

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1m. Aggregated Characteristics of Givosiran in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	150	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	47.0	12.5
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	46	30.7%
41-64 years	77	51.3%
≥ 65 years	*****	*****
Sex		
Female	122	81.3%
Male	28	18.7%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	0	0.0%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	54	36.0%
White	83	55.3%
Hispanic origin		
Yes	*****	*****
No	89	59.3%
Unknown	*****	*****
Year		
2019	0	0.0%
2020	65	43.3%
2021	48	32.0%
2022	*****	*****
2023	*****	*****
<b>Health Characteristics</b>		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease and related conditions	*****	*****
Atrial Fibrillation	*****	*****
Diabetes Mellitus	16	10.7%
Heart Failure	*****	*****



**Table 1m. Aggregated Characteristics of Givosiran in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	25	16.7%
Hypertension	65	43.3%
Depression	55	36.7%
Ischemic Heart Disease	13	8.7%
Rheumatoid Arthritis/Osteoarthritis	19	12.7%
Stroke/TIA <sup>4</sup>	*****	*****
Breast Cancer	*****	*****
Colorectal Cancer	0	0.0%
Prostate Cancer	*****	*****
Lung Cancer	0	0.0%
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	17	11.3%
Anemia	62	41.3%
Asthma	13	8.7%
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	35	23.3%
COPD <sup>5</sup> and Bronchiectasis	*****	*****
Glaucoma	*****	*****
Osteoporosis	*****	*****
Obesity: diagnosed or identified by weight management procedures	25	16.7%
Obesity: identified by weight management-related prescriptions	0	0.0%
Overweight	13	8.7%
Smoking: diagnosed or identified by smoking cessation procedures	44	29.3%
Smoking: identified by smoking-related prescriptions	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	39	26.0%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	*****	*****
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	23.4	18.5
Mean number of emergency room encounters	1.5	2.4
Mean number of inpatient hospital encounters	1.1	2.0
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	13.0	23.1
Mean number of filled prescriptions	25.6	18.2
Mean number of generics dispensed	9.0	5.2

**Table 1m. Aggregated Characteristics of Givosiran in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	8.3	4.8

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1n. Aggregated Characteristics of Cenobamate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	7,201	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	43.0	14.6
Age		
0-17 years	205	2.8%
18-24 years	723	10.0%
25-40 years	2,607	36.2%
41-64 years	2,926	40.6%
≥ 65 years	740	10.3%
Sex		
Female	3,591	49.9%
Male	3,610	50.1%
Race <sup>3</sup>		
American Indian or Alaska Native	40	0.6%
Asian	129	1.8%
Black or African American	607	8.4%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	2,354	32.7%
White	4,038	56.1%
Hispanic origin		
Yes	362	5.0%
No	4,474	62.1%
Unknown	2,365	32.8%
Year		
2019	0	0.0%
2020	1,658	23.0%
2021	2,650	36.8%
2022	2,672	37.1%
2023	221	3.1%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	14	0.2%
Alzheimer's Disease and related conditions	325	4.5%
Atrial Fibrillation	118	1.6%
Diabetes Mellitus	504	7.0%
Heart Failure	189	2.6%

**Table 1n. Aggregated Characteristics of Cenobamate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,110	15.4%
Hypertension	1,323	18.4%
Depression	2,010	27.9%
Ischemic Heart Disease	342	4.7%
Rheumatoid Arthritis/Osteoarthritis	452	6.3%
Stroke/TIA <sup>4</sup>	256	3.6%
Breast Cancer	48	0.7%
Colorectal Cancer	34	0.5%
Prostate Cancer	25	0.3%
Lung Cancer	15	0.2%
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	608	8.4%
Anemia	879	12.2%
Asthma	283	3.9%
Benign Prostatic Hyperplasia	150	2.1%
Chronic Kidney Disease	387	5.4%
COPD <sup>5</sup> and Bronchiectasis	199	2.8%
Glaucoma	251	3.5%
Osteoporosis	221	3.1%
Obesity: diagnosed or identified by weight management procedures	1,233	17.1%
Obesity: identified by weight management-related prescriptions	14	0.2%
Overweight	463	6.4%
Smoking: diagnosed or identified by smoking cessation procedures	988	13.7%
Smoking: identified by smoking-related prescriptions	27	0.4%
Alcohol Abuse or Dependence	145	2.0%
Drug Abuse or Dependence	307	4.3%
History of Cardiac Arrest	14	0.2%
History of Coronary Angioplasty or Bypass	73	1.0%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	11.5	13.7
Mean number of emergency room encounters	0.7	1.6
Mean number of inpatient hospital encounters	0.3	0.7
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	8.6	21.7
Mean number of filled prescriptions	28.8	22.0
Mean number of generics dispensed	8.1	5.0

**Table 1n. Aggregated Characteristics of Cenobamate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	7.8	4.6

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1o. Aggregated Characteristics of Voxelotor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	2,718	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	35.3	12.5
Age		
0-17 years	335	12.3%
18-24 years	318	11.7%
25-40 years	1,207	44.4%
41-64 years	776	28.6%
≥ 65 years	82	3.0%
Sex		
Female	1,592	58.6%
Male	1,126	41.4%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	1,950	71.7%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	696	25.6%
White	53	1.9%
Hispanic origin		
Yes	105	3.9%
No	1,948	71.7%
Unknown	665	24.5%
Year		
2019	21	0.8%
2020	1,705	62.7%
2021	513	18.9%
2022	446	16.4%
2023	33	1.2%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	20	0.7%
Alzheimer's Disease and related conditions	21	0.8%
Atrial Fibrillation	101	3.7%
Diabetes Mellitus	114	4.2%
Heart Failure	366	13.5%

**Table 1o. Aggregated Characteristics of Voxelotor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	131	4.8%
Hypertension	728	26.8%
Depression	634	23.3%
Ischemic Heart Disease	217	8.0%
Rheumatoid Arthritis/Osteoarthritis	169	6.2%
Stroke/TIA <sup>4</sup>	97	3.6%
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	91	3.3%
Anemia	2,700	99.3%
Asthma	527	19.4%
Benign Prostatic Hyperplasia	27	1.0%
Chronic Kidney Disease	629	23.1%
COPD <sup>5</sup> and Bronchiectasis	144	5.3%
Glaucoma	91	3.3%
Osteoporosis	52	1.9%
Obesity: diagnosed or identified by weight management procedures	239	8.8%
Obesity: identified by weight management-related prescriptions	0	0.0%
Overweight	150	5.5%
Smoking: diagnosed or identified by smoking cessation procedures	522	19.2%
Smoking: identified by smoking-related prescriptions	18	0.7%
Alcohol Abuse or Dependence	26	1.0%
Drug Abuse or Dependence	592	21.8%
History of Cardiac Arrest	14	0.5%
History of Coronary Angioplasty or Bypass	24	0.9%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	19.5	22.6
Mean number of emergency room encounters	2.5	7.2
Mean number of inpatient hospital encounters	1.6	2.4
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	16.4	25.8
Mean number of filled prescriptions	22.9	17.8
Mean number of generics dispensed	7.8	4.7

**Table 1o. Aggregated Characteristics of Voxelotor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	7.1	4.3

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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**Table 1p. Aggregated Characteristics of Golodirsén in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	43	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	14.4	4.6
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	0	0.0%
≥ 65 years	0	0.0%
Sex		
Female	0	0.0%
Male	43	100.0%
Race <sup>3</sup>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	0	0.0%
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	27	62.8%
White	*****	*****
Hispanic origin		
Yes	14	32.6%
No	16	37.2%
Unknown	13	30.2%
Year		
2019	0	0.0%
2020	*****	*****
2021	*****	*****
2022	*****	*****
2023	0	0.0%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease and related conditions	0	0.0%
Atrial Fibrillation	0	0.0%
Diabetes Mellitus	0	0.0%
Heart Failure	*****	*****

**Table 1p. Aggregated Characteristics of Golodirsen in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	0	0.0%
Hypertension	0	0.0%
Depression	*****	*****
Ischemic Heart Disease	0	0.0%
Rheumatoid Arthritis/Osteoarthritis	0	0.0%
Stroke/TIA <sup>4</sup>	0	0.0%
Breast Cancer	0	0.0%
Colorectal Cancer	0	0.0%
Prostate Cancer	0	0.0%
Lung Cancer	0	0.0%
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	0	0.0%
Anemia	*****	*****
Asthma	0	0.0%
Benign Prostatic Hyperplasia	0	0.0%
Chronic Kidney Disease	0	0.0%
COPD <sup>5</sup> and Bronchiectasis	0	0.0%
Glaucoma	0	0.0%
Osteoporosis	*****	*****
Obesity: diagnosed or identified by weight management procedures	0	0.0%
Obesity: identified by weight management-related prescriptions	0	0.0%
Overweight	*****	*****
Smoking: diagnosed or identified by smoking cessation procedures	0	0.0%
Smoking: identified by smoking-related prescriptions	0	0.0%
Alcohol Abuse or Dependence	0	0.0%
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	11.1	12.6
Mean number of emergency room encounters	0.2	0.7
Mean number of inpatient hospital encounters	0.0	0.2
Mean number of non-acute institutional encounters	0.0	NaN
Mean number of other ambulatory encounters	28.3	46.1
Mean number of filled prescriptions	12.1	13.9
Mean number of generics dispensed	4.2	4.1

**Table 1p. Aggregated Characteristics of Golodirsén in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	4.1	3.8

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	3,640	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	73.5	8.0
Age		
0-17 years	0	0.0%
18-24 years	0	0.0%
25-40 years	13	0.4%
41-64 years	418	11.5%
≥ 65 years	3,209	88.2%
Sex		
Female	981	27.0%
Male	2,659	73.0%
Race <sup>3</sup>		
American Indian or Alaska Native	*****	*****
Asian	75	2.1%
Black or African American	138	3.8%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	654	18.0%
White	2,752	75.6%
Hispanic origin		
Yes	47	1.3%
No	2,770	76.1%
Unknown	823	22.6%
Year		
2019	0	0.0%
2020	946	26.0%
2021	1,245	34.2%
2022	1,384	38.0%
2023	65	1.8%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	46	1.3%
Alzheimer's Disease and related conditions	124	3.4%
Atrial Fibrillation	528	14.5%
Diabetes Mellitus	899	24.7%
Heart Failure	489	13.4%

**Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,781	48.9%
Hypertension	2,341	64.3%
Depression	679	18.7%
Ischemic Heart Disease	1,241	34.1%
Rheumatoid Arthritis/Osteoarthritis	612	16.8%
Stroke/TIA <sup>4</sup>	133	3.7%
Breast Cancer	112	3.1%
Colorectal Cancer	110	3.0%
Prostate Cancer	659	18.1%
Lung Cancer	246	6.8%
Endometrial Cancer	15	0.4%
Acquired Hypothyroidism	751	20.6%
Anemia	2,326	63.9%
Asthma	156	4.3%
Benign Prostatic Hyperplasia	561	15.4%
Chronic Kidney Disease	2,732	75.1%
COPD <sup>5</sup> and Bronchiectasis	582	16.0%
Glaucoma	331	9.1%
Osteoporosis	144	4.0%
Obesity: diagnosed or identified by weight management procedures	579	15.9%
Obesity: identified by weight management-related prescriptions	13	0.4%
Overweight	442	12.1%
Smoking: diagnosed or identified by smoking cessation procedures	1,905	52.3%
Smoking: identified by smoking-related prescriptions	21	0.6%
Alcohol Abuse or Dependence	87	2.4%
Drug Abuse or Dependence	104	2.9%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	448	12.3%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	32.4	15.0
Mean number of emergency room encounters	0.7	1.3
Mean number of inpatient hospital encounters	0.7	1.0
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	10.5	11.7
Mean number of filled prescriptions	20.6	14.7
Mean number of generics dispensed	10.0	5.7

**Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	9.1	4.9

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Unique patients	813	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	66.3	11.1
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	309	38.0%
≥ 65 years	478	58.8%
Sex		
Female	448	55.1%
Male	365	44.9%
Race <sup>3</sup>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	15	1.8%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	557	68.5%
White	228	28.0%
Hispanic origin		
Yes	*****	*****
No	0	0.0%
Unknown	*****	*****
Year		
2019	0	0.0%
2020	109	13.4%
2021	301	37.0%
2022	311	38.3%
2023	92	11.3%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease and related conditions	12	1.5%
Atrial Fibrillation	45	5.5%
Diabetes Mellitus	171	21.0%
Heart Failure	42	5.2%

**Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	273	33.6%
Hypertension	349	42.9%
Depression	109	13.4%
Ischemic Heart Disease	112	13.8%
Rheumatoid Arthritis/Osteoarthritis	101	12.4%
Stroke/TIA <sup>4</sup>	12	1.5%
Breast Cancer	16	2.0%
Colorectal Cancer	*****	*****
Prostate Cancer	21	2.6%
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	78	9.6%
Anemia	97	11.9%
Asthma	27	3.3%
Benign Prostatic Hyperplasia	42	5.2%
Chronic Kidney Disease	73	9.0%
COPD <sup>5</sup> and Bronchiectasis	33	4.1%
Glaucoma	190	23.4%
Osteoporosis	29	3.6%
Obesity: diagnosed or identified by weight management procedures	166	20.4%
Obesity: identified by weight management-related prescriptions	*****	*****
Overweight	72	8.9%
Smoking: diagnosed or identified by smoking cessation procedures	109	13.4%
Smoking: identified by smoking-related prescriptions	0	0.0%
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	12	1.5%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	26	3.2%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	13.8	11.9
Mean number of emergency room encounters	0.2	0.7
Mean number of inpatient hospital encounters	0.0	0.2
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	2.1	4.2
Mean number of filled prescriptions	13.9	13.2
Mean number of generics dispensed	6.6	4.9



**Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	6.2	4.5

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1s. Aggregated Characteristics of Lumateperone Tosylate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	17,075	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	45.8	13.6
Age		
0-17 years	95	0.6%
18-24 years	1,184	6.9%
25-40 years	5,459	32.0%
41-64 years	8,676	50.8%
≥ 65 years	1,661	9.7%
Sex		
Female	9,714	56.9%
Male	7,361	43.1%
Race <sup>3</sup>		
American Indian or Alaska Native	108	0.6%
Asian	213	1.2%
Black or African American	1,905	11.2%
Multi-racial	62	0.4%
Native Hawaiian or Other Pacific Islander	17	0.1%
Unknown	5,223	30.6%
White	9,547	55.9%
Hispanic origin		
Yes	629	3.7%
No	11,164	65.4%
Unknown	5,282	30.9%
Year		
2019	0	0.0%
2020	4,263	25.0%
2021	3,474	20.3%
2022	8,613	50.4%
2023	725	4.2%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	40	0.2%
Alzheimer's Disease and related conditions	653	3.8%
Atrial Fibrillation	225	1.3%
Diabetes Mellitus	3,232	18.9%
Heart Failure	673	3.9%

**Table 1s. Aggregated Characteristics of Lumateperone Tosylate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	3,882	22.7%
Hypertension	4,825	28.3%
Depression	11,720	68.6%
Ischemic Heart Disease	1,086	6.4%
Rheumatoid Arthritis/Osteoarthritis	2,060	12.1%
Stroke/TIA <sup>4</sup>	219	1.3%
Breast Cancer	142	0.8%
Colorectal Cancer	27	0.2%
Prostate Cancer	36	0.2%
Lung Cancer	42	0.2%
Endometrial Cancer	16	0.1%
Acquired Hypothyroidism	2,115	12.4%
Anemia	2,278	13.3%
Asthma	1,286	7.5%
Benign Prostatic Hyperplasia	323	1.9%
Chronic Kidney Disease	1,192	7.0%
COPD <sup>5</sup> and Bronchiectasis	1,393	8.2%
Glaucoma	594	3.5%
Osteoporosis	218	1.3%
Obesity: diagnosed or identified by weight management procedures	5,014	29.4%
Obesity: identified by weight management-related prescriptions	205	1.2%
Overweight	1,163	6.8%
Smoking: diagnosed or identified by smoking cessation procedures	5,225	30.6%
Smoking: identified by smoking-related prescriptions	424	2.5%
Alcohol Abuse or Dependence	1,589	9.3%
Drug Abuse or Dependence	2,867	16.8%
History of Cardiac Arrest	12	0.1%
History of Coronary Angioplasty or Bypass	175	1.0%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	16.5	16.8
Mean number of emergency room encounters	0.9	2.2
Mean number of inpatient hospital encounters	0.2	0.6
Mean number of non-acute institutional encounters	0.2	0.6
Mean number of other ambulatory encounters	9.1	18.5
Mean number of filled prescriptions	38.9	28.3
Mean number of generics dispensed	11.5	6.9

**Table 1s. Aggregated Characteristics of Lumateperone Tosylate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	10.6	6.1

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

**Table 1t. Aggregated Characteristics of Lemborexant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	16,996	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	57.9	13.5
Age		
0-17 years	19	0.1%
18-24 years	388	2.3%
25-40 years	2,285	13.4%
41-64 years	8,023	47.2%
≥ 65 years	6,281	37.0%
Sex		
Female	10,940	64.4%
Male	6,056	35.6%
Race <sup>3</sup>		
American Indian or Alaska Native	65	0.4%
Asian	275	1.6%
Black or African American	610	3.6%
Multi-racial	69	0.4%
Native Hawaiian or Other Pacific Islander	11	0.1%
Unknown	7,608	44.8%
White	8,358	49.2%
Hispanic origin		
Yes	321	1.9%
No	8,636	50.8%
Unknown	8,039	47.3%
Year		
2019	0	0.0%
2020	2,848	16.8%
2021	7,670	45.1%
2022	6,013	35.4%
2023	465	2.7%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	56	0.3%
Alzheimer's Disease and related conditions	681	4.0%
Atrial Fibrillation	888	5.2%
Diabetes Mellitus	3,105	18.3%
Heart Failure	1,206	7.1%

**Table 1t. Aggregated Characteristics of Lemborexant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	5,237	30.8%
Hypertension	6,451	38.0%
Depression	8,606	50.6%
Ischemic Heart Disease	2,367	13.9%
Rheumatoid Arthritis/Osteoarthritis	4,224	24.9%
Stroke/TIA <sup>4</sup>	407	2.4%
Breast Cancer	320	1.9%
Colorectal Cancer	82	0.5%
Prostate Cancer	251	1.5%
Lung Cancer	87	0.5%
Endometrial Cancer	22	0.1%
Acquired Hypothyroidism	2,411	14.2%
Anemia	3,068	18.1%
Asthma	1,076	6.3%
Benign Prostatic Hyperplasia	694	4.1%
Chronic Kidney Disease	1,720	10.1%
COPD <sup>5</sup> and Bronchiectasis	1,441	8.5%
Glaucoma	1,106	6.5%
Osteoporosis	745	4.4%
Obesity: diagnosed or identified by weight management procedures	3,942	23.2%
Obesity: identified by weight management-related prescriptions	283	1.7%
Overweight	1,676	9.9%
Smoking: diagnosed or identified by smoking cessation procedures	3,221	19.0%
Smoking: identified by smoking-related prescriptions	237	1.4%
Alcohol Abuse or Dependence	777	4.6%
Drug Abuse or Dependence	1,700	10.0%
History of Cardiac Arrest	18	0.1%
History of Coronary Angioplasty or Bypass	558	3.3%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	16.0	14.5
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.2	0.5
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	5.1	10.8
Mean number of filled prescriptions	33.4	25.7
Mean number of generics dispensed	12.0	6.9

**Table 1t. Aggregated Characteristics of Lemborexant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	11.0	6.1

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

**Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	7,566	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	65.3	10.9
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	2,641	34.9%
≥ 65 years	4,589	60.7%
Sex		
Female	6,621	87.5%
Male	945	12.5%
Race <sup>3</sup>		
American Indian or Alaska Native	18	0.2%
Asian	203	2.7%
Black or African American	694	9.2%
Multi-racial	24	0.3%
Native Hawaiian or Other Pacific Islander	12	0.2%
Unknown	2,147	28.4%
White	4,468	59.1%
Hispanic origin		
Yes	207	2.7%
No	4,977	65.8%
Unknown	2,382	31.5%
Year		
2019	0	0.0%
2020	1,187	15.7%
2021	1,545	20.4%
2022	4,495	59.4%
2023	339	4.5%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	36	0.5%
Alzheimer's Disease and related conditions	190	2.5%
Atrial Fibrillation	410	5.4%
Diabetes Mellitus	1,296	17.1%
Heart Failure	1,100	14.5%



**Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	1,947	25.7%
Hypertension	3,066	40.5%
Depression	1,656	21.9%
Ischemic Heart Disease	1,025	13.5%
Rheumatoid Arthritis/Osteoarthritis	944	12.5%
Stroke/TIA <sup>4</sup>	265	3.5%
Breast Cancer	6,177	81.6%
Colorectal Cancer	279	3.7%
Prostate Cancer	78	1.0%
Lung Cancer	631	8.3%
Endometrial Cancer	73	1.0%
Acquired Hypothyroidism	1,141	15.1%
Anemia	3,384	44.7%
Asthma	347	4.6%
Benign Prostatic Hyperplasia	156	2.1%
Chronic Kidney Disease	1,129	14.9%
COPD <sup>5</sup> and Bronchiectasis	560	7.4%
Glaucoma	504	6.7%
Osteoporosis	444	5.9%
Obesity: diagnosed or identified by weight management procedures	1,009	13.3%
Obesity: identified by weight management-related prescriptions	20	0.3%
Overweight	668	8.8%
Smoking: diagnosed or identified by smoking cessation procedures	1,955	25.8%
Smoking: identified by smoking-related prescriptions	16	0.2%
Alcohol Abuse or Dependence	116	1.5%
Drug Abuse or Dependence	227	3.0%
History of Cardiac Arrest	13	0.2%
History of Coronary Angioplasty or Bypass	185	2.4%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	29.0	13.8
Mean number of emergency room encounters	0.5	1.2
Mean number of inpatient hospital encounters	0.4	0.8
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	8.0	10.9
Mean number of filled prescriptions	20.0	15.7
Mean number of generics dispensed	8.9	5.4

**Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	8.3	4.8

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

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

**Table 1v. Aggregated Characteristics of Ubrogepant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Unique patients	111,136	N/A <sup>2</sup>
<b>Demographic Characteristics</b>		
Age (years)	48.6	13.0
Age		
0-17 years	514	0.5%
18-24 years	5,841	5.3%
25-40 years	28,732	25.9%
41-64 years	58,815	52.9%
≥ 65 years	17,234	15.5%
Sex		
Female	96,208	86.6%
Male	14,928	13.4%
Race <sup>3</sup>		
American Indian or Alaska Native	287	0.3%
Asian	795	0.7%
Black or African American	4,750	4.3%
Multi-racial	1,328	1.2%
Native Hawaiian or Other Pacific Islander	65	0.1%
Unknown	62,836	56.5%
White	41,075	37.0%
Hispanic origin		
Yes	2,918	2.6%
No	37,591	33.8%
Unknown	70,627	63.6%
Year		
2019	0	0.0%
2020	35,062	31.5%
2021	34,229	30.8%
2022	37,267	33.5%
2023	4,578	4.1%
<b>Health Characteristics</b>		
Acute Myocardial Infarction	240	0.2%
Alzheimer's Disease and related conditions	1,539	1.4%
Atrial Fibrillation	2,400	2.2%
Diabetes Mellitus	12,514	11.3%
Heart Failure	4,017	3.6%

**Table 1v. Aggregated Characteristics of Ubrogepant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

<b>Patient Characteristics</b>	<b>Number/Mean</b>	<b>Percent/ Standard Deviation<sup>1</sup></b>
Hyperlipidemia	21,614	19.4%
Hypertension	26,947	24.2%
Depression	38,450	34.6%
Ischemic Heart Disease	8,637	7.8%
Rheumatoid Arthritis/Osteoarthritis	20,562	18.5%
Stroke/TIA <sup>4</sup>	3,599	3.2%
Breast Cancer	1,535	1.4%
Colorectal Cancer	225	0.2%
Prostate Cancer	278	0.3%
Lung Cancer	237	0.2%
Endometrial Cancer	129	0.1%
Acquired Hypothyroidism	11,856	10.7%
Anemia	14,791	13.3%
Asthma	8,248	7.4%
Benign Prostatic Hyperplasia	984	0.9%
Chronic Kidney Disease	5,590	5.0%
COPD <sup>5</sup> and Bronchiectasis	5,637	5.1%
Glaucoma	5,030	4.5%
Osteoporosis	3,009	2.7%
Obesity: diagnosed or identified by weight management procedures	25,462	22.9%
Obesity: identified by weight management-related prescriptions	1,671	1.5%
Overweight	9,080	8.2%
Smoking: diagnosed or identified by smoking cessation procedures	15,426	13.9%
Smoking: identified by smoking-related prescriptions	1,238	1.1%
Alcohol Abuse or Dependence	1,509	1.4%
Drug Abuse or Dependence	5,555	5.0%
History of Cardiac Arrest	68	0.1%
History of Coronary Angioplasty or Bypass	1,814	1.6%
<b>Health Service Utilization Intensity Metrics</b>		
Mean number of ambulatory encounters	14.0	12.4
Mean number of emergency room encounters	0.5	1.6
Mean number of inpatient hospital encounters	0.1	0.4
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	3.8	9.2
Mean number of filled prescriptions	28.7	24.5
Mean number of generics dispensed	10.8	6.9

**Table 1v. Aggregated Characteristics of Ubrogepant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

Patient Characteristics	Number/Mean	Percent/ Standard Deviation <sup>1</sup>
Mean number of unique drug classes dispensed	10.0	6.1

<sup>1</sup>Value represents standard deviation where no % follows the value

<sup>2</sup>N/A: Not Applicable

<sup>3</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>4</sup>TIA: Transient Ischemic Attack

<sup>5</sup>COPD: Chronic Obstructive Pulmonary Disease

**Table 2a. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
<i>Tenapanor</i>	2,962	2,794	94.3%	*****	*****	111	3.7%	*****	*****
<i>Trifarotene</i>	37,809	36,752	97.2%	838	2.2%	*****	*****	*****	*****
<i>Brolucizumab-dbl</i>	93,114	93,075	100.0%	*****	*****	*****	*****	0	0.0%
<i>Afamelanotide</i>	199	199	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Fluorodopa F-18</i>	*****	*****	*****	*****	*****	*****	*****	*****	*****
<i>Lasmiditan</i>	25,776	25,101	97.4%	517	2.0%	*****	*****	*****	*****
<i>Elexacaftor Ivacaftor Tezacaftor</i>	139,605	137,361	98.4%	908	0.7%	1,284	0.9%	52	0.0%
<i>Air Polymer-Type A</i>	25	25	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Luspatercept-aamt</i>	50,587	50,404	99.6%	170	0.3%	*****	*****	*****	*****
<i>Zanubrutinib</i>	20,730	20,668	99.7%	36	0.2%	26	0.1%	0	0.0%
<i>Cefiderocol</i>	2,729	2,729	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Crizanlizumab-tmca</i>	14,184	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Givosiran</i>	1,680	1,680	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Cenobamate</i>	57,869	52,075	90.0%	3,146	5.4%	2,471	4.3%	177	0.3%
<i>Voxelotor</i>	16,405	16,292	99.3%	49	0.3%	64	0.4%	0	0.0%
<i>Golodirsen</i>	750	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Enfortumab Vedotin-ejfv</i>	42,964	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Brilliant Blue G Ophthalmic Solution</i>	851	851	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Lumateperone Tosylate</i>	80,122	77,800	97.1%	*****	*****	1,324	1.7%	*****	*****
<i>Lemborexant</i>	73,306	70,635	96.4%	*****	*****	2,120	2.9%	*****	*****
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	53,950	53,950	100.0%	0	0.0%	0	0.0%	0	0.0%
<i>Ubrogepant</i>	525,555	514,028	97.8%	5,939	1.1%	5,569	1.1%	19	0.0%

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

**Table 2b. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	2,962	1	30	30	30	101	29.6	13.5
<i>Trifarotene</i>	37,809	1	30	30	30	180	29.9	6.2
<i>Brolucizumab-dbll</i>	93,114	1	1	1	1	84	1.0	1.4
<i>Afamelanotide</i>	199	1	1	1	1	1	1.0	0.0
<i>Fluorodopa F-18</i>	*****	*****	*****	*****	*****	*****	*****	*****
<i>Lasmiditan</i>	25,776	1	8	28	30	181	21.2	12.8
<i>Elexacaftor Ivacaftor Tezacaftor</i>	139,605	1	28	28	28	294	28.0	7.0
<i>Air Polymer-Type A</i>	25	1	1	1	1	1	1.0	0.0
<i>Luspatercept-aamt</i>	50,587	1	1	1	1	180	1.8	4.5
<i>Zanubrutinib</i>	20,730	1	30	30	30	90	28.7	5.6
<i>Cefiderocol</i>	2,729	1	1	1	1	27	1.6	1.9
<i>Crizanlizumab-tmca</i>	14,184	1	1	1	1	56	3.2	7.3
<i>Givosiran</i>	1,680	1	1	1	1	30	6.4	11.0
<i>Cenobamate</i>	57,869	1	28	30	30	316	31.7	15.8
<i>Voxelotor</i>	16,405	1	30	30	30	90	29.3	5.9
<i>Golodirsen</i>	750	1	1	1	1	35	6.5	10.6
<i>Enfortumab Vedotin-ejfv</i>	42,964	1	1	1	1	56	1.1	1.2
<i>Brilliant Blue G Ophthalmic Solution</i>	851	1	1	1	1	1	1.0	0.0
<i>Lumateperone Tosylate</i>	80,122	1	30	30	30	120	28.2	10.4
<i>Lemborexant</i>	73,306	1	30	30	30	141	30.1	11.8
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	53,950	1	1	1	1	28	1.2	2.1
<i>Ubrogepant</i>	525,555	1	10	30	30	160	22.0	12.6

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

**Table 2c. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
<b>Tenapanor</b>	<b>2,962</b>	<b>2,794</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>111</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>
Female	2,417	2,282	81.7%	*****	*****	89	80.2%	*****	*****
Male	545	512	18.3%	11	*****	22	19.8%	0	0.0%
<b>Trifarotene</b>	<b>37,809</b>	<b>36,752</b>	<b>100.0%</b>	<b>838</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	27,472	26,709	72.7%	609	72.7%	*****	*****	*****	*****
Male	10,337	10,043	27.3%	229	27.3%	*****	*****	*****	*****
<b>Brolucizumab-dbll</b>	<b>93,114</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
Female	52,587	52,552	*****	35	*****	0	0.0%	0	NaN
Male	40,527	*****	*****	*****	*****	*****	*****	0	NaN
<b>Afamelanotide</b>	<b>199</b>	<b>199</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	92	92	46.2%	0	NaN	0	NaN	0	NaN
Male	107	107	53.8%	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>25,776</b>	<b>25,101</b>	<b>100.0%</b>	<b>517</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	22,168	21,612	86.1%	416	80.5%	*****	*****	*****	*****
Male	3,608	3,489	13.9%	101	19.5%	*****	*****	*****	*****
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>139,605</b>	<b>137,361</b>	<b>100.0%</b>	<b>908</b>	<b>100.0%</b>	<b>1,284</b>	<b>100.0%</b>	<b>52</b>	<b>100.0%</b>
Female	68,616	67,542	49.2%	411	45.3%	628	48.9%	35	67.3%
Male	70,989	69,819	50.8%	497	54.7%	656	51.1%	17	32.7%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	25	25	100.0%	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>50,587</b>	<b>50,404</b>	<b>100.0%</b>	<b>170</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	22,721	22,687	45.0%	*****	*****	*****	*****	*****	*****
Male	27,866	27,717	55.0%	*****	*****	*****	*****	0	0.0%
<b>Zanubrutinib</b>	<b>20,730</b>	<b>20,668</b>	<b>100.0%</b>	<b>36</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
Female	8,128	8,099	39.2%	*****	*****	*****	*****	0	NaN



**Table 2c. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
Male	12,602	12,569	60.8%	*****	*****	*****	*****	0	NaN
<b>Cefiderocol</b>	<b>2,729</b>	<b>2,729</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,251	1,251	45.8%	0	NaN	0	NaN	0	NaN
Male	1,478	1,478	54.2%	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>14,184</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	8,282	*****	*****	*****	*****	0	NaN	0	NaN
Male	5,902	5,902	*****	0	0.0%	0	NaN	0	NaN
<b>Givosiran</b>	<b>1,680</b>	<b>1,680</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,412	1,412	84.0%	0	NaN	0	NaN	0	NaN
Male	268	268	16.0%	0	NaN	0	NaN	0	NaN
<b>Kenobamate</b>	<b>57,869</b>	<b>52,075</b>	<b>100.0%</b>	<b>3,146</b>	<b>100.0%</b>	<b>2,471</b>	<b>100.0%</b>	<b>177</b>	<b>100.0%</b>
Female	28,096	25,201	48.4%	1,524	48.4%	1,290	52.2%	81	45.8%
Male	29,773	26,874	51.6%	1,622	51.6%	1,181	47.8%	96	54.2%
<b>Voxelotor</b>	<b>16,405</b>	<b>16,292</b>	<b>100.0%</b>	<b>49</b>	<b>100.0%</b>	<b>64</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
Female	9,631	9,557	58.7%	34	69.4%	40	62.5%	0	NaN
Male	6,774	6,735	41.3%	15	30.6%	24	37.5%	0	NaN
<b>Golodirsen</b>	<b>750</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	0	0	0.0%	0	0.0%	0	NaN	0	NaN
Male	750	*****	*****	*****	*****	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,964</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	11,587	*****	*****	*****	*****	0	NaN	0	NaN
Male	31,377	31,377	*****	0	0.0%	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>851</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	468	468	55.0%	0	NaN	0	NaN	0	NaN
Male	383	383	45.0%	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>80,122</b>	<b>77,800</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>1,324</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>
Female	41,268	40,125	51.6%	*****	*****	717	54.2%	*****	*****
Male	38,854	37,675	48.4%	*****	*****	607	45.8%	*****	*****
<b>Lemborexant</b>	<b>73,306</b>	<b>70,635</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>2,120</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>

**Table 2c. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
Female	46,775	45,219	64.0%	*****	*****	1,243	58.6%	*****	*****
Male	26,531	25,416	36.0%	*****	*****	877	41.4%	*****	*****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,950</b>	<b>53,950</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	48,437	48,437	89.8%	0	NaN	0	NaN	0	NaN
Male	5,513	5,513	10.2%	0	NaN	0	NaN	0	NaN
<b>Ubrogepant</b>	<b>525,555</b>	<b>514,028</b>	<b>100.0%</b>	<b>5,939</b>	<b>100.0%</b>	<b>5,569</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>
Female	460,412	450,456	87.6%	*****	*****	4,753	85.3%	*****	*****
Male	65,143	63,572	12.4%	*****	*****	816	14.7%	*****	*****

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>2,962</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>101</b>	<b>29.6</b>	<b>13.5</b>
Female	2,417	1	30	30	30	101	29.5	13.5
Male	545	1	30	30	30	90	29.6	13.7
<b>Trifarotene</b>	<b>37,809</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>180</b>	<b>29.9</b>	<b>6.2</b>
Female	27,472	1	30	30	30	96	29.9	6.1
Male	10,337	1	30	30	30	180	30.0	6.4
<b>Brolucizumab-dbl</b>	<b>93,114</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>84</b>	<b>1.0</b>	<b>1.4</b>
Female	52,587	1	1	1	1	60	1.1	1.7
Male	40,527	1	1	1	1	84	1.0	0.9
<b>Afamelanotide</b>	<b>199</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	92	1	1	1	1	1	1.0	0.0
Male	107	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	*****	*****	*****	*****	*****	*****	*****	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Lasmiditan</b>	<b>25,776</b>	<b>1</b>	<b>8</b>	<b>28</b>	<b>30</b>	<b>181</b>	<b>21.2</b>	<b>12.8</b>
Female	22,168	1	8	28	30	120	21.2	12.7
Male	3,608	1	8	28	30	181	21.4	13.2
<b>Elxacaftor Ivacaftor Tezacaftor</b>	<b>139,605</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>294</b>	<b>28.0</b>	<b>7.0</b>
Female	68,616	1	28	28	28	238	28.0	6.9
Male	70,989	1	28	28	28	294	28.0	7.1
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	25	1	1	1	1	1	1.0	0.0
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>50,587</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>180</b>	<b>1.8</b>	<b>4.5</b>
Female	22,721	1	1	1	1	180	1.8	4.3
Male	27,866	1	1	1	1	84	1.8	4.7
<b>Zanubrutinib</b>	<b>20,730</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>28.7</b>	<b>5.6</b>
Female	8,128	1	30	30	30	90	28.7	5.5
Male	12,602	1	30	30	30	90	28.7	5.6
<b>Cefiderocol</b>	<b>2,729</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>27</b>	<b>1.6</b>	<b>1.9</b>
Female	1,251	1	1	1	1	27	1.5	1.7

**Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	1,478	1	1	1	1	26	1.8	2.1
<b>Crizanlizumab-tmca</b>	<b>14,184</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>56</b>	<b>3.2</b>	<b>7.3</b>
Female	8,282	1	1	1	1	56	3.5	7.7
Male	5,902	1	1	1	1	30	2.9	6.8
<b>Givosiran</b>	<b>1,680</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>30</b>	<b>6.4</b>	<b>11.0</b>
Female	1,412	1	1	1	1	30	6.1	10.8
Male	268	1	1	1	1	30	7.5	12.1
<b>Cenobamate</b>	<b>57,869</b>	<b>1</b>	<b>28</b>	<b>30</b>	<b>30</b>	<b>316</b>	<b>31.7</b>	<b>15.8</b>
Female	28,096	1	28	30	30	316	32.0	16.0
Male	29,773	1	28	30	30	180	31.5	15.6
<b>Voxelotor</b>	<b>16,405</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>29.3</b>	<b>5.9</b>
Female	9,631	1	30	30	30	90	29.3	6.0
Male	6,774	1	30	30	30	90	29.2	5.7
<b>Golodirsen</b>	<b>750</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>35</b>	<b>6.5</b>	<b>10.6</b>
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	750	1	1	1	1	35	6.5	10.6
<b>Enfortumab Vedotin-ejfv</b>	<b>42,964</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>56</b>	<b>1.1</b>	<b>1.2</b>
Female	11,587	1	1	1	1	56	1.1	1.3
Male	31,377	1	1	1	1	28	1.1	1.2
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	468	1	1	1	1	1	1.0	0.0
Male	383	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>80,122</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>120</b>	<b>28.2</b>	<b>10.4</b>
Female	41,268	1	30	30	30	120	28.2	10.6
Male	38,854	1	30	30	30	104	28.1	10.3
<b>Lemborexant</b>	<b>73,306</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>141</b>	<b>30.1</b>	<b>11.8</b>
Female	46,775	1	30	30	30	120	30.0	11.4
Male	26,531	1	30	30	30	141	30.3	12.4
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,950</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>28</b>	<b>1.2</b>	<b>2.1</b>
Female	48,437	1	1	1	1	28	1.2	2.2
Male	5,513	1	1	1	1	21	1.1	1.6
<b>Ubrogepant</b>	<b>525,555</b>	<b>1</b>	<b>10</b>	<b>30</b>	<b>30</b>	<b>160</b>	<b>22.0</b>	<b>12.6</b>

**Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	460,412	1	10	30	30	160	22.0	12.5
Male	65,143	1	10	30	30	120	22.3	12.9

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
<b>Tenapanor</b>	<b>2,962</b>	<b>2,794</b>	<b>100.0%</b>	<b>56</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	353	335	12.0%	*****	*****	*****	*****	0	0.0%
41-64 years	1,438	1,370	49.0%	15	26.8%	53	*****	0	0.0%
≥ 65 years	1,048	975	34.9%	*****	*****	40	*****	*****	*****
<b>Trifarotene</b>	<b>37,809</b>	<b>36,752</b>	<b>100.0%</b>	<b>838</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	15,903	15,439	42.0%	372	44.4%	*****	*****	*****	*****
18-24 years	9,563	9,263	25.2%	237	28.3%	*****	*****	*****	*****
25-40 years	8,647	8,453	23.0%	150	17.9%	44	*****	0	0.0%
41-64 years	3,503	*****	*****	*****	*****	18	*****	0	0.0%
≥ 65 years	193	*****	*****	*****	*****	*****	*****	0	0.0%
<b>Brolicizumab-dblb</b>	<b>93,114</b>	<b>93,075</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
41-64 years	*****	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	91,681	91,648	98.5%	*****	*****	*****	*****	0	NaN
<b>Afamelanotide</b>	<b>199</b>	<b>199</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	31	31	15.6%	0	NaN	0	NaN	0	NaN
25-40 years	43	43	21.6%	0	NaN	0	NaN	0	NaN
41-64 years	96	96	48.2%	0	NaN	0	NaN	0	NaN
≥ 65 years	29	29	14.6%	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
25-40 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN

**Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Dispensings by Days Supplied								
	Total Number of Dispensings	1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>25,776</b>	<b>25,101</b>	<b>100.0%</b>	<b>517</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	72	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	749	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	5,739	5,599	22.3%	*****	*****	*****	*****	0	0.0%
41-64 years	15,801	15,430	61.5%	287	55.5%	*****	*****	*****	*****
≥ 65 years	3,415	3,262	13.0%	111	21.5%	42	*****	0	0.0%
<b>Eluxacaftor Ivacaftor Tezacaftor</b>	<b>139,605</b>	<b>137,361</b>	<b>100.0%</b>	<b>908</b>	<b>100.0%</b>	<b>1,284</b>	<b>100.0%</b>	<b>52</b>	<b>100.0%</b>
0-17 years	33,851	33,359	24.3%	210	23.1%	*****	*****	*****	*****
18-24 years	26,875	26,383	19.2%	188	20.7%	*****	*****	*****	*****
25-40 years	53,891	53,101	38.7%	301	33.1%	469	36.5%	20	38.5%
41-64 years	20,531	20,205	14.7%	124	13.7%	186	14.5%	16	30.8%
≥ 65 years	4,457	4,313	3.1%	85	9.4%	*****	*****	*****	*****
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>50,587</b>	<b>50,404</b>	<b>100.0%</b>	<b>170</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	30	30	0.1%	0	0.0%	0	0.0%	0	0.0%
18-24 years	143	143	0.3%	0	0.0%	0	0.0%	0	0.0%
25-40 years	824	824	1.6%	0	0.0%	0	0.0%	0	0.0%
41-64 years	2,626	2,611	5.2%	*****	*****	*****	*****	0	0.0%
≥ 65 years	46,964	46,796	92.8%	*****	*****	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>20,730</b>	<b>20,668</b>	<b>100.0%</b>	<b>36</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	13	13	0.1%	0	0.0%	0	0.0%	0	NaN
25-40 years	24	24	0.1%	0	0.0%	0	0.0%	0	NaN

**Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
41-64 years	1,950	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	18,743	*****	*****	*****	*****	26	100.0%	0	NaN
<b>Cefiderocol</b>	<b>2,729</b>	<b>2,729</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	258	258	9.5%	0	NaN	0	NaN	0	NaN
41-64 years	859	859	31.5%	0	NaN	0	NaN	0	NaN
≥ 65 years	1,588	1,588	58.2%	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>14,184</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	448	448	*****	0	0.0%	0	NaN	0	NaN
18-24 years	1,798	1,798	*****	0	0.0%	0	NaN	0	NaN
25-40 years	8,101	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	3,469	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	368	368	*****	0	0.0%	0	NaN	0	NaN
<b>Givosiran</b>	<b>1,680</b>	<b>1,680</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	92	92	5.5%	0	NaN	0	NaN	0	NaN
25-40 years	591	591	35.2%	0	NaN	0	NaN	0	NaN
41-64 years	794	794	47.3%	0	NaN	0	NaN	0	NaN
≥ 65 years	203	203	12.1%	0	NaN	0	NaN	0	NaN
<b>Cenobamate</b>	<b>57,869</b>	<b>52,075</b>	<b>100.0%</b>	<b>3,146</b>	<b>100.0%</b>	<b>2,471</b>	<b>100.0%</b>	<b>177</b>	<b>100.0%</b>
0-17 years	1,205	1,071	2.1%	92	2.9%	*****	*****	*****	*****
18-24 years	5,202	4,613	8.9%	303	9.6%	269	10.9%	17	9.6%
25-40 years	21,611	19,285	37.0%	1,279	40.7%	981	39.7%	66	37.3%
41-64 years	24,434	22,047	42.3%	1,279	40.7%	1,032	41.8%	76	42.9%
≥ 65 years	5,417	5,059	9.7%	193	6.1%	*****	*****	*****	*****
<b>Voxelotor</b>	<b>16,405</b>	<b>16,292</b>	<b>100.0%</b>	<b>49</b>	<b>100.0%</b>	<b>64</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
0-17 years	1,718	1,703	10.5%	*****	*****	*****	*****	0	NaN
18-24 years	1,524	*****	*****	*****	*****	*****	*****	0	NaN



**Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
25-40 years	7,005	6,948	42.6%	26	53.1%	31	48.4%	0	NaN
41-64 years	5,666	5,634	34.6%	*****	*****	*****	*****	0	NaN
≥ 65 years	492	*****	*****	*****	*****	*****	*****	0	NaN
<b>Golodirsen</b>	<b>750</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	647	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	28	28	*****	0	0.0%	0	NaN	0	NaN
25-40 years	75	75	*****	0	0.0%	0	NaN	0	NaN
41-64 years	0	0	*****	0	0.0%	0	NaN	0	NaN
≥ 65 years	0	0	*****	0	0.0%	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,964</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	103	103	*****	0	0.0%	0	NaN	0	NaN
41-64 years	4,651	4,651	*****	0	0.0%	0	NaN	0	NaN
≥ 65 years	38,210	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>851</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	320	320	37.6%	0	NaN	0	NaN	0	NaN
≥ 65 years	503	503	59.1%	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>80,122</b>	<b>77,800</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>1,324</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>
0-17 years	337	*****	*****	*****	*****	*****	*****	0	0.0%
18-24 years	4,213	*****	*****	*****	*****	97	7.3%	0	0.0%
25-40 years	24,807	24,047	30.9%	360	*****	400	30.2%	0	0.0%
41-64 years	42,970	41,805	53.7%	*****	*****	707	53.4%	*****	*****
≥ 65 years	7,795	7,556	9.7%	123	*****	*****	*****	*****	*****
<b>Lemborexant</b>	<b>73,306</b>	<b>70,635</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>2,120</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>
0-17 years	65	65	0.1%	0	*****	0	0.0%	0	0.0%

**Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Number of Dispensings by Days Supplied							
		1-30 Days		31-60 Days		61-90 Days		91+ Days	
		Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings	Number of Dispensings	Percent of Total Dispensings
18-24 years	1,590	1,545	2.2%	20	*****	25	1.2%	0	0.0%
25-40 years	9,662	9,430	13.4%	48	*****	184	8.7%	0	0.0%
41-64 years	36,725	35,573	50.4%	*****	*****	908	42.8%	*****	*****
≥ 65 years	25,264	24,022	34.0%	*****	*****	1,003	47.3%	*****	*****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,950</b>	<b>53,950</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	43	43	0.1%	0	NaN	0	NaN	0	NaN
25-40 years	2,340	2,340	4.3%	0	NaN	0	NaN	0	NaN
41-64 years	19,657	19,657	36.4%	0	NaN	0	NaN	0	NaN
≥ 65 years	31,910	31,910	59.1%	0	NaN	0	NaN	0	NaN
<b>Ubrogepant</b>	<b>525,555</b>	<b>514,028</b>	<b>100.0%</b>	<b>5,939</b>	<b>100.0%</b>	<b>5,569</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>
0-17 years	1,758	1,728	0.3%	13	0.2%	17	0.3%	0	0.0%
18-24 years	20,659	20,337	4.0%	179	3.0%	*****	*****	*****	*****
25-40 years	128,291	125,827	24.5%	1,392	23.4%	*****	*****	*****	*****
41-64 years	303,625	297,018	57.8%	3,370	56.7%	*****	*****	*****	*****
≥ 65 years	71,222	69,118	13.4%	985	16.6%	*****	*****	*****	*****

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>2,962</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>101</b>	<b>29.6</b>	<b>13.5</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	353	1	30	30	30	90	29.3	12.4
41-64 years	1,438	1	30	30	30	90	29.4	13.3
≥ 65 years	1,048	1	30	30	30	101	29.8	13.9
<b>Trifarotene</b>	<b>37,809</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>180</b>	<b>29.9</b>	<b>6.2</b>
0-17 years	15,903	1	30	30	30	120	30.0	6.1
18-24 years	9,563	1	30	30	30	180	30.1	6.4
25-40 years	8,647	1	30	30	30	90	29.7	6.2
41-64 years	3,503	1	30	30	30	90	30.0	5.8
≥ 65 years	193	1	30	30	30	90	29.2	7.7
<b>Brolucizumab-dbil</b>	<b>93,114</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>84</b>	<b>1.0</b>	<b>1.4</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	39	1	1	1	1	1	1.0	0.0
41-64 years	1,394	1	1	1	1	56	1.4	4.2
≥ 65 years	91,681	1	1	1	1	84	1.0	1.3
<b>Afamelanotide</b>	<b>199</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	31	1	1	1	1	1	1.0	0.0
25-40 years	43	1	1	1	1	1	1.0	0.0
41-64 years	96	1	1	1	1	1	1.0	0.0
≥ 65 years	29	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
41-64 years	*****	*****	*****	*****	*****	*****	*****	NaN
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	NaN
<b>Lasmiditan</b>	<b>25,776</b>	<b>1</b>	<b>8</b>	<b>28</b>	<b>30</b>	<b>181</b>	<b>21.2</b>	<b>12.8</b>

**Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	72	2	8	23	30	60	19.0	11.8
18-24 years	749	2	8	30	30	90	22.1	12.0
25-40 years	5,739	1	8	30	30	90	21.6	12.5
41-64 years	15,801	1	8	28	30	181	21.1	12.6
≥ 65 years	3,415	1	8	25	30	90	21.2	14.4
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>139,605</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>294</b>	<b>28.0</b>	<b>7.0</b>
0-17 years	33,851	1	28	28	28	180	27.8	6.9
18-24 years	26,875	1	28	28	28	280	28.1	7.6
25-40 years	53,891	1	28	28	28	294	28.0	6.8
41-64 years	20,531	1	28	28	28	153	28.2	6.7
≥ 65 years	4,457	2	28	28	28	112	28.8	8.0
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept–aamt</b>	<b>50,587</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>180</b>	<b>1.8</b>	<b>4.5</b>
0-17 years	30	1	1	1	1	1	1.0	0.0
18-24 years	143	1	1	1	1	21	5.0	7.9
25-40 years	824	1	1	1	1	21	1.4	2.7
41-64 years	2,626	1	1	1	1	84	2.4	6.0
≥ 65 years	46,964	1	1	1	1	180	1.8	4.4
<b>Zanubrutinib</b>	<b>20,730</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>28.7</b>	<b>5.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	13	30	30	30	30	30	30.0	0.0
25-40 years	24	8	30	30	30	30	27.7	6.3
41-64 years	1,950	1	30	30	30	60	28.5	5.4
≥ 65 years	18,743	1	30	30	30	90	28.8	5.6
<b>Cefiderocol</b>	<b>2,729</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>27</b>	<b>1.6</b>	<b>1.9</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	258	1	1	1	1	8	1.8	1.8
41-64 years	859	1	1	1	1	26	1.8	2.1
≥ 65 years	1,588	1	1	1	1	27	1.5	1.9
<b>Crizanlizumab-tmca</b>	<b>14,184</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>56</b>	<b>3.2</b>	<b>7.3</b>
0-17 years	448	1	1	1	1	28	3.3	7.3
18-24 years	1,798	1	1	1	1	30	3.0	7.0
25-40 years	8,101	1	1	1	1	56	3.5	7.7
41-64 years	3,469	1	1	1	1	42	2.9	6.9
≥ 65 years	368	1	1	1	1	28	1.8	4.6
<b>Givosiran</b>	<b>1,680</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>30</b>	<b>6.4</b>	<b>11.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	92	1	1	1	1	30	3.0	7.2
25-40 years	591	1	1	1	1	30	7.7	12.0
41-64 years	794	1	1	1	1	30	6.4	11.1
≥ 65 years	203	1	1	1	1	30	3.8	8.4
<b>Cenobamate</b>	<b>57,869</b>	<b>1</b>	<b>28</b>	<b>30</b>	<b>30</b>	<b>316</b>	<b>31.7</b>	<b>15.8</b>
0-17 years	1,205	1	28	30	30	158	30.8	14.7
18-24 years	5,202	1	28	30	30	180	32.4	16.8
25-40 years	21,611	1	28	30	30	316	32.4	16.0
41-64 years	24,434	1	28	30	30	180	31.5	15.7
≥ 65 years	5,417	1	28	30	30	180	29.4	14.4
<b>Voxelotor</b>	<b>16,405</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>29.3</b>	<b>5.9</b>
0-17 years	1,718	1	30	30	30	90	28.6	6.6
18-24 years	1,524	1	30	30	30	90	29.0	6.0
25-40 years	7,005	1	30	30	30	90	29.5	5.8
41-64 years	5,666	1	30	30	30	90	29.3	5.7
≥ 65 years	492	1	30	30	30	90	29.1	5.0
<b>Golodirsen</b>	<b>750</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>35</b>	<b>6.5</b>	<b>10.6</b>
0-17 years	647	1	1	1	1	35	3.7	7.7
18-24 years	28	1	1	23	28	28	16.0	12.9

**Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	75	5	28	28	28	30	27.1	4.1
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,964</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>56</b>	<b>1.1</b>	<b>1.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	103	1	1	1	1	1	1.0	0.0
41-64 years	4,651	1	1	1	1	28	1.1	1.8
≥ 65 years	38,210	1	1	1	1	56	1.1	1.2
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	320	1	1	1	1	1	1.0	0.0
≥ 65 years	503	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>80,122</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>120</b>	<b>28.2</b>	<b>10.4</b>
0-17 years	337	2	30	30	30	90	28.6	8.7
18-24 years	4,213	1	30	30	30	90	29.3	11.1
25-40 years	24,807	1	30	30	30	90	28.4	10.3
41-64 years	42,970	1	30	30	30	104	28.3	10.3
≥ 65 years	7,795	1	21	30	30	120	26.3	11.2
<b>Lemborexant</b>	<b>73,306</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>141</b>	<b>30.1</b>	<b>11.8</b>
0-17 years	65	2	30	30	30	30	27.4	7.2
18-24 years	1,590	1	30	30	30	90	29.1	9.8
25-40 years	9,662	1	30	30	30	90	29.3	10.4
41-64 years	36,725	1	30	30	30	141	29.9	11.0
≥ 65 years	25,264	1	30	30	30	97	30.8	13.4
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,950</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>28</b>	<b>1.2</b>	<b>2.1</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	43	1	1	1	1	1	1.0	0.0
25-40 years	2,340	1	1	1	1	21	1.4	2.9

**Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	19,657	1	1	1	1	28	1.2	2.2
≥ 65 years	31,910	1	1	1	1	21	1.2	2.0
<b>Ubrogepant</b>	<b>525,555</b>	<b>1</b>	<b>10</b>	<b>30</b>	<b>30</b>	<b>160</b>	<b>22.0</b>	<b>12.6</b>
0-17 years	1,758	1	10	28	30	90	21.8	12.4
18-24 years	20,659	1	10	30	30	100	21.9	11.8
25-40 years	128,291	1	10	28	30	120	21.7	12.2
41-64 years	303,625	1	10	29	30	160	21.9	12.6
≥ 65 years	71,222	1	10	30	30	120	22.9	13.4

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 3a. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Number of Patients by Cumulative Treatment Episode Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	
<i>Tenapanor</i>	1,273	495 38.9%	495 38.9%	283 22.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Trifarotene</i>	21,437	12,746 59.5%	6,769 31.6%	1,894 8.8%	28 0.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Brolucizumab-dbl</i>	17,358	17,256 99.4%	85 0.5%	*****	*****	*****	*****	0 0.0%	0 0.0%	0 0.0%	
<i>Afamelanotide</i>	40	40 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Fluorodopa F-18</i>	*****	*****	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Lasmiditan</i>	6,734	3,372 50.1%	1,712 25.4%	1,421 21.1%	198 2.9%	31 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Elexacaftor Ivacaftor Tezacaftor</i>	9,638	696 7.2%	1,011 10.5%	3,893 40.4%	2,214 23.0%	1,824 18.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Air Polymer-Type A</i>	25	25 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Luspatercept-aamt</i>	4,619	4,140 89.6%	349 7.6%	94 2.0%	*****	*****	*****	*****	*****	*****	
<i>Zanubrutinib</i>	3,050	544 17.8%	635 20.8%	1,377 45.1%	448 14.7%	46 1.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Cefiderocol</i>	962	930 96.7%	*****	*****	*****	*****	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Crizanlizumab-tmca</i>	1,798	1,624 90.3%	66 3.7%	82 4.6%	*****	*****	*****	*****	*****	*****	
<i>Givosiran</i>	150	112 74.7%	16 10.7%	*****	*****	*****	*****	*****	*****	*****	
<i>Cenobamate</i>	7,201	1,234 17.1%	1,457 20.2%	2,481 34.5%	1,588 22.1%	441 6.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Voxelotor</i>	2,718	627 23.1%	689 25.3%	1,069 39.3%	239 8.8%	94 3.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Golodirsen</i>	43	19 44.2%	*****	*****	13 30.2%	0 0.0%	*****	*****	*****	*****	
<i>Enfortumab Vedotin-ejfv</i>	3,640	3,387 93.0%	242 6.6%	*****	*****	*****	*****	0 0.0%	0 0.0%	0 0.0%	
<i>Brilliant Blue G Ophthalmic Solution</i>	813	813 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Lumateperone Tosylate</i>	17,075	5,689 33.3%	4,692 27.5%	5,275 30.9%	1,164 6.8%	255 1.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Lemborexant</i>	16,996	6,660 39.2%	4,043 23.8%	4,755 28.0%	1,406 8.3%	132 0.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	7,566	7,365 97.3%	155 2.0%	35 0.5%	11 0.1%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	
<i>Ubrogepant</i>	111,136	44,153 39.7%	29,934 26.9%	31,091 28.0%	5,424 4.9%	534 0.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	

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



**Table 3b. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	1,273	1	30	59	90	360	68.8	53.6
<i>Trifarotene</i>	21,437	1	30	30	60	592	52.8	43.5
<i>Brolucizumab-dbl</i>	17,358	1	1	3	8	448	5.6	9.4
<i>Afamelanotide</i>	40	1	2	5	8	13	5.0	3.5
<i>Fluorodopa F-18</i>	*****	*****	*****	*****	*****	*****	*****	*****
<i>Lasmiditan</i>	6,734	1	20	30	90	1,050	81.2	113.5
<i>Elexacaftor Ivacaftor Tezacaftor</i>	9,638	1	140	325	574	1,302	405.9	331.5
<i>Air Polymer-Type A</i>	25	1	1	1	1	1	1.0	0.0
<i>Luspatercept-aamt</i>	4,619	1	4	8	17	1,113	19.8	61.7
<i>Zanubrutinib</i>	3,050	1	60	149	286	1,070	195.4	176.6
<i>Cefiderocol</i>	962	1	1	1	2	286	4.6	12.3
<i>Crizanlizumab-tmca</i>	1,798	1	2	6	14	924	25.3	79.0
<i>Givosiran</i>	150	1	4	12	31	843	70.7	171.9
<i>Cenobamate</i>	7,201	1	56	159	408	1,056	254.8	242.8
<i>Voxelotor</i>	2,718	1	46	107	226	1,161	176.7	198.1
<i>Golodirsen</i>	43	1	16	40	139	887	113.5	188.1
<i>Enfortumab Vedotin-ejfv</i>	3,640	1	3	9	17	508	12.5	16.2
<i>Brilliant Blue G Ophthalmic Solution</i>	813	1	1	1	1	3	1.0	0.2
<i>Lumateperone Tosylate</i>	17,075	1	30	63	164	1,058	132.1	158.8
<i>Lemborexant</i>	16,996	1	30	60	166	930	129.7	155.2
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	7,566	1	3	5	9	625	8.7	22.8
<i>Ubrogepant</i>	111,136	1	30	58	130	1,120	104.0	130.1

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

**Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by Cumulative Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<b>Tenapanor</b>	<b>1,273</b>	<b>495</b>	<b>100.0%</b>	<b>495</b>	<b>100.0%</b>	<b>283</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,037	403	81.4%	401	81.0%	233	82.3%	0	NaN	0	NaN
Male	236	92	18.6%	94	19.0%	50	17.7%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>21,437</b>	<b>12,746</b>	<b>100.0%</b>	<b>6,769</b>	<b>100.0%</b>	<b>1,894</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
Female	15,890	9,566	75.1%	4,997	73.8%	1,311	69.2%	16	57.1%	0	NaN
Male	5,547	3,180	24.9%	1,772	26.2%	583	30.8%	12	42.9%	0	NaN
<b>Brolucizumab-dbll</b>	<b>17,358</b>	<b>17,256</b>	<b>100.0%</b>	<b>85</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
Female	10,178	10,119	58.6%	*****	*****	11	*****	*****	*****	0	NaN
Male	7,180	7,137	41.4%	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Afamelanotide</b>	<b>40</b>	<b>40</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	18	18	45.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	22	22	55.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>3,372</b>	<b>100.0%</b>	<b>1,712</b>	<b>100.0%</b>	<b>1,421</b>	<b>100.0%</b>	<b>198</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>
Female	5,746	2,850	84.5%	1,479	86.4%	1,218	85.7%	*****	*****	*****	*****
Male	988	522	15.5%	233	13.6%	203	14.3%	*****	*****	*****	*****
<b>Elxacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>696</b>	<b>100.0%</b>	<b>1,011</b>	<b>100.0%</b>	<b>3,893</b>	<b>100.0%</b>	<b>2,214</b>	<b>100.0%</b>	<b>1,824</b>	<b>100.0%</b>
Female	4,711	338	48.6%	507	50.1%	1,847	47.4%	1,115	50.4%	904	49.6%
Male	4,927	358	51.4%	504	49.9%	2,046	52.6%	1,099	49.6%	920	50.4%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	25	25	100.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>4,140</b>	<b>100.0%</b>	<b>349</b>	<b>100.0%</b>	<b>94</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	2,011	1,780	43.0%	174	49.9%	41	43.6%	*****	*****	*****	*****
Male	2,608	2,360	57.0%	175	50.1%	53	56.4%	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>3,050</b>	<b>544</b>	<b>100.0%</b>	<b>635</b>	<b>100.0%</b>	<b>1,377</b>	<b>100.0%</b>	<b>448</b>	<b>100.0%</b>	<b>46</b>	<b>100.0%</b>
Female	1,211	216	39.7%	262	41.3%	540	39.2%	174	38.8%	19	41.3%

**Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by Cumulative Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
Male	1,839	328	60.3%	373	58.7%	837	60.8%	274	61.2%	27	58.7%
<b>Cefiderocol</b>	<b>962</b>	<b>930</b>	<b>100.0%</b>	****	****	****	****	0	NaN	0	NaN
Female	413	400	43.0%	13	****	0	0.0%	0	NaN	0	NaN
Male	549	530	57.0%	****	****	****	****	0	NaN	0	NaN
<b>Crizalizumab-tmca</b>	<b>1,798</b>	<b>1,624</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>	<b>82</b>	<b>100.0%</b>	****	****	****	****
Female	1,066	956	58.9%	39	59.1%	56	68.3%	****	****	****	****
Male	732	668	41.1%	27	40.9%	26	31.7%	****	****	****	****
<b>Givosiran</b>	<b>150</b>	<b>112</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>	****	****	****	****	****	****
Female	122	****	****	****	****	****	****	****	****	****	****
Male	28	****	****	****	****	****	****	****	****	****	****
<b>Cenobamate</b>	<b>7,201</b>	<b>1,234</b>	<b>100.0%</b>	<b>1,457</b>	<b>100.0%</b>	<b>2,481</b>	<b>100.0%</b>	<b>1,588</b>	<b>100.0%</b>	<b>441</b>	<b>100.0%</b>
Female	3,591	639	51.8%	724	49.7%	1,233	49.7%	781	49.2%	214	48.5%
Male	3,610	595	48.2%	733	50.3%	1,248	50.3%	807	50.8%	227	51.5%
<b>Voxelotor</b>	<b>2,718</b>	<b>627</b>	<b>100.0%</b>	<b>689</b>	<b>100.0%</b>	<b>1,069</b>	<b>100.0%</b>	<b>239</b>	<b>100.0%</b>	<b>94</b>	<b>100.0%</b>
Female	1,592	368	58.7%	399	57.9%	628	58.7%	146	61.1%	51	54.3%
Male	1,126	259	41.3%	290	42.1%	441	41.3%	93	38.9%	43	45.7%
<b>Goldirsen</b>	<b>43</b>	<b>19</b>	<b>100.0%</b>	****	****	<b>13</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	****	****
Female	0	0	0.0%	****	****	0	0.0%	0	NaN	****	****
Male	43	19	100.0%	****	****	13	100.0%	0	NaN	****	****
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>3,387</b>	<b>100.0%</b>	<b>242</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
Female	981	909	26.8%	****	****	****	****	0	0.0%	0	NaN
Male	2,659	2,478	73.2%	****	****	****	****	****	****	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>813</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	448	448	55.1%	0	NaN	0	NaN	0	NaN	0	NaN
Male	365	365	44.9%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>5,689</b>	<b>100.0%</b>	<b>4,692</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>1,164</b>	<b>100.0%</b>	<b>255</b>	<b>100.0%</b>
Female	9,714	3,479	61.2%	2,673	57.0%	2,928	55.5%	523	44.9%	111	43.5%
Male	7,361	2,210	38.8%	2,019	43.0%	2,347	44.5%	641	55.1%	144	56.5%

**Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by Cumulative Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<b>Lemborexant</b>	<b>16,996</b>	<b>6,660</b>	<b>100.0%</b>	<b>4,043</b>	<b>100.0%</b>	<b>4,755</b>	<b>100.0%</b>	<b>1,406</b>	<b>100.0%</b>	<b>132</b>	<b>100.0%</b>
Female	10,940	4,338	65.1%	2,604	64.4%	3,016	63.4%	902	64.2%	80	60.6%
Male	6,056	2,322	34.9%	1,439	35.6%	1,739	36.6%	504	35.8%	52	39.4%
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>7,365</b>	<b>100.0%</b>	<b>155</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
Female	6,621	*****	*****	*****	*****	*****	*****	11	100.0%	0	NaN
Male	945	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Ubrogepant</b>	<b>111,136</b>	<b>44,153</b>	<b>100.0%</b>	<b>29,934</b>	<b>100.0%</b>	<b>31,091</b>	<b>100.0%</b>	<b>5,424</b>	<b>100.0%</b>	<b>534</b>	<b>100.0%</b>
Female	96,208	37,639	85.2%	26,053	87.0%	27,279	87.7%	4,785	88.2%	452	84.6%
Male	14,928	6,514	14.8%	3,881	13.0%	3,812	12.3%	639	11.8%	82	15.4%

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,273</b>	<b>1</b>	<b>30</b>	<b>59</b>	<b>90</b>	<b>360</b>	<b>68.8</b>	<b>53.6</b>
Female	1,037	1	30	60	90	360	68.9	53.4
Male	236	2	30	49	90	279	68.4	54.5
<b>Trifarotene</b>	<b>21,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>592</b>	<b>52.8</b>	<b>43.5</b>
Female	15,890	1	30	30	60	540	51.7	41.5
Male	5,547	1	30	30	60	592	55.8	48.5
<b>Brolucizumab-dbil</b>	<b>17,358</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>8</b>	<b>448</b>	<b>5.6</b>	<b>9.4</b>
Female	10,178	1	1	3	7	448	5.5	10.6
Male	7,180	1	1	3	8	241	5.8	7.4
<b>Afamelanotide</b>	<b>40</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>13</b>	<b>5.0</b>	<b>3.5</b>
Female	18	1	2	5	9	11	5.1	3.6
Male	22	1	2	5	8	13	4.9	3.5
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	*****	*****	*****	*****	*****	*****	*****	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>1</b>	<b>20</b>	<b>30</b>	<b>90</b>	<b>1,050</b>	<b>81.2</b>	<b>113.5</b>
Female	5,746	1	21	32	90	1,050	81.8	112.8
Male	988	1	16	30	90	988	78.2	117.4
<b>Elexacaftor Ivacaftor</b>								
<b>Tezacaftor</b>	<b>9,638</b>	<b>1</b>	<b>140</b>	<b>325</b>	<b>574</b>	<b>1,302</b>	<b>405.9</b>	<b>331.5</b>
Female	4,711	1	140	331	572	1,302	408.1	331.2
Male	4,927	1	140	319	579	1,297	403.7	331.9
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	25	1	1	1	1	1	1.0	0.0
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>17</b>	<b>1,113</b>	<b>19.8</b>	<b>61.7</b>
Female	2,011	1	4	8	17	986	20.1	61.7
Male	2,608	1	4	7	16	1,113	19.6	61.7
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1</b>	<b>60</b>	<b>149</b>	<b>286</b>	<b>1,070</b>	<b>195.4</b>	<b>176.6</b>
Female	1,211	1	60	142	282	933	192.9	175.8
Male	1,839	1	60	150	287	1,070	197.0	177.0

**Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Cefiderocol</b>	<b>962</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>286</b>	<b>4.6</b>	<b>12.3</b>
Female	413	1	1	1	2	70	4.5	8.5
Male	549	1	1	1	2	286	4.7	14.5
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>14</b>	<b>924</b>	<b>25.3</b>	<b>79.0</b>
Female	1,066	1	2	6	14	924	26.9	81.8
Male	732	1	3	6	13	788	23.0	74.8
<b>Givosiran</b>	<b>150</b>	<b>1</b>	<b>4</b>	<b>12</b>	<b>31</b>	<b>843</b>	<b>70.7</b>	<b>171.9</b>
Female	122	1	4	12	32	843	70.4	167.9
Male	28	1	5	11	28	811	71.9	191.7
<b>Cenobamate</b>	<b>7,201</b>	<b>1</b>	<b>56</b>	<b>159</b>	<b>408</b>	<b>1,056</b>	<b>254.8</b>	<b>242.8</b>
Female	3,591	1	56	150	404	1,048	250.0	241.0
Male	3,610	1	56	167	415	1,056	259.6	244.4
<b>Voxelotor</b>	<b>2,718</b>	<b>1</b>	<b>46</b>	<b>107</b>	<b>226</b>	<b>1,161</b>	<b>176.7</b>	<b>198.1</b>
Female	1,592	1	46	110	230	1,161	177.3	196.1
Male	1,126	1	46	104	218	1,104	175.9	201.0
<b>Golodirsen</b>	<b>43</b>	<b>1</b>	<b>16</b>	<b>40</b>	<b>139</b>	<b>887</b>	<b>113.5</b>	<b>188.1</b>
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	43	1	16	40	139	887	113.5	188.1
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>17</b>	<b>508</b>	<b>12.5</b>	<b>16.2</b>
Female	981	1	4	9	17	315	12.5	15.3
Male	2,659	1	3	9	17	508	12.5	16.5
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1.0</b>	<b>0.2</b>
Female	448	1	1	1	1	3	1.0	0.2
Male	365	1	1	1	1	3	1.0	0.2
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>1</b>	<b>30</b>	<b>63</b>	<b>164</b>	<b>1,058</b>	<b>132.1</b>	<b>158.8</b>
Female	9,714	1	30	60	150	1,058	119.8	144.9
Male	7,361	1	30	84	180	992	148.3	174.2
<b>Lemborexant</b>	<b>16,996</b>	<b>1</b>	<b>30</b>	<b>60</b>	<b>166</b>	<b>930</b>	<b>129.7</b>	<b>155.2</b>
Female	10,940	1	30	60	156	925	128.1	153.9
Male	6,056	1	30	60	180	930	132.7	157.6

**Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Fam-Trastuzumab</b>								
<b>Deruxtecan-nxki</b>	<b>7,566</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>625</b>	<b>8.7</b>	<b>22.8</b>
Female	6,621	1	3	5	9	625	9.0	24.0
Male	945	1	2	4	8	256	6.6	12.1
<b>Ubrogepant</b>	<b>111,136</b>	<b>1</b>	<b>30</b>	<b>58</b>	<b>130</b>	<b>1,120</b>	<b>104.0</b>	<b>130.1</b>
Female	96,208	1	30	60	132	1,120	105.1	130.5
Male	14,928	1	26	48	120	1,044	97.2	127.5

\*NaN: Not a Number

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

**Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by Cumulative Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<b>Tenapanor</b>	<b>1,273</b>	<b>495</b>	<b>100.0%</b>	<b>495</b>	<b>100.0%</b>	<b>283</b>	<b>100.0%</b>	<b>0</b>	<b>*NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	*****	*****	*****	17	3.4%	*****	*****	0	NaN	0	NaN
25-40 years	161	*****	*****	73	14.7%	*****	*****	0	NaN	0	NaN
41-64 years	576	213	43.0%	215	43.4%	148	52.3%	0	NaN	0	NaN
≥ 65 years	478	192	38.8%	190	38.4%	96	33.9%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>21,437</b>	<b>12,746</b>	<b>100.0%</b>	<b>6,769</b>	<b>100.0%</b>	<b>1,894</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
0-17 years	8,457	4,702	36.9%	2,850	42.1%	*****	*****	*****	*****	0	NaN
18-24 years	5,727	3,538	27.8%	1,766	26.1%	*****	*****	*****	*****	0	NaN
25-40 years	5,223	3,295	25.9%	1,550	22.9%	*****	*****	*****	*****	0	NaN
41-64 years	1,908	1,126	8.8%	*****	*****	*****	*****	*****	*****	0	NaN
≥ 65 years	122	85	0.7%	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Brolucizumab-dbl</b>	<b>17,358</b>	<b>17,256</b>	<b>100.0%</b>	<b>85</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	11	11	0.1%	0	0.0%	0	0.0%	0	0.0%	0	NaN
41-64 years	316	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	17,031	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
<b>Afamelanotide</b>	<b>40</b>	<b>40</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	11	11	27.5%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	18	18	45.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN



**Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Patients by Cumulative Treatment Episode Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>3,372</b>	<b>100.0%</b>	<b>1,712</b>	<b>100.0%</b>	<b>1,421</b>	<b>100.0%</b>	<b>198</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>
0-17 years	29	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	262	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	1,593	836	24.8%	395	23.1%	311	21.9%	*****	*****	*****	*****
41-64 years	3,814	1,765	52.3%	1,016	59.3%	887	62.4%	131	66.2%	15	48.4%
≥ 65 years	1,036	599	17.8%	231	13.5%	179	12.6%	*****	*****	*****	*****
<b>Elxacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>696</b>	<b>100.0%</b>	<b>1,011</b>	<b>100.0%</b>	<b>3,893</b>	<b>100.0%</b>	<b>2,214</b>	<b>100.0%</b>	<b>1,824</b>	<b>100.0%</b>
0-17 years	2,812	198	28.4%	299	29.6%	1,348	34.6%	721	32.6%	246	13.5%
18-24 years	2,226	192	27.6%	267	26.4%	1,040	26.7%	450	20.3%	277	15.2%
25-40 years	3,292	227	32.6%	326	32.2%	1,148	29.5%	738	33.3%	853	46.8%
41-64 years	1,061	62	8.9%	98	9.7%	290	7.4%	237	10.7%	374	20.5%
≥ 65 years	247	17	2.4%	21	2.1%	67	1.7%	68	3.1%	74	4.1%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>4,140</b>	<b>100.0%</b>	<b>349</b>	<b>100.0%</b>	<b>94</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	0	0.0%	*****	*****	0	0.0%
25-40 years	84	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
41-64 years	261	224	5.4%	*****	*****	*****	*****	*****	*****	0	0.0%
≥ 65 years	4,246	3,815	92.1%	316	90.5%	82	87.2%	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>3,050</b>	<b>544</b>	<b>100.0%</b>	<b>635</b>	<b>100.0%</b>	<b>1,377</b>	<b>100.0%</b>	<b>448</b>	<b>100.0%</b>	<b>46</b>	<b>100.0%</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	0	0.0%	0	0.0%	*****	*****	0	0.0%	0	0.0%
25-40 years	*****	*****	*****	*****	*****	0	0.0%	*****	*****	0	0.0%

**Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Patients by Cumulative Treatment Episode Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	
41-64 years	****	****	****	****	****	****	****	****	****	****	****
≥ 65 years	2,754	492	90.4%	570	89.8%	1,251	90.8%	****	****	****	****
<b>Cefiderocol</b>	<b>962</b>	<b>930</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	****	****	****	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	****	****	****	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	****	****	****	****	****	0	0.0%	0	NaN	0	NaN
41-64 years	299	284	30.5%	15	****	0	0.0%	0	NaN	0	NaN
≥ 65 years	585	572	61.5%	****	****	****	****	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1,624</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>	<b>82</b>	<b>100.0%</b>	****	****	****	****
0-17 years	72	****	****	****	****	****	****	0	0.0%	0	0.0%
18-24 years	296	269	16.6%	****	****	16	19.5%	****	****	0	0.0%
25-40 years	997	899	55.4%	33	50.0%	49	59.8%	****	****	****	****
41-64 years	396	359	22.1%	18	27.3%	****	****	****	****	****	****
≥ 65 years	37	****	****	****	****	****	****	0	0.0%	0	0.0%
<b>Givosiran</b>	<b>150</b>	<b>112</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>	****	****	****	****	****	****
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	****	****	****	****	****	****	****	0	0.0%	0	0.0%
25-40 years	46	32	28.6%	****	****	****	****	****	****	****	****
41-64 years	77	60	53.6%	****	****	****	****	****	****	****	****
≥ 65 years	****	****	****	****	****	****	****	****	****	0	0.0%
<b>Cenobamate</b>	<b>7,201</b>	<b>1,234</b>	<b>100.0%</b>	<b>1,457</b>	<b>100.0%</b>	<b>2,481</b>	<b>100.0%</b>	<b>1,588</b>	<b>100.0%</b>	<b>441</b>	<b>100.0%</b>
0-17 years	205	40	3.2%	55	3.8%	77	3.1%	****	****	****	****
18-24 years	723	134	10.9%	144	9.9%	267	10.8%	****	****	****	****
25-40 years	2,607	383	31.0%	535	36.7%	898	36.2%	612	38.5%	179	40.6%
41-64 years	2,926	487	39.5%	564	38.7%	1,019	41.1%	669	42.1%	187	42.4%
≥ 65 years	740	190	15.4%	159	10.9%	220	8.9%	140	8.8%	31	7.0%
<b>Voxelotor</b>	<b>2,718</b>	<b>627</b>	<b>100.0%</b>	<b>689</b>	<b>100.0%</b>	<b>1,069</b>	<b>100.0%</b>	<b>239</b>	<b>100.0%</b>	<b>94</b>	<b>100.0%</b>
0-17 years	335	66	10.5%	91	13.2%	159	14.9%	****	****	****	****
18-24 years	318	81	12.9%	91	13.2%	****	****	****	****	****	****

**Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Patients by Cumulative Treatment Episode Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	
25-40 years	1,207	294	46.9%	310	45.0%	464	43.4%	106	44.4%	33	35.1%
41-64 years	776	169	27.0%	172	25.0%	289	27.0%	102	42.7%	44	46.8%
≥ 65 years	82	17	2.7%	25	3.6%	*****	*****	*****	*****	*****	*****
<b>Golodirsen</b>	<b>43</b>	<b>19</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>13</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>*****</b>	<b>*****</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	0.0%
18-24 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	0.0%
25-40 years	*****	0	0.0%	0	0.0%	*****	*****	0	NaN	*****	*****
41-64 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	0.0%
≥ 65 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	0.0%
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>3,387</b>	<b>100.0%</b>	<b>242</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	13	13	0.4%	0	0.0%	0	0.0%	0	0.0%	0	NaN
41-64 years	418	391	11.5%	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	3,209	2,983	88.1%	*****	*****	*****	*****	*****	*****	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>813</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	309	309	38.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	478	478	58.8%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>5,689</b>	<b>100.0%</b>	<b>4,692</b>	<b>100.0%</b>	<b>5,275</b>	<b>100.0%</b>	<b>1,164</b>	<b>100.0%</b>	<b>255</b>	<b>100.0%</b>
0-17 years	95	38	0.7%	35	0.7%	*****	*****	*****	*****	*****	*****
18-24 years	1,184	472	8.3%	342	7.3%	310	5.9%	*****	*****	*****	*****
25-40 years	5,459	1,810	31.8%	1,528	32.6%	1,689	32.0%	352	30.2%	80	31.4%
41-64 years	8,676	2,744	48.2%	2,371	50.5%	2,763	52.4%	650	55.8%	148	58.0%
≥ 65 years	1,661	625	11.0%	416	8.9%	*****	*****	105	9.0%	*****	*****
<b>Lemborexant</b>	<b>16,996</b>	<b>6,660</b>	<b>100.0%</b>	<b>4,043</b>	<b>100.0%</b>	<b>4,755</b>	<b>100.0%</b>	<b>1,406</b>	<b>100.0%</b>	<b>132</b>	<b>100.0%</b>
0-17 years	19	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%

**Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by Cumulative Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
18-24 years	388	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	2,285	846	12.7%	573	14.2%	685	14.4%	*****	*****	*****	*****
41-64 years	8,023	2,885	43.3%	1,977	48.9%	2,384	50.1%	708	50.4%	69	52.3%
≥ 65 years	6,281	2,775	41.7%	1,379	34.1%	1,577	33.2%	505	35.9%	45	34.1%
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>7,365</b>	<b>100.0%</b>	<b>155</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
41-64 years	2,641	2,563	34.8%	65	41.9%	*****	*****	*****	*****	0	NaN
≥ 65 years	4,589	4,475	60.8%	*****	*****	23	65.7%	*****	*****	0	NaN
<b>Ubrogepant</b>	<b>111,136</b>	<b>44,153</b>	<b>100.0%</b>	<b>29,934</b>	<b>100.0%</b>	<b>31,091</b>	<b>100.0%</b>	<b>5,424</b>	<b>100.0%</b>	<b>534</b>	<b>100.0%</b>
0-17 years	514	232	0.5%	151	0.5%	*****	*****	*****	*****	*****	*****
18-24 years	5,841	2,785	6.3%	1,607	5.4%	1,308	4.2%	*****	*****	*****	*****
25-40 years	28,732	11,758	26.6%	7,885	26.3%	7,814	25.1%	1,158	21.3%	117	21.9%
41-64 years	58,815	21,404	48.5%	15,908	53.1%	17,808	57.3%	3,364	62.0%	331	62.0%
≥ 65 years	17,234	7,974	18.1%	4,383	14.6%	*****	*****	761	14.0%	*****	*****

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,273</b>	<b>1</b>	<b>30</b>	<b>59</b>	<b>90</b>	<b>360</b>	<b>68.8</b>	<b>53.6</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	161	3	30	60	90	246	64.2	44.9
41-64 years	576	1	30	60	93	321	73.3	57.2
≥ 65 years	478	3	30	49	90	279	65.3	50.3
<b>Trifarotene</b>	<b>21,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>592</b>	<b>52.8</b>	<b>43.5</b>
0-17 years	8,457	1	30	30	60	592	56.5	48.0
18-24 years	5,727	1	30	30	60	380	50.2	38.9
25-40 years	5,223	1	30	30	60	540	49.1	38.7
41-64 years	1,908	1	30	30	60	486	55.0	46.9
≥ 65 years	122	1	30	30	60	195	46.2	34.4
<b>Brolucizumab-dbil</b>	<b>17,358</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>8</b>	<b>448</b>	<b>5.6</b>	<b>9.4</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	11	1	2	3	5	8	3.5	2.2
41-64 years	316	1	1	3	6	255	6.2	20.4
≥ 65 years	17,031	1	1	3	8	448	5.6	9.1
<b>Afamelanotide</b>	<b>40</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>13</b>	<b>5.0</b>	<b>3.5</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	11	1	1	3	7	8	3.9	2.6
41-64 years	18	1	2	5	9	13	5.3	3.9
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Lasmiditan</b>	<b>6,734</b>	<b>1</b>	<b>20</b>	<b>30</b>	<b>90</b>	<b>1,050</b>	<b>81.2</b>	<b>113.5</b>

**Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	29	5	9	28	60	218	47.3	58.2
18-24 years	262	3	16	30	68	676	63.3	92.3
25-40 years	1,593	1	17	30	90	1,050	77.8	115.7
41-64 years	3,814	1	24	38	102	925	87.2	115.5
≥ 65 years	1,036	1	16	30	72	895	69.8	107.0
<b>Elxacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>1</b>	<b>140</b>	<b>325</b>	<b>574</b>	<b>1,302</b>	<b>405.9</b>	<b>331.5</b>
0-17 years	2,812	1	140	308	402	1,297	334.1	260.7
18-24 years	2,226	1	116	280	402	1,269	338.7	287.9
25-40 years	3,292	1	156	359	751	1,302	459.0	360.6
41-64 years	1,061	1	186	455	942	1,295	545.6	392.6
≥ 65 years	247	16	164	476	868	1,171	520.2	374.8
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>1</b>	<b>4</b>	<b>8</b>	<b>17</b>	<b>1,113</b>	<b>19.8</b>	<b>61.7</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	84	1	3	7	14	143	13.6	21.4
41-64 years	261	1	3	6	15	714	23.8	67.9
≥ 65 years	4,246	1	4	8	17	1,113	19.6	61.7
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1</b>	<b>60</b>	<b>149</b>	<b>286</b>	<b>1,070</b>	<b>195.4</b>	<b>176.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	2,754	1	60	150	288	1,070	195.8	177.2
<b>Cefiderocol</b>	<b>962</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>286</b>	<b>4.6</b>	<b>12.3</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	299	1	1	1	2	70	5.0	9.7
≥ 65 years	585	1	1	1	2	286	4.2	13.8
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>14</b>	<b>924</b>	<b>25.3</b>	<b>79.0</b>
0-17 years	72	1	2	4	8	280	20.3	52.8
18-24 years	296	1	2	4	9	379	18.3	48.4
25-40 years	997	1	2	6	15	852	27.8	85.7
41-64 years	396	1	3	6	14	924	25.6	86.5
≥ 65 years	37	1	4	7	16	154	18.2	32.9
<b>Givosiran</b>	<b>150</b>	<b>1</b>	<b>4</b>	<b>12</b>	<b>31</b>	<b>843</b>	<b>70.7</b>	<b>171.9</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	46	1	6	15	56	842	97.8	215.0
41-64 years	77	1	4	10	27	843	65.7	164.4
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Cenobamate</b>	<b>7,201</b>	<b>1</b>	<b>56</b>	<b>159</b>	<b>408</b>	<b>1,056</b>	<b>254.8</b>	<b>242.8</b>
0-17 years	205	1	45	113	238	814	181.0	193.0
18-24 years	723	1	56	141	357	1,045	233.4	235.7
25-40 years	2,607	1	58	174	432	1,048	268.4	248.4
41-64 years	2,926	1	58	171	424	1,056	263.2	243.8
≥ 65 years	740	1	30	112	333	1,014	215.1	228.6
<b>Voxelotor</b>	<b>2,718</b>	<b>1</b>	<b>46</b>	<b>107</b>	<b>226</b>	<b>1,161</b>	<b>176.7</b>	<b>198.1</b>
0-17 years	335	3	54	103	203	991	146.6	148.1
18-24 years	318	1	30	90	180	1,066	139.1	161.8
25-40 years	1,207	1	41	90	210	1,084	171.0	191.6
41-64 years	776	1	54	120	284	1,161	214.2	232.0
≥ 65 years	82	9	56	90	240	944	174.8	194.5
<b>Goldirsen</b>	<b>43</b>	<b>1</b>	<b>16</b>	<b>40</b>	<b>139</b>	<b>887</b>	<b>113.5</b>	<b>188.1</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>17</b>	<b>508</b>	<b>12.5</b>	<b>16.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	13	1	3	4	12	22	7.9	7.6
41-64 years	418	1	4	9	16	168	12.5	15.1
≥ 65 years	3,209	1	3	9	17	508	12.5	16.4
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1.0</b>	<b>0.2</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	309	1	1	1	1	2	1.0	0.2
≥ 65 years	478	1	1	1	1	3	1.1	0.2
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>1</b>	<b>30</b>	<b>63</b>	<b>164</b>	<b>1,058</b>	<b>132.1</b>	<b>158.8</b>
0-17 years	95	3	30	56	90	779	101.4	144.2
18-24 years	1,184	1	30	60	120	991	104.1	124.5
25-40 years	5,459	1	30	63	153	1,058	128.9	155.4
41-64 years	8,676	1	30	73	180	992	140.0	165.9
≥ 65 years	1,661	1	30	60	150	972	123.4	151.3
<b>Lemborexant</b>	<b>16,996</b>	<b>1</b>	<b>30</b>	<b>60</b>	<b>166</b>	<b>930</b>	<b>129.7</b>	<b>155.2</b>
0-17 years	19	4	30	40	90	454	93.8	127.3
18-24 years	388	1	30	60	142	898	119.2	147.8
25-40 years	2,285	1	30	60	155	873	123.7	144.2
41-64 years	8,023	1	30	60	180	930	136.6	159.1
≥ 65 years	6,281	1	30	60	150	925	123.8	154.3
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>625</b>	<b>8.7</b>	<b>22.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****



**Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	2,641	1	3	5	10	625	9.3	28.0
≥ 65 years	4,589	1	2	5	9	399	8.3	19.2
<b>Ubrogepant</b>	<b>111,136</b>	<b>1</b>	<b>30</b>	<b>58</b>	<b>130</b>	<b>1,120</b>	<b>104.0</b>	<b>130.1</b>
0-17 years	514	1	24	40	96	759	74.6	86.9
18-24 years	5,841	1	21	37	90	1,000	77.5	96.6
25-40 years	28,732	1	25	54	120	1,044	97.0	121.7
41-64 years	58,815	1	30	60	150	1,120	113.1	137.0
≥ 65 years	17,234	1	25	40	114	1,046	94.5	127.7

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 4a. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Number of Treatment Episodes by Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	
<i>Tenapanor</i>	1,849	63.8%	505	27.3%	165	8.9%	0	0.0%	0	0.0%	
<i>Trifarotene</i>	33,760	90.7%	2,726	8.1%	*****	*****	*****	*****	0	0.0%	
<i>Brolucizumab-dbl</i>	92,860	100.0%	*****	*****	*****	*****	0	0.0%	0	0.0%	
<i>Afamelanotide</i>	199	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
<i>Fluorodopa F-18</i>	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
<i>Lasmiditan</i>	19,429	86.1%	2,033	10.5%	617	3.2%	*****	*****	*****	*****	
<i>Elexacaftor Ivacaftor Tezacaftor</i>	41,044	51.7%	10,287	25.1%	7,544	18.4%	1,399	3.4%	588	1.4%	
<i>Air Polymer-Type A</i>	25	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
<i>Luspatercept-aamt</i>	48,881	99.4%	189	0.4%	111	0.2%	*****	*****	*****	*****	
<i>Zanubrutinib</i>	7,684	51.5%	2,106	27.4%	1,455	18.9%	150	2.0%	14	0.2%	
<i>Cefiderocol</i>	1,410	99.1%	13	0.9%	0	0.0%	0	0.0%	0	0.0%	
<i>Crizanlizumab-tmca</i>	13,359	98.3%	167	1.3%	*****	*****	*****	*****	0	0.0%	
<i>Givosiran</i>	1,407	95.5%	41	2.9%	*****	*****	*****	*****	0	0.0%	
<i>Cenobamate</i>	16,413	48.1%	4,169	25.4%	3,008	18.3%	1,080	6.6%	264	1.6%	
<i>Voxelotor</i>	8,437	67.5%	1,851	21.9%	792	9.4%	84	1.0%	16	0.2%	
<i>Golodirsen</i>	640	95.3%	19	3.0%	11	1.7%	0	0.0%	0	0.0%	
<i>Enfortumab Vedotin-ejfv</i>	42,822	100.0%	*****	*****	*****	*****	0	0.0%	0	0.0%	
<i>Brilliant Blue G Ophthalmic Solution</i>	851	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
<i>Lumateperone Tosylate</i>	33,445	57.9%	8,737	26.1%	4,715	14.1%	535	1.6%	91	0.3%	
<i>Lemborexant</i>	40,831	70.8%	8,071	19.8%	3,362	8.2%	453	1.1%	35	0.1%	
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	53,365	99.8%	83	0.2%	*****	*****	*****	*****	0	0.0%	
<i>Ubrogepant</i>	368,728	83.9%	42,644	11.6%	15,352	4.2%	1,320	0.4%	131	0.0%	

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

**Table 4b. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	1,849	1	30	30	60	360	47.4	39.1
<i>Trifarotene</i>	33,760	1	30	30	30	510	33.5	19.5
<i>Brolucizumab-dbll</i>	92,860	1	1	1	1	193	1.1	1.7
<i>Afamelanotide</i>	199	1	1	1	1	1	1.0	0.0
<i>Fluorodopa F-18</i>	*****	*****	*****	*****	*****	*****	*****	*****
<i>Lasmiditan</i>	19,429	1	8	24	30	900	28.2	41.5
<i>Elexacaftor Ivacaftor Tezacaftor</i>	41,044	1	28	28	84	1,302	95.3	151.6
<i>Air Polymer-Type A</i>	25	1	1	1	1	1	1.0	0.0
<i>Luspatercept-aamt</i>	48,881	1	1	1	1	1,008	1.9	13.3
<i>Zanubrutinib</i>	7,684	1	30	30	90	909	77.5	92.6
<i>Cefiderocol</i>	1,410	1	1	1	1	58	3.2	5.7
<i>Crizanlizumab-tmca</i>	13,359	1	1	1	1	476	3.4	14.6
<i>Givosiran</i>	1,407	1	1	1	1	480	7.5	30.2
<i>Cenobamate</i>	16,413	1	28	42	109	1,045	111.8	162.8
<i>Voxelotor</i>	8,437	1	30	30	60	1,104	56.9	75.3
<i>Golodirsen</i>	640	1	1	1	1	364	7.6	30.2
<i>Enfortumab Vedotin-ejfv</i>	42,822	1	1	1	1	168	1.1	1.9
<i>Brilliant Blue G Ophthalmic Solution</i>	851	1	1	1	1	1	1.0	0.0
<i>Lumateperone Tosylate</i>	33,445	1	30	30	61	1,058	67.4	89.2
<i>Lemborexant</i>	40,831	1	30	30	60	925	54.0	71.3
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	53,365	1	1	1	1	399	1.2	5.2
<i>Ubrogepant</i>	368,728	1	10	24	30	1,098	31.3	48.4

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

**Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<b>Tenapanor</b>	<b>1,849</b>	<b>1,179</b>	<b>100.0%</b>	<b>505</b>	<b>100.0%</b>	<b>165</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,511	968	82.1%	410	81.2%	133	80.6%	0	NaN	0	NaN
Male	338	211	17.9%	95	18.8%	32	19.4%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>33,760</b>	<b>30,609</b>	<b>100.0%</b>	<b>2,726</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
Female	24,692	22,470	73.4%	1,933	70.9%	*****	*****	*****	*****	0	NaN
Male	9,068	8,139	26.6%	793	29.1%	*****	*****	*****	*****	0	NaN
<b>Brolicizumab-dblI</b>	<b>92,860</b>	<b>92,823</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	52,447	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
Male	40,413	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>199</b>	<b>199</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	92	92	46.2%	0	NaN	0	NaN	0	NaN	0	NaN
Male	107	107	53.8%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>19,429</b>	<b>16,732</b>	<b>100.0%</b>	<b>2,033</b>	<b>100.0%</b>	<b>617</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	16,632	14,339	85.7%	1,716	84.4%	*****	*****	*****	*****	*****	*****
Male	2,797	2,393	14.3%	317	15.6%	*****	*****	*****	*****	*****	*****
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>41,044</b>	<b>21,226</b>	<b>100.0%</b>	<b>10,287</b>	<b>100.0%</b>	<b>7,544</b>	<b>100.0%</b>	<b>1,399</b>	<b>100.0%</b>	<b>588</b>	<b>100.0%</b>
Female	20,348	10,634	50.1%	5,040	49.0%	3,695	49.0%	697	49.8%	282	48.0%
Male	20,696	10,592	49.9%	5,247	51.0%	3,849	51.0%	702	50.2%	306	52.0%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	25	25	100.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>48,881</b>	<b>48,568</b>	<b>100.0%</b>	<b>189</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	22,047	21,895	45.1%	100	52.9%	*****	*****	*****	*****	0	0.0%
Male	26,834	26,673	54.9%	89	47.1%	*****	*****	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>7,684</b>	<b>3,959</b>	<b>100.0%</b>	<b>2,106</b>	<b>100.0%</b>	<b>1,455</b>	<b>100.0%</b>	<b>150</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>
Female	3,091	1,613	40.7%	860	40.8%	554	38.1%	*****	*****	*****	*****
Male	4,593	2,346	59.3%	1,246	59.2%	901	61.9%	*****	*****	*****	*****
<b>Cefiderocol</b>	<b>1,410</b>	<b>1,397</b>	<b>100.0%</b>	<b>13</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>

Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Female	619	****	****	****	****	0	NaN	0	NaN	0	NaN
Male	791	****	****	****	****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>13,359</b>	<b>13,137</b>	<b>100.0%</b>	<b>167</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
Female	7,784	7,634	58.1%	115	68.9%	****	****	****	****	0	NaN
Male	5,575	5,503	41.9%	52	31.1%	20	****	0	0.0%	0	NaN
<b>Givosiran</b>	<b>1,407</b>	<b>1,343</b>	<b>100.0%</b>	<b>41</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
Female	1,190	****	****	****	****	17	****	0	0.0%	0	NaN
Male	217	****	****	****	****	****	****	****	****	0	NaN
<b>Cenobamate</b>	<b>16,413</b>	<b>7,892</b>	<b>100.0%</b>	<b>4,169</b>	<b>100.0%</b>	<b>3,008</b>	<b>100.0%</b>	<b>1,080</b>	<b>100.0%</b>	<b>264</b>	<b>100.0%</b>
Female	8,197	4,074	51.6%	2,017	48.4%	1,446	48.1%	532	49.3%	128	48.5%
Male	8,216	3,818	48.4%	2,152	51.6%	1,562	51.9%	548	50.7%	136	51.5%
<b>Voxelotor</b>	<b>8,437</b>	<b>5,694</b>	<b>100.0%</b>	<b>1,851</b>	<b>100.0%</b>	<b>792</b>	<b>100.0%</b>	<b>84</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>
Female	4,988	3,395	59.6%	1,061	57.3%	479	60.5%	****	****	****	****
Male	3,449	2,299	40.4%	790	42.7%	313	39.5%	****	****	****	****
<b>Golodirsen</b>	<b>640</b>	<b>610</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
Male	640	610	100.0%	19	100.0%	11	100.0%	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,822</b>	<b>42,804</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	11,545	****	****	****	****	0	0.0%	0	NaN	0	NaN
Male	31,277	****	****	****	****	****	****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>851</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	468	468	55.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	383	383	45.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>33,445</b>	<b>19,367</b>	<b>100.0%</b>	<b>8,737</b>	<b>100.0%</b>	<b>4,715</b>	<b>100.0%</b>	<b>535</b>	<b>100.0%</b>	<b>91</b>	<b>100.0%</b>
Female	18,218	10,784	55.7%	4,713	53.9%	2,447	51.9%	236	44.1%	38	41.8%
Male	15,227	8,583	44.3%	4,024	46.1%	2,268	48.1%	299	55.9%	53	58.2%
<b>Lemborexant</b>	<b>40,831</b>	<b>28,910</b>	<b>100.0%</b>	<b>8,071</b>	<b>100.0%</b>	<b>3,362</b>	<b>100.0%</b>	<b>453</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>
Female	25,908	18,306	63.3%	5,148	63.8%	2,127	63.3%	310	68.4%	17	48.6%
Male	14,923	10,604	36.7%	2,923	36.2%	1,235	36.7%	143	31.6%	18	51.4%
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,365</b>	<b>53,252</b>	<b>100.0%</b>	<b>83</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
Female	47,883	****	****	****	****	****	****	****	****	0	NaN

**Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Male	5,482	****	****	****	****	****	****	0	0.0%	0	NaN
<b>Ubrogapant</b>	<b>368,728</b>	<b>309,281</b>	<b>100.0%</b>	<b>42,644</b>	<b>100.0%</b>	<b>15,352</b>	<b>100.0%</b>	<b>1,320</b>	<b>100.0%</b>	<b>131</b>	<b>100.0%</b>
Female	323,601	271,524	87.8%	37,431	87.8%	13,390	87.2%	1,148	87.0%	108	82.4%
Male	45,127	37,757	12.2%	5,213	12.2%	1,962	12.8%	172	13.0%	23	17.6%

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,849</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>360</b>	<b>47.4</b>	<b>39.1</b>
Female	1,511	1	30	30	60	360	47.3	39.1
Male	338	1	30	30	60	279	47.8	39.2
<b>Trifarotene</b>	<b>33,760</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>510</b>	<b>33.5</b>	<b>19.5</b>
Female	24,692	1	30	30	30	510	33.3	18.9
Male	9,068	1	30	30	30	477	34.2	21.1
<b>Brolucizumab-dbl</b>	<b>92,860</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>193</b>	<b>1.1</b>	<b>1.7</b>
Female	52,447	1	1	1	1	193	1.1	2.1
Male	40,413	1	1	1	1	129	1.0	1.1
<b>Afamelanotide</b>	<b>199</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	92	1	1	1	1	1	1.0	0.0
Male	107	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	*****	*****	*****	*****	*****	*****	*****	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Lasmiditan</b>	<b>19,429</b>	<b>1</b>	<b>8</b>	<b>24</b>	<b>30</b>	<b>900</b>	<b>28.2</b>	<b>41.5</b>
Female	16,632	1	8	25	30	900	28.2	42.0
Male	2,797	1	8	24	30	778	27.6	38.1
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>41,044</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>84</b>	<b>1,302</b>	<b>95.3</b>	<b>151.6</b>
Female	20,348	1	28	28	84	1,302	94.5	150.5
Male	20,696	1	28	28	84	1,297	96.1	152.8
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	25	1	1	1	1	1	1.0	0.0
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>48,881</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1,008</b>	<b>1.9</b>	<b>13.3</b>
Female	22,047	1	1	1	1	525	1.8	10.5
Male	26,834	1	1	1	1	1,008	1.9	15.2
<b>Zanubrutinib</b>	<b>7,684</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>909</b>	<b>77.5</b>	<b>92.6</b>
Female	3,091	1	30	30	90	877	75.6	90.8
Male	4,593	1	30	30	90	909	78.9	93.7
<b>Cefiderocol</b>	<b>1,410</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>58</b>	<b>3.2</b>	<b>5.7</b>

**Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	619	1	1	1	1	40	3.0	5.0
Male	791	1	1	1	1	58	3.3	6.3
<b>Crizanlizumab-tmca</b>	<b>13,359</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>476</b>	<b>3.4</b>	<b>14.6</b>
Female	7,784	1	1	1	1	476	3.7	15.6
Male	5,575	1	1	1	1	322	3.0	13.2
<b>Givosiran</b>	<b>1,407</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>480</b>	<b>7.5</b>	<b>30.2</b>
Female	1,190	1	1	1	1	363	7.2	27.4
Male	217	1	1	1	1	480	9.3	42.4
<b>Cenobamate</b>	<b>16,413</b>	<b>1</b>	<b>28</b>	<b>42</b>	<b>109</b>	<b>1,045</b>	<b>111.8</b>	<b>162.8</b>
Female	8,197	1	28	32	98	1,014	109.5	161.6
Male	8,216	1	28	49	114	1,045	114.1	164.0
<b>Voxelotor</b>	<b>8,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,104</b>	<b>56.9</b>	<b>75.3</b>
Female	4,988	1	30	30	60	1,054	56.6	73.8
Male	3,449	1	30	30	60	1,104	57.4	77.3
<b>Golodirsen</b>	<b>640</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>364</b>	<b>7.6</b>	<b>30.2</b>
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	640	1	1	1	1	364	7.6	30.2
<b>Enfortumab Vedotin-ejfv</b>	<b>42,822</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>168</b>	<b>1.1</b>	<b>1.9</b>
Female	11,545	1	1	1	1	84	1.1	1.6
Male	31,277	1	1	1	1	168	1.1	2.0
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	468	1	1	1	1	1	1.0	0.0
Male	383	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>33,445</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>61</b>	<b>1,058</b>	<b>67.4</b>	<b>89.2</b>
Female	18,218	1	30	30	60	1,058	63.9	82.4
Male	15,227	1	30	30	74	992	71.7	96.5
<b>Lemborexant</b>	<b>40,831</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>925</b>	<b>54.0</b>	<b>71.3</b>
Female	25,908	1	30	30	60	925	54.1	71.5
Male	14,923	1	30	30	60	891	53.9	71.0
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,365</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>399</b>	<b>1.2</b>	<b>5.2</b>
Female	47,883	1	1	1	1	399	1.3	5.3



**Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	5,482	1	1	1	1	210	1.1	4.0
<b>Ubrogepant</b>	<b>368,728</b>	<b>1</b>	<b>10</b>	<b>24</b>	<b>30</b>	<b>1,098</b>	<b>31.3</b>	<b>48.4</b>
Female	323,601	1	10	24	30	1,098	31.2	48.0
Male	45,127	1	10	24	30	1,028	32.1	50.6

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Treatment Episodes by Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	
<b>Tenapanor</b>	<b>1,849</b>	<b>1,179</b>	<b>100.0%</b>	<b>505</b>	<b>100.0%</b>	<b>165</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	*****	*****	*****	17	3.4%	*****	*****	0	NaN	0	NaN
25-40 years	233	*****	*****	68	13.5%	*****	*****	0	NaN	0	NaN
41-64 years	875	557	47.2%	235	46.5%	83	50.3%	0	NaN	0	NaN
≥ 65 years	665	421	35.7%	185	36.6%	59	35.8%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>33,760</b>	<b>30,609</b>	<b>100.0%</b>	<b>2,726</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
0-17 years	14,072	12,735	41.6%	1,131	41.5%	*****	*****	*****	*****	0	NaN
18-24 years	8,705	7,902	25.8%	726	26.6%	77	*****	0	0.0%	0	NaN
25-40 years	7,763	7,060	23.1%	620	22.7%	*****	*****	*****	*****	0	NaN
41-64 years	3,041	2,745	9.0%	*****	*****	*****	*****	*****	*****	0	NaN
≥ 65 years	179	167	0.5%	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Brolucizumab-dblb</b>	<b>92,860</b>	<b>92,823</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	91,436	91,404	98.5%	*****	*****	*****	*****	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>199</b>	<b>199</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	31	31	15.6%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	43	43	21.6%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	96	96	48.2%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	29	29	14.6%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN

**Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>19,429</b>	<b>16,732</b>	<b>100.0%</b>	<b>2,033</b>	<b>100.0%</b>	<b>617</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	62	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	514	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	4,213	3,608	21.6%	453	22.3%	*****	*****	*****	*****	*****	*****
41-64 years	11,923	10,281	61.4%	1,236	60.8%	377	61.1%	*****	*****	*****	*****
≥ 65 years	2,717	2,352	14.1%	284	14.0%	*****	*****	*****	*****	*****	*****
<b>Eluxacaftor Ivacaftor Tezacaftor</b>	<b>41,044</b>	<b>21,226</b>	<b>100.0%</b>	<b>10,287</b>	<b>100.0%</b>	<b>7,544</b>	<b>100.0%</b>	<b>1,399</b>	<b>100.0%</b>	<b>588</b>	<b>100.0%</b>
0-17 years	9,963	5,018	23.6%	2,438	23.7%	2,025	26.8%	409	29.2%	73	12.4%
18-24 years	9,514	5,211	24.6%	2,448	23.8%	1,560	20.7%	222	15.9%	73	12.4%
25-40 years	16,101	8,493	40.0%	4,071	39.6%	2,785	36.9%	491	35.1%	261	44.4%
41-64 years	4,648	2,170	10.2%	1,144	11.1%	975	12.9%	214	15.3%	145	24.7%
≥ 65 years	818	334	1.6%	186	1.8%	199	2.6%	63	4.5%	36	6.1%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>48,881</b>	<b>48,568</b>	<b>100.0%</b>	<b>189</b>	<b>100.0%</b>	<b>111</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	30	30	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	128	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	817	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
41-64 years	2,507	2,477	5.1%	*****	*****	*****	*****	0	0.0%	0	0.0%
≥ 65 years	45,399	45,126	92.9%	161	85.2%	99	89.2%	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>7,684</b>	<b>3,959</b>	<b>100.0%</b>	<b>2,106</b>	<b>100.0%</b>	<b>1,455</b>	<b>100.0%</b>	<b>150</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%

**Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
41-64 years	694	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	6,973	3,591	90.7%	1,922	91.3%	*****	*****	*****	*****	*****	*****
<b>Cefiderocol</b>	<b>1,410</b>	<b>1,397</b>	<b>100.0%</b>	<b>13</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
25-40 years	117	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	442	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
≥ 65 years	836	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>13,359</b>	<b>13,137</b>	<b>100.0%</b>	<b>167</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
0-17 years	427	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
18-24 years	1,731	1,708	13.0%	*****	*****	*****	*****	0	0.0%	0	NaN
25-40 years	7,576	7,433	56.6%	112	67.1%	31	*****	0	0.0%	0	NaN
41-64 years	3,270	3,226	24.6%	29	17.4%	*****	*****	*****	*****	0	NaN
≥ 65 years	355	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Givosiran</b>	<b>1,407</b>	<b>1,343</b>	<b>100.0%</b>	<b>41</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	90	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
25-40 years	471	446	33.2%	*****	*****	*****	*****	*****	*****	0	NaN
41-64 years	660	626	46.6%	23	56.1%	11	*****	0	0.0%	0	NaN
≥ 65 years	186	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Cenobamate</b>	<b>16,413</b>	<b>7,892</b>	<b>100.0%</b>	<b>4,169</b>	<b>100.0%</b>	<b>3,008</b>	<b>100.0%</b>	<b>1,080</b>	<b>100.0%</b>	<b>264</b>	<b>100.0%</b>
0-17 years	385	186	2.4%	97	2.3%	82	2.7%	*****	*****	*****	*****
18-24 years	1,536	769	9.7%	374	9.0%	262	8.7%	105	9.7%	26	9.8%
25-40 years	6,007	2,820	35.7%	1,545	37.1%	1,109	36.9%	425	39.4%	108	40.9%
41-64 years	6,844	3,271	41.4%	1,740	41.7%	1,276	42.4%	448	41.5%	109	41.3%
≥ 65 years	1,641	846	10.7%	413	9.9%	279	9.3%	*****	*****	*****	*****
<b>Voxelotor</b>	<b>8,437</b>	<b>5,694</b>	<b>100.0%</b>	<b>1,851</b>	<b>100.0%</b>	<b>792</b>	<b>100.0%</b>	<b>84</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>
0-17 years	811	497	8.7%	199	10.8%	*****	*****	*****	*****	*****	*****
18-24 years	837	589	10.3%	170	9.2%	*****	*****	*****	*****	*****	*****

**Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
25-40 years	3,860	2,685	47.2%	836	45.2%	300	37.9%	*****	*****	*****	*****
41-64 years	2,683	1,750	30.7%	603	32.6%	285	36.0%	*****	*****	*****	*****
≥ 65 years	246	173	3.0%	43	2.3%	*****	*****	*****	*****	*****	*****
<b>Golodirsen</b>	<b>640</b>	<b>610</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	595	580	95.1%	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	25	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	20	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,822</b>	<b>42,804</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	103	103	0.2%	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	4,624	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	38,095	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>851</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	320	320	37.6%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	503	503	59.1%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>33,445</b>	<b>19,367</b>	<b>100.0%</b>	<b>8,737</b>	<b>100.0%</b>	<b>4,715</b>	<b>100.0%</b>	<b>535</b>	<b>100.0%</b>	<b>91</b>	<b>100.0%</b>
0-17 years	150	85	0.4%	48	0.5%	*****	*****	*****	*****	*****	*****
18-24 years	2,032	1,225	6.3%	525	6.0%	*****	*****	*****	*****	*****	*****
25-40 years	10,645	6,189	32.0%	2,801	32.1%	1,480	31.4%	*****	*****	*****	*****
41-64 years	17,404	9,943	51.3%	4,555	52.1%	2,535	53.8%	324	60.6%	47	51.6%
≥ 65 years	3,214	1,925	9.9%	808	9.2%	425	9.0%	*****	*****	*****	*****
<b>Lemborexant</b>	<b>40,831</b>	<b>28,910</b>	<b>100.0%</b>	<b>8,071</b>	<b>100.0%</b>	<b>3,362</b>	<b>100.0%</b>	<b>453</b>	<b>100.0%</b>	<b>35</b>	<b>100.0%</b>
0-17 years	36	25	0.1%	*****	*****	*****	*****	0	0.0%	0	0.0%

**Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration										
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	
18-24 years	867	611	2.1%	*****	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	5,578	4,004	13.8%	1,106	13.7%	422	12.6%	*****	*****	*****	*****	*****
41-64 years	19,997	13,954	48.3%	4,093	50.7%	1,701	50.6%	232	51.2%	17	48.6%	*****
≥ 65 years	14,353	10,316	35.7%	2,686	33.3%	1,170	34.8%	*****	*****	*****	*****	*****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,365</b>	<b>53,252</b>	<b>100.0%</b>	<b>83</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	NaN
18-24 years	43	43	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	NaN
25-40 years	2,309	2,298	4.3%	*****	*****	*****	*****	0	0.0%	0	0.0%	NaN
41-64 years	19,400	19,359	36.4%	*****	*****	*****	*****	*****	*****	0	0.0%	NaN
≥ 65 years	31,613	31,552	59.3%	48	57.8%	*****	*****	*****	*****	0	0.0%	NaN
<b>Ubrogepant</b>	<b>368,728</b>	<b>309,281</b>	<b>100.0%</b>	<b>42,644</b>	<b>100.0%</b>	<b>15,352</b>	<b>100.0%</b>	<b>1,320</b>	<b>100.0%</b>	<b>131</b>	<b>100.0%</b>	<b>100.0%</b>
0-17 years	1,321	1,100	0.4%	172	0.4%	*****	*****	*****	*****	0	0.0%	0.0%
18-24 years	15,465	13,211	4.3%	1,720	4.0%	*****	*****	*****	*****	0	0.0%	0.0%
25-40 years	91,117	76,693	24.8%	10,441	24.5%	3,682	24.0%	278	21.1%	23	17.6%	17.6%
41-64 years	210,205	175,560	56.8%	24,690	57.9%	9,088	59.2%	781	59.2%	86	65.6%	65.6%
≥ 65 years	50,620	42,717	13.8%	5,621	13.2%	2,030	13.2%	230	17.4%	22	16.8%	16.8%

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,849</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>360</b>	<b>47.4</b>	<b>39.1</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	233	3	30	30	60	203	44.4	31.3
41-64 years	875	1	30	30	60	300	48.2	40.6
≥ 65 years	665	1	30	30	60	279	46.9	37.8
<b>Trifarotene</b>	<b>33,760</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>510</b>	<b>33.5</b>	<b>19.5</b>
0-17 years	14,072	1	30	30	30	477	33.9	21.1
18-24 years	8,705	1	30	30	30	360	33.0	16.1
25-40 years	7,763	1	30	30	30	510	33.0	18.5
41-64 years	3,041	1	30	30	30	397	34.5	23.2
≥ 65 years	179	1	30	30	30	151	31.5	13.9
<b>Brolucizumab-dbl</b>	<b>92,860</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>193</b>	<b>1.1</b>	<b>1.7</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	39	1	1	1	1	1	1.0	0.0
41-64 years	1,385	1	1	1	1	129	1.4	5.0
≥ 65 years	91,436	1	1	1	1	193	1.0	1.6
<b>Afamelanotide</b>	<b>199</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	31	1	1	1	1	1	1.0	0.0
25-40 years	43	1	1	1	1	1	1.0	0.0
41-64 years	96	1	1	1	1	1	1.0	0.0
≥ 65 years	29	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Lasmiditan</b>	<b>19,429</b>	<b>1</b>	<b>8</b>	<b>24</b>	<b>30</b>	<b>900</b>	<b>28.2</b>	<b>41.5</b>
0-17 years	62	2	8	22	30	150	22.1	21.6
18-24 years	514	2	8	29	30	643	32.3	49.3
25-40 years	4,213	1	8	28	30	900	29.4	46.2
41-64 years	11,923	1	8	24	30	816	27.9	39.7
≥ 65 years	2,717	1	8	18	30	811	26.6	40.2
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>41,044</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>84</b>	<b>1,302</b>	<b>95.3</b>	<b>151.6</b>
0-17 years	9,963	1	28	30	95	1,297	94.3	133.3
18-24 years	9,514	1	28	28	84	1,256	79.2	119.4
25-40 years	16,101	1	28	28	84	1,302	93.8	155.0
41-64 years	4,648	1	28	56	112	1,295	124.5	202.7
≥ 65 years	818	5	28	56	168	1,171	157.1	231.2
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>48,881</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1,008</b>	<b>1.9</b>	<b>13.3</b>
0-17 years	30	1	1	1	1	1	1.0	0.0
18-24 years	128	1	1	1	1	189	5.5	19.0
25-40 years	817	1	1	1	1	84	1.4	4.0
41-64 years	2,507	1	1	1	1	315	2.5	12.7
≥ 65 years	45,399	1	1	1	1	1,008	1.8	13.4
<b>Zanubrutinib</b>	<b>7,684</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>90</b>	<b>909</b>	<b>77.5</b>	<b>92.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	694	1	30	30	90	775	80.0	96.8
≥ 65 years	6,973	1	30	30	90	909	77.3	92.2



**Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Cefiderocol</b>	<b>1,410</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>58</b>	<b>3.2</b>	<b>5.7</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	117	1	1	1	5	41	4.0	6.0
41-64 years	442	1	1	1	2	41	3.4	6.1
≥ 65 years	836	1	1	1	1	58	2.9	5.6
<b>Crizanlizumab-tmca</b>	<b>13,359</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>476</b>	<b>3.4</b>	<b>14.6</b>
0-17 years	427	1	1	1	1	196	3.4	14.4
18-24 years	1,731	1	1	1	1	219	3.1	11.8
25-40 years	7,576	1	1	1	1	364	3.7	14.5
41-64 years	3,270	1	1	1	1	476	3.1	16.7
≥ 65 years	355	1	1	1	1	126	1.9	8.7
<b>Givosiran</b>	<b>1,407</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>480</b>	<b>7.5</b>	<b>30.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	90	1	1	1	1	60	3.0	8.9
25-40 years	471	1	1	1	1	480	9.5	36.1
41-64 years	660	1	1	1	1	348	7.7	27.6
≥ 65 years	186	1	1	1	1	363	4.1	28.6
<b>Cenobamate</b>	<b>16,413</b>	<b>1</b>	<b>28</b>	<b>42</b>	<b>109</b>	<b>1,045</b>	<b>111.8</b>	<b>162.8</b>
0-17 years	385	1	28	36	103	794	96.4	136.8
18-24 years	1,536	1	28	30	95	1,045	109.9	168.0
25-40 years	6,007	1	30	45	115	1,018	116.5	168.7
41-64 years	6,844	1	28	44	112	944	112.5	162.3
≥ 65 years	1,641	1	28	30	90	1,014	97.0	141.7
<b>Voxelotor</b>	<b>8,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,104</b>	<b>56.9</b>	<b>75.3</b>
0-17 years	811	1	30	30	60	840	60.6	72.4
18-24 years	837	1	30	30	60	895	52.9	66.3
25-40 years	3,860	1	30	30	60	1,033	53.5	69.3
41-64 years	2,683	1	30	30	60	1,104	61.9	85.4
≥ 65 years	246	1	30	30	60	745	58.3	81.7

**Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Golodirsen</b>	<b>640</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>364</b>	<b>7.6</b>	<b>30.2</b>
0-17 years	595	1	1	1	1	252	4.0	16.9
18-24 years	25	1	1	17	28	56	17.9	17.7
25-40 years	20	5	28	56	126	364	101.6	107.8
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>42,822</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>168</b>	<b>1.1</b>	<b>1.9</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	103	1	1	1	1	1	1.0	0.0
41-64 years	4,624	1	1	1	1	168	1.1	3.3
≥ 65 years	38,095	1	1	1	1	140	1.1	1.7
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>851</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	320	1	1	1	1	1	1.0	0.0
≥ 65 years	503	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>33,445</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>61</b>	<b>1,058</b>	<b>67.4</b>	<b>89.2</b>
0-17 years	150	2	30	30	60	768	64.2	86.7
18-24 years	2,032	1	30	30	60	886	60.7	72.2
25-40 years	10,645	1	30	30	60	1,058	66.1	86.7
41-64 years	17,404	1	30	30	69	992	69.8	92.8
≥ 65 years	3,214	1	30	30	60	972	63.8	87.1
<b>Lemborexant</b>	<b>40,831</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>925</b>	<b>54.0</b>	<b>71.3</b>
0-17 years	36	4	30	30	38	334	49.5	56.4
18-24 years	867	1	30	30	60	818	53.3	75.7
25-40 years	5,578	1	30	30	60	873	50.7	64.2
41-64 years	19,997	1	30	30	60	909	54.8	71.8
≥ 65 years	14,353	1	30	30	60	925	54.2	73.0

**Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>53,365</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>399</b>	<b>1.2</b>	<b>5.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	43	1	1	1	1	1	1.0	0.0
25-40 years	2,309	1	1	1	1	210	1.4	6.2
41-64 years	19,400	1	1	1	1	379	1.3	5.9
≥ 65 years	31,613	1	1	1	1	399	1.2	4.6
<b>Ubrogepant</b>	<b>368,728</b>	<b>1</b>	<b>10</b>	<b>24</b>	<b>30</b>	<b>1,098</b>	<b>31.3</b>	<b>48.4</b>
0-17 years	1,321	1	10	30	30	485	29.0	33.3
18-24 years	15,465	1	10	28	30	720	29.3	37.5
25-40 years	91,117	1	10	24	30	1,014	30.6	45.6
41-64 years	210,205	1	10	24	30	1,098	31.7	49.7
≥ 65 years	50,620	1	10	25	30	1,046	32.2	50.7

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 5a. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<i>Tenapanor</i>	1,273	772	60.6%	361	28.4%	140	11.0%	0	0.0%	0	0.0%
<i>Trifarotene</i>	21,437	19,441	90.7%	1,714	8.0%	*****	*****	*****	*****	0	0.0%
<i>Brolucizumab-dbl</i>	17,358	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
<i>Afamelanotide</i>	40	40	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Fluorodopa F-18</i>	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Lasmiditan</i>	6,734	5,692	84.5%	767	11.4%	252	3.7%	*****	*****	*****	*****
<i>Elexacaftor Ivacaftor Tezacaftor</i>	9,638	3,536	36.7%	2,179	22.6%	2,680	27.8%	822	8.5%	421	4.4%
<i>Air Polymer-Type A</i>	25	25	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Luspatercept-aamt</i>	4,619	4,527	98.0%	48	1.0%	*****	*****	*****	*****	*****	*****
<i>Zanubrutinib</i>	3,050	1,453	47.6%	750	24.6%	739	24.2%	97	3.2%	11	0.4%
<i>Cefiderocol</i>	962	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
<i>Crizanlizumab-tmca</i>	1,798	1,763	98.1%	23	1.3%	12	0.7%	0	0.0%	0	0.0%
<i>Givosiran</i>	150	138	92.0%	*****	*****	*****	*****	*****	*****	0	0.0%
<i>Cenobamate</i>	7,201	3,388	47.0%	1,831	25.4%	1,258	17.5%	546	7.6%	178	2.5%
<i>Voxelotor</i>	2,718	1,721	63.3%	617	22.7%	324	11.9%	42	1.5%	14	0.5%
<i>Golodirsen</i>	43	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Enfortumab Vedotin-ejfv</i>	3,640	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Brilliant Blue G Ophthalmic Solution</i>	813	813	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Lumateperone Tosylate</i>	17,075	10,024	58.7%	4,244	24.9%	2,427	14.2%	306	1.8%	74	0.4%
<i>Lemborexant</i>	16,996	12,240	72.0%	2,989	17.6%	1,466	8.6%	270	1.6%	31	0.2%
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	7,566	7,532	99.6%	23	0.3%	*****	*****	*****	*****	0	0.0%
<i>Ubrogepant</i>	111,136	90,516	81.4%	14,110	12.7%	5,805	5.2%	628	0.6%	77	0.1%

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

**Table 5b. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	1,273	1	30	30	60	360	51.1	42.6
<i>Trifarotene</i>	21,437	1	30	30	30	462	33.7	19.9
<i>Brolucizumab-dbl</i>	17,358	1	1	1	1	60	1.0	1.2
<i>Afamelanotide</i>	40	1	1	1	1	1	1.0	0.0
<i>Fluorodopa F-18</i>	*****	*****	*****	*****	*****	*****	*****	*****
<i>Lasmiditan</i>	6,734	1	8	30	30	900	31.5	47.7
<i>Elexacaftor Ivacaftor Tezacaftor</i>	9,638	1	28	56	196	1,302	167.0	233.1
<i>Air Polymer-Type A</i>	25	1	1	1	1	1	1.0	0.0
<i>Luspatercept-aamt</i>	4,619	1	1	1	1	977	4.2	28.8
<i>Zanubrutinib</i>	3,050	1	30	53	120	909	93.1	112.4
<i>Cefiderocol</i>	962	1	1	1	1	41	2.3	4.6
<i>Crizanlizumab-tmca</i>	1,798	1	1	1	1	322	4.2	16.8
<i>Givosiran</i>	150	1	1	1	1	480	14.2	47.0
<i>Cenobamate</i>	7,201	1	28	46	114	1,045	122.1	181.3
<i>Voxelotor</i>	2,718	1	30	30	60	1,104	67.2	98.1
<i>Golodirsen</i>	43	1	1	1	30	332	37.3	74.0
<i>Enfortumab Vedotin-ejfv</i>	3,640	1	1	1	1	168	1.3	4.8
<i>Brilliant Blue G Ophthalmic</i>	813	1	1	1	1	1	1.0	0.0
<i>Lumateperone Tosylate</i>	17,075	1	30	30	61	1,058	69.9	97.4
<i>Lemborexant</i>	16,996	1	30	30	60	925	56.9	83.7
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	7,566	1	1	1	1	399	1.5	8.0
<i>Ubrogepant</i>	111,136	1	10	30	30	1,098	36.2	57.2

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

**Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<b>Tenapanor</b>	<b>1,273</b>	<b>772</b>	<b>100.0%</b>	<b>361</b>	<b>100.0%</b>	<b>140</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,037	630	81.6%	292	80.9%	115	82.1%	0	NaN	0	NaN
Male	236	142	18.4%	69	19.1%	25	17.9%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>21,437</b>	<b>19,441</b>	<b>100.0%</b>	<b>1,714</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
Female	15,890	14,445	74.3%	1,248	72.8%	*****	*****	*****	*****	0	NaN
Male	5,547	4,996	25.7%	466	27.2%	*****	*****	*****	*****	0	NaN
<b>Brolucizumab-dbl</b>	<b>17,358</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	10,178	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	7,180	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>40</b>	<b>40</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	18	18	45.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	22	22	55.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>5,692</b>	<b>100.0%</b>	<b>767</b>	<b>100.0%</b>	<b>252</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	5,746	4,850	85.2%	647	84.4%	*****	*****	*****	*****	*****	*****
Male	988	842	14.8%	120	15.6%	*****	*****	*****	*****	0	0.0%
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>3,536</b>	<b>100.0%</b>	<b>2,179</b>	<b>100.0%</b>	<b>2,680</b>	<b>100.0%</b>	<b>822</b>	<b>100.0%</b>	<b>421</b>	<b>100.0%</b>
Female	4,711	1,734	49.0%	1,057	48.5%	1,306	48.7%	414	50.4%	200	47.5%
Male	4,927	1,802	51.0%	1,122	51.5%	1,374	51.3%	408	49.6%	221	52.5%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	25	25	100.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>4,527</b>	<b>100.0%</b>	<b>48</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	2,011	1,977	43.7%	22	45.8%	*****	*****	*****	*****	0	0.0%
Male	2,608	2,550	56.3%	26	54.2%	*****	*****	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1,453</b>	<b>100.0%</b>	<b>750</b>	<b>100.0%</b>	<b>739</b>	<b>100.0%</b>	<b>97</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>
Female	1,211	575	39.6%	330	44.0%	265	35.9%	*****	*****	*****	*****

**Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
Male	1,839	878	60.4%	420	56.0%	474	64.1%	*****	*****	*****	*****
<b>Cefiderocol</b>	<b>962</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	413	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	549	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1,763</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>12</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	1,066	1,044	59.2%	*****	*****	*****	*****	0	NaN	0	NaN
Male	732	719	40.8%	*****	*****	*****	*****	0	NaN	0	NaN
<b>Givosiran</b>	<b>150</b>	<b>138</b>	<b>100.0%</b>	*****	*****	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
Female	122	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
Male	28	*****	*****	*****	*****	0	0.0%	*****	*****	0	NaN
<b>Kenobamate</b>	<b>7,201</b>	<b>3,388</b>	<b>100.0%</b>	<b>1,831</b>	<b>100.0%</b>	<b>1,258</b>	<b>100.0%</b>	<b>546</b>	<b>100.0%</b>	<b>178</b>	<b>100.0%</b>
Female	3,591	1,747	51.6%	880	48.1%	613	48.7%	266	48.7%	85	47.8%
Male	3,610	1,641	48.4%	951	51.9%	645	51.3%	280	51.3%	93	52.2%
<b>Voxelotor</b>	<b>2,718</b>	<b>1,721</b>	<b>100.0%</b>	<b>617</b>	<b>100.0%</b>	<b>324</b>	<b>100.0%</b>	<b>42</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>
Female	1,592	995	57.8%	366	59.3%	202	62.3%	*****	*****	*****	*****
Male	1,126	726	42.2%	251	40.7%	122	37.7%	*****	*****	*****	*****
<b>Golodirsen</b>	<b>43</b>	*****	*****	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
Male	43	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	*****	*****	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	981	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
Male	2,659	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic</b>	<b>813</b>	<b>813</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	448	448	55.1%	0	NaN	0	NaN	0	NaN	0	NaN
Male	365	365	44.9%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>10,024</b>	<b>100.0%</b>	<b>4,244</b>	<b>100.0%</b>	<b>2,427</b>	<b>100.0%</b>	<b>306</b>	<b>100.0%</b>	<b>74</b>	<b>100.0%</b>
Female	9,714	5,874	58.6%	2,364	55.7%	1,301	53.6%	143	46.7%	32	43.2%
Male	7,361	4,150	41.4%	1,880	44.3%	1,126	46.4%	163	53.3%	42	56.8%
<b>Lemborexant</b>	<b>16,996</b>	<b>12,240</b>	<b>100.0%</b>	<b>2,989</b>	<b>100.0%</b>	<b>1,466</b>	<b>100.0%</b>	<b>270</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>

**Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
Female	10,940	7,888	64.4%	1,930	64.6%	926	63.2%	180	66.7%	16	51.6%
Male	6,056	4,352	35.6%	1,059	35.4%	540	36.8%	90	33.3%	15	48.4%
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>7,532</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
Female	6,621	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
Male	945	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
<b>Ubrogepant</b>	<b>111,136</b>	<b>90,516</b>	<b>100.0%</b>	<b>14,110</b>	<b>100.0%</b>	<b>5,805</b>	<b>100.0%</b>	<b>628</b>	<b>100.0%</b>	<b>77</b>	<b>100.0%</b>
Female	96,208	78,390	86.6%	12,217	86.6%	4,995	86.0%	545	86.8%	61	79.2%
Male	14,928	12,126	13.4%	1,893	13.4%	810	14.0%	83	13.2%	16	20.8%

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.



**Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,273</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>360</b>	<b>51.1</b>	<b>42.6</b>
Female	1,037	1	30	30	60	360	51.2	42.5
Male	236	2	30	30	60	279	50.5	42.8
<b>Trifarotene</b>	<b>21,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>462</b>	<b>33.7</b>	<b>19.9</b>
Female	15,890	1	30	30	30	462	33.5	19.4
Male	5,547	1	30	30	30	397	34.2	21.5
<b>Brolucizumab-dbl</b>	<b>17,358</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>60</b>	<b>1.0</b>	<b>1.2</b>
Female	10,178	1	1	1	1	35	1.1	1.2
Male	7,180	1	1	1	1	60	1.0	1.2
<b>Afamelanotide</b>	<b>40</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	18	1	1	1	1	1	1.0	0.0
Male	22	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
Female	*****	*****	*****	*****	*****	*****	*****	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>1</b>	<b>8</b>	<b>30</b>	<b>30</b>	<b>900</b>	<b>31.5</b>	<b>47.7</b>
Female	5,746	1	8	30	30	900	32.1	49.9
Male	988	1	8	28	30	510	27.8	31.1
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>1</b>	<b>28</b>	<b>56</b>	<b>196</b>	<b>1,302</b>	<b>167.0</b>	<b>233.1</b>
Female	4,711	1	28	56	196	1,302	167.0	231.1
Male	4,927	1	28	56	196	1,297	167.1	235.0
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	25	1	1	1	1	1	1.0	0.0
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>977</b>	<b>4.2</b>	<b>28.8</b>
Female	2,011	1	1	1	1	421	3.2	17.0
Male	2,608	1	1	1	1	977	5.0	35.3
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1</b>	<b>30</b>	<b>53</b>	<b>120</b>	<b>909</b>	<b>93.1</b>	<b>112.4</b>
Female	1,211	1	30	52	98	852	88.7	107.2
Male	1,839	1	30	53	120	909	96.1	115.5
<b>Cefiderocol</b>	<b>962</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>41</b>	<b>2.3</b>	<b>4.6</b>

**Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	413	1	1	1	1	40	2.4	4.6
Male	549	1	1	1	1	41	2.3	4.5
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>322</b>	<b>4.2</b>	<b>16.8</b>
Female	1,066	1	1	1	1	210	4.2	13.9
Male	732	1	1	1	1	322	4.3	20.3
<b>Givosiran</b>	<b>150</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>480</b>	<b>14.2</b>	<b>47.0</b>
Female	122	1	1	1	1	210	11.8	29.5
Male	28	1	1	1	10	480	24.8	90.3
<b>Cenobamate</b>	<b>7,201</b>	<b>1</b>	<b>28</b>	<b>46</b>	<b>114</b>	<b>1,045</b>	<b>122.1</b>	<b>181.3</b>
Female	3,591	1	28	42	112	1,014	119.6	179.5
Male	3,610	1	28	56	116	1,045	124.7	183.1
<b>Voxelotor</b>	<b>2,718</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,104</b>	<b>67.2</b>	<b>98.1</b>
Female	1,592	1	30	30	60	1,054	67.3	94.2
Male	1,126	1	30	30	60	1,104	67.0	103.3
<b>Golodirsen</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>30</b>	<b>332</b>	<b>37.3</b>	<b>74.0</b>
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	43	1	1	1	30	332	37.3	74.0
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>168</b>	<b>1.3</b>	<b>4.8</b>
Female	981	1	1	1	1	84	1.3	3.9
Male	2,659	1	1	1	1	168	1.3	5.1
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	448	1	1	1	1	1	1.0	0.0
Male	365	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>61</b>	<b>1,058</b>	<b>69.9</b>	<b>97.4</b>
Female	9,714	1	30	30	60	1,058	65.4	88.9
Male	7,361	1	30	30	82	992	75.8	107.2
<b>Lemborexant</b>	<b>16,996</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>925</b>	<b>56.9</b>	<b>83.7</b>
Female	10,940	1	30	30	60	925	56.6	83.2
Male	6,056	1	30	30	60	891	57.3	84.6
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>399</b>	<b>1.5</b>	<b>8.0</b>
Female	6,621	1	1	1	1	399	1.5	8.4

**Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	945	1	1	1	1	74	1.3	3.8
<b>Ubrogepant</b>	<b>111,136</b>	<b>1</b>	<b>10</b>	<b>30</b>	<b>30</b>	<b>1,098</b>	<b>36.2</b>	<b>57.2</b>
Female	96,208	1	10	30	30	1,098	36.0	56.7
Male	14,928	1	10	30	30	1,028	37.1	60.2

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
<b>Tenapanor</b>	<b>1,273</b>	<b>772</b>	<b>100.0%</b>	<b>361</b>	<b>100.0%</b>	<b>140</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	****	****	****	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	****	****	****	****	****	****	****	0	NaN	0	NaN
25-40 years	161	93	12.0%	****	****	****	****	0	NaN	0	NaN
41-64 years	576	349	45.2%	156	43.2%	71	50.7%	0	NaN	0	NaN
≥ 65 years	478	291	37.7%	139	38.5%	48	34.3%	0	NaN	0	NaN
<b>Trifarotene</b>	<b>21,437</b>	<b>19,441</b>	<b>100.0%</b>	<b>1,714</b>	<b>100.0%</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>0</b>	<b>NaN</b>
0-17 years	8,457	7,659	39.4%	671	39.1%	****	****	****	****	0	NaN
18-24 years	5,727	5,214	26.8%	461	26.9%	52	****	0	0.0%	0	NaN
25-40 years	5,223	4,745	24.4%	418	24.4%	****	****	****	****	0	NaN
41-64 years	1,908	****	****	****	****	****	****	****	****	0	NaN
≥ 65 years	122	****	****	****	****	****	****	0	0.0%	0	NaN
<b>Brolicizumab-dblb</b>	<b>17,358</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	NaN	0	NaN	0	NaN
25-40 years	11	11	****	0	0.0%	0	NaN	0	NaN	0	NaN
41-64 years	316	316	****	0	0.0%	0	NaN	0	NaN	0	NaN
≥ 65 years	17,031	****	****	****	****	0	NaN	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>40</b>	<b>40</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	11	11	27.5%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	18	18	45.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN

**Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Number of Patients by First Treatment Episode Duration										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	
≥ 65 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lasmiditan</b>	<b>6,734</b>	<b>5,692</b>	<b>100.0%</b>	<b>767</b>	<b>100.0%</b>	<b>252</b>	<b>100.0%</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>
0-17 years	29	****	****	****	****	0	0.0%	0	0.0%	0	0.0%
18-24 years	262	****	****	****	****	****	****	****	****	0	0.0%
25-40 years	1,593	1,350	23.7%	179	23.3%	****	****	0	0.0%	****	****
41-64 years	3,814	3,196	56.1%	451	58.8%	****	****	****	****	0	0.0%
≥ 65 years	1,036	895	15.7%	109	14.2%	****	****	****	****	****	****
<b>Eluxacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>3,536</b>	<b>100.0%</b>	<b>2,179</b>	<b>100.0%</b>	<b>2,680</b>	<b>100.0%</b>	<b>822</b>	<b>100.0%</b>	<b>421</b>	<b>100.0%</b>
0-17 years	2,812	1,003	28.4%	603	27.7%	869	32.4%	289	35.2%	48	11.4%
18-24 years	2,226	917	25.9%	552	25.3%	561	20.9%	143	17.4%	53	12.6%
25-40 years	3,292	1,194	33.8%	769	35.3%	898	33.5%	249	30.3%	182	43.2%
41-64 years	1,061	344	9.7%	212	9.7%	281	10.5%	113	13.7%	111	26.4%
≥ 65 years	247	78	2.2%	43	2.0%	71	2.6%	28	3.4%	27	6.4%
<b>Air Polymer-Type A</b>	<b>25</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	****	****	****	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>4,527</b>	<b>100.0%</b>	<b>48</b>	<b>100.0%</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>
0-17 years	****	****	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	****	****	****	****	****	0	0.0%	0	0.0%	0	0.0%
25-40 years	84	84	1.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
41-64 years	261	****	****	****	****	****	****	0	0.0%	0	0.0%
≥ 65 years	4,246	4,161	91.9%	****	****	****	****	****	****	****	****
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1,453</b>	<b>100.0%</b>	<b>750</b>	<b>100.0%</b>	<b>739</b>	<b>100.0%</b>	<b>97</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	****	0	0.0%	****	****	0	0.0%	0	0.0%	0	0.0%
25-40 years	****	****	****	****	****	****	****	0	0.0%	0	0.0%

**Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
41-64 years	****	****	****	****	****	****	****	****	****	****	****
≥ 65 years	2,754	1,310	90.2%	685	91.3%	666	90.1%	****	****	****	****
<b>Cefiderocol</b>	<b>962</b>	****	****	****	****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	****	****	****	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	****	****	****	0	0.0%	0	NaN	0	NaN	0	NaN
25-40 years	****	****	****	****	****	0	NaN	0	NaN	0	NaN
41-64 years	299	****	****	****	****	0	NaN	0	NaN	0	NaN
≥ 65 years	585	****	****	****	****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1,763</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>12</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	72	****	****	0	0.0%	****	****	0	NaN	0	NaN
18-24 years	296	****	****	****	****	****	****	0	NaN	0	NaN
25-40 years	997	976	55.4%	****	****	****	****	0	NaN	0	NaN
41-64 years	396	****	****	****	****	****	****	0	NaN	0	NaN
≥ 65 years	37	****	****	****	****	****	****	0	NaN	0	NaN
<b>Givosiran</b>	<b>150</b>	<b>138</b>	<b>100.0%</b>	****	****	****	****	****	****	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	****	****	****	****	****	0	0.0%	0	0.0%	0	NaN
25-40 years	****	****	****	****	****	0	0.0%	****	****	0	NaN
41-64 years	77	****	****	****	****	****	****	0	0.0%	0	NaN
≥ 65 years	17	****	****	****	****	****	****	0	0.0%	0	NaN
<b>Cenobamate</b>	<b>7,201</b>	<b>3,388</b>	<b>100.0%</b>	<b>1,831</b>	<b>100.0%</b>	<b>1,258</b>	<b>100.0%</b>	<b>546</b>	<b>100.0%</b>	<b>178</b>	<b>100.0%</b>
0-17 years	205	93	2.7%	54	2.9%	44	3.5%	****	****	****	****
18-24 years	723	345	10.2%	175	9.6%	122	9.7%	64	11.7%	17	9.6%
25-40 years	2,607	1,146	33.8%	701	38.3%	470	37.4%	212	38.8%	78	43.8%
41-64 years	2,926	1,398	41.3%	719	39.3%	521	41.4%	221	40.5%	67	37.6%
≥ 65 years	740	406	12.0%	182	9.9%	101	8.0%	****	****	****	****
<b>Voxelotor</b>	<b>2,718</b>	<b>1,721</b>	<b>100.0%</b>	<b>617</b>	<b>100.0%</b>	<b>324</b>	<b>100.0%</b>	<b>42</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>
0-17 years	335	187	10.9%	82	13.3%	****	****	****	****	****	****
18-24 years	318	205	11.9%	73	11.8%	****	****	****	****	****	****

**Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
25-40 years	1,207	804	46.7%	268	43.4%	113	34.9%	*****	*****	*****	*****
41-64 years	776	479	27.8%	172	27.9%	102	31.5%	*****	*****	*****	*****
≥ 65 years	82	46	2.7%	22	3.6%	*****	*****	*****	*****	*****	*****
<b>Golodirsen</b>	<b>43</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	*****	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	*****	0	0.0%	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	13	13	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	418	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	3,209	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>813</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	309	309	38.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	478	478	58.8%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>10,024</b>	<b>100.0%</b>	<b>4,244</b>	<b>100.0%</b>	<b>2,427</b>	<b>100.0%</b>	<b>306</b>	<b>100.0%</b>	<b>74</b>	<b>100.0%</b>
0-17 years	95	52	0.5%	32	0.8%	*****	*****	*****	*****	*****	*****
18-24 years	1,184	746	7.4%	286	6.7%	*****	*****	*****	*****	0	0.0%
25-40 years	5,459	3,231	32.2%	1,366	32.2%	748	30.8%	*****	*****	*****	*****
41-64 years	8,676	4,989	49.8%	2,173	51.2%	1,299	53.5%	174	56.9%	41	55.4%
≥ 65 years	1,661	1,006	10.0%	387	9.1%	229	9.4%	*****	*****	*****	*****
<b>Lemborexant</b>	<b>16,996</b>	<b>12,240</b>	<b>100.0%</b>	<b>2,989</b>	<b>100.0%</b>	<b>1,466</b>	<b>100.0%</b>	<b>270</b>	<b>100.0%</b>	<b>31</b>	<b>100.0%</b>
0-17 years	19	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%

**Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Number of Patients by First Treatment Episode Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients	Number of Patients	Percent of Total Patients
18-24 years	388	****	****	****	****	36	2.5%	****	****	0	0.0%
25-40 years	2,285	1,638	13.4%	410	13.7%	204	13.9%	****	****	****	****
41-64 years	8,023	5,574	45.5%	1,542	51.6%	751	51.2%	141	52.2%	15	48.4%
≥ 65 years	6,281	4,744	38.8%	956	32.0%	475	32.4%	****	****	****	****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>7,532</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	****	****	****	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	****	****	****	****	****	****	****	0	0.0%	0	NaN
41-64 years	2,641	2,627	34.9%	****	****	****	****	0	0.0%	0	NaN
≥ 65 years	4,589	4,572	60.7%	****	****	****	****	****	****	0	NaN
<b>Ubrogepant</b>	<b>111,136</b>	<b>90,516</b>	<b>100.0%</b>	<b>14,110</b>	<b>100.0%</b>	<b>5,805</b>	<b>100.0%</b>	<b>628</b>	<b>100.0%</b>	<b>77</b>	<b>100.0%</b>
0-17 years	514	421	0.5%	64	0.5%	****	****	****	****	0	0.0%
18-24 years	5,841	4,933	5.4%	668	4.7%	****	****	****	****	0	0.0%
25-40 years	28,732	23,510	26.0%	3,604	25.5%	1,472	25.4%	131	20.9%	15	19.5%
41-64 years	58,815	47,250	52.2%	7,826	55.5%	3,329	57.3%	362	57.6%	48	62.3%
≥ 65 years	17,234	14,402	15.9%	1,948	13.8%	753	13.0%	117	18.6%	14	18.2%

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.



**Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>1,273</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>360</b>	<b>51.1</b>	<b>42.6</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	576	1	30	30	60	300	52.7	45.0
≥ 65 years	478	3	30	30	60	279	49.8	40.1
<b>Trifarotene</b>	<b>21,437</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>462</b>	<b>33.7</b>	<b>19.9</b>
0-17 years	8,457	1	30	30	30	412	34.1	21.3
18-24 years	5,727	1	30	30	30	360	33.0	16.3
25-40 years	5,223	1	30	30	30	462	33.3	18.6
41-64 years	1,908	1	30	30	30	397	35.2	26.1
≥ 65 years	122	1	30	30	30	151	31.9	15.7
<b>Brolucizumab-dbil</b>	<b>17,358</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>60</b>	<b>1.0</b>	<b>1.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	11	1	1	1	1	1	1.0	0.0
41-64 years	316	1	1	1	1	28	1.2	2.1
≥ 65 years	17,031	1	1	1	1	60	1.0	1.2
<b>Afamelanotide</b>	<b>40</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	11	1	1	1	1	1	1.0	0.0
41-64 years	18	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Fluorodopa F-18</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Lasmiditan</b>	<b>6,734</b>	<b>1</b>	<b>8</b>	<b>30</b>	<b>30</b>	<b>900</b>	<b>31.5</b>	<b>47.7</b>

**Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	29	4	8	10	30	60	19.3	15.1
18-24 years	262	3	8	30	30	643	33.9	57.8
25-40 years	1,593	1	8	30	30	900	31.7	50.9
41-64 years	3,814	1	8	30	30	596	32.0	45.8
≥ 65 years	1,036	1	8	28	30	811	29.0	47.2
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>9,638</b>	<b>1</b>	<b>28</b>	<b>56</b>	<b>196</b>	<b>1,302</b>	<b>167.0</b>	<b>233.1</b>
0-17 years	2,812	1	28	77	196	1,297	152.2	185.2
18-24 years	2,226	1	28	56	140	1,256	130.3	184.8
25-40 years	3,292	1	28	56	196	1,302	174.7	251.5
41-64 years	1,061	1	28	84	308	1,295	239.7	317.9
≥ 65 years	247	16	28	112	336	1,171	251.7	316.7
<b>Air Polymer-Type A</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Luspatercept-aamt</b>	<b>4,619</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>977</b>	<b>4.2</b>	<b>28.8</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	84	1	1	1	1	21	1.7	3.7
41-64 years	261	1	1	1	1	199	4.0	17.6
≥ 65 years	4,246	1	1	1	1	977	4.3	29.7
<b>Zanubrutinib</b>	<b>3,050</b>	<b>1</b>	<b>30</b>	<b>53</b>	<b>120</b>	<b>909</b>	<b>93.1</b>	<b>112.4</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	2,754	1	30	52	120	909	92.5	111.1
<b>Cefiderocol</b>	<b>962</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>41</b>	<b>2.3</b>	<b>4.6</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	299	1	1	1	1	41	2.6	5.5
≥ 65 years	585	1	1	1	1	31	2.1	3.8
<b>Crizanlizumab-tmca</b>	<b>1,798</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>322</b>	<b>4.2</b>	<b>16.8</b>
0-17 years	72	1	1	1	1	98	3.8	12.6
18-24 years	296	1	1	1	1	126	3.6	11.5
25-40 years	997	1	1	1	1	210	4.1	13.9
41-64 years	396	1	1	1	1	322	4.8	24.7
≥ 65 years	37	1	1	1	1	126	6.6	24.3
<b>Givosiran</b>	<b>150</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>480</b>	<b>14.2</b>	<b>47.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	46	1	1	1	1	480	18.8	71.7
41-64 years	77	1	1	1	1	210	12.2	31.1
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****
<b>Cenobamate</b>	<b>7,201</b>	<b>1</b>	<b>28</b>	<b>46</b>	<b>114</b>	<b>1,045</b>	<b>122.1</b>	<b>181.3</b>
0-17 years	205	1	28	43	113	794	104.2	148.7
18-24 years	723	1	28	42	114	1,045	124.2	190.6
25-40 years	2,607	1	28	56	118	1,018	130.1	190.2
41-64 years	2,926	1	28	46	115	944	121.9	178.6
≥ 65 years	740	1	28	30	84	1,014	97.9	155.0
<b>Voxelotor</b>	<b>2,718</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,104</b>	<b>67.2</b>	<b>98.1</b>
0-17 years	335	1	30	30	90	840	72.8	93.8
18-24 years	318	1	30	30	60	895	61.6	84.2
25-40 years	1,207	1	30	30	60	1,033	62.0	90.0
41-64 years	776	1	30	30	60	1,104	74.3	114.3
≥ 65 years	82	9	30	30	90	745	75.4	107.8
<b>Golodirsen</b>	<b>43</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>30</b>	<b>332</b>	<b>37.3</b>	<b>74.0</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>3,640</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>168</b>	<b>1.3</b>	<b>4.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	13	1	1	1	1	1	1.0	0.0
41-64 years	418	1	1	1	1	168	2.1	10.5
≥ 65 years	3,209	1	1	1	1	140	1.2	3.5
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>813</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	309	1	1	1	1	1	1.0	0.0
≥ 65 years	478	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>17,075</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>61</b>	<b>1,058</b>	<b>69.9</b>	<b>97.4</b>
0-17 years	95	3	30	30	60	768	70.5	103.6
18-24 years	1,184	1	30	30	60	645	56.9	64.8
25-40 years	5,459	1	30	30	60	1,058	67.8	94.8
41-64 years	8,676	1	30	30	73	992	73.1	101.7
≥ 65 years	1,661	1	30	30	60	972	69.2	100.2
<b>Lemborexant</b>	<b>16,996</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>925</b>	<b>56.9</b>	<b>83.7</b>
0-17 years	19	4	30	30	35	90	35.3	17.8
18-24 years	388	1	30	30	60	712	55.0	79.5
25-40 years	2,285	1	30	30	60	873	54.9	80.7
41-64 years	8,023	1	30	30	60	909	59.3	85.7
≥ 65 years	6,281	1	30	30	30	925	54.6	82.4
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>7,566</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>399</b>	<b>1.5</b>	<b>8.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	2,641	1	1	1	1	167	1.4	5.9
≥ 65 years	4,589	1	1	1	1	399	1.5	8.6
<b>Ubrogepant</b>	<b>111,136</b>	<b>1</b>	<b>10</b>	<b>30</b>	<b>30</b>	<b>1,098</b>	<b>36.2</b>	<b>57.2</b>
0-17 years	514	1	10	30	30	384	31.9	36.7
18-24 years	5,841	1	10	30	30	720	31.3	41.4
25-40 years	28,732	1	10	30	30	983	34.8	53.0
41-64 years	58,815	1	10	30	30	1,098	37.6	60.2
≥ 65 years	17,234	1	10	30	30	1,046	35.6	58.1

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

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**Table 6a. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)										
	1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days		
	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	
<i>Tenapanor</i>	576	407	70.7%	144	25.0%	25	4.3%	0	0.0%	0	0.0%
<i>Trifarotene</i>	12,323	11,168	90.6%	1,012	8.2%	*****	*****	*****	*****	0	0.0%
<i>Brolucizumab-dbl</i>	75,502	75,468	100.0%	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Afamelanotide</i>	159	159	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Fluorodopa F-18</i>	0	.	.	.	.	.	.	.	.	.	.
<i>Lasmiditan</i>	12,695	11,040	87.0%	1,266	10.0%	365	2.9%	*****	*****	*****	*****
<i>Elexacaftor Ivacaftor Tezacaftor</i>	31,406	17,690	56.3%	8,108	25.8%	4,864	15.5%	577	1.8%	167	0.5%
<i>Air Polymer-Type A</i>	0	.	.	.	.	*****	*****	*****	*****	*****	*****
<i>Luspatercept-aamt</i>	44,262	44,041	99.5%	141	0.3%	*****	*****	*****	*****	*****	*****
<i>Zanubrutinib</i>	4,634	2,506	54.1%	1,356	29.3%	716	15.5%	*****	*****	*****	*****
<i>Cefiderocol</i>	448	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
<i>Crizanlizumab-tmca</i>	11,561	11,374	98.4%	144	1.2%	*****	*****	*****	*****	0	0.0%
<i>Givosiran</i>	1,257	1,205	95.9%	33	2.6%	19	1.5%	0	0.0%	0	0.0%
<i>Cenobamate</i>	9,212	4,504	48.9%	2,338	25.4%	1,750	19.0%	534	5.8%	86	0.9%
<i>Voxelotor</i>	5,719	3,973	69.5%	1,234	21.6%	468	8.2%	*****	*****	*****	*****
<i>Golodirsen</i>	597	577	96.6%	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Enfortumab Vedotin-ejfv</i>	39,182	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
<i>Brilliant Blue G Ophthalmic Solution</i>	38	38	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Lumateperone Tosylate</i>	16,370	9,343	57.1%	4,493	27.4%	2,288	14.0%	229	1.4%	17	0.1%
<i>Lemborexant</i>	23,835	16,670	69.9%	5,082	21.3%	1,896	8.0%	*****	*****	*****	*****
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	45,799	45,720	99.8%	60	0.1%	*****	*****	*****	*****	0	0.0%
<i>Ubrogepant</i>	257,592	218,765	84.9%	28,534	11.1%	9,547	3.7%	692	0.3%	54	0.0%

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**Table 6b. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	576	1	30	30	44	203	39.1	28.3
<i>Trifarotene</i>	12,323	1	30	30	30	510	33.3	18.8
<i>Brolucizumab-dbll</i>	75,502	1	1	1	1	193	1.1	1.8
<i>Afamelanotide</i>	159	1	1	1	1	1	1.0	0.0
<i>Fluorodopa F-18</i>	0	.	.	.	.	.	.	.
<i>Lasmiditan</i>	12,695	1	8	18	30	816	26.4	37.7
<i>Elexacaftor Ivacaftor Tezacaftor</i>	31,406	1	28	28	84	1,180	73.3	106.4
<i>Air Polymer-Type A</i>	0	.	.	.	.	.	.	.
<i>Luspatercept-aamt</i>	44,262	1	1	1	1	1,008	1.6	10.4
<i>Zanubrutinib</i>	4,634	1	30	30	76	877	67.3	75.1
<i>Cefiderocol</i>	448	1	1	1	7	58	4.9	7.4
<i>Crizanlizumab-tmca</i>	11,561	1	1	1	1	476	3.3	14.3
<i>Givosiran</i>	1,257	1	1	1	1	363	6.7	27.4
<i>Cenobamate</i>	9,212	1	30	35	100	942	103.7	146.2
<i>Voxelotor</i>	5,719	1	30	30	60	1,018	52.0	60.9
<i>Golodirsen</i>	597	1	1	1	1	364	5.5	22.9
<i>Enfortumab Vedotin-ejfv</i>	39,182	1	1	1	1	112	1.0	1.3
<i>Brilliant Blue G Ophthalmic Solution</i>	38	1	1	1	1	1	1.0	0.0
<i>Lumateperone Tosylate</i>	16,370	1	30	30	60	886	64.9	79.7
<i>Lemborexant</i>	23,835	1	30	30	60	818	52.0	60.9
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	45,799	1	1	1	1	379	1.2	4.6
<i>Ubrogepant</i>	257,592	1	10	20	30	1,059	29.3	43.9

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<b>Tenapanor</b>	<b>576</b>	<b>407</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	474	338	83.0%	****	****	****	****	0	NaN	0	NaN
Male	102	69	17.0%	****	****	****	****	0	NaN	0	NaN
<b>Trifarotene</b>	<b>12,323</b>	<b>11,168</b>	<b>100.0%</b>	<b>1,012</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
Female	8,802	8,025	71.9%	685	67.7%	****	****	****	****	0	NaN
Male	3,521	3,143	28.1%	327	32.3%	****	****	****	****	0	NaN
<b>Brolucizumab-dbl</b>	<b>75,502</b>	<b>75,468</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	42,269	****	****	****	****	****	****	0	NaN	0	NaN
Male	33,233	****	****	****	****	****	****	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>159</b>	<b>159</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
Female	74	74	46.5%	0	NaN	0	NaN	0	NaN	0	NaN
Male	85	85	53.5%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	.	.	.	.	.	.	.	.	.	.	.
Female	.	.	.	.	.	.	.	.	.	.	.
Male	.	.	.	.	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>11,040</b>	<b>100.0%</b>	<b>1,266</b>	<b>100.0%</b>	<b>365</b>	<b>100.0%</b>	****	****	****	****
Female	10,886	9,489	86.0%	1,069	84.4%	****	****	****	****	****	****
Male	1,809	1,551	14.0%	197	15.6%	****	****	****	****	****	****
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>17,690</b>	<b>100.0%</b>	<b>8,108</b>	<b>100.0%</b>	<b>4,864</b>	<b>100.0%</b>	<b>577</b>	<b>100.0%</b>	<b>167</b>	<b>100.0%</b>
Female	15,637	8,900	50.3%	3,983	49.1%	2,389	49.1%	283	49.0%	82	49.1%
Male	15,769	8,790	49.7%	4,125	50.9%	2,475	50.9%	294	51.0%	85	50.9%
<b>Air Polymer-Type A</b>	.	.	.	.	.	.	.	.	.	.	.
Female	.	.	.	.	.	.	.	.	.	.	.
Male	.	.	.	.	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>44,041</b>	<b>100.0%</b>	<b>141</b>	<b>100.0%</b>	****	****	****	****	****	****
Female	20,036	19,918	45.2%	78	55.3%	****	****	****	****	0	0.0%
Male	24,226	24,123	54.8%	63	44.7%	****	****	****	****	****	100.0%
<b>Zanubrutinib</b>	<b>4,634</b>	<b>2,506</b>	<b>100.0%</b>	<b>1,356</b>	<b>100.0%</b>	<b>716</b>	<b>100.0%</b>	****	****	****	****
Female	1,880	1,038	41.4%	530	39.1%	289	40.4%	****	****	****	****



**Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Male	2,754	1,468	58.6%	826	60.9%	427	59.6%	*****	*****	*****	*****
<b>Cefiderocol</b>	<b>448</b>	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Female	206	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	242	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>11,561</b>	<b>11,374</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	*****	*****	*****	*****	0	NaN
Female	6,718	6,590	57.9%	99	68.8%	*****	*****	*****	*****	0	NaN
Male	4,843	4,784	42.1%	45	31.3%	14	*****	0	0.0%	0	NaN
<b>Givosiran</b>	<b>1,257</b>	<b>1,205</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	0	NaN	0	NaN
Female	1,068	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
Male	189	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Cenobamate</b>	<b>9,212</b>	<b>4,504</b>	<b>100.0%</b>	<b>2,338</b>	<b>100.0%</b>	<b>1,750</b>	<b>100.0%</b>	<b>534</b>	<b>100.0%</b>	<b>86</b>	<b>100.0%</b>
Female	4,606	2,327	51.7%	1,137	48.6%	833	47.6%	266	49.8%	43	50.0%
Male	4,606	2,177	48.3%	1,201	51.4%	917	52.4%	268	50.2%	43	50.0%
<b>Voxelotor</b>	<b>5,719</b>	<b>3,973</b>	<b>100.0%</b>	<b>1,234</b>	<b>100.0%</b>	<b>468</b>	<b>100.0%</b>	*****	*****	*****	*****
Female	3,396	2,400	60.4%	695	56.3%	277	59.2%	*****	*****	*****	*****
Male	2,323	1,573	39.6%	539	43.7%	191	40.8%	20	*****	0	0.0%
<b>Golodirsén</b>	<b>597</b>	<b>577</b>	<b>100.0%</b>	*****	*****	*****	*****	0	NaN	0	NaN
Female	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
Male	597	577	100.0%	*****	*****	*****	*****	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
Female	10,564	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
Male	28,618	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>38</b>	<b>100.0%</b>	0	NaN	0	NaN	0	NaN	0	NaN
Female	20	20	52.6%	0	NaN	0	NaN	0	NaN	0	NaN
Male	18	18	47.4%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>9,343</b>	<b>100.0%</b>	<b>4,493</b>	<b>100.0%</b>	<b>2,288</b>	<b>100.0%</b>	<b>229</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>
Female	8,504	4,910	52.6%	2,349	52.3%	1,146	50.1%	*****	*****	*****	*****
Male	7,866	4,433	47.4%	2,144	47.7%	1,142	49.9%	*****	*****	*****	*****
<b>Lemborexant</b>	<b>23,835</b>	<b>16,670</b>	<b>100.0%</b>	<b>5,082</b>	<b>100.0%</b>	<b>1,896</b>	<b>100.0%</b>	*****	*****	*****	*****

**Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
Female	14,968	10,418	62.5%	3,218	63.3%	1,201	63.3%	*****	*****	*****	*****
Male	8,867	6,252	37.5%	1,864	36.7%	695	36.7%	*****	*****	*****	*****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>45,720</b>	<b>100.0%</b>	<b>60</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
Female	41,262	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
Male	4,537	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
<b>Ubrogepant</b>	<b>257,592</b>	<b>218,765</b>	<b>100.0%</b>	<b>28,534</b>	<b>100.0%</b>	<b>9,547</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>	<b>54</b>	<b>100.0%</b>
Female	227,393	193,134	88.3%	25,214	88.4%	8,395	87.9%	*****	*****	*****	*****
Male	30,199	25,631	11.7%	3,320	11.6%	1,152	12.1%	*****	*****	*****	*****

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>576</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>44</b>	<b>203</b>	<b>39.1</b>	<b>28.3</b>
Female	474	1	30	30	36	203	38.5	28.3
Male	102	1	30	30	60	149	41.5	28.4
<b>Trifarotene</b>	<b>12,323</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>510</b>	<b>33.3</b>	<b>18.8</b>
Female	8,802	1	30	30	30	510	33.0	18.0
Male	3,521	1	30	30	30	477	34.1	20.6
<b>Brolucizumab-dbl</b>	<b>75,502</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>193</b>	<b>1.1</b>	<b>1.8</b>
Female	42,269	1	1	1	1	193	1.1	2.2
Male	33,233	1	1	1	1	129	1.0	1.1
<b>Afamelanotide</b>	<b>159</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	74	1	1	1	1	1	1.0	0.0
Male	85	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>1</b>	<b>8</b>	<b>18</b>	<b>30</b>	<b>816</b>	<b>26.4</b>	<b>37.7</b>
Female	10,886	1	8	18	30	816	26.2	37.0
Male	1,809	1	8	17	30	778	27.5	41.4
<b>Elxacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>84</b>	<b>1,180</b>	<b>73.3</b>	<b>106.4</b>
Female	15,637	1	28	28	80	1,180	72.6	106.4
Male	15,769	1	28	28	84	1,146	73.9	106.4
<b>Air Polymer-Type A</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1,008</b>	<b>1.6</b>	<b>10.4</b>
Female	20,036	1	1	1	1	525	1.7	9.6
Male	24,226	1	1	1	1	1,008	1.6	11.0
<b>Zanubrutinib</b>	<b>4,634</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>76</b>	<b>877</b>	<b>67.3</b>	<b>75.1</b>
Female	1,880	1	30	30	62	877	67.1	77.4
Male	2,754	1	30	30	83	779	67.4	73.5
<b>Cefiderocol</b>	<b>448</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>58</b>	<b>4.9</b>	<b>7.4</b>

**Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	206	1	1	1	7	32	4.4	5.4
Male	242	1	1	1	6	58	5.3	8.7
<b>Crizanlizumab-tmca</b>	<b>11,561</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>476</b>	<b>3.3</b>	<b>14.3</b>
Female	6,718	1	1	1	1	476	3.6	15.8
Male	4,843	1	1	1	1	270	2.8	11.7
<b>Givosiran</b>	<b>1,257</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>363</b>	<b>6.7</b>	<b>27.4</b>
Female	1,068	1	1	1	1	363	6.7	27.1
Male	189	1	1	1	1	272	7.0	29.1
<b>Cenobamate</b>	<b>9,212</b>	<b>1</b>	<b>30</b>	<b>35</b>	<b>100</b>	<b>942</b>	<b>103.7</b>	<b>146.2</b>
Female	4,606	1	30	30	90	890	101.7	145.7
Male	4,606	1	30	44	111	942	105.7	146.7
<b>Voxelotor</b>	<b>5,719</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,018</b>	<b>52.0</b>	<b>60.9</b>
Female	3,396	1	30	30	60	1,018	51.6	61.4
Male	2,323	1	30	30	60	690	52.8	60.4
<b>Golodirsen</b>	<b>597</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>364</b>	<b>5.5</b>	<b>22.9</b>
Female	0	*NaN	*NaN	*NaN	*NaN	*NaN	*NaN	*NaN
Male	597	1	1	1	1	364	5.5	22.9
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>112</b>	<b>1.0</b>	<b>1.3</b>
Female	10,564	1	1	1	1	57	1.0	1.2
Male	28,618	1	1	1	1	112	1.0	1.4
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
Female	20	1	1	1	1	1	1.0	0.0
Male	18	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>886</b>	<b>64.9</b>	<b>79.7</b>
Female	8,504	1	30	30	60	858	62.2	74.2
Male	7,866	1	30	30	67	886	67.8	85.1
<b>Lemborexant</b>	<b>23,835</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>818</b>	<b>52.0</b>	<b>60.9</b>
Female	14,968	1	30	30	60	735	52.2	61.6
Male	8,867	1	30	30	60	818	51.5	59.8
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>379</b>	<b>1.2</b>	<b>4.6</b>
Female	41,262	1	1	1	1	379	1.2	4.6

**Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	4,537	1	1	1	1	210	1.1	4.1
<b>Ubrogepant</b>	<b>257,592</b>	<b>1</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>1,059</b>	<b>29.3</b>	<b>43.9</b>
Female	227,393	1	10	20	30	1,059	29.2	43.7
Male	30,199	1	10	20	30	823	29.7	45.0

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<b>Tenapanor</b>	<b>576</b>	<b>407</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	18	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	72	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	299	208	51.1%	79	54.9%	12	48.0%	0	NaN	0	NaN
≥ 65 years	187	130	31.9%	*****	*****	*****	*****	0	NaN	0	NaN
<b>Trifarotene</b>	<b>12,323</b>	<b>11,168</b>	<b>100.0%</b>	<b>1,012</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>
0-17 years	5,615	5,076	45.5%	460	45.5%	*****	*****	*****	*****	0	NaN
18-24 years	2,978	2,688	24.1%	265	26.2%	25	*****	0	0.0%	0	NaN
25-40 years	2,540	2,315	20.7%	202	20.0%	*****	*****	*****	*****	0	NaN
41-64 years	1,133	*****	*****	*****	*****	16	*****	0	0.0%	0	NaN
≥ 65 years	57	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
<b>Brolucizumab-dblb</b>	<b>75,502</b>	<b>75,468</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	28	28	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	1,069	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	74,405	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Afamelanotide</b>	<b>159</b>	<b>159</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	27	27	17.0%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	32	32	20.1%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	78	78	49.1%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	22	22	13.8%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Fluorodopa F-18</b>	.	.	.	.	.	.	.	.	.	.	.
0-17 years	.	.	.	.	.	.	.	.	.	.	.
18-24 years	.	.	.	.	.	.	.	.	.	.	.
25-40 years	.	.	.	.	.	.	.	.	.	.	.
41-64 years	.	.	.	.	.	.	.	.	.	.	.

**Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
≥ 65 years	.	.	.	.	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>11,040</b>	<b>100.0%</b>	<b>1,266</b>	<b>100.0%</b>	<b>365</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	33	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	252	*****	*****	*****	*****	12	3.3%	0	0.0%	0	0.0%
25-40 years	2,620	2,258	20.5%	274	21.6%	*****	*****	*****	*****	*****	*****
41-64 years	8,109	7,085	64.2%	785	62.0%	225	61.6%	*****	*****	*****	*****
≥ 65 years	1,681	1,457	13.2%	175	13.8%	*****	*****	*****	*****	0	0.0%
<b>Eluxacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>17,690</b>	<b>100.0%</b>	<b>8,108</b>	<b>100.0%</b>	<b>4,864</b>	<b>100.0%</b>	<b>577</b>	<b>100.0%</b>	<b>167</b>	<b>100.0%</b>
0-17 years	7,151	4,015	22.7%	1,835	22.6%	1,156	23.8%	120	20.8%	25	15.0%
18-24 years	7,288	4,294	24.3%	1,896	23.4%	999	20.5%	79	13.7%	20	12.0%
25-40 years	12,809	7,299	41.3%	3,302	40.7%	1,887	38.8%	242	41.9%	79	47.3%
41-64 years	3,587	1,826	10.3%	932	11.5%	694	14.3%	*****	*****	*****	*****
≥ 65 years	571	256	1.4%	143	1.8%	128	2.6%	*****	*****	*****	*****
<b>Air Polymer-Type A</b>	.	.	.	.	.	.	.	.	.	.	.
0-17 years	.	.	.	.	.	.	.	.	.	.	.
18-24 years	.	.	.	.	.	.	.	.	.	.	.
25-40 years	.	.	.	.	.	.	.	.	.	.	.
41-64 years	.	.	.	.	.	.	.	.	.	.	.
≥ 65 years	.	.	.	.	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>44,041</b>	<b>100.0%</b>	<b>141</b>	<b>100.0%</b>	*****	*****	*****	*****	*****	*****
0-17 years	26	26	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	104	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	733	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
41-64 years	2,246	2,222	5.0%	*****	*****	*****	*****	0	0.0%	0	0.0%
≥ 65 years	41,153	40,965	93.0%	118	83.7%	*****	*****	*****	*****	*****	*****
<b>Zanubrutinib</b>	<b>4,634</b>	<b>2,506</b>	<b>100.0%</b>	<b>1,356</b>	<b>100.0%</b>	<b>716</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%

**Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
≥ 65 years	4,219	2,281	91.0%	1,237	91.2%	648	90.5%	*****	*****	*****	*****
<b>Cefiderocol</b>	<b>448</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
41-64 years	143	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
≥ 65 years	251	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
<b>Crizanlizumab-tmca</b>	<b>11,561</b>	<b>11,374</b>	<b>100.0%</b>	<b>144</b>	<b>100.0%</b>	*****	*****	*****	*****	<b>0</b>	<b>NaN</b>
0-17 years	355	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
18-24 years	1,435	1,417	12.5%	*****	*****	*****	*****	0	0.0%	0	NaN
25-40 years	6,579	6,457	56.8%	95	66.0%	27	64.3%	0	0.0%	0	NaN
41-64 years	2,874	2,836	24.9%	*****	*****	*****	*****	*****	*****	0	NaN
≥ 65 years	318	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
<b>Givosiran</b>	<b>1,257</b>	<b>1,205</b>	<b>100.0%</b>	<b>33</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	80	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	425	403	33.4%	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	583	555	46.1%	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	169	*****	*****	0	0.0%	*****	*****	0	NaN	0	NaN
<b>Cenobamate</b>	<b>9,212</b>	<b>4,504</b>	<b>100.0%</b>	<b>2,338</b>	<b>100.0%</b>	<b>1,750</b>	<b>100.0%</b>	<b>534</b>	<b>100.0%</b>	<b>86</b>	<b>100.0%</b>
0-17 years	180	93	2.1%	43	1.8%	*****	*****	*****	*****	*****	*****
18-24 years	813	424	9.4%	199	8.5%	*****	*****	*****	*****	*****	*****
25-40 years	3,400	1,674	37.2%	844	36.1%	639	36.5%	213	39.9%	30	34.9%
41-64 years	3,918	1,873	41.6%	1,021	43.7%	755	43.1%	227	42.5%	42	48.8%
≥ 65 years	901	440	9.8%	231	9.9%	178	10.2%	*****	*****	*****	*****
<b>Voxelotor</b>	<b>5,719</b>	<b>3,973</b>	<b>100.0%</b>	<b>1,234</b>	<b>100.0%</b>	<b>468</b>	<b>100.0%</b>	*****	*****	*****	*****
0-17 years	476	310	7.8%	117	9.5%	*****	*****	*****	*****	0	0.0%
18-24 years	519	384	9.7%	97	7.9%	*****	*****	*****	*****	0	0.0%



**Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
25-40 years	2,653	1,881	47.3%	568	46.0%	187	40.0%	*****	*****	*****	*****
41-64 years	1,907	1,271	32.0%	431	34.9%	183	39.1%	*****	*****	*****	*****
≥ 65 years	164	127	3.2%	21	1.7%	*****	*****	*****	*****	0	0.0%
<b>Golodirsen</b>	<b>597</b>	<b>577</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	561	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	19	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	17	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	34,886	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>38</b>	<b>100.0%</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	25	25	65.8%	0	NaN	0	NaN	0	NaN	0	NaN
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>9,343</b>	<b>100.0%</b>	<b>4,493</b>	<b>100.0%</b>	<b>2,288</b>	<b>100.0%</b>	<b>229</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>
0-17 years	55	33	0.4%	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	848	479	5.1%	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	5,186	2,958	31.7%	1,435	31.9%	732	32.0%	*****	*****	*****	*****
41-64 years	8,728	4,954	53.0%	2,382	53.0%	1,236	54.0%	*****	*****	*****	*****
≥ 65 years	1,553	919	9.8%	421	9.4%	196	8.6%	17	7.4%	0	0.0%
<b>Lemborexant</b>	<b>23,835</b>	<b>16,670</b>	<b>100.0%</b>	<b>5,082</b>	<b>100.0%</b>	<b>1,896</b>	<b>100.0%</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>	<b>*****</b>
0-17 years	17	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%

**Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Number of Treatment Episodes by Duration (Excluding First Treatment Episode)									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
		Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
18-24 years	479	****	****	****	****	****	****	****	****	****	****
25-40 years	3,293	2,366	14.2%	696	13.7%	218	11.5%	13	****	0	0.0%
41-64 years	11,974	8,380	50.3%	2,551	50.2%	950	50.1%	****	****	****	****
≥ 65 years	8,072	5,572	33.4%	1,730	34.0%	695	36.7%	****	****	****	****
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>45,720</b>	<b>100.0%</b>	<b>60</b>	<b>100.0%</b>	****	****	****	****	<b>0</b>	<b>NaN</b>
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	38	38	0.1%	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	1,978	****	****	****	****	****	****	0	0.0%	0	NaN
41-64 years	16,759	****	****	16	26.7%	****	****	****	****	0	NaN
≥ 65 years	27,024	26,980	59.0%	****	****	****	****	0	0.0%	0	NaN
<b>Ubrogepant</b>	<b>257,592</b>	<b>218,765</b>	<b>100.0%</b>	<b>28,534</b>	<b>100.0%</b>	<b>9,547</b>	<b>100.0%</b>	<b>692</b>	<b>100.0%</b>	<b>54</b>	<b>100.0%</b>
0-17 years	807	679	0.3%	108	0.4%	****	****	****	****	0	0.0%
18-24 years	9,624	8,278	3.8%	1,052	3.7%	282	3.0%	12	1.7%	0	0.0%
25-40 years	62,385	53,183	24.3%	6,837	24.0%	2,210	23.1%	****	****	****	****
41-64 years	151,390	128,310	58.7%	16,864	59.1%	5,759	60.3%	419	60.5%	38	70.4%
≥ 65 years	33,386	28,315	12.9%	3,673	12.9%	****	****	****	****	****	****

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>576</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>44</b>	<b>203</b>	<b>39.1</b>	<b>28.3</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	18	10	25	30	37	90	35.8	19.4
25-40 years	72	9	30	30	30	203	36.4	25.8
41-64 years	299	1	30	30	48	200	39.6	28.5
≥ 65 years	187	1	30	30	48	180	39.5	29.7
<b>Trifarotene</b>	<b>12,323</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>510</b>	<b>33.3</b>	<b>18.8</b>
0-17 years	5,615	1	30	30	30	477	33.7	20.7
18-24 years	2,978	1	30	30	30	300	33.1	15.7
25-40 years	2,540	1	30	30	30	510	32.5	18.3
41-64 years	1,133	2	30	30	30	270	33.3	17.3
≥ 65 years	57	10	30	30	30	72	30.5	9.2
<b>Brolucizumab–dbll</b>	<b>75,502</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>193</b>	<b>1.1</b>	<b>1.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	28	1	1	1	1	1	1.0	0.0
41-64 years	1,069	1	1	1	1	129	1.5	5.5
≥ 65 years	74,405	1	1	1	1	193	1.0	1.7
<b>Afamelanotide</b>	<b>159</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	27	1	1	1	1	1	1.0	0.0
25-40 years	32	1	1	1	1	1	1.0	0.0
41-64 years	78	1	1	1	1	1	1.0	0.0
≥ 65 years	22	1	1	1	1	1	1.0	0.0
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>1</b>	<b>8</b>	<b>18</b>	<b>30</b>	<b>816</b>	<b>26.4</b>	<b>37.7</b>

**Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	33	2	8	24	30	150	24.5	26.1
18-24 years	252	2	8	24	30	330	30.6	38.7
25-40 years	2,620	1	8	24	30	778	28.0	43.0
41-64 years	8,109	1	8	18	30	816	26.0	36.3
≥ 65 years	1,681	1	8	14	30	698	25.2	35.2
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>1</b>	<b>28</b>	<b>28</b>	<b>84</b>	<b>1,180</b>	<b>73.3</b>	<b>106.4</b>
0-17 years	7,151	1	28	28	84	1,122	71.5	97.2
18-24 years	7,288	1	28	28	56	1,124	63.6	84.6
25-40 years	12,809	1	28	28	72	1,180	73.1	108.8
41-64 years	3,587	1	28	28	84	1,146	90.5	135.2
≥ 65 years	571	5	28	56	112	1,038	116.2	166.6
<b>Air Polymer-Type A</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1,008</b>	<b>1.6</b>	<b>10.4</b>
0-17 years	26	1	1	1	1	1	1.0	0.0
18-24 years	104	1	1	1	1	189	5.6	20.5
25-40 years	733	1	1	1	1	84	1.4	4.1
41-64 years	2,246	1	1	1	1	315	2.3	11.9
≥ 65 years	41,153	1	1	1	1	1,008	1.6	10.3
<b>Zanubrutinib</b>	<b>4,634</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>76</b>	<b>877</b>	<b>67.3</b>	<b>75.1</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	4,219	1	30	30	76	877	67.5	75.8
<b>Cefiderocol</b>	<b>448</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>58</b>	<b>4.9</b>	<b>7.4</b>
0-17 years	*****	*****	*****	*****	*****	*****	*****	*****

**Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	143	1	1	1	7	32	5.0	6.8
≥ 65 years	251	1	1	1	6	58	4.8	8.0
<b>Crizanlizumab-tmca</b>	<b>11,561</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>476</b>	<b>3.3</b>	<b>14.3</b>
0-17 years	355	1	1	1	1	196	3.3	14.7
18-24 years	1,435	1	1	1	1	219	3.0	11.8
25-40 years	6,579	1	1	1	1	364	3.6	14.6
41-64 years	2,874	1	1	1	1	476	2.9	15.3
≥ 65 years	318	1	1	1	1	56	1.3	3.8
<b>Givosiran</b>	<b>1,257</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>363</b>	<b>6.7</b>	<b>27.4</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	80	1	1	1	1	39	2.2	6.2
25-40 years	425	1	1	1	1	300	8.5	29.8
41-64 years	583	1	1	1	1	348	7.1	27.1
≥ 65 years	169	1	1	1	1	363	3.2	27.9
<b>Cenobamate</b>	<b>9,212</b>	<b>1</b>	<b>30</b>	<b>35</b>	<b>100</b>	<b>942</b>	<b>103.7</b>	<b>146.2</b>
0-17 years	180	4	30	30	90	786	87.4	121.6
18-24 years	813	1	30	30	90	894	97.1	143.9
25-40 years	3,400	1	30	34	104	906	106.1	149.4
41-64 years	3,918	1	30	42	107	942	105.5	148.5
≥ 65 years	901	1	30	35	97	874	96.3	129.7
<b>Voxelotor</b>	<b>5,719</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>1,018</b>	<b>52.0</b>	<b>60.9</b>
0-17 years	476	1	30	30	60	480	52.0	50.6
18-24 years	519	1	30	30	50	516	47.5	51.9
25-40 years	2,653	1	30	30	60	1,018	49.6	57.0
41-64 years	1,907	1	30	30	60	780	56.9	69.7
≥ 65 years	164	1	30	30	30	660	49.7	63.5
<b>Golodirsen</b>	<b>597</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>364</b>	<b>5.5</b>	<b>22.9</b>
0-17 years	561	1	1	1	1	112	2.7	10.2
18-24 years	19	1	1	17	28	56	18.3	18.1

**Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	17	5	28	56	84	364	82.6	93.9
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>112</b>	<b>1.0</b>	<b>1.3</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	90	1	1	1	1	1	1.0	0.0
41-64 years	4,206	1	1	1	1	28	1.0	0.8
≥ 65 years	34,886	1	1	1	1	112	1.0	1.4
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.0</b>	<b>0.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	25	1	1	1	1	1	1.0	0.0
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>886</b>	<b>64.9</b>	<b>79.7</b>
0-17 years	55	2	30	30	60	180	53.4	43.3
18-24 years	848	1	30	30	70	886	65.8	81.2
25-40 years	5,186	1	30	30	60	875	64.3	77.1
41-64 years	8,728	1	30	30	65	830	66.5	82.8
≥ 65 years	1,553	1	30	30	60	641	58.0	70.1
<b>Lemborexant</b>	<b>23,835</b>	<b>1</b>	<b>30</b>	<b>30</b>	<b>60</b>	<b>818</b>	<b>52.0</b>	<b>60.9</b>
0-17 years	17	30	30	30	60	334	65.4	78.1
18-24 years	479	2	30	30	54	818	52.0	72.5
25-40 years	3,293	1	30	30	60	542	47.7	49.4
41-64 years	11,974	1	30	30	60	788	51.8	60.5
≥ 65 years	8,072	1	30	30	60	804	53.9	64.8
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>379</b>	<b>1.2</b>	<b>4.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	38	1	1	1	1	1	1.0	0.0
25-40 years	1,978	1	1	1	1	126	1.3	4.2

**Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	16,759	1	1	1	1	379	1.2	5.9
≥ 65 years	27,024	1	1	1	1	273	1.2	3.6
<b>Ubrogepant</b>	<b>257,592</b>	<b>1</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>1,059</b>	<b>29.3</b>	<b>43.9</b>
0-17 years	807	1	10	26	30	485	27.2	30.8
18-24 years	9,624	1	10	24	30	630	28.0	34.8
25-40 years	62,385	1	10	21	30	1,014	28.7	41.7
41-64 years	151,390	1	10	20	30	1,059	29.4	44.8
≥ 65 years	33,386	1	10	20	30	894	30.4	46.4

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

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 7a. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	576	1	4	10	26	237	20.4	28.5
<i>Trifarotene</i>	12,323	1	24	61	116	1,024	90.9	103.3
<i>Brolucizumab-dbll</i>	75,502	1	34	55	69	1,026	58.9	44.9
<i>Afamelanotide</i>	159	44	55	62	75	340	79.4	48.7
<i>Fluorodopa F-18</i>	0	.	.	.	.	.	.	.
<i>Lasmiditan</i>	12,695	1	10	23	47	1,109	43.2	68.7
<i>Elexacaftor Ivacaftor Tezacaftor</i>	31,406	1	3	7	16	1,055	18.6	48.7
<i>Air Polymer-Type A</i>	0	.	.	.	.	.	.	.
<i>Luspatercept-aamt</i>	44,262	1	20	20	21	838	24.0	18.8
<i>Zanubrutinib</i>	4,634	1	2	5	13	443	14.4	31.6
<i>Cefiderocol</i>	448	1	3	12	47	430	38.6	62.6
<i>Crizanlizumab-tmca</i>	11,561	1	27	27	34	831	36.0	39.4
<i>Givosiran</i>	1,257	1	27	27	29	356	30.0	21.6
<i>Cenobamate</i>	9,212	1	2	5	14	802	17.1	44.9
<i>Voxelotor</i>	5,719	1	4	11	27	867	30.2	67.7
<i>Golodirsen</i>	597	1	6	6	6	54	7.8	5.7
<i>Enfortumab Vedotin-ejfv</i>	39,182	1	6	6	13	763	10.9	15.2
<i>Brilliant Blue G Ophthalmic Solution</i>	38	7	32	80	160	538	118.6	123.9
<i>Lumateperone Tosylate</i>	16,370	1	3	6	16	748	18.8	47.6
<i>Lemborexant</i>	23,835	1	3	9	26	892	25.9	52.5
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	45,799	1	20	20	21	854	23.2	16.8
<i>Ubrogepant</i>	257,592	1	10	24	54	1,025	47.2	70.7

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.



**Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>576</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>26</b>	<b>237</b>	<b>20.4</b>	<b>28.5</b>
Female	474	1	4	9	25	237	20.1	29.2
Male	102	1	3	13	31	138	22.0	24.7
<b>Trifarotene</b>	<b>12,323</b>	<b>1</b>	<b>24</b>	<b>61</b>	<b>116</b>	<b>1,024</b>	<b>90.9</b>	<b>103.3</b>
Female	8,802	1	26	63	122	1,024	95.5	106.8
Male	3,521	1	20	52	100	965	79.2	92.9
<b>Brolucizumab-dbll</b>	<b>75,502</b>	<b>1</b>	<b>34</b>	<b>55</b>	<b>69</b>	<b>1,026</b>	<b>58.9</b>	<b>44.9</b>
Female	42,269	1	34	55	69	1,026	59.3	44.9
Male	33,233	1	34	55	69	980	58.3	45.0
<b>Afamelanotide</b>	<b>159</b>	<b>44</b>	<b>55</b>	<b>62</b>	<b>75</b>	<b>340</b>	<b>79.4</b>	<b>48.7</b>
Female	74	49	55	62	70	340	74.5	41.7
Male	85	44	55	62	76	315	83.6	54.0
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>1</b>	<b>10</b>	<b>23</b>	<b>47</b>	<b>1,109</b>	<b>43.2</b>	<b>68.7</b>
Female	10,886	1	10	23	47	1,109	43.1	68.2
Male	1,809	1	9	22	47	763	44.3	71.3
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>16</b>	<b>1,055</b>	<b>18.6</b>	<b>48.7</b>
Female	15,637	1	3	7	16	1,055	19.0	50.2
Male	15,769	1	3	7	16	1,026	18.2	47.0
<b>Air Polymer-Type A</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>838</b>	<b>24.0</b>	<b>18.8</b>
Female	20,036	1	20	20	21	582	23.8	18.0
Male	24,226	1	20	20	21	838	24.1	19.5
<b>Zanubrutinib</b>	<b>4,634</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>13</b>	<b>443</b>	<b>14.4</b>	<b>31.6</b>
Female	1,880	1	3	6	14	395	15.0	30.0
Male	2,754	1	2	5	13	443	14.0	32.6
<b>Cefiderocol</b>	<b>448</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>47</b>	<b>430</b>	<b>38.6</b>	<b>62.6</b>

**Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	206	1	5	14	59	370	43.8	66.0
Male	242	1	2	10	34	430	34.2	59.3
<b>Crizanlizumab-tmca</b>	<b>11,561</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>34</b>	<b>831</b>	<b>36.0</b>	<b>39.4</b>
Female	6,718	1	27	27	34	817	36.3	41.1
Male	4,843	1	27	27	34	831	35.5	37.1
<b>Givosiran</b>	<b>1,257</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>29</b>	<b>356</b>	<b>30.0</b>	<b>21.6</b>
Female	1,068	1	27	27	29	356	30.2	23.0
Male	189	1	27	27	29	98	28.8	10.7
<b>Cenobamate</b>	<b>9,212</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>14</b>	<b>802</b>	<b>17.1</b>	<b>44.9</b>
Female	4,606	1	2	5	15	645	18.2	47.6
Male	4,606	1	2	5	13	802	15.9	41.9
<b>Voxelotor</b>	<b>5,719</b>	<b>1</b>	<b>4</b>	<b>11</b>	<b>27</b>	<b>867</b>	<b>30.2</b>	<b>67.7</b>
Female	3,396	1	4	11	27	867	31.7	71.4
Male	2,323	1	4	10	26	736	27.9	61.7
<b>Golodirsen</b>	<b>597</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>54</b>	<b>7.8</b>	<b>5.7</b>
Female	0	*NaN	*NaN	*NaN	*NaN	*NaN	*NaN	*NaN
Male	597	1	6	6	6	54	7.8	5.7
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>763</b>	<b>10.9</b>	<b>15.2</b>
Female	10,564	1	6	6	13	447	10.7	14.0
Male	28,618	1	6	6	13	763	11.0	15.6
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>7</b>	<b>32</b>	<b>80</b>	<b>160</b>	<b>538</b>	<b>118.6</b>	<b>123.9</b>
Female	20	7	41	80	184	515	124.6	119.8
Male	18	13	27	80	118	538	111.9	131.5
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>748</b>	<b>18.8</b>	<b>47.6</b>
Female	8,504	1	3	6	16	748	19.6	52.4
Male	7,866	1	2	6	16	642	17.8	41.7
<b>Lemborexant</b>	<b>23,835</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>26</b>	<b>892</b>	<b>25.9</b>	<b>52.5</b>
Female	14,968	1	3	9	25	788	25.5	51.4
Male	8,867	1	3	9	26	892	26.5	54.5
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>854</b>	<b>23.2</b>	<b>16.8</b>
Female	41,262	1	20	20	21	854	23.2	17.2

**Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	4,537	1	20	20	21	356	23.5	13.6
<b>Ubrogepant</b>	<b>257,592</b>	<b>1</b>	<b>10</b>	<b>24</b>	<b>54</b>	<b>1,025</b>	<b>47.2</b>	<b>70.7</b>
Female	227,393	1	10	25	54	1,025	47.2	70.7
Male	30,199	1	9	23	53	904	46.8	71.1

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>576</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>26</b>	<b>237</b>	<b>20.4</b>	<b>28.5</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	18	1	3	7	22	116	17.5	27.5
25-40 years	72	1	4	10	29	150	22.5	31.2
41-64 years	299	1	3	8	22	237	18.0	28.7
≥ 65 years	187	1	5	14	35	175	23.7	26.9
<b>Trifarotene</b>	<b>12,323</b>	<b>1</b>	<b>24</b>	<b>61</b>	<b>116</b>	<b>1,024</b>	<b>90.9</b>	<b>103.3</b>
0-17 years	5,615	1	24	60	110	1,024	88.1	101.7
18-24 years	2,978	1	25	61	115	779	89.8	98.1
25-40 years	2,540	1	23	63	120	958	95.0	109.3
41-64 years	1,133	1	25	63	134	809	98.4	109.9
≥ 65 years	57	1	28	61	151	464	92.5	93.0
<b>Brolucizumab-dbl</b>	<b>75,502</b>	<b>1</b>	<b>34</b>	<b>55</b>	<b>69</b>	<b>1,026</b>	<b>58.9</b>	<b>44.9</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	28	27	34	61	89	226	65.8	40.8
41-64 years	1,069	2	34	55	69	559	58.9	42.3
≥ 65 years	74,405	1	34	55	69	1,026	58.9	44.9
<b>Afamelanotide</b>	<b>159</b>	<b>44</b>	<b>55</b>	<b>62</b>	<b>75</b>	<b>340</b>	<b>79.4</b>	<b>48.7</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	27	54	56	62	69	153	68.8	25.1
25-40 years	32	49	58	62	69	315	83.7	62.4
41-64 years	78	44	55	62	76	279	80.1	43.5
≥ 65 years	22	50	55	62	69	340	83.7	64.9
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>12,695</b>	<b>1</b>	<b>10</b>	<b>23</b>	<b>47</b>	<b>1,109</b>	<b>43.2</b>	<b>68.7</b>

**Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	33	2	33	55	112	401	93.7	100.3
18-24 years	252	1	14	28	73	684	59.4	87.6
25-40 years	2,620	1	9	24	48	874	44.3	69.4
41-64 years	8,109	1	10	22	46	1,109	41.3	65.7
≥ 65 years	1,681	1	10	23	52	782	47.4	76.7
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>31,406</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>16</b>	<b>1,055</b>	<b>18.6</b>	<b>48.7</b>
0-17 years	7,151	1	3	7	15	956	16.5	40.7
18-24 years	7,288	1	3	7	20	1,026	20.8	49.8
25-40 years	12,809	1	3	7	16	888	18.8	50.9
41-64 years	3,587	1	2	6	14	1,055	17.6	51.3
≥ 65 years	571	1	2	5	14	691	19.1	54.9
<b>Air Polymer-Type A</b>	<b>0</b>	.	.	.	.	.	.	.
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>44,262</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>838</b>	<b>24.0</b>	<b>18.8</b>
0-17 years	26	17	20	20	23	45	23.4	7.5
18-24 years	104	2	20	20	27	299	27.4	30.2
25-40 years	733	1	20	20	26	526	27.9	34.8
41-64 years	2,246	1	20	20	21	582	23.7	19.1
≥ 65 years	41,153	1	20	20	21	838	23.9	18.4
<b>Zanubrutinib</b>	<b>4,634</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>13</b>	<b>443</b>	<b>14.4</b>	<b>31.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	6	1	2	3	5	14	4.5	4.8
25-40 years	4	2	2	4	7	7	4.3	2.6
41-64 years	405	1	3	5	11	384	12.3	28.9
≥ 65 years	4,219	1	2	5	14	443	14.7	31.9
<b>Cefiderocol</b>	<b>448</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>47</b>	<b>430</b>	<b>38.6</b>	<b>62.6</b>
0-17 years	3	3	3	6	58	58	22.3	30.9

**Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	4	6	7	19	168	306	87.3	146.2
25-40 years	47	1	3	6	23	430	35.3	80.5
41-64 years	143	1	3	11	44	312	39.5	61.8
≥ 65 years	251	1	2	14	52	370	38.2	57.7
<b>Crizalizumab-tmca</b>	<b>11,561</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>34</b>	<b>831</b>	<b>36.0</b>	<b>39.4</b>
0-17 years	355	1	26	27	33	326	30.0	21.1
18-24 years	1,435	1	27	27	35	831	36.8	43.5
25-40 years	6,579	1	27	27	34	817	37.2	42.2
41-64 years	2,874	1	27	27	32	814	34.2	34.0
≥ 65 years	318	1	27	27	27	91	28.7	9.8
<b>Givosiran</b>	<b>1,257</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>29</b>	<b>356</b>	<b>30.0</b>	<b>21.6</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	80	2	27	27	34	149	32.3	18.5
25-40 years	425	1	27	27	29	356	30.7	28.8
41-64 years	583	1	27	27	29	221	29.4	18.2
≥ 65 years	169	1	27	27	27	118	28.9	9.5
<b>Cenobamate</b>	<b>9,212</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>14</b>	<b>802</b>	<b>17.1</b>	<b>44.9</b>
0-17 years	180	1	2	5	17	272	16.9	36.7
18-24 years	813	1	2	6	16	538	20.4	50.9
25-40 years	3,400	1	2	5	14	645	17.5	46.1
41-64 years	3,918	1	2	5	13	802	16.1	42.5
≥ 65 years	901	1	2	5	13	630	16.5	45.7
<b>Voxelotor</b>	<b>5,719</b>	<b>1</b>	<b>4</b>	<b>11</b>	<b>27</b>	<b>867</b>	<b>30.2</b>	<b>67.7</b>
0-17 years	476	1	3	8	21	274	17.5	27.3
18-24 years	519	1	5	12	32	472	28.8	49.2
25-40 years	2,653	1	5	11	29	867	33.0	70.7
41-64 years	1,907	1	4	10	25	797	29.3	70.7
≥ 65 years	164	1	5	11	24	832	36.5	101.2
<b>Golodirsen</b>	<b>597</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>54</b>	<b>7.8</b>	<b>5.7</b>
0-17 years	561	1	6	6	6	54	7.7	5.6
18-24 years	19	1	4	6	14	31	10.5	9.1

**Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	17	1	2	6	8	21	6.7	6.0
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>39,182</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>763</b>	<b>10.9</b>	<b>15.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	90	6	6	13	27	100	17.9	13.6
41-64 years	4,206	3	6	6	13	496	10.8	14.1
≥ 65 years	34,886	1	6	6	13	763	10.9	15.3
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>38</b>	<b>7</b>	<b>32</b>	<b>80</b>	<b>160</b>	<b>538</b>	<b>118.6</b>	<b>123.9</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	1	538	538	538	538	538	538.0	NaN
25-40 years	1	164	164	164	164	164	164.0	NaN
41-64 years	11	27	41	118	230	515	166.7	146.4
≥ 65 years	25	7	27	55	111	251	78.8	67.9
<b>Lumateperone Tosylate</b>	<b>16,370</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>748</b>	<b>18.8</b>	<b>47.6</b>
0-17 years	55	1	2	8	20	229	21.3	43.1
18-24 years	848	1	3	7	17	568	17.6	37.8
25-40 years	5,186	1	3	6	16	721	18.9	47.5
41-64 years	8,728	1	2	6	15	732	19.1	49.4
≥ 65 years	1,553	1	2	5	15	748	16.7	42.0
<b>Lemborexant</b>	<b>23,835</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>26</b>	<b>892</b>	<b>25.9</b>	<b>52.5</b>
0-17 years	17	1	3	6	28	80	18.8	24.0
18-24 years	479	1	3	7	25	496	23.2	45.1
25-40 years	3,293	1	3	9	27	794	25.9	51.6
41-64 years	11,974	1	3	8	24	788	24.2	48.8
≥ 65 years	8,072	1	3	9	27	892	28.5	58.3
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>45,799</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>854</b>	<b>23.2</b>	<b>16.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	38	17	20	20	26	55	23.7	7.8
25-40 years	1,978	1	20	20	21	440	23.5	14.2

**Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	16,759	1	20	20	21	843	23.4	18.9
≥ 65 years	27,024	1	20	20	20	854	23.1	15.6
<b>Ubrogepant</b>	<b>257,592</b>	<b>1</b>	<b>10</b>	<b>24</b>	<b>54</b>	<b>1,025</b>	<b>47.2</b>	<b>70.7</b>
0-17 years	807	1	11	27	71	608	59.9	82.2
18-24 years	9,624	1	12	29	64	787	54.1	75.7
25-40 years	62,385	1	10	25	54	1,022	47.0	70.0
41-64 years	151,390	1	10	24	52	1,025	45.7	68.8
≥ 65 years	33,386	1	10	25	58	936	51.7	78.3

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.



**Table 8a. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<i>Tenapanor</i>	376	1	4	10	29	237	22.5	31.8
<i>Trifarotene</i>	7,358	1	26	62	124	1,024	95.8	108.0
<i>Brolucizumab-dbll</i>	12,243	1	28	35	55	1,014	51.7	59.7
<i>Afamelanotide</i>	33	51	59	62	70	340	84.3	66.0
<i>Fluorodopa F-18</i>	0	.	.	.	.	.	.	.
<i>Lasmiditan</i>	3,365	1	10	27	63	1,109	56.6	88.7
<i>Elexacaftor Ivacaftor Tezacaftor</i>	6,637	1	3	6	16	1,055	23.7	72.3
<i>Air Polymer-Type A</i>	0	.	.	.	.	.	.	.
<i>Luspatercept-aamt</i>	4,124	1	20	20	21	838	24.6	27.7
<i>Zanubrutinib</i>	1,664	1	3	6	16	418	16.3	36.8
<i>Cefiderocol</i>	231	1	6	21	65	430	49.3	71.2
<i>Crizanlizumab-tmca</i>	1,520	1	13	22	31	682	34.3	55.5
<i>Givosiran</i>	129	1	27	27	32	356	40.1	52.1
<i>Cenobamate</i>	3,662	1	3	6	18	645	23.0	57.5
<i>Voxelotor</i>	1,670	1	4	10	30	867	34.0	81.6
<i>Golodirsen</i>	38	2	6	6	13	40	11.3	9.8
<i>Enfortumab Vedotin-ejfv</i>	3,371	2	6	6	6	390	8.6	14.2
<i>Brilliant Blue G Ophthalmic Solution</i>	36	7	33	90	162	538	122.9	125.8
<i>Lumateperone Tosylate</i>	6,911	1	3	7	18	748	22.6	57.1
<i>Lemborexant</i>	7,834	1	3	10	31	892	32.8	66.4
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	6,468	1	20	20	21	572	23.2	18.4
<i>Ubrogepant</i>	66,443	1	11	30	72	1,025	61.8	91.6

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>376</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>29</b>	<b>237</b>	<b>22.5</b>	<b>31.8</b>
Female	308	1	4	9	26	237	22.1	33.0
Male	68	1	4	16	38	138	24.2	26.3
<b>Trifarotene</b>	<b>7,358</b>	<b>1</b>	<b>26</b>	<b>62</b>	<b>124</b>	<b>1,024</b>	<b>95.8</b>	<b>108.0</b>
Female	5,354	1	27	64	131	1,024	100.3	111.3
Male	2,004	1	22	55	105	965	83.6	97.7
<b>Brolucizumab-dbil</b>	<b>12,243</b>	<b>1</b>	<b>28</b>	<b>35</b>	<b>55</b>	<b>1,014</b>	<b>51.7</b>	<b>59.7</b>
Female	7,068	1	28	35	55	1,014	51.6	57.1
Male	5,175	1	27	35	55	964	51.9	63.0
<b>Afamelanotide</b>	<b>33</b>	<b>51</b>	<b>59</b>	<b>62</b>	<b>70</b>	<b>340</b>	<b>84.3</b>	<b>66.0</b>
Female	15	51	59	62	69	340	81.1	71.9
Male	18	54	59	62	83	315	87.0	62.7
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>3,365</b>	<b>1</b>	<b>10</b>	<b>27</b>	<b>63</b>	<b>1,109</b>	<b>56.6</b>	<b>88.7</b>
Female	2,888	1	10	27	62	1,109	55.8	87.3
Male	477	1	11	27	70	616	61.7	96.2
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>6,637</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>1,055</b>	<b>23.7</b>	<b>72.3</b>
Female	3,259	1	3	6	17	1,055	26.2	79.9
Male	3,378	1	3	6	16	1,026	21.2	64.0
<b>Air Polymer-Type A</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
Female	0	.	.	.	.	.	.	.
Male	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>4,124</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>838</b>	<b>24.6</b>	<b>27.7</b>
Female	1,797	1	20	20	21	397	24.5	23.7
Male	2,327	1	20	20	21	838	24.7	30.4
<b>Zanubrutinib</b>	<b>1,664</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>418</b>	<b>16.3</b>	<b>36.8</b>
Female	661	1	3	6	17	395	16.9	35.7
Male	1,003	1	2	5	15	418	15.9	37.5
<b>Cefiderocol</b>	<b>231</b>	<b>1</b>	<b>6</b>	<b>21</b>	<b>65</b>	<b>430</b>	<b>49.3</b>	<b>71.2</b>

**Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Female	101	1	8	27	72	370	59.3	80.5
Male	130	1	6	18	50	430	41.5	62.2
<b>Crizanlizumab-tmca</b>	<b>1,520</b>	<b>1</b>	<b>13</b>	<b>22</b>	<b>31</b>	<b>682</b>	<b>34.3</b>	<b>55.5</b>
Female	890	1	13	20	30	682	32.9	53.5
Male	630	1	13	26	31	610	36.3	58.2
<b>Givosiran</b>	<b>129</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>32</b>	<b>356</b>	<b>40.1</b>	<b>52.1</b>
Female	107	1	27	27	32	356	42.1	56.3
Male	22	3	27	27	29	98	30.6	20.6
<b>Cenobamate</b>	<b>3,662</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>18</b>	<b>645</b>	<b>23.0</b>	<b>57.5</b>
Female	1,819	1	3	6	18	645	24.9	63.5
Male	1,843	1	3	6	18	630	21.1	50.9
<b>Voxelotor</b>	<b>1,670</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>30</b>	<b>867</b>	<b>34.0</b>	<b>81.6</b>
Female	973	1	4	11	30	867	34.6	83.5
Male	697	1	4	10	29	719	33.1	78.8
<b>Golodirsen</b>	<b>38</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>40</b>	<b>11.3</b>	<b>9.8</b>
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	38	2	6	6	13	40	11.3	9.8
<b>Enfortumab Vedotin-ejfv</b>	<b>3,371</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>390</b>	<b>8.6</b>	<b>14.2</b>
Female	903	3	6	6	6	336	8.4	13.4
Male	2,468	2	6	6	6	390	8.7	14.4
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>36</b>	<b>7</b>	<b>33</b>	<b>90</b>	<b>162</b>	<b>538</b>	<b>122.9</b>	<b>125.8</b>
Female	19	7	34	90	204	515	127.5	122.4
Male	17	20	32	90	118	538	117.8	133.1
<b>Lumateperone Tosylate</b>	<b>6,911</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>18</b>	<b>748</b>	<b>22.6</b>	<b>57.1</b>
Female	3,771	1	3	7	19	748	23.7	61.9
Male	3,140	1	3	6	18	642	21.3	50.6
<b>Lemborexant</b>	<b>7,834</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>31</b>	<b>892</b>	<b>32.8</b>	<b>66.4</b>
Female	4,974	1	3	10	30	788	32.4	64.9
Male	2,860	1	4	11	31	892	33.6	68.9
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>6,468</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>572</b>	<b>23.2</b>	<b>18.4</b>
Female	5,687	1	20	20	21	572	23.2	19.1

**Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Sex**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
Male	781	1	20	20	21	194	23.0	11.7
<b>Ubrogepant</b>	<b>66,443</b>	<b>1</b>	<b>11</b>	<b>30</b>	<b>72</b>	<b>1,025</b>	<b>61.8</b>	<b>91.6</b>
Female	58,306	1	11	30	72	1,025	61.7	91.3
Male	8,137	1	11	29	73	904	62.6	94.2

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
<b>Tenapanor</b>	<b>376</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>29</b>	<b>237</b>	<b>22.5</b>	<b>31.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	12	1	5	17	26	116	24.1	31.9
25-40 years	50	1	4	10	33	150	24.3	33.2
41-64 years	188	1	3	8	23	237	19.4	32.9
≥ 65 years	126	1	5	14	38	175	26.2	29.4
<b>Trifarotene</b>	<b>7,358</b>	<b>1</b>	<b>26</b>	<b>62</b>	<b>124</b>	<b>1,024</b>	<b>95.8</b>	<b>108.0</b>
0-17 years	3,241	1	26	61	119	1,024	94.8	109.2
18-24 years	1,826	1	25	63	120	779	93.3	102.1
25-40 years	1,602	1	24	64	125	958	97.7	111.3
41-64 years	658	1	26	65	139	809	102.1	110.1
≥ 65 years	31	1	41	72	152	464	109.4	103.0
<b>Brolucizumab–dbll</b>	<b>12,243</b>	<b>1</b>	<b>28</b>	<b>35</b>	<b>55</b>	<b>1,014</b>	<b>51.7</b>	<b>59.7</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	9	27	29	35	71	101	53.2	30.3
41-64 years	218	2	28	40	59	559	56.2	62.9
≥ 65 years	12,016	1	28	35	55	1,014	51.6	59.6
<b>Afamelanotide</b>	<b>33</b>	<b>51</b>	<b>59</b>	<b>62</b>	<b>70</b>	<b>340</b>	<b>84.3</b>	<b>66.0</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	4	55	57	60	62	62	59.3	3.1
25-40 years	8	51	58	65	73	315	94.6	89.4
41-64 years	15	54	55	62	83	154	74.5	28.8
≥ 65 years	6	62	62	66	75	340	111.7	112.0
<b>Fluorodopa F-18</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Lasmiditan</b>	<b>3,365</b>	<b>1</b>	<b>10</b>	<b>27</b>	<b>63</b>	<b>1,109</b>	<b>56.6</b>	<b>88.7</b>

**Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
0-17 years	11	4	33	60	213	401	115.7	137.1
18-24 years	111	1	14	32	81	490	68.2	91.8
25-40 years	760	1	10	27	60	794	53.2	81.9
41-64 years	2,034	1	11	26	59	1,109	53.4	84.8
≥ 65 years	449	1	11	32	84	782	72.7	109.9
<b>Elexacaftor Ivacaftor Tezacaftor</b>	<b>6,637</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>1,055</b>	<b>23.7</b>	<b>72.3</b>
0-17 years	1,849	1	3	6	15	956	18.9	57.3
18-24 years	1,602	1	3	7	20	1,026	25.1	71.4
25-40 years	2,340	1	3	6	15	870	25.4	78.1
41-64 years	687	1	2	6	16	1,055	25.0	82.8
≥ 65 years	159	1	2	5	16	691	33.4	94.9
<b>Air Polymer-Type A</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>
0-17 years	0	.	.	.	.	.	.	.
18-24 years	0	.	.	.	.	.	.	.
25-40 years	0	.	.	.	.	.	.	.
41-64 years	0	.	.	.	.	.	.	.
≥ 65 years	0	.	.	.	.	.	.	.
<b>Luspatercept-aamt</b>	<b>4,124</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>838</b>	<b>24.6</b>	<b>27.7</b>
0-17 years	1	20	20	20	20	20	20.0	NaN
18-24 years	20	4	20	20	33	299	40.2	63.9
25-40 years	76	14	20	20	28	160	28.1	20.4
41-64 years	214	1	20	20	21	92	22.2	9.3
≥ 65 years	3,813	1	20	20	21	838	24.6	28.2
<b>Zanubrutinib</b>	<b>1,664</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>16</b>	<b>418</b>	<b>16.3</b>	<b>36.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	2	1	1	2	2	2	1.5	0.7
25-40 years	2	2	2	5	7	7	4.5	3.5
41-64 years	152	1	2	5	11	384	11.4	33.1
≥ 65 years	1,508	1	3	6	17	418	16.9	37.2
<b>Cefiderocol</b>	<b>231</b>	<b>1</b>	<b>6</b>	<b>21</b>	<b>65</b>	<b>430</b>	<b>49.3</b>	<b>71.2</b>
0-17 years	1	58	58	58	58	58	58.0	NaN

**Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
18-24 years	3	6	6	8	306	306	106.7	172.6
25-40 years	28	1	5	17	36	430	51.7	98.3
41-64 years	73	1	4	16	57	312	47.4	72.0
≥ 65 years	126	1	8	28	65	370	48.5	60.8
<b>Crizanolizumab-tmca</b>	<b>1,520</b>	<b>1</b>	<b>13</b>	<b>22</b>	<b>31</b>	<b>682</b>	<b>34.3</b>	<b>55.5</b>
0-17 years	61	2	13	14	27	89	23.2	16.8
18-24 years	244	1	13	25	31	423	32.3	42.5
25-40 years	835	1	13	25	32	682	38.2	66.8
41-64 years	346	1	13	21	29	362	29.7	36.7
≥ 65 years	34	1	13	14	27	48	20.1	10.4
<b>Givosiran</b>	<b>129</b>	<b>1</b>	<b>27</b>	<b>27</b>	<b>32</b>	<b>356</b>	<b>40.1</b>	<b>52.1</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	8	2	16	28	53	91	35.5	31.4
25-40 years	42	1	25	27	31	356	52.0	78.2
41-64 years	65	2	27	27	32	221	35.6	35.1
≥ 65 years	14	1	27	27	29	53	27.9	10.7
<b>Cenobamate</b>	<b>3,662</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>18</b>	<b>645</b>	<b>23.0</b>	<b>57.5</b>
0-17 years	85	1	3	8	21	272	24.1	49.4
18-24 years	347	1	3	7	18	538	26.4	65.3
25-40 years	1,355	1	2	6	19	645	22.9	57.7
41-64 years	1,514	1	3	6	18	628	21.9	54.5
≥ 65 years	361	1	3	7	19	630	24.0	62.9
<b>Voxelotor</b>	<b>1,670</b>	<b>1</b>	<b>4</b>	<b>10</b>	<b>30</b>	<b>867</b>	<b>34.0</b>	<b>81.6</b>
0-17 years	197	1	4	9	22	274	19.3	31.3
18-24 years	192	1	5	10	33	277	26.9	41.9
25-40 years	744	1	4	11	32	867	34.4	79.2
41-64 years	489	1	4	11	29	797	40.6	101.4
≥ 65 years	48	1	3	10	33	832	47.2	131.9
<b>Golodirsén</b>	<b>38</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>40</b>	<b>11.3</b>	<b>9.8</b>
0-17 years	30	2	6	6	8	40	10.2	9.4
18-24 years	6	3	4	12	31	31	15.5	12.6

**Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
25-40 years	2	7	7	14	21	21	14.0	9.9
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
<b>Enfortumab Vedotin-ejfv</b>	<b>3,371</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>390</b>	<b>8.6</b>	<b>14.2</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	12	6	6	6	13	13	8.4	3.4
41-64 years	388	4	6	6	7	237	8.9	13.1
≥ 65 years	2,971	2	6	6	6	390	8.6	14.3
<b>Brilliant Blue G Ophthalmic Solution</b>	<b>36</b>	<b>7</b>	<b>33</b>	<b>90</b>	<b>162</b>	<b>538</b>	<b>122.9</b>	<b>125.8</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	1	538	538	538	538	538	538.0	NaN
25-40 years	1	164	164	164	164	164	164.0	NaN
41-64 years	11	27	41	118	230	515	166.7	146.4
≥ 65 years	23	7	27	55	118	251	82.1	69.4
<b>Lumateperone Tosylate</b>	<b>6,911</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>18</b>	<b>748</b>	<b>22.6</b>	<b>57.1</b>
0-17 years	25	1	2	6	15	229	28.1	57.8
18-24 years	405	1	3	8	16	410	18.3	38.1
25-40 years	2,238	1	3	7	18	721	22.6	57.8
41-64 years	3,622	1	3	7	18	732	22.9	58.2
≥ 65 years	621	1	3	7	19	748	23.3	58.4
<b>Lemborexant</b>	<b>7,834</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>31</b>	<b>892</b>	<b>32.8</b>	<b>66.4</b>
0-17 years	7	2	4	12	28	61	18.0	21.0
18-24 years	171	1	3	8	30	388	27.3	51.2
25-40 years	1,088	1	4	11	32	794	31.4	65.2
41-64 years	3,828	1	3	10	29	788	30.5	61.7
≥ 65 years	2,740	1	4	11	33	892	37.0	73.5
<b>Fam-Trastuzumab Deruxtecan-nxki</b>	<b>6,468</b>	<b>1</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>572</b>	<b>23.2</b>	<b>18.4</b>
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	5	20	20	20	27	27	22.8	3.8
25-40 years	298	1	20	20	22	440	25.2	28.1



**Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023, by Age Group**

	Total Number of Gaps	Distribution of First Treatment Episode Gap Duration, days						Standard Deviation
		Minimum	Q1	Median	Q3	Maximum	Mean	
41-64 years	2,283	1	20	20	21	558	23.2	18.8
≥ 65 years	3,882	1	20	20	20	572	23.0	17.2
<b>Ubrogepant</b>	<b>66,443</b>	<b>1</b>	<b>11</b>	<b>30</b>	<b>72</b>	<b>1,025</b>	<b>61.8</b>	<b>91.6</b>
0-17 years	274	1	11	30	91	481	68.1	87.9
18-24 years	3,052	1	13	33	81	787	66.5	92.6
25-40 years	16,958	1	11	29	69	1,022	59.2	87.5
41-64 years	37,002	1	11	29	70	1,025	59.6	89.2
≥ 65 years	9,157	1	12	34	87	936	73.5	106.5

Data presented by a dash, period, or NaN (Not a Number) is due to their inability to be calculated. This table may not use all data representations.

**Table 9. Summary of Reasons Treatment Episodes Ended for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023<sup>1</sup>**

	Censoring Reason												
	End of Exposure Episode <sup>2</sup>		Occurrence of User-Defined Censoring Criteria <sup>3</sup>		Evidence of Death <sup>4</sup>		Disenrollment <sup>5</sup>		End of Data <sup>6</sup>		End of Study Period <sup>7</sup>		
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>Tenapanor</i>	1,849	*****	*****	0	0.0%	*****	*****	646	34.9%	554	30.0%	554	30.0%
<i>Trifarotene</i>	33,760	33,760	100.0%	0	0.0%	0	0.0%	1,603	4.7%	792	2.3%	792	2.3%
<i>Brolucizumab–dbll</i>	92,860	92,860	100.0%	0	0.0%	*****	*****	25	0.0%	18	0.0%	18	0.0%
<i>Afamelanotide</i>	199	199	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Fluorodopa F-18</i>	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Lasmiditan</i>	19,429	19,415	99.9%	0	0.0%	14	0.1%	1,086	5.6%	733	3.8%	733	3.8%
<i>Elexacaftor Ivacaftor Tezacaftor</i>	41,044	40,996	99.9%	0	0.0%	53	0.1%	7,139	17.4%	5,138	12.5%	5,138	12.5%
<i>Air Polymer-Type A</i>	25	25	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<i>Luspatercept–aamt</i>	48,881	48,861	100.0%	0	0.0%	21	0.0%	65	0.1%	49	0.1%	49	0.1%
<i>Zanubrutinib</i>	7,684	7,549	98.2%	0	0.0%	146	1.9%	1,678	21.8%	1,497	19.5%	1,497	19.5%
<i>Cefiderocol</i>	1,410	*****	*****	0	0.0%	*****	*****	*****	*****	*****	*****	*****	*****
<i>Crizanlizumab-tmca</i>	13,359	*****	*****	0	0.0%	*****	*****	66	0.5%	49	0.4%	49	0.4%
<i>Givosiran</i>	1,407	*****	*****	0	0.0%	*****	*****	20	1.4%	16	1.1%	16	1.1%
<i>Cenobamate</i>	16,413	16,344	99.6%	0	0.0%	73	0.4%	4,827	29.4%	3,989	24.3%	3,989	24.3%
<i>Voxelotor</i>	8,437	8,376	99.3%	0	0.0%	65	0.8%	1,029	12.2%	828	9.8%	828	9.8%
<i>Golodirsen</i>	640	640	100.0%	0	0.0%	*****	*****	15	2.3%	14	2.2%	14	2.2%
<i>Enfortumab Vedotin-ejfv</i>	42,822	*****	*****	0	0.0%	*****	*****	24	0.1%	19	0.0%	19	0.0%
<i>Brilliant Blue G Ophthalmic Solution</i>	851	851	100.0%	0	0.0%	0	0.0%	*****	*****	*****	*****	*****	*****
<i>Lumateperone Tosylate</i>	33,445	33,372	99.8%	0	0.0%	76	0.2%	7,079	21.2%	5,699	17.0%	5,699	17.0%

**Table 9. Summary of Reasons Treatment Episodes Ended for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023<sup>1</sup>**

		Censoring Reason											
		End of Exposure Episode <sup>2</sup>		Occurrence of User-Defined Censoring Criteria <sup>3</sup>		Evidence of Death <sup>4</sup>		Disenrollment <sup>5</sup>		End of Data <sup>6</sup>		End of Study Period <sup>7</sup>	
	Total Number of Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes	Number of Episodes	Percent of Total Episodes
<i>Lemborexant</i>	40,831	40,741	99.8%	0	0.0%	103	0.3%	4,711	11.5%	3,481	8.5%	3,481	8.5%
<i>Fam-Trastuzumab Deruxtecan-nxki</i>	53,365	*****	*****	0	0.0%	*****	*****	87	0.2%	69	0.1%	69	0.1%
<i>Ubrogepant</i>	368,728	368,619	100.0%	0	0.0%	119	0.0%	26,954	7.3%	18,751	5.1%	18,751	5.1%

<sup>1</sup>An episode may be censored due to more than one reason if they occur on the same date. Therefore, the sum of the reasons for censoring may be greater than the total number of episodes.  
<sup>2</sup>Represents episodes censored due to end of the exposure episode. In as-treated analyses, exposure episodes are defined using days supplied as recorded in outpatient pharmacy dispensing records, and episodes end after days supplied are exhausted or a pre-determined maximum episode duration is met. In point exposure analyses, exposure episodes end when a pre-determined maximum episode duration is met.  
<sup>3</sup>Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.  
<sup>4</sup>Represents episodes censored due to evidence of death. Death data source and completeness varies by Data Partner.  
<sup>5</sup>Represents episodes censored due to disenrollment from health plan. Data Partners often artificially assign a "disenrollment" date equal to data end date for members still enrolled on that date. Therefore, a patient may have dual reasons for censoring as "disenrollment" and "end of data" on the same day - this can be interpreted as right-censoring in most cases.  
<sup>6</sup>Represents episodes censored due to Data Partner data end date. This end date represents the last day of the most recent year-month in which all of a Data Partner's data tables in the Sentinel Common Data Model have at least 80% of the record count relative to the prior month.  
<sup>7</sup>Represents episodes censored due to user-specified study end date.

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

**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Tenapanor		Trifarotene		Brolucizumab-dbl		Afamelanotide	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	1,436	202,058,032	23,738	202,035,730	17,907	202,041,561	*****	*****
Claim recorded during specified age range	1,436	0	23,738	0	17,907	0	*****	0
Episode defining index claim recorded during the query period	1,436	0	23,738	0	17,907	0	*****	0
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	1,273	163	21,437	2,301	17,358	549	*****	*****
Met inclusion and exclusion criteria	1,273	0	21,437	0	17,358	0	*****	0
<b>Members with required post-index follow-up</b>								
Had sufficient post-index continuous enrollment	1,273	0	21,437	0	17,358	0	*****	0
<b>Final cohort</b>								
Number of members	1,273	N/A	21,437	N/A	17,358	N/A	40	N/A

**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Fluorodopa F-18		Lasmiditan		Elexacaftor Ivacaftor Tezacaftor		Air Polymer-Type A	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	*****	*****	7,548	202,051,920	11,204	202,048,264	*****	*****
Claim recorded during specified age range	*****	0	7,548	0	11,204	0	*****	0
Episode defining index claim recorded during the query period	*****	0	7,548	0	11,204	0	*****	0
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	*****	*****	6,734	814	9,638	1,566	*****	*****
Met inclusion and exclusion criteria	*****	0	6,734	0	9,638	0	*****	0
<b>Members with required post-index follow-up</b>								
Had sufficient post-index continuous enrollment	*****	0	6,734	0	9,638	0	*****	0
<b>Final cohort</b>								
Number of members	*****	N/A	6,734	N/A	9,638	N/A	25	N/A

**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Luspatercept-aamt		Zanubrutinib		Cefiderocol		Crizanlizumab-tmca	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	4,839	202,054,629	3,297	202,056,171	1,086	202,058,382	1,970	202,057,498
Claim recorded during specified age range	4,839	0	3,297	0	1,086	0	1,970	0
Episode defining index claim recorded during the query period	4,839	0	3,297	0	1,086	0	1,970	0
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	4,619	220	3,050	247	962	124	1,798	172
Met inclusion and exclusion criteria	4,619	0	3,050	0	962	0	1,798	0
<b>Members with required post-index follow-up</b>								
Had sufficient post-index continuous enrollment	4,619	0	3,050	0	962	0	1,798	0
<b>Final cohort</b>								
Number of members	4,619	N/A	3,050	N/A	962	N/A	1,798	N/A

**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Givosiran		Cenobamate		Voxelotor		Golodirsen	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	164	202,059,304	8,365	202,051,103	2,987	202,056,481	*****	*****
Claim recorded during specified age range	164	0	8,365	0	2,987	0	*****	0
Episode defining index claim recorded during the query period	164	0	8,365	0	2,987	0	*****	0
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	150	14	7,201	1,164	2,718	269	*****	*****
Met inclusion and exclusion criteria	150	0	7,201	0	2,718	0	*****	0
<b>Members with required post-index follow-up</b>								
Had sufficient post-index continuous enrollment	150	0	7,201	0	2,718	0	*****	0
<b>Final cohort</b>								
Number of members	150	N/A	7,201	N/A	2,718	N/A	43	N/A

**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Enfortumab Vedotin-ejfv		Brilliant Blue G Ophthalmic Solution		Lumateperone Tosylate		Lemborexant	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>								
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>								
Had any cohort-defining claim during the query period	3,895	202,055,573	916	202,058,552	19,723	202,039,745	19,424	202,040,044
Claim recorded during specified age range	3,895	0	916	0	19,723	0	19,424	0
Episode defining index claim recorded during the query period	3,895	0	916	0	19,723	0	19,424	0
<b>Members with required pre-index history</b>								
Had sufficient pre-index continuous enrollment	3,640	255	813	103	17,075	2,648	16,996	2,428
Met inclusion and exclusion criteria	3,640	0	813	0	17,075	0	16,996	0
<b>Members with required post-index follow-up</b>								
Had sufficient post-index continuous enrollment	3,640	0	813	0	17,075	0	16,996	0
<b>Final cohort</b>								
Number of members	3,640	N/A	813	N/A	17,075	N/A	16,996	N/A



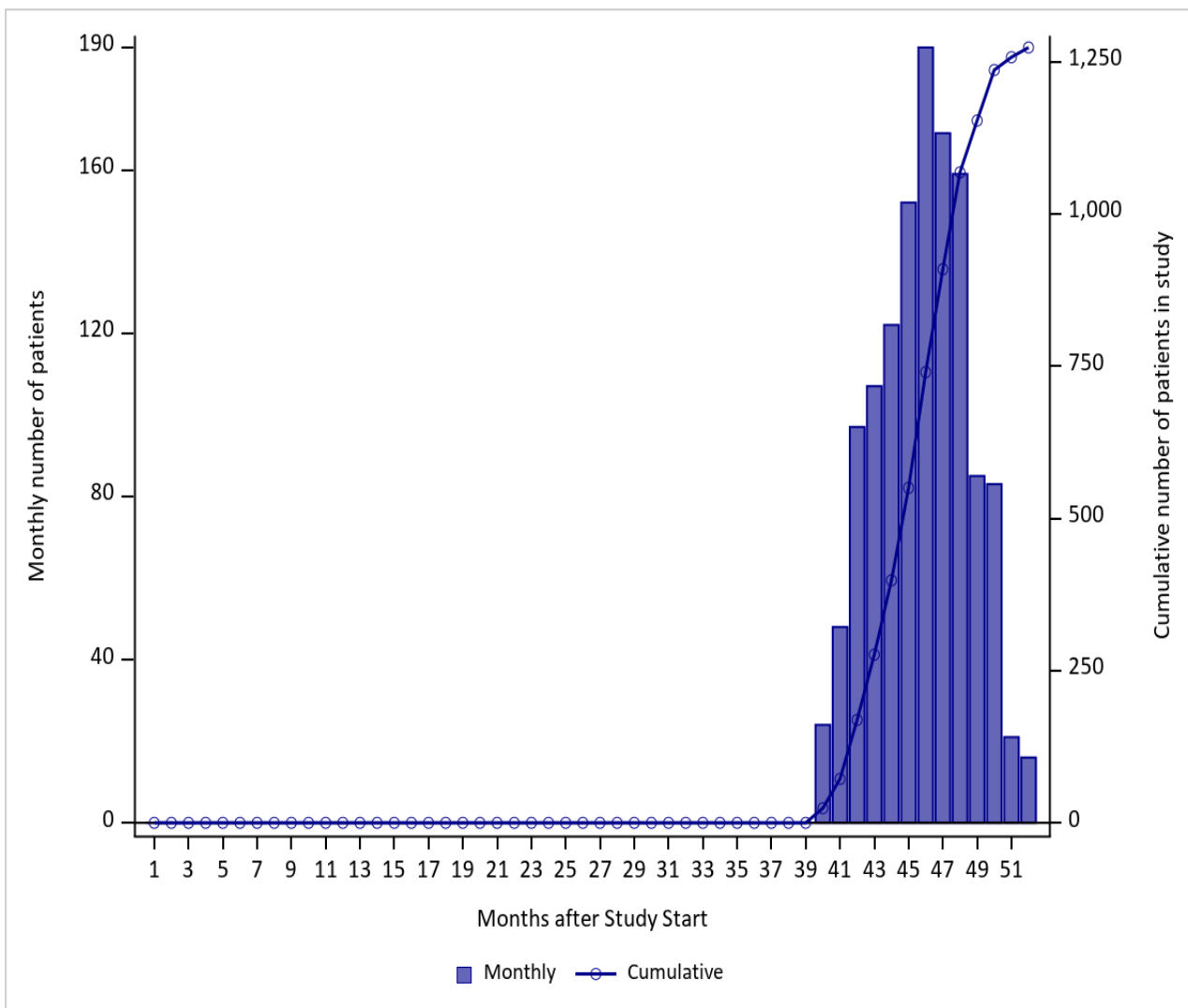
**Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

	Fam-Trastuzumab		Ubrogepant	
	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>				
Enrolled at any point during the query period	275,148,001	N/A	275,148,001	N/A
Had required coverage type (medical and/or drug coverage)	202,159,665	72,988,336	202,159,665	72,988,336
Enrolled during specified age range	202,133,388	26,277	202,133,388	26,277
Had requestable medical charts	202,133,388	0	202,133,388	0
Met demographic requirements (sex, race, and Hispanic origin)	202,059,468	73,920	202,059,468	73,920
<b>Members with a valid index event</b>				
Had any cohort-defining claim during the query period	8,406	202,051,062	125,979	201,933,489
Claim recorded during specified age range	8,406	0	125,979	0
Episode defining index claim recorded during the query period	8,406	0	125,979	0
<b>Members with required pre-index history</b>				
Had sufficient pre-index continuous enrollment	7,566	840	111,136	14,843
Met inclusion and exclusion criteria	7,566	0	111,136	0
<b>Members with required post-index follow-up</b>				
Had sufficient post-index continuous enrollment	7,566	0	111,136	0
<b>Final cohort</b>				
Number of members	7,566	N/A	111,136	N/A

N/A: Not Applicable

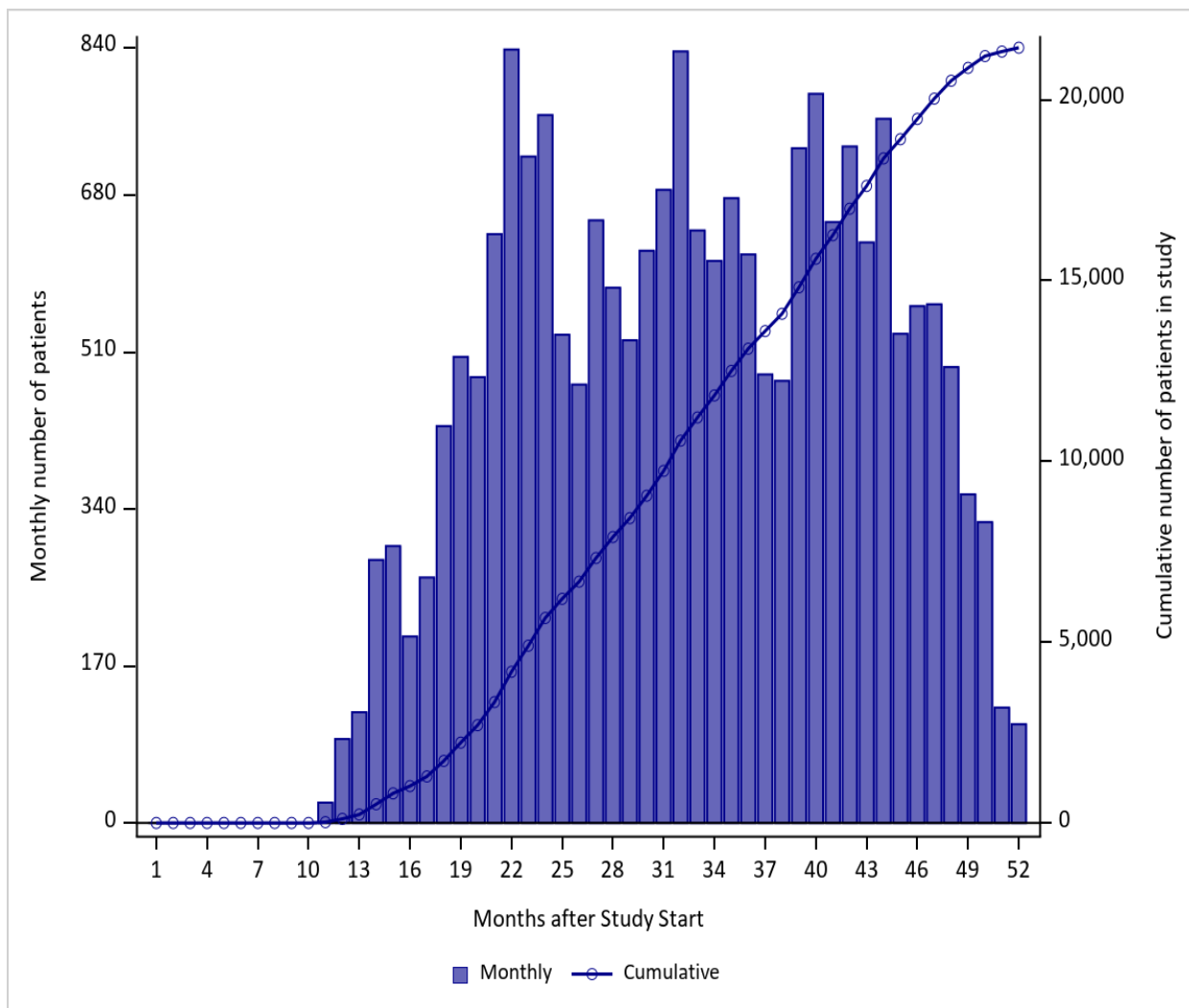
**Figure 1a. Patient Entry into Study by Month for Tenapanor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

The FDA approval date for this drug was on September 12, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>



**Figure 1b. Patient Entry into Study by Month for Trifarotene in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

The FDA approval date for this drug was on October 4, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>



**Figure 1c. Patient Entry into Study by Month for Brolucizumab–dbll in the Sentinel Distributed Database from January 1, 2019 to May 31,2023**

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The FDA approval date for this drug was on October 7, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

***\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.***

**Figure 1d. Patient Entry into Study by Month for Afamelanotide in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on October 8, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1e. Patient Entry into Study by Month for Fluorodopa F-18 in the Sentinel Distributed Database from January 1, 2019 to May 31,2023**

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The FDA approval date for this drug was on October 10, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1f. Patient Entry into Study by Month for Lasmiditan in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on October 11, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1g. Patient Entry into Study by Month for Elexacaftor Ivacaftor Tezacaftor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on October 21, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**



**Figure 1h. Patient Entry into Study by Month for Air Polymer-Type A in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 7, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1i. Patient Entry into Study by Month for Luspatercept–aamt in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 8, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1j. Patient Entry into Study by Month for Zanubrutinib in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 14, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1k. Patient Entry into Study by Month for Cefiderocol in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 14, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1I. Patient Entry into Study by Month for Crizanlizumab-tmca in the Sentinel Distributed Database from January 1, 2019 to May 31,2023**

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The FDA approval date for this drug was on November 15, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1m. Patient Entry into Study by Month for Givosiran in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 20, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1n. Patient Entry into Study by Month for Cenobamate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 21, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1o. Patient Entry into Study by Month for Voxelotor in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on November 25, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**



**Figure 1p. Patient Entry into Study by Month for Golodirsen in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on December 12, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1q. Patient Entry into Study by Month for Enfortumab Vedotin-ejfv in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on December 18, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1r. Patient Entry into Study by Month for Brilliant Blue G Ophthalmic Solution in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1s. Patient Entry into Study by Month for Lumateperone Tosylate in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

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The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

**Figure 1t. Patient Entry into Study by Month for Lemborexant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

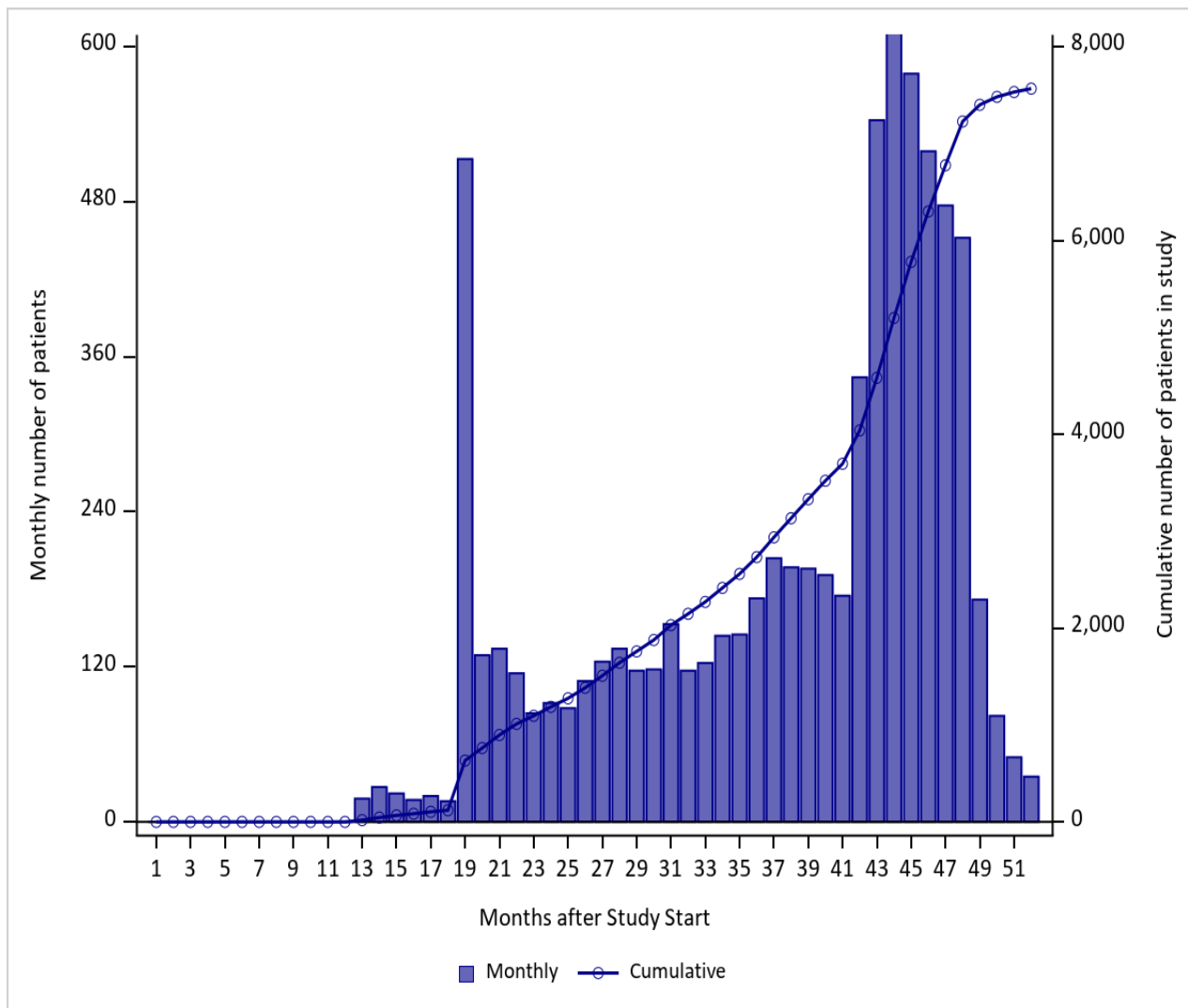
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The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>

**\*\*\*\*Data are not presented due to a small sample size or to ensure a small cell cannot be recalculated through the data presented.**

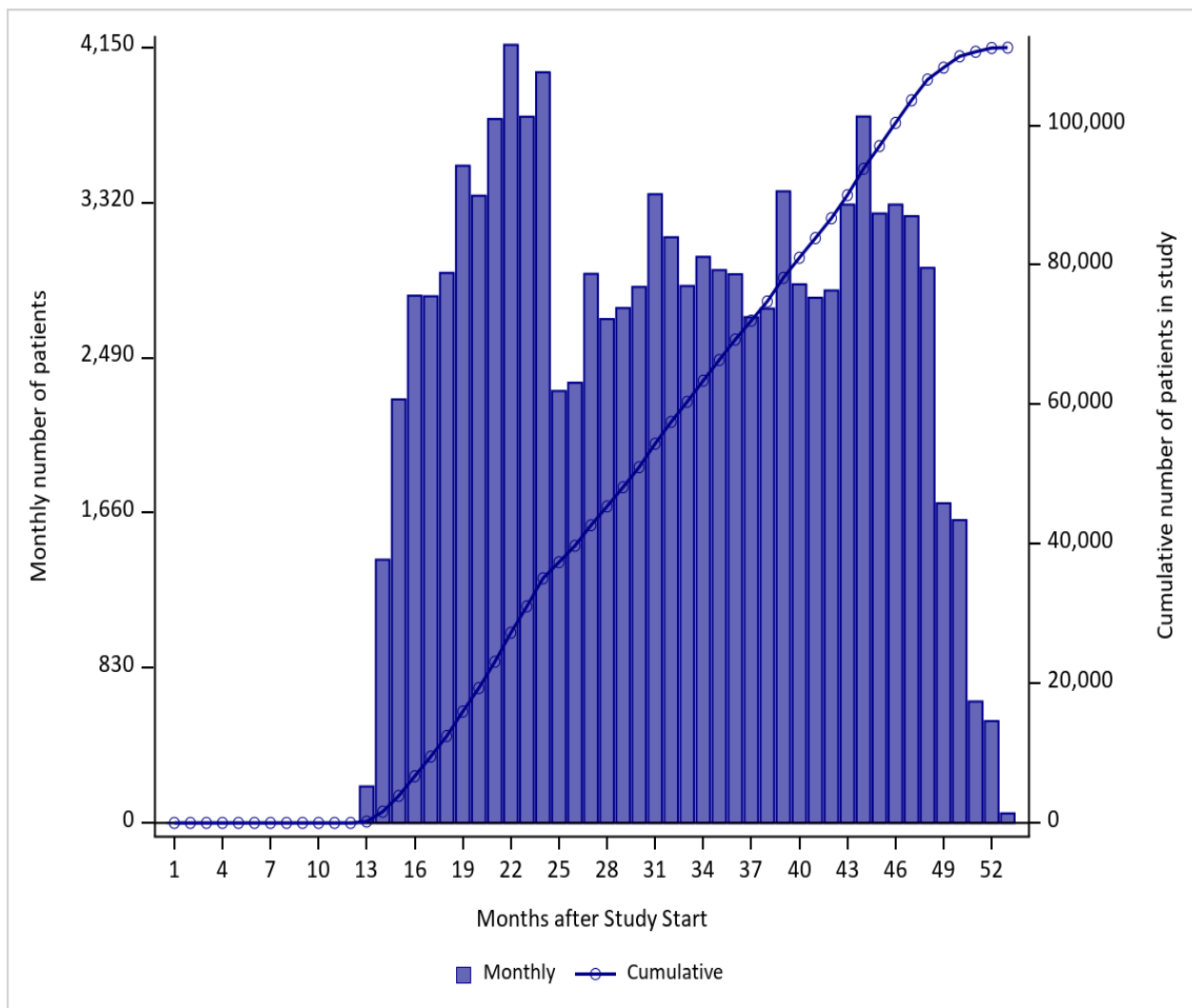
**Figure 1u. Patient Entry into Study by Month for Fam-Trastuzumab Deruxtecan-nxki in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>



**Figure 1v. Patient Entry into Study by Month for Ubrogепant in the Sentinel Distributed Database from January 1, 2019 to May 31, 2023**

The FDA approval date for this drug was on December 23, 2019, as listed on the FDA website <https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/novel-drug-approvals-2019>



**Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (September 18, 2023)**

Masked DP ID	DP Start Date	DP End Date <sup>1</sup>
DP01	01/01/2004	11/30/2022
DP02	01/01/2005	07/31/2022
DP03	01/01/2008	12/31/2022
DP04	01/01/2006	02/28/2023
DP05	01/01/2000	05/31/2023
DP06	01/01/2000	04/30/2023
DP07	01/01/2000	08/31/2022
DP08	01/01/2000	08/31/2022
DP09	01/01/2000	10/31/2022
DP10	01/01/2007	01/31/2023
DP11	01/01/2014	12/31/2020
DP12	01/01/2008	04/30/2023
DP13	01/01/2010	12/31/2022

<sup>1</sup>End Date represents the earliest of: (1) query end date, or (2) last day of the most recent month 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 Non-Proprietary and Proprietary Names of Medical Products Used to Define Exposures in this Request**

<b>Non-Proprietary Name</b>	<b>Proprietary Name</b>
	<b>Tenapanor</b>
tenapanor HCl	Ibsrela
	<b>Trifarotene</b>
trifarotene	Aklief
	<b>Brolucizumab-dbll</b>
brlucizumab-dbll	Beovu
	<b>Afamelanotide</b>
afamelanotide acetate	Scenesse
	<b>Fluorodopa F-18</b>
fluorodopa F-18	fluorodopa F-18
	<b>Lasmiditan</b>
lasmiditan succinate	Reyvow
	<b>Elexacaftor Ivacaftor Tezacaftor</b>
elexacaftor/tezacaftor/ivacaftor	Trikafta
	<b>Air Polymer-Type A</b>
Air Polymer-Type A Intrauterine Foam	ExEm
	<b>Luspatercept-aamt</b>
luspatercept-aamt	Reblozyl
	<b>Zanubrutinib</b>
zanubrutinib	Brukinsa
	<b>Cefiderocol</b>
cefiderocol sulfate tosylate	Fetroja
	<b>Crizanlizumab-tmca</b>
crizanlizumab-tmca	Adakveo
	<b>Givosiran</b>
givosiran sodium	Givlaari
	<b>Cenobamate</b>
cenobamate	Xcopri
cenobamate	Xcopri Maintenance Pack
cenobamate	Xcopri Titration Pack
	<b>Voxelotor</b>
voxelotor	Oxbryta
	<b>Golodirsen</b>
golodirsen	Vyondys-53
	<b>Enfortumab Vedotin-ejfv</b>
enfortumab vedotin-ejfv	Padcev
	<b>Brilliant Blue G Ophthalmic Solution</b>
Brilliant Blue G	TissueBlue
	<b>Lumateperone Tosylate</b>
lumateperone tosylate	Caplyta
	<b>Lemborexant</b>
lemborexant	Dayvigo
	<b>Fam-Trastuzumab Deruxtecan-nxki</b>
fam-trastuzumab deruxtecan-nxki	Enhertu
	<b>Ubrogepant</b>
ubrogepant	Ubrelvy

**Appendix C. List of Healthcare Common Procedure Coding System, Level II (HCPCS) and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Exposures in this Request**

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
<b>Brolucizumab–dbll</b>			
J0179	Injection, brolucizumab-dbll, 1 mg	Procedure	HCPCS
<b>Afamelanotide</b>			
J7352	Afamelanotide implant, 1 mg	Procedure	HCPCS
<b>Fluorodopa F-18</b>			
A9602	Fluorodopa F-18, diagnostic, per mCi	Procedure	HCPCS
<b>Air Polymer-Type A</b>			
A9574	Air polymer-type A intrauterine foam, 0.1 ml	Procedure	HCPCS
<b>Luspatercept–aamt</b>			
J0896	Injection, luspatercept-aamt, 0.25 mg	Procedure	HCPCS
<b>Cefiderocol</b>			
J0693	Injection, cefiderocol, 5 mg	Procedure	HCPCS
J0699	Injection, cefiderocol, 10 mg	Procedure	HCPCS
XW033A6	Introduction of Cefiderocol Anti-infective into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW043A6	Introduction of Cefiderocol Anti-infective into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
<b>Crizanlizumab-tmca</b>			
C9053	Injection, crizanlizumab-tmca, 1 mg	Procedure	HCPCS
J0791	Injection, crizanlizumab-tmca, 5 mg	Procedure	HCPCS
<b>Givosiran</b>			
C9056	Injection, givosiran, 0.5 mg	Procedure	HCPCS
J0223	Injection, givosiran, 0.5 mg	Procedure	HCPCS
<b>Golodirsen</b>			
J1429	Injection, golodirsen, 10 mg	Procedure	HCPCS
<b>Fam-Trastuzumab Deruxtecan-nxki</b>			
J9358	Injection, fam-trastuzumab deruxtecan-nxki, 1 mg	Procedure	HCPCS

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
<b>Acquired Hypothyroidism</b>			
244.0	Postsurgical hypothyroidism	Diagnosis	ICD-9-CM
244.1	Other postablative hypothyroidism	Diagnosis	ICD-9-CM
244.2	Iodine hypothyroidism	Diagnosis	ICD-9-CM
244.3	Other iatrogenic hypothyroidism	Diagnosis	ICD-9-CM
244.8	Other specified acquired hypothyroidism	Diagnosis	ICD-9-CM
244.9	Unspecified hypothyroidism	Diagnosis	ICD-9-CM
E00.0	Congenital iodine-deficiency syndrome, neurological type	Diagnosis	ICD-10-CM
E00.1	Congenital iodine-deficiency syndrome, myxedematous type	Diagnosis	ICD-10-CM
E00.2	Congenital iodine-deficiency syndrome, mixed type	Diagnosis	ICD-10-CM
E00.9	Congenital iodine-deficiency syndrome, unspecified	Diagnosis	ICD-10-CM
E01.8	Other iodine-deficiency related thyroid disorders and allied conditions	Diagnosis	ICD-10-CM
E02	Subclinical iodine-deficiency hypothyroidism	Diagnosis	ICD-10-CM
E03.0	Congenital hypothyroidism with diffuse goiter	Diagnosis	ICD-10-CM
E03.1	Congenital hypothyroidism without goiter	Diagnosis	ICD-10-CM
E03.2	Hypothyroidism due to medicaments and other exogenous substances	Diagnosis	ICD-10-CM
E03.3	Postinfectious hypothyroidism	Diagnosis	ICD-10-CM
E03.4	Atrophy of thyroid (acquired)	Diagnosis	ICD-10-CM
E03.8	Other specified hypothyroidism	Diagnosis	ICD-10-CM
E03.9	Hypothyroidism, unspecified	Diagnosis	ICD-10-CM
E89.0	Postprocedural hypothyroidism	Diagnosis	ICD-10-CM
<b>Alcohol Abuse</b>			
291.0	Alcohol withdrawal delirium	Diagnosis	ICD-9-CM
291.1	Alcohol-induced persisting amnesic disorder	Diagnosis	ICD-9-CM
291.2	Alcohol-induced persisting dementia	Diagnosis	ICD-9-CM
291.3	Alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
291.4	Idiosyncratic alcohol intoxication	Diagnosis	ICD-9-CM
291.5	Alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
291.8	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.81	Alcohol withdrawal	Diagnosis	ICD-9-CM
291.82	Alcohol induced sleep disorders	Diagnosis	ICD-9-CM
291.89	Other specified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
291.9	Unspecified alcohol-induced mental disorders	Diagnosis	ICD-9-CM
303.00	Acute alcoholic intoxication, unspecified	Diagnosis	ICD-9-CM
303.01	Acute alcoholic intoxication, continuous	Diagnosis	ICD-9-CM
303.02	Acute alcoholic intoxication, episodic	Diagnosis	ICD-9-CM
303.90	Other and unspecified alcohol dependence, unspecified	Diagnosis	ICD-9-CM
303.91	Other and unspecified alcohol dependence, continuous	Diagnosis	ICD-9-CM
303.92	Other and unspecified alcohol dependence, episodic	Diagnosis	ICD-9-CM
305.00	Nondependent alcohol abuse, unspecified	Diagnosis	ICD-9-CM
305.01	Nondependent alcohol abuse, continuous	Diagnosis	ICD-9-CM
305.02	Nondependent alcohol abuse, episodic	Diagnosis	ICD-9-CM
357.5	Alcoholic polyneuropathy	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
425.5	Alcoholic cardiomyopathy	Diagnosis	ICD-9-CM
535.30	Alcoholic gastritis without mention of hemorrhage	Diagnosis	ICD-9-CM
535.31	Alcoholic gastritis with hemorrhage	Diagnosis	ICD-9-CM
571.0	Alcoholic fatty liver	Diagnosis	ICD-9-CM
571.1	Acute alcoholic hepatitis	Diagnosis	ICD-9-CM
571.2	Alcoholic cirrhosis of liver	Diagnosis	ICD-9-CM
571.3	Unspecified alcoholic liver damage	Diagnosis	ICD-9-CM
760.71	Noxious influences affecting fetus or newborn via placenta or breast milk, alcohol	Diagnosis	ICD-9-CM
94.6	Alcohol and drug rehabilitation and detoxification	Procedure	ICD-9-CM
94.61	Alcohol rehabilitation	Procedure	ICD-9-CM
94.62	Alcohol detoxification	Procedure	ICD-9-CM
94.63	Alcohol rehabilitation and detoxification	Procedure	ICD-9-CM
94.67	Combined alcohol and drug rehabilitation	Procedure	ICD-9-CM
94.68	Combined alcohol and drug detoxification	Procedure	ICD-9-CM
94.69	Combined alcohol and drug rehabilitation and detoxification	Procedure	ICD-9-CM
980.0	Toxic effect of ethyl alcohol	Diagnosis	ICD-9-CM
E860.0	Accidental poisoning by alcoholic beverages	Diagnosis	ICD-9-CM
F10.10	Alcohol abuse, uncomplicated	Diagnosis	ICD-10-CM
F10.11	Alcohol abuse, in remission	Diagnosis	ICD-10-CM
F10.120	Alcohol abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.121	Alcohol abuse with intoxication delirium	Diagnosis	ICD-10-CM
F10.129	Alcohol abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.130	Alcohol abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.131	Alcohol abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F10.132	Alcohol abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F10.139	Alcohol abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.14	Alcohol abuse with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.150	Alcohol abuse with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.151	Alcohol abuse with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.159	Alcohol abuse with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.180	Alcohol abuse with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.181	Alcohol abuse with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.182	Alcohol abuse with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.188	Alcohol abuse with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.19	Alcohol abuse with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.20	Alcohol dependence, uncomplicated	Diagnosis	ICD-10-CM
F10.21	Alcohol dependence, in remission	Diagnosis	ICD-10-CM
F10.220	Alcohol dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.221	Alcohol dependence with intoxication delirium	Diagnosis	ICD-10-CM
F10.229	Alcohol dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.230	Alcohol dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.231	Alcohol dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F10.232	Alcohol dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F10.239	Alcohol dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.24	Alcohol dependence with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.250	Alcohol dependence with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.251	Alcohol dependence with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.259	Alcohol dependence with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.26	Alcohol dependence with alcohol-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F10.27	Alcohol dependence with alcohol-induced persisting dementia	Diagnosis	ICD-10-CM
F10.280	Alcohol dependence with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.281	Alcohol dependence with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.282	Alcohol dependence with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.288	Alcohol dependence with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.29	Alcohol dependence with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.920	Alcohol use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F10.921	Alcohol use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F10.929	Alcohol use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F10.930	Alcohol use, unspecified with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F10.931	Alcohol use, unspecified with withdrawal delirium	Diagnosis	ICD-10-CM
F10.932	Alcohol use, unspecified with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F10.939	Alcohol use, unspecified with withdrawal, unspecified	Diagnosis	ICD-10-CM
F10.94	Alcohol use, unspecified with alcohol-induced mood disorder	Diagnosis	ICD-10-CM
F10.950	Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F10.951	Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F10.959	Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F10.96	Alcohol use, unspecified with alcohol-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F10.97	Alcohol use, unspecified with alcohol-induced persisting dementia	Diagnosis	ICD-10-CM
F10.980	Alcohol use, unspecified with alcohol-induced anxiety disorder	Diagnosis	ICD-10-CM
F10.981	Alcohol use, unspecified with alcohol-induced sexual dysfunction	Diagnosis	ICD-10-CM
F10.982	Alcohol use, unspecified with alcohol-induced sleep disorder	Diagnosis	ICD-10-CM
F10.988	Alcohol use, unspecified with other alcohol-induced disorder	Diagnosis	ICD-10-CM
F10.99	Alcohol use, unspecified with unspecified alcohol-induced disorder	Diagnosis	ICD-10-CM
G62.1	Alcoholic polyneuropathy	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
K29.20	Alcoholic gastritis without bleeding	Diagnosis	ICD-10-CM
K29.21	Alcoholic gastritis with bleeding	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.10	Alcoholic hepatitis without ascites	Diagnosis	ICD-10-CM
K70.11	Alcoholic hepatitis with ascites	Diagnosis	ICD-10-CM
K70.2	Alcoholic fibrosis and sclerosis of liver	Diagnosis	ICD-10-CM
K70.30	Alcoholic cirrhosis of liver without ascites	Diagnosis	ICD-10-CM
K70.31	Alcoholic cirrhosis of liver with ascites	Diagnosis	ICD-10-CM
K70.40	Alcoholic hepatic failure without coma	Diagnosis	ICD-10-CM
K70.41	Alcoholic hepatic failure with coma	Diagnosis	ICD-10-CM
K70.9	Alcoholic liver disease, unspecified	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
R78.0	Finding of alcohol in blood	Diagnosis	ICD-10-CM
V65.42	Counseling on substance use and abuse	Diagnosis	ICD-9-CM
V79.1	Screening for alcoholism	Diagnosis	ICD-9-CM
Z65.8	Other specified problems related to psychosocial circumstances	Diagnosis	ICD-10-CM
Z71.41	Alcohol abuse counseling and surveillance of alcoholic	Diagnosis	ICD-10-CM
<b>Alzheimers</b>			
290.0	Senile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.10	Presenile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.11	Presenile dementia with delirium	Diagnosis	ICD-9-CM
290.12	Presenile dementia with delusional features	Diagnosis	ICD-9-CM
290.13	Presenile dementia with depressive features	Diagnosis	ICD-9-CM
290.20	Senile dementia with delusional features	Diagnosis	ICD-9-CM
290.21	Senile dementia with depressive features	Diagnosis	ICD-9-CM
290.3	Senile dementia with delirium	Diagnosis	ICD-9-CM
290.40	Vascular dementia, uncomplicated	Diagnosis	ICD-9-CM
290.41	Vascular dementia, with delirium	Diagnosis	ICD-9-CM
290.42	Vascular dementia, with delusions	Diagnosis	ICD-9-CM
290.43	Vascular dementia, with depressed mood	Diagnosis	ICD-9-CM
294.0	Amnestic disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.10	Dementia in conditions classified elsewhere without behavioral disturbance	Diagnosis	ICD-9-CM
294.11	Dementia in conditions classified elsewhere with behavioral disturbance	Diagnosis	ICD-9-CM
294.20	Dementia, unspecified, without behavioral disturbance	Diagnosis	ICD-9-CM
294.21	Dementia, unspecified, with behavioral disturbance	Diagnosis	ICD-9-CM
294.8	Other persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
331.0	Alzheimer's disease	Diagnosis	ICD-9-CM
331.11	Pick's disease	Diagnosis	ICD-9-CM
331.19	Other frontotemporal dementia	Diagnosis	ICD-9-CM
331.2	Senile degeneration of brain	Diagnosis	ICD-9-CM
331.7	Cerebral degeneration in diseases classified elsewhere	Diagnosis	ICD-9-CM
797	Senility without mention of psychosis	Diagnosis	ICD-9-CM
F01.50	Vascular dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F01.51	Vascular dementia with behavioral disturbance	Diagnosis	ICD-10-CM
F02.80	Dementia in other diseases classified elsewhere without behavioral disturbance	Diagnosis	ICD-10-CM
F02.81	Dementia in other diseases classified elsewhere with behavioral disturbance	Diagnosis	ICD-10-CM
F03.90	Unspecified dementia without behavioral disturbance	Diagnosis	ICD-10-CM
F03.91	Unspecified dementia with behavioral disturbance	Diagnosis	ICD-10-CM
F04	Amnestic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F05	Delirium due to known physiological condition	Diagnosis	ICD-10-CM
F06.1	Catatonic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F06.8	Other specified mental disorders due to known physiological condition	Diagnosis	ICD-10-CM
G13.8	Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere	Diagnosis	ICD-10-CM
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
G30.1	Alzheimer's disease with late onset	Diagnosis	ICD-10-CM
G30.8	Other Alzheimer's disease	Diagnosis	ICD-10-CM
G30.9	Alzheimer's disease, unspecified	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal dementia	Diagnosis	ICD-10-CM
G31.1	Senile degeneration of brain, not elsewhere classified	Diagnosis	ICD-10-CM
G31.2	Degeneration of nervous system due to alcohol	Diagnosis	ICD-10-CM
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
R41.81	Age-related cognitive decline	Diagnosis	ICD-10-CM
R54	Age-related physical debility	Diagnosis	ICD-10-CM
<b>Acute Myocardial Infarction</b>			
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
<b>Anemia</b>			
280.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-9-CM
280.1	Iron deficiency anemia secondary to inadequate dietary iron intake	Diagnosis	ICD-9-CM
280.8	Other specified iron deficiency anemias	Diagnosis	ICD-9-CM
280.9	Unspecified iron deficiency anemia	Diagnosis	ICD-9-CM
281.0	Pernicious anemia	Diagnosis	ICD-9-CM
281.1	Other vitamin B12 deficiency anemia	Diagnosis	ICD-9-CM
281.2	Folate-deficiency anemia	Diagnosis	ICD-9-CM
281.3	Other specified megaloblastic anemias not elsewhere classified	Diagnosis	ICD-9-CM
281.4	Protein-deficiency anemia	Diagnosis	ICD-9-CM
281.8	Anemia associated with other specified nutritional deficiency	Diagnosis	ICD-9-CM
281.9	Unspecified deficiency anemia	Diagnosis	ICD-9-CM
282.0	Hereditary spherocytosis	Diagnosis	ICD-9-CM
282.1	Hereditary elliptocytosis	Diagnosis	ICD-9-CM
282.2	Anemias due to disorders of glutathione metabolism	Diagnosis	ICD-9-CM
282.3	Other hemolytic anemias due to enzyme deficiency	Diagnosis	ICD-9-CM
282.40	Thalassemia, unspecified	Diagnosis	ICD-9-CM
282.41	Sickle-cell thalassemia without crisis	Diagnosis	ICD-9-CM
282.42	Sickle-cell thalassemia with crisis	Diagnosis	ICD-9-CM
282.43	Alpha thalassemia	Diagnosis	ICD-9-CM
282.44	Beta thalassemia	Diagnosis	ICD-9-CM
282.45	Delta-beta thalassemia	Diagnosis	ICD-9-CM
282.46	Thalassemia minor	Diagnosis	ICD-9-CM
282.47	Hemoglobin E-beta thalassemia	Diagnosis	ICD-9-CM
282.49	Other thalassemia	Diagnosis	ICD-9-CM
282.5	Sickle-cell trait	Diagnosis	ICD-9-CM
282.60	Sickle-cell disease, unspecified	Diagnosis	ICD-9-CM
282.61	Hb-SS disease without crisis	Diagnosis	ICD-9-CM
282.62	Hb-SS disease with crisis	Diagnosis	ICD-9-CM
282.63	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-9-CM
282.64	Sickle-cell/Hb-C disease with crisis	Diagnosis	ICD-9-CM
282.68	Other sickle-cell disease without crisis	Diagnosis	ICD-9-CM
282.69	Other sickle-cell disease with crisis	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
282.7	Other hemoglobinopathies	Diagnosis	ICD-9-CM
282.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-9-CM
282.9	Unspecified hereditary hemolytic anemia	Diagnosis	ICD-9-CM
283.0	Autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.10	Unspecified non-autoimmune hemolytic anemia	Diagnosis	ICD-9-CM
283.11	Hemolytic-uremic syndrome	Diagnosis	ICD-9-CM
283.19	Other non-autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.2	Hemoglobinuria due to hemolysis from external causes	Diagnosis	ICD-9-CM
283.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-9-CM
284.01	Constitutional red blood cell aplasia	Diagnosis	ICD-9-CM
284.09	Other constitutional aplastic anemia	Diagnosis	ICD-9-CM
284.11	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-9-CM
284.12	Other drug induced pancytopenia	Diagnosis	ICD-9-CM
284.19	Other pancytopenia	Diagnosis	ICD-9-CM
284.2	Myelophthisis	Diagnosis	ICD-9-CM
284.81	Red cell aplasia (acquired) (adult) (with thymoma)	Diagnosis	ICD-9-CM
284.89	Other specified aplastic anemias	Diagnosis	ICD-9-CM
284.9	Unspecified aplastic anemia	Diagnosis	ICD-9-CM
285.0	Sideroblastic anemia	Diagnosis	ICD-9-CM
285.1	Acute posthemorrhagic anemia	Diagnosis	ICD-9-CM
285.21	Anemia in chronic kidney disease	Diagnosis	ICD-9-CM
285.22	Anemia in neoplastic disease	Diagnosis	ICD-9-CM
285.29	Anemia of other chronic disease	Diagnosis	ICD-9-CM
285.3	Antineoplastic chemotherapy induced anemia	Diagnosis	ICD-9-CM
285.8	Other specified anemias	Diagnosis	ICD-9-CM
285.9	Unspecified anemia	Diagnosis	ICD-9-CM
C94.6	Myelodysplastic disease, not elsewhere classified	Diagnosis	ICD-10-CM
D46.0	Refractory anemia without ring sideroblasts, so stated	Diagnosis	ICD-10-CM
D46.1	Refractory anemia with ring sideroblasts	Diagnosis	ICD-10-CM
D46.20	Refractory anemia with excess of blasts, unspecified	Diagnosis	ICD-10-CM
D46.21	Refractory anemia with excess of blasts 1	Diagnosis	ICD-10-CM
D46.22	Refractory anemia with excess of blasts 2	Diagnosis	ICD-10-CM
D46.4	Refractory anemia, unspecified	Diagnosis	ICD-10-CM
D46.9	Myelodysplastic syndrome, unspecified	Diagnosis	ICD-10-CM
D46.A	Refractory cytopenia with multilineage dysplasia	Diagnosis	ICD-10-CM
D46.B	Refractory cytopenia with multilineage dysplasia and ring sideroblasts	Diagnosis	ICD-10-CM
D46.C	Myelodysplastic syndrome with isolated del(5q) chromosomal abnormality	Diagnosis	ICD-10-CM
D46.Z	Other myelodysplastic syndromes	Diagnosis	ICD-10-CM
D47.4	Osteomyelofibrosis	Diagnosis	ICD-10-CM
D50.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-10-CM
D50.1	Sideropenic dysphagia	Diagnosis	ICD-10-CM
D50.8	Other iron deficiency anemias	Diagnosis	ICD-10-CM
D50.9	Iron deficiency anemia, unspecified	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency	Diagnosis	ICD-10-CM
D51.1	Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with proteinuria	Diagnosis	ICD-10-CM
D51.2	Transcobalamin II deficiency	Diagnosis	ICD-10-CM
D51.3	Other dietary vitamin B12 deficiency anemia	Diagnosis	ICD-10-CM
D51.8	Other vitamin B12 deficiency anemias	Diagnosis	ICD-10-CM
D51.9	Vitamin B12 deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D52.0	Dietary folate deficiency anemia	Diagnosis	ICD-10-CM
D52.1	Drug-induced folate deficiency anemia	Diagnosis	ICD-10-CM
D52.8	Other folate deficiency anemias	Diagnosis	ICD-10-CM
D52.9	Folate deficiency anemia, unspecified	Diagnosis	ICD-10-CM
D53.0	Protein deficiency anemia	Diagnosis	ICD-10-CM
D53.1	Other megaloblastic anemias, not elsewhere classified	Diagnosis	ICD-10-CM
D53.2	Scorbutic anemia	Diagnosis	ICD-10-CM
D53.8	Other specified nutritional anemias	Diagnosis	ICD-10-CM
D53.9	Nutritional anemia, unspecified	Diagnosis	ICD-10-CM
D55.0	Anemia due to glucose-6-phosphate dehydrogenase [G6PD] deficiency	Diagnosis	ICD-10-CM
D55.1	Anemia due to other disorders of glutathione metabolism	Diagnosis	ICD-10-CM
D55.2	Anemia due to disorders of glycolytic enzymes	Diagnosis	ICD-10-CM
D55.21	Anemia due to pyruvate kinase deficiency	Diagnosis	ICD-10-CM
D55.29	Anemia due to other disorders of glycolytic enzymes	Diagnosis	ICD-10-CM
D55.3	Anemia due to disorders of nucleotide metabolism	Diagnosis	ICD-10-CM
D55.8	Other anemias due to enzyme disorders	Diagnosis	ICD-10-CM
D55.9	Anemia due to enzyme disorder, unspecified	Diagnosis	ICD-10-CM
D56.0	Alpha thalassemia	Diagnosis	ICD-10-CM
D56.1	Beta thalassemia	Diagnosis	ICD-10-CM
D56.2	Delta-beta thalassemia	Diagnosis	ICD-10-CM
D56.3	Thalassemia minor	Diagnosis	ICD-10-CM
D56.4	Hereditary persistence of fetal hemoglobin [HPFH]	Diagnosis	ICD-10-CM
D56.5	Hemoglobin E-beta thalassemia	Diagnosis	ICD-10-CM
D56.8	Other thalassemias	Diagnosis	ICD-10-CM
D56.9	Thalassemia, unspecified	Diagnosis	ICD-10-CM
D57.00	Hb-SS disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.01	Hb-SS disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.02	Hb-SS disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.03	Hb-SS disease with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.09	Hb-SS disease with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.1	Sickle-cell disease without crisis	Diagnosis	ICD-10-CM
D57.20	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-10-CM
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.212	Sickle-cell/Hb-C disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.213	Sickle-cell/Hb-C disease with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.218	Sickle-cell/Hb-C disease with crisis with other specified complication	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.3	Sickle-cell trait	Diagnosis	ICD-10-CM
D57.40	Sickle-cell thalassemia without crisis	Diagnosis	ICD-10-CM
D57.411	Sickle-cell thalassemia with acute chest syndrome	Diagnosis	ICD-10-CM
D57.412	Sickle-cell thalassemia with splenic sequestration	Diagnosis	ICD-10-CM
D57.413	Sickle-cell thalassemia, unspecified, with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.418	Sickle-cell thalassemia, unspecified, with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.419	Sickle-cell thalassemia with crisis, unspecified	Diagnosis	ICD-10-CM
D57.42	Sickle-cell thalassemia beta zero without crisis	Diagnosis	ICD-10-CM
D57.431	Sickle-cell thalassemia beta zero with acute chest syndrome	Diagnosis	ICD-10-CM
D57.432	Sickle-cell thalassemia beta zero with splenic sequestration	Diagnosis	ICD-10-CM
D57.433	Sickle-cell thalassemia beta zero with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.438	Sickle-cell thalassemia beta zero with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.439	Sickle-cell thalassemia beta zero with crisis, unspecified	Diagnosis	ICD-10-CM
D57.44	Sickle-cell thalassemia beta plus without crisis	Diagnosis	ICD-10-CM
D57.451	Sickle-cell thalassemia beta plus with acute chest syndrome	Diagnosis	ICD-10-CM
D57.452	Sickle-cell thalassemia beta plus with splenic sequestration	Diagnosis	ICD-10-CM
D57.453	Sickle-cell thalassemia beta plus with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.458	Sickle-cell thalassemia beta plus with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.459	Sickle-cell thalassemia beta plus with crisis, unspecified	Diagnosis	ICD-10-CM
D57.80	Other sickle-cell disorders without crisis	Diagnosis	ICD-10-CM
D57.811	Other sickle-cell disorders with acute chest syndrome	Diagnosis	ICD-10-CM
D57.812	Other sickle-cell disorders with splenic sequestration	Diagnosis	ICD-10-CM
D57.813	Other sickle-cell disorders with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.818	Other sickle-cell disorders with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.819	Other sickle-cell disorders with crisis, unspecified	Diagnosis	ICD-10-CM
D58.0	Hereditary spherocytosis	Diagnosis	ICD-10-CM
D58.1	Hereditary elliptocytosis	Diagnosis	ICD-10-CM
D58.2	Other hemoglobinopathies	Diagnosis	ICD-10-CM
D58.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-10-CM
D58.9	Hereditary hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.0	Drug-induced autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.1	Other autoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.10	Autoimmune hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.11	Warm autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.12	Cold autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.13	Mixed type autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.19	Other autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.2	Drug-induced nonautoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.5	Paroxysmal nocturnal hemoglobinuria [Marchiafava-Micheli]	Diagnosis	ICD-10-CM
D59.6	Hemoglobinuria due to hemolysis from other external causes	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
D59.8	Other acquired hemolytic anemias	Diagnosis	ICD-10-CM
D59.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D60.0	Chronic acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.1	Transient acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.8	Other acquired pure red cell aplasias	Diagnosis	ICD-10-CM
D60.9	Acquired pure red cell aplasia, unspecified	Diagnosis	ICD-10-CM
D61.01	Constitutional (pure) red blood cell aplasia	Diagnosis	ICD-10-CM
D61.09	Other constitutional aplastic anemia	Diagnosis	ICD-10-CM
D61.1	Drug-induced aplastic anemia	Diagnosis	ICD-10-CM
D61.2	Aplastic anemia due to other external agents	Diagnosis	ICD-10-CM
D61.3	Idiopathic aplastic anemia	Diagnosis	ICD-10-CM
D61.810	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-10-CM
D61.811	Other drug-induced pancytopenia	Diagnosis	ICD-10-CM
D61.818	Other pancytopenia	Diagnosis	ICD-10-CM
D61.82	Myelophthisis	Diagnosis	ICD-10-CM
D61.89	Other specified aplastic anemias and other bone marrow failure syndromes	Diagnosis	ICD-10-CM
D61.9	Aplastic anemia, unspecified	Diagnosis	ICD-10-CM
D62	Acute posthemorrhagic anemia	Diagnosis	ICD-10-CM
D63.0	Anemia in neoplastic disease	Diagnosis	ICD-10-CM
D63.1	Anemia in chronic kidney disease	Diagnosis	ICD-10-CM
D63.8	Anemia in other chronic diseases classified elsewhere	Diagnosis	ICD-10-CM
D64.0	Hereditary sideroblastic anemia	Diagnosis	ICD-10-CM
D64.1	Secondary sideroblastic anemia due to disease	Diagnosis	ICD-10-CM
D64.2	Secondary sideroblastic anemia due to drugs and toxins	Diagnosis	ICD-10-CM
D64.3	Other sideroblastic anemias	Diagnosis	ICD-10-CM
D64.4	Congenital dyserythropoietic anemia	Diagnosis	ICD-10-CM
D64.81	Anemia due to antineoplastic chemotherapy	Diagnosis	ICD-10-CM
D64.89	Other specified anemias	Diagnosis	ICD-10-CM
D64.9	Anemia, unspecified	Diagnosis	ICD-10-CM
D75.81	Myelofibrosis	Diagnosis	ICD-10-CM

**Asthma**

493.00	Extrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.01	Extrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.02	Extrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.10	Intrinsic asthma, unspecified	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
493.20	Chronic obstructive asthma, unspecified	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.81	Exercise induced bronchospasm	Diagnosis	ICD-9-CM
493.82	Cough variant asthma	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
493.90	Asthma, unspecified, unspecified status	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
J45.20	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
J45.30	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
J45.40	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
J45.50	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
J45.901	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
J45.990	Exercise induced bronchospasm	Diagnosis	ICD-10-CM
J45.991	Cough variant asthma	Diagnosis	ICD-10-CM
J45.998	Other asthma	Diagnosis	ICD-10-CM
J82.83	Eosinophilic asthma	Diagnosis	ICD-10-CM
<b>Atrial Fibrillation</b>			
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
I48.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
I48.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
I48.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM
I48.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
I48.3	Typical atrial flutter	Diagnosis	ICD-10-CM
I48.4	Atypical atrial flutter	Diagnosis	ICD-10-CM
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
<b>Benign Prostatic Hyperplasia</b>			
600.00	Hypertrophy (benign) of prostate without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.01	Hypertrophy (benign) of prostate with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.10	Nodular prostate without urinary obstruction	Diagnosis	ICD-9-CM
600.11	Nodular prostate with urinary obstruction	Diagnosis	ICD-9-CM
600.20	Benign localized hyperplasia of prostate without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
600.21	Benign localized hyperplasia of prostate with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.3	Cyst of prostate	Diagnosis	ICD-9-CM
600.90	Hyperplasia of prostate, unspecified, without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.91	Hyperplasia of prostate, unspecified, with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
N40.0	Benign prostatic hyperplasia without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.1	Benign prostatic hyperplasia with lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.2	Nodular prostate without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.3	Nodular prostate with lower urinary tract symptoms	Diagnosis	ICD-10-CM
N42.83	Cyst of prostate	Diagnosis	ICD-10-CM
<b>Breast Cancer</b>			
174.0	Malignant neoplasm of nipple and areola of female breast	Diagnosis	ICD-9-CM
174.1	Malignant neoplasm of central portion of female breast	Diagnosis	ICD-9-CM
174.2	Malignant neoplasm of upper-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.3	Malignant neoplasm of lower-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.4	Malignant neoplasm of upper-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.5	Malignant neoplasm of lower-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.6	Malignant neoplasm of axillary tail of female breast	Diagnosis	ICD-9-CM
174.8	Malignant neoplasm of other specified sites of female breast	Diagnosis	ICD-9-CM
174.9	Malignant neoplasm of breast (female), unspecified site	Diagnosis	ICD-9-CM
175.0	Malignant neoplasm of nipple and areola of male breast	Diagnosis	ICD-9-CM
175.9	Malignant neoplasm of other and unspecified sites of male breast	Diagnosis	ICD-9-CM
233.0	Carcinoma in situ of breast	Diagnosis	ICD-9-CM
C50.011	Malignant neoplasm of nipple and areola, right female breast	Diagnosis	ICD-10-CM
C50.012	Malignant neoplasm of nipple and areola, left female breast	Diagnosis	ICD-10-CM
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast	Diagnosis	ICD-10-CM
C50.021	Malignant neoplasm of nipple and areola, right male breast	Diagnosis	ICD-10-CM
C50.022	Malignant neoplasm of nipple and areola, left male breast	Diagnosis	ICD-10-CM
C50.029	Malignant neoplasm of nipple and areola, unspecified male breast	Diagnosis	ICD-10-CM
C50.111	Malignant neoplasm of central portion of right female breast	Diagnosis	ICD-10-CM
C50.112	Malignant neoplasm of central portion of left female breast	Diagnosis	ICD-10-CM
C50.119	Malignant neoplasm of central portion of unspecified female breast	Diagnosis	ICD-10-CM
C50.121	Malignant neoplasm of central portion of right male breast	Diagnosis	ICD-10-CM
C50.122	Malignant neoplasm of central portion of left male breast	Diagnosis	ICD-10-CM
C50.129	Malignant neoplasm of central portion of unspecified male breast	Diagnosis	ICD-10-CM
C50.211	Malignant neoplasm of upper-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.212	Malignant neoplasm of upper-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.219	Malignant neoplasm of upper-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.221	Malignant neoplasm of upper-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.222	Malignant neoplasm of upper-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.229	Malignant neoplasm of upper-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
C50.311	Malignant neoplasm of lower-inner quadrant of right female breast	Diagnosis	ICD-10-CM
C50.312	Malignant neoplasm of lower-inner quadrant of left female breast	Diagnosis	ICD-10-CM
C50.319	Malignant neoplasm of lower-inner quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.321	Malignant neoplasm of lower-inner quadrant of right male breast	Diagnosis	ICD-10-CM
C50.322	Malignant neoplasm of lower-inner quadrant of left male breast	Diagnosis	ICD-10-CM
C50.329	Malignant neoplasm of lower-inner quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.611	Malignant neoplasm of axillary tail of right female breast	Diagnosis	ICD-10-CM
C50.612	Malignant neoplasm of axillary tail of left female breast	Diagnosis	ICD-10-CM
C50.619	Malignant neoplasm of axillary tail of unspecified female breast	Diagnosis	ICD-10-CM
C50.621	Malignant neoplasm of axillary tail of right male breast	Diagnosis	ICD-10-CM
C50.622	Malignant neoplasm of axillary tail of left male breast	Diagnosis	ICD-10-CM
C50.629	Malignant neoplasm of axillary tail of unspecified male breast	Diagnosis	ICD-10-CM
C50.811	Malignant neoplasm of overlapping sites of right female breast	Diagnosis	ICD-10-CM
C50.812	Malignant neoplasm of overlapping sites of left female breast	Diagnosis	ICD-10-CM
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast	Diagnosis	ICD-10-CM
C50.821	Malignant neoplasm of overlapping sites of right male breast	Diagnosis	ICD-10-CM
C50.822	Malignant neoplasm of overlapping sites of left male breast	Diagnosis	ICD-10-CM
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast	Diagnosis	ICD-10-CM
C50.911	Malignant neoplasm of unspecified site of right female breast	Diagnosis	ICD-10-CM
C50.912	Malignant neoplasm of unspecified site of left female breast	Diagnosis	ICD-10-CM
C50.919	Malignant neoplasm of unspecified site of unspecified female breast	Diagnosis	ICD-10-CM
C50.921	Malignant neoplasm of unspecified site of right male breast	Diagnosis	ICD-10-CM
C50.922	Malignant neoplasm of unspecified site of left male breast	Diagnosis	ICD-10-CM
C50.929	Malignant neoplasm of unspecified site of unspecified male breast	Diagnosis	ICD-10-CM
D05.00	Lobular carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.01	Lobular carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.02	Lobular carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.10	Intraductal carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.11	Intraductal carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.12	Intraductal carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.80	Other specified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
D05.81	Other specified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.82	Other specified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
D05.90	Unspecified type of carcinoma in situ of unspecified breast	Diagnosis	ICD-10-CM
D05.91	Unspecified type of carcinoma in situ of right breast	Diagnosis	ICD-10-CM
D05.92	Unspecified type of carcinoma in situ of left breast	Diagnosis	ICD-10-CM
V10.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-9-CM
Z17.0	Estrogen receptor positive status [ER+]	Diagnosis	ICD-10-CM
Z17.1	Estrogen receptor negative status [ER-]	Diagnosis	ICD-10-CM
Z19.1	Hormone sensitive malignancy status	Diagnosis	ICD-10-CM
Z19.2	Hormone resistant malignancy status	Diagnosis	ICD-10-CM
Z85.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-10-CM
Z86.000	Personal history of in-situ neoplasm of breast	Diagnosis	ICD-10-CM
<b>Cardiac Arrest</b>			
V12.53	Personal history of sudden cardiac arrest	Diagnosis	ICD-9-CM
Z86.74	Personal history of sudden cardiac arrest	Diagnosis	ICD-10-CM
<b>Chronic Kidney Disease</b>			
016.00	Tuberculosis of kidney, confirmation unspecified	Diagnosis	ICD-9-CM
016.01	Tuberculosis of kidney, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
016.02	Tuberculosis of kidney, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
016.03	Tuberculosis of kidney, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
016.04	Tuberculosis of kidney, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
016.05	Tuberculosis of kidney, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
016.06	Tuberculosis of kidney, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
095.4	Syphilis of kidney	Diagnosis	ICD-9-CM
189.0	Malignant neoplasm of kidney, except pelvis	Diagnosis	ICD-9-CM
189.9	Malignant neoplasm of urinary organ, site unspecified	Diagnosis	ICD-9-CM
223.0	Benign neoplasm of kidney, except pelvis	Diagnosis	ICD-9-CM
236.91	Neoplasm of uncertain behavior of kidney and ureter	Diagnosis	ICD-9-CM
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
271.4	Renal glycosuria	Diagnosis	ICD-9-CM
274.10	Gouty nephropathy, unspecified	Diagnosis	ICD-9-CM
283.11	Hemolytic-uremic syndrome	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
440.1	Atherosclerosis of renal artery	Diagnosis	ICD-9-CM
442.1	Aneurysm of renal artery	Diagnosis	ICD-9-CM
572.4	Hepatorenal syndrome	Diagnosis	ICD-9-CM
580.0	Acute glomerulonephritis with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM
580.4	Acute glomerulonephritis with lesion of rapidly progressive glomerulonephritis	Diagnosis	ICD-9-CM
580.81	Acute glomerulonephritis with other specified pathological lesion in kidney in disease classified elsewhere	Diagnosis	ICD-9-CM
580.89	Other acute glomerulonephritis with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
580.9	Acute glomerulonephritis with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
581.0	Nephrotic syndrome with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM
581.1	Nephrotic syndrome with lesion of membranous glomerulonephritis	Diagnosis	ICD-9-CM
581.2	Nephrotic syndrome with lesion of membranoproliferative glomerulonephritis	Diagnosis	ICD-9-CM
581.3	Nephrotic syndrome with lesion of minimal change glomerulonephritis	Diagnosis	ICD-9-CM
581.81	Nephrotic syndrome with other specified pathological lesion in kidney in diseases classified elsewhere	Diagnosis	ICD-9-CM
581.89	Other nephrotic syndrome with specified pathological lesion in kidney	Diagnosis	ICD-9-CM
581.9	Nephrotic syndrome with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
582.0	Chronic glomerulonephritis with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM
582.1	Chronic glomerulonephritis with lesion of membranous glomerulonephritis	Diagnosis	ICD-9-CM
582.2	Chronic glomerulonephritis with lesion of membranoproliferative glomerulonephritis	Diagnosis	ICD-9-CM
582.4	Chronic glomerulonephritis with lesion of rapidly progressive glomerulonephritis	Diagnosis	ICD-9-CM
582.81	Chronic glomerulonephritis with other specified pathological lesion in kidney in diseases classified elsewhere	Diagnosis	ICD-9-CM
582.89	Other chronic glomerulonephritis with specified pathological lesion in kidney	Diagnosis	ICD-9-CM
582.9	Chronic glomerulonephritis with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
583.0	Nephritis and nephropathy, not specified as acute or chronic, with lesion of proliferative glomerulonephritis	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
583.1	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranous glomerulonephritis	Diagnosis	ICD-9-CM
583.2	Nephritis and nephropathy, not specified as acute or chronic, with lesion of membranoproliferative glomerulonephritis	Diagnosis	ICD-9-CM
583.4	Nephritis and nephropathy, not specified as acute or chronic, with lesion of rapidly progressive glomerulonephritis	Diagnosis	ICD-9-CM
583.6	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
583.7	Nephritis and nephropathy, not specified as acute or chronic, with lesion of renal medullary necrosis	Diagnosis	ICD-9-CM
583.81	Nephritis and nephropathy, not specified as acute or chronic, with other specified pathological lesion in kidney, in diseases classified elsewhere	Diagnosis	ICD-9-CM
583.89	Other nephritis and nephropathy, not specified as acute or chronic, with specified pathological lesion in kidney	Diagnosis	ICD-9-CM
583.9	Nephritis and nephropathy, not specified as acute or chronic, with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.5	Acute kidney failure with lesion of tubular necrosis	Diagnosis	ICD-9-CM
584.6	Acute kidney failure with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
584.7	Acute kidney failure with lesion of medullary [papillary] necrosis	Diagnosis	ICD-9-CM
584.8	Acute kidney failure with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.9	Acute kidney failure, unspecified	Diagnosis	ICD-9-CM
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
586	Unspecified renal failure	Diagnosis	ICD-9-CM
587	Unspecified renal sclerosis	Diagnosis	ICD-9-CM
588.0	Renal osteodystrophy	Diagnosis	ICD-9-CM
588.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-9-CM
588.81	Secondary hyperparathyroidism (of renal origin)	Diagnosis	ICD-9-CM
588.89	Other specified disorders resulting from impaired renal function	Diagnosis	ICD-9-CM
588.9	Unspecified disorder resulting from impaired renal function	Diagnosis	ICD-9-CM
591	Hydronephrosis	Diagnosis	ICD-9-CM
753.12	Congenital polycystic kidney, unspecified type	Diagnosis	ICD-9-CM
753.13	Congenital polycystic kidney, autosomal dominant	Diagnosis	ICD-9-CM
753.14	Congenital polycystic kidney, autosomal recessive	Diagnosis	ICD-9-CM
753.15	Congenital renal dysplasia	Diagnosis	ICD-9-CM
753.16	Congenital medullary cystic kidney	Diagnosis	ICD-9-CM
753.17	Congenital medullary sponge kidney	Diagnosis	ICD-9-CM
753.19	Other specified congenital cystic kidney disease	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
753.20	Unspecified obstructive defect of renal pelvis and ureter	Diagnosis	ICD-9-CM
753.21	Congenital obstruction of ureteropelvic junction	Diagnosis	ICD-9-CM
753.22	Congenital obstruction of ureterovesical junction	Diagnosis	ICD-9-CM
753.23	Congenital ureterocele	Diagnosis	ICD-9-CM
753.29	Other obstructive defect of renal pelvis and ureter	Diagnosis	ICD-9-CM
794.4	Nonspecific abnormal results of kidney function study	Diagnosis	ICD-9-CM
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C68.9	Malignant neoplasm of urinary organ, unspecified	Diagnosis	ICD-10-CM
D30.00	Benign neoplasm of unspecified kidney	Diagnosis	ICD-10-CM
D30.01	Benign neoplasm of right kidney	Diagnosis	ICD-10-CM
D30.02	Benign neoplasm of left kidney	Diagnosis	ICD-10-CM
D41.00	Neoplasm of uncertain behavior of unspecified kidney	Diagnosis	ICD-10-CM
D41.01	Neoplasm of uncertain behavior of right kidney	Diagnosis	ICD-10-CM
D41.02	Neoplasm of uncertain behavior of left kidney	Diagnosis	ICD-10-CM
D41.10	Neoplasm of uncertain behavior of unspecified renal pelvis	Diagnosis	ICD-10-CM
D41.11	Neoplasm of uncertain behavior of right renal pelvis	Diagnosis	ICD-10-CM
D41.12	Neoplasm of uncertain behavior of left renal pelvis	Diagnosis	ICD-10-CM
D41.20	Neoplasm of uncertain behavior of unspecified ureter	Diagnosis	ICD-10-CM
D41.21	Neoplasm of uncertain behavior of right ureter	Diagnosis	ICD-10-CM
D41.22	Neoplasm of uncertain behavior of left ureter	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E74.8	Other specified disorders of carbohydrate metabolism	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I70.1	Atherosclerosis of renal artery	Diagnosis	ICD-10-CM
I72.2	Aneurysm of renal artery	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis	ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis	ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis	ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis	ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis	ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis	ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis	ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis	ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis	ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis	ICD-10-CM
M10.341	Gout due to renal impairment, right hand	Diagnosis	ICD-10-CM
M10.342	Gout due to renal impairment, left hand	Diagnosis	ICD-10-CM
M10.349	Gout due to renal impairment, unspecified hand	Diagnosis	ICD-10-CM
M10.351	Gout due to renal impairment, right hip	Diagnosis	ICD-10-CM
M10.352	Gout due to renal impairment, left hip	Diagnosis	ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis	ICD-10-CM
M10.361	Gout due to renal impairment, right knee	Diagnosis	ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis	ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis	ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis	ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis	ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis	ICD-10-CM
M10.38	Gout due to renal impairment, vertebrae	Diagnosis	ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M35.04	Sicca syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
M35.0A	Sjogren syndrome with glomerular disease	Diagnosis	ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N00.A	Acute nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N01.3	Rapidly progressive nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.4	Rapidly progressive nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N01.5	Rapidly progressive nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N01.6	Rapidly progressive nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N01.7	Rapidly progressive nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N01.8	Rapidly progressive nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N01.9	Rapidly progressive nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N01.A	Rapidly progressive nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N02.0	Recurrent and persistent hematuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N02.1	Recurrent and persistent hematuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N02.2	Recurrent and persistent hematuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.3	Recurrent and persistent hematuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.A	Chronic nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.A	Nephrotic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.A	Unspecified nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N06.A	Isolated proteinuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N07.0	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality	Diagnosis	ICD-10-CM
N07.1	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	Diagnosis	ICD-10-CM
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N07.A	Hereditary nephropathy, not elsewhere classified with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N13.1	Hydronephrosis with ureteral stricture, not elsewhere classified	Diagnosis	ICD-10-CM
N13.2	Hydronephrosis with renal and ureteral calculous obstruction	Diagnosis	ICD-10-CM
N13.30	Unspecified hydronephrosis	Diagnosis	ICD-10-CM
N13.39	Other hydronephrosis	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
N99.0	Postprocedural (acute) (chronic) kidney failure	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
Q62.0	Congenital hydronephrosis	Diagnosis	ICD-10-CM
Q62.10	Congenital occlusion of ureter, unspecified	Diagnosis	ICD-10-CM
Q62.11	Congenital occlusion of ureteropelvic junction	Diagnosis	ICD-10-CM
Q62.12	Congenital occlusion of ureterovesical orifice	Diagnosis	ICD-10-CM
Q62.2	Congenital megaureter	Diagnosis	ICD-10-CM
Q62.31	Congenital ureterocele, orthotopic	Diagnosis	ICD-10-CM
Q62.32	Cecoureterocele	Diagnosis	ICD-10-CM
Q62.39	Other obstructive defects of renal pelvis and ureter	Diagnosis	ICD-10-CM
R94.4	Abnormal results of kidney function studies	Diagnosis	ICD-10-CM
<b>Colorectal Cancer</b>			
153.0	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-9-CM
153.1	Malignant neoplasm of transverse colon	Diagnosis	ICD-9-CM
153.2	Malignant neoplasm of descending colon	Diagnosis	ICD-9-CM
153.3	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-9-CM
153.4	Malignant neoplasm of cecum	Diagnosis	ICD-9-CM
153.5	Malignant neoplasm of appendix	Diagnosis	ICD-9-CM
153.6	Malignant neoplasm of ascending colon	Diagnosis	ICD-9-CM
153.7	Malignant neoplasm of splenic flexure	Diagnosis	ICD-9-CM
153.8	Malignant neoplasm of other specified sites of large intestine	Diagnosis	ICD-9-CM
153.9	Malignant neoplasm of colon, unspecified site	Diagnosis	ICD-9-CM
154.0	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-9-CM
154.1	Malignant neoplasm of rectum	Diagnosis	ICD-9-CM
230.3	Carcinoma in situ of colon	Diagnosis	ICD-9-CM
230.4	Carcinoma in situ of rectum	Diagnosis	ICD-9-CM
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM
C18.1	Malignant neoplasm of appendix	Diagnosis	ICD-10-CM
C18.2	Malignant neoplasm of ascending colon	Diagnosis	ICD-10-CM
C18.3	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
C18.4	Malignant neoplasm of transverse colon	Diagnosis	ICD-10-CM
C18.5	Malignant neoplasm of splenic flexure	Diagnosis	ICD-10-CM
C18.6	Malignant neoplasm of descending colon	Diagnosis	ICD-10-CM
C18.7	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-10-CM
C18.8	Malignant neoplasm of overlapping sites of colon	Diagnosis	ICD-10-CM
C18.9	Malignant neoplasm of colon, unspecified	Diagnosis	ICD-10-CM
C19	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-10-CM
C20	Malignant neoplasm of rectum	Diagnosis	ICD-10-CM
C49.A4	Gastrointestinal stromal tumor of large intestine	Diagnosis	ICD-10-CM
C49.A5	Gastrointestinal stromal tumor of rectum	Diagnosis	ICD-10-CM
D01.0	Carcinoma in situ of colon	Diagnosis	ICD-10-CM
D01.1	Carcinoma in situ of rectosigmoid junction	Diagnosis	ICD-10-CM
D01.2	Carcinoma in situ of rectum	Diagnosis	ICD-10-CM
V10.05	Personal history of malignant neoplasm of large intestine	Diagnosis	ICD-9-CM
V10.06	Personal history of malignant neoplasm of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-9-CM
Z85.030	Personal history of malignant carcinoid tumor of large intestine	Diagnosis	ICD-10-CM
Z85.038	Personal history of other malignant neoplasm of large intestine	Diagnosis	ICD-10-CM
Z85.040	Personal history of malignant carcinoid tumor of rectum	Diagnosis	ICD-10-CM
Z85.048	Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-10-CM
<b>Chronic Obstructive Pulmonary Disease</b>			
490	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-9-CM
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
494.0	Bronchiectasis without acute exacerbation	Diagnosis	ICD-9-CM
494.1	Bronchiectasis with acute exacerbation	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
J40	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-10-CM
J41.0	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
J43.0	Unilateral pulmonary emphysema [MacLeod's syndrome]	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

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
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
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
J98.2	Interstitial emphysema	Diagnosis	ICD-10-CM
J98.3	Compensatory emphysema	Diagnosis	ICD-10-CM
<b>Coronary Angioplasty Bypass</b>			
V45.81	Postprocedural aortocoronary bypass status	Diagnosis	ICD-9-CM
V45.82	Postprocedural percutaneous transluminal coronary angioplasty status	Diagnosis	ICD-9-CM
Z95.1	Presence of aortocoronary bypass graft	Diagnosis	ICD-10-CM
Z95.5	Presence of coronary angioplasty implant and graft	Diagnosis	ICD-10-CM
Z98.61	Coronary angioplasty status	Diagnosis	ICD-10-CM
<b>Depression</b>			
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.60	Bipolar I disorder, most recent episode (or current) mixed, unspecified	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
296.61	Bipolar I disorder, most recent episode (or current) mixed, mild	Diagnosis	ICD-9-CM
296.62	Bipolar I disorder, most recent episode (or current) mixed, moderate	Diagnosis	ICD-9-CM
296.63	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.64	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.65	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.66	Bipolar I disorder, most recent episode (or current) mixed, in full remission	Diagnosis	ICD-9-CM
296.89	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
F06.31	Mood disorder due to known physiological condition with depressive features	Diagnosis	ICD-10-CM
F06.32	Mood disorder due to known physiological condition with major depressive-like episode	Diagnosis	ICD-10-CM
F31.0	Bipolar disorder, current episode hypomanic	Diagnosis	ICD-10-CM
F31.10	Bipolar disorder, current episode manic without psychotic features, unspecified	Diagnosis	ICD-10-CM
F31.11	Bipolar disorder, current episode manic without psychotic features, mild	Diagnosis	ICD-10-CM
F31.12	Bipolar disorder, current episode manic without psychotic features, moderate	Diagnosis	ICD-10-CM
F31.13	Bipolar disorder, current episode manic without psychotic features, severe	Diagnosis	ICD-10-CM
F31.2	Bipolar disorder, current episode manic severe with psychotic features	Diagnosis	ICD-10-CM
F31.30	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified	Diagnosis	ICD-10-CM
F31.31	Bipolar disorder, current episode depressed, mild	Diagnosis	ICD-10-CM
F31.32	Bipolar disorder, current episode depressed, moderate	Diagnosis	ICD-10-CM
F31.4	Bipolar disorder, current episode depressed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.5	Bipolar disorder, current episode depressed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.60	Bipolar disorder, current episode mixed, unspecified	Diagnosis	ICD-10-CM
F31.61	Bipolar disorder, current episode mixed, mild	Diagnosis	ICD-10-CM
F31.62	Bipolar disorder, current episode mixed, moderate	Diagnosis	ICD-10-CM
F31.63	Bipolar disorder, current episode mixed, severe, without psychotic features	Diagnosis	ICD-10-CM
F31.64	Bipolar disorder, current episode mixed, severe, with psychotic features	Diagnosis	ICD-10-CM
F31.71	Bipolar disorder, in partial remission, most recent episode hypomanic	Diagnosis	ICD-10-CM
F31.73	Bipolar disorder, in partial remission, most recent episode manic	Diagnosis	ICD-10-CM
F31.75	Bipolar disorder, in partial remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.76	Bipolar disorder, in full remission, most recent episode depressed	Diagnosis	ICD-10-CM
F31.77	Bipolar disorder, in partial remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.78	Bipolar disorder, in full remission, most recent episode mixed	Diagnosis	ICD-10-CM
F31.81	Bipolar II disorder	Diagnosis	ICD-10-CM
F31.89	Other bipolar disorder	Diagnosis	ICD-10-CM
F31.9	Bipolar disorder, unspecified	Diagnosis	ICD-10-CM
F32.0	Major depressive disorder, single episode, mild	Diagnosis	ICD-10-CM
F32.1	Major depressive disorder, single episode, moderate	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F32.2	Major depressive disorder, single episode, severe without psychotic features	Diagnosis	ICD-10-CM
F32.3	Major depressive disorder, single episode, severe with psychotic features	Diagnosis	ICD-10-CM
F32.4	Major depressive disorder, single episode, in partial remission	Diagnosis	ICD-10-CM
F32.5	Major depressive disorder, single episode, in full remission	Diagnosis	ICD-10-CM
F32.8	Other depressive episodes	Diagnosis	ICD-10-CM
F32.89	Other specified depressive episodes	Diagnosis	ICD-10-CM
F32.9	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-10-CM
F32.A	Depression, unspecified	Diagnosis	ICD-10-CM
F33.0	Major depressive disorder, recurrent, mild	Diagnosis	ICD-10-CM
F33.1	Major depressive disorder, recurrent, moderate	Diagnosis	ICD-10-CM
F33.2	Major depressive disorder, recurrent severe without psychotic features	Diagnosis	ICD-10-CM
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	Diagnosis	ICD-10-CM
F33.40	Major depressive disorder, recurrent, in remission, unspecified	Diagnosis	ICD-10-CM
F33.41	Major depressive disorder, recurrent, in partial remission	Diagnosis	ICD-10-CM
F33.42	Major depressive disorder, recurrent, in full remission	Diagnosis	ICD-10-CM
F33.8	Other recurrent depressive disorders	Diagnosis	ICD-10-CM
F33.9	Major depressive disorder, recurrent, unspecified	Diagnosis	ICD-10-CM
F34.0	Cyclothymic disorder	Diagnosis	ICD-10-CM
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F43.21	Adjustment disorder with depressed mood	Diagnosis	ICD-10-CM
F43.23	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-10-CM
<b>Diabetes</b>			
249.00	Secondary diabetes mellitus without mention of complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.01	Secondary diabetes mellitus without mention of complication, uncontrolled	Diagnosis	ICD-9-CM
249.10	Secondary diabetes mellitus with ketoacidosis, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.11	Secondary diabetes mellitus with ketoacidosis, uncontrolled	Diagnosis	ICD-9-CM
249.20	Secondary diabetes mellitus with hyperosmolarity, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.21	Secondary diabetes mellitus with hyperosmolarity, uncontrolled	Diagnosis	ICD-9-CM
249.30	Secondary diabetes mellitus with other coma, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.31	Secondary diabetes mellitus with other coma, uncontrolled	Diagnosis	ICD-9-CM
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.50	Secondary diabetes mellitus with ophthalmic manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.51	Secondary diabetes mellitus with ophthalmic manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.60	Secondary diabetes mellitus with neurological manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.61	Secondary diabetes mellitus with neurological manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.70	Secondary diabetes mellitus with peripheral circulatory disorders, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
249.71	Secondary diabetes mellitus with peripheral circulatory disorders, uncontrolled	Diagnosis	ICD-9-CM
249.80	Secondary diabetes mellitus with other specified manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.81	Secondary diabetes mellitus with other specified manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.90	Secondary diabetes mellitus with unspecified complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.91	Secondary diabetes mellitus with unspecified complication, uncontrolled	Diagnosis	ICD-9-CM
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.10	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.20	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.30	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.50	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.60	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.70	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.80	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.82	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.90	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.92	Diabetes with unspecified complication, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
357.2	Polyneuropathy in diabetes	Diagnosis	ICD-9-CM
362.01	Background diabetic retinopathy	Diagnosis	ICD-9-CM
362.02	Proliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.03	Nonproliferative diabetic retinopathy NOS	Diagnosis	ICD-9-CM
362.04	Mild nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.05	Moderate nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
362.06	Severe nonproliferative diabetic retinopathy	Diagnosis	ICD-9-CM
366.41	Diabetic cataract	Diagnosis	ICD-9-CM
E08.00	Diabetes mellitus due to underlying condition with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E08.01	Diabetes mellitus due to underlying condition with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E08.10	Diabetes mellitus due to underlying condition with ketoacidosis without coma	Diagnosis	ICD-10-CM
E08.11	Diabetes mellitus due to underlying condition with ketoacidosis with coma	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.311	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.319	Diabetes mellitus due to underlying condition with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.321	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3211	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3212	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3213	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E08.3219	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.329	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3291	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3292	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3293	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3299	Diabetes mellitus due to underlying condition with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.331	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3311	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3312	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3313	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3319	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.339	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3391	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3392	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3393	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3399	Diabetes mellitus due to underlying condition with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.341	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3411	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3412	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3413	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3419	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E08.349	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3491	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3492	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3493	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3499	Diabetes mellitus due to underlying condition with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.351	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E08.3511	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E08.3512	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E08.3513	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3519	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.3521	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E08.3522	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E08.3523	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3529	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3531	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E08.3532	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E08.3533	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E08.3539	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E08.3541	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E08.3542	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E08.3543	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E08.3549	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E08.3551	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E08.3552	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E08.3553	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E08.3559	Diabetes mellitus due to underlying condition with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E08.359	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E08.3591	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E08.3592	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E08.3593	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E08.3599	Diabetes mellitus due to underlying condition with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E08.36	Diabetes mellitus due to underlying condition with diabetic cataract	Diagnosis	ICD-10-CM
E08.37X1	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E08.37X2	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E08.37X3	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E08.37X9	Diabetes mellitus due to underlying condition with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy	Diagnosis	ICD-10-CM
E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication	Diagnosis	ICD-10-CM
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E08.52	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications	Diagnosis	ICD-10-CM
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy	Diagnosis	ICD-10-CM
E08.620	Diabetes mellitus due to underlying condition with diabetic dermatitis	Diagnosis	ICD-10-CM
E08.621	Diabetes mellitus due to underlying condition with foot ulcer	Diagnosis	ICD-10-CM
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer	Diagnosis	ICD-10-CM
E08.628	Diabetes mellitus due to underlying condition with other skin complications	Diagnosis	ICD-10-CM
E08.630	Diabetes mellitus due to underlying condition with periodontal disease	Diagnosis	ICD-10-CM
E08.638	Diabetes mellitus due to underlying condition with other oral complications	Diagnosis	ICD-10-CM
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma	Diagnosis	ICD-10-CM
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E08.69	Diabetes mellitus due to underlying condition with other specified complication	Diagnosis	ICD-10-CM
E08.8	Diabetes mellitus due to underlying condition with unspecified complications	Diagnosis	ICD-10-CM
E08.9	Diabetes mellitus due to underlying condition without complications	Diagnosis	ICD-10-CM
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3211	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3212	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3213	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3291	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3292	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E09.3293	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3299	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3311	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3312	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3313	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3391	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3392	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3393	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3399	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3411	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3412	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3413	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3491	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3492	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3493	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E09.3499	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.3521	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3522	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E09.3523	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3531	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3532	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E09.3533	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3541	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E09.3542	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E09.3543	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E09.3551	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E09.3552	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E09.3553	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E09.3559	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E09.359	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3591	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3592	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3593	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3599	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.36	Drug or chemical induced diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E09.37X1	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E09.37X2	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E09.37X3	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy	Diagnosis	ICD-10-CM
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	Diagnosis	ICD-10-CM
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E09.628	Drug or chemical induced diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E09.638	Drug or chemical induced diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E09.69	Drug or chemical induced diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E09.9	Drug or chemical induced diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3419	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3499	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3519	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3529	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3311	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3312	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3313	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3319	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3391	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3392	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3393	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3399	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3411	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3412	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E11.3413	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3419	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3491	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3492	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3493	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3499	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3511	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3512	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3413	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3419	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.349	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3491	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3492	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3493	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3499	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.351	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3511	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3512	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E13.3513	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3519	Other specified diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.3521	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3522	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3523	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3529	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3531	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E13.3532	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E13.3533	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E13.3539	Other specified diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E13.3541	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E13.3542	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E13.3543	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E13.3549	Other specified diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E13.3551	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E13.3552	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E13.3553	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E13.3559	Other specified diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E13.359	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3591	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3592	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3593	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3599	Other specified diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E13.36	Other specified diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E13.39	Other specified diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E13.40	Other specified diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E13.41	Other specified diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E13.42	Other specified diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E13.43	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E13.44	Other specified diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E13.49	Other specified diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E13.51	Other specified diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E13.52	Other specified diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E13.59	Other specified diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E13.610	Other specified diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E13.618	Other specified diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E13.620	Other specified diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E13.621	Other specified diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E13.622	Other specified diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E13.628	Other specified diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E13.630	Other specified diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E13.638	Other specified diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E13.641	Other specified diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E13.649	Other specified diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E13.65	Other specified diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.69	Other specified diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E13.8	Other specified diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E13.9	Other specified diabetes mellitus without complications	Diagnosis	ICD-10-CM
Drug Abuse			
292.0	Drug withdrawal	Diagnosis	ICD-9-CM
292.11	Drug-induced psychotic disorder with delusions	Diagnosis	ICD-9-CM
292.12	Drug-induced psychotic disorder with hallucinations	Diagnosis	ICD-9-CM
292.2	Pathological drug intoxication	Diagnosis	ICD-9-CM
292.81	Drug-induced delirium	Diagnosis	ICD-9-CM
292.82	Drug-induced persisting dementia	Diagnosis	ICD-9-CM
292.83	Drug-induced persisting amnestic disorder	Diagnosis	ICD-9-CM
292.84	Drug-induced mood disorder	Diagnosis	ICD-9-CM
292.85	Drug induced sleep disorders	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
304.00	Opioid type dependence, unspecified	Diagnosis	ICD-9-CM
304.01	Opioid type dependence, continuous	Diagnosis	ICD-9-CM
304.02	Opioid type dependence, episodic	Diagnosis	ICD-9-CM
304.10	Sedative, hypnotic or anxiolytic dependence, unspecified	Diagnosis	ICD-9-CM
304.11	Sedative, hypnotic or anxiolytic dependence, continuous	Diagnosis	ICD-9-CM
304.12	Sedative, hypnotic or anxiolytic dependence, episodic	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
304.2	Cocaine dependence	Diagnosis	ICD-9-CM
304.20	Cocaine dependence, unspecified	Diagnosis	ICD-9-CM
304.21	Cocaine dependence, continuous	Diagnosis	ICD-9-CM
304.22	Cocaine dependence, episodic	Diagnosis	ICD-9-CM
304.3	Cannabis dependence	Diagnosis	ICD-9-CM
304.30	Cannabis dependence, unspecified	Diagnosis	ICD-9-CM
304.31	Cannabis dependence, continuous	Diagnosis	ICD-9-CM
304.32	Cannabis dependence, episodic	Diagnosis	ICD-9-CM
304.4	Amphetamine and other psychostimulant dependence	Diagnosis	ICD-9-CM
304.40	Amphetamine and other psychostimulant dependence, unspecified	Diagnosis	ICD-9-CM
304.41	Amphetamine and other psychostimulant dependence, continuous	Diagnosis	ICD-9-CM
304.42	Amphetamine and other psychostimulant dependence, episodic	Diagnosis	ICD-9-CM
304.5	Hallucinogen dependence	Diagnosis	ICD-9-CM
304.50	Hallucinogen dependence, unspecified	Diagnosis	ICD-9-CM
304.51	Hallucinogen dependence, continuous	Diagnosis	ICD-9-CM
304.52	Hallucinogen dependence, episodic	Diagnosis	ICD-9-CM
304.6	Other specified drug dependence	Diagnosis	ICD-9-CM
304.60	Other specified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.61	Other specified drug dependence, continuous	Diagnosis	ICD-9-CM
304.62	Other specified drug dependence, episodic	Diagnosis	ICD-9-CM
304.7	Combinations of opioid type drug with any other drug dependence	Diagnosis	ICD-9-CM
304.70	Combinations of opioid type drug with any other drug dependence, unspecified	Diagnosis	ICD-9-CM
304.71	Combinations of opioid type drug with any other drug dependence, continuous	Diagnosis	ICD-9-CM
304.72	Combinations of opioid type drug with any other drug dependence, episodic	Diagnosis	ICD-9-CM
304.8	Combinations of drug dependence excluding opioid type drug	Diagnosis	ICD-9-CM
304.80	Combinations of drug dependence excluding opioid type drug, unspecified	Diagnosis	ICD-9-CM
304.81	Combinations of drug dependence excluding opioid type drug, continuous	Diagnosis	ICD-9-CM
304.82	Combinations of drug dependence excluding opioid type drug, episodic	Diagnosis	ICD-9-CM
304.9	Unspecified drug dependence	Diagnosis	ICD-9-CM
304.90	Unspecified drug dependence, unspecified	Diagnosis	ICD-9-CM
304.91	Unspecified drug dependence, continuous	Diagnosis	ICD-9-CM
304.92	Unspecified drug dependence, episodic	Diagnosis	ICD-9-CM
305.2	Nondependent cannabis abuse	Diagnosis	ICD-9-CM
305.20	Nondependent cannabis abuse, unspecified	Diagnosis	ICD-9-CM
305.21	Nondependent cannabis abuse, continuous	Diagnosis	ICD-9-CM
305.22	Nondependent cannabis abuse, episodic	Diagnosis	ICD-9-CM
305.3	Nondependent hallucinogen abuse	Diagnosis	ICD-9-CM
305.30	Nondependent hallucinogen abuse, unspecified	Diagnosis	ICD-9-CM
305.31	Nondependent hallucinogen abuse, continuous	Diagnosis	ICD-9-CM
305.32	Nondependent hallucinogen abuse, episodic	Diagnosis	ICD-9-CM
305.4	Nondependent sedative, hypnotic or anxiolytic abuse	Diagnosis	ICD-9-CM
305.40	Nondependent sedative, hypnotic or anxiolytic abuse, unspecified	Diagnosis	ICD-9-CM
305.41	Nondependent sedative hypnotic or anxiolytic abuse, continuous	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
305.42	Nondependent sedative, hypnotic or anxiolytic abuse, episodic	Diagnosis	ICD-9-CM
305.5	Nondependent opioid abuse	Diagnosis	ICD-9-CM
305.50	Nondependent opioid abuse, unspecified	Diagnosis	ICD-9-CM
305.51	Nondependent opioid abuse, continuous	Diagnosis	ICD-9-CM
305.52	Nondependent opioid abuse, episodic	Diagnosis	ICD-9-CM
305.6	Nondependent cocaine abuse	Diagnosis	ICD-9-CM
305.60	Nondependent cocaine abuse, unspecified	Diagnosis	ICD-9-CM
305.61	Nondependent cocaine abuse, continuous	Diagnosis	ICD-9-CM
305.62	Nondependent cocaine abuse, episodic	Diagnosis	ICD-9-CM
305.7	Nondependent amphetamine or related acting sympathomimetic abuse	Diagnosis	ICD-9-CM
305.70	Nondependent amphetamine or related acting sympathomimetic abuse, unspecified	Diagnosis	ICD-9-CM
305.71	Nondependent amphetamine or related acting sympathomimetic abuse, continuous	Diagnosis	ICD-9-CM
305.72	Nondependent amphetamine or related acting sympathomimetic abuse, episodic	Diagnosis	ICD-9-CM
305.8	Nondependent antidepressant type abuse	Diagnosis	ICD-9-CM
305.80	Nondependent antidepressant type abuse, unspecified	Diagnosis	ICD-9-CM
305.81	Nondependent antidepressant type abuse, continuous	Diagnosis	ICD-9-CM
305.82	Nondependent antidepressant type abuse, episodic	Diagnosis	ICD-9-CM
305.9	Other, mixed, or unspecified nondependent drug abuse	Diagnosis	ICD-9-CM
305.90	Other, mixed, or unspecified nondependent drug abuse, unspecified	Diagnosis	ICD-9-CM
305.91	Other, mixed, or unspecified nondependent drug abuse, continuous	Diagnosis	ICD-9-CM
305.92	Other, mixed, or unspecified nondependent drug abuse, episodic	Diagnosis	ICD-9-CM
648.3	Maternal drug dependence complicating pregnancy, childbirth, or the puerperium	Diagnosis	ICD-9-CM
648.30	Maternal drug dependence complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care	Diagnosis	ICD-9-CM
648.31	Maternal drug dependence, with delivery	Diagnosis	ICD-9-CM
648.32	Maternal drug dependence, with delivery, with current postpartum complication	Diagnosis	ICD-9-CM
648.33	Maternal drug dependence, antepartum	Diagnosis	ICD-9-CM
648.34	Maternal drug dependence complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diagnosis	ICD-9-CM
655.5	Suspected damage to fetus from drugs, affecting management of mother	Diagnosis	ICD-9-CM
655.50	Suspected damage to fetus from drugs, affecting management of mother, unspecified as to episode of care	Diagnosis	ICD-9-CM
655.51	Suspected damage to fetus from drugs, affecting management of mother, delivered	Diagnosis	ICD-9-CM
655.53	Suspected damage to fetus from drugs, affecting management of mother, antepartum	Diagnosis	ICD-9-CM
760.72	Noxious influences affecting fetus or newborn via placenta or breast milk, narcotics	Diagnosis	ICD-9-CM
760.73	Noxious influences affecting fetus or newborn via placenta or breast milk, hallucinogenic agents	Diagnosis	ICD-9-CM
760.75	Noxious influences affecting fetus or newborn via placenta or breast milk, cocaine	Diagnosis	ICD-9-CM
779.5	Drug withdrawal syndrome in newborn	Diagnosis	ICD-9-CM
94.6	Alcohol and drug rehabilitation and detoxification	Procedure	ICD-9-CM
94.64	Drug rehabilitation	Procedure	ICD-9-CM
94.65	Drug detoxification	Procedure	ICD-9-CM
94.66	Drug rehabilitation and detoxification	Procedure	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
94.67	Combined alcohol and drug rehabilitation	Procedure	ICD-9-CM
94.68	Combined alcohol and drug detoxification	Procedure	ICD-9-CM
94.69	Combined alcohol and drug rehabilitation and detoxification	Procedure	ICD-9-CM
965.0	Poisoning by opiates and related narcotics	Diagnosis	ICD-9-CM
965.00	Poisoning by opium (alkaloids), unspecified	Diagnosis	ICD-9-CM
965.01	Poisoning by heroin	Diagnosis	ICD-9-CM
965.02	Poisoning by methadone	Diagnosis	ICD-9-CM
965.09	Poisoning by opiates and related narcotics, other	Diagnosis	ICD-9-CM
E850.0	Accidental poisoning by heroin	Diagnosis	ICD-9-CM
E850.1	Accidental poisoning by methadone	Diagnosis	ICD-9-CM
E850.2	Accidental poisoning by other opiates and related narcotics	Diagnosis	ICD-9-CM
E854.1	Accidental poisoning by psychodysleptics (hallucinogens)	Diagnosis	ICD-9-CM
E935.0	Heroin causing adverse effect in therapeutic use	Diagnosis	ICD-9-CM
E935.1	Methadone causing adverse effect in therapeutic use	Diagnosis	ICD-9-CM
F11.10	Opioid abuse, uncomplicated	Diagnosis	ICD-10-CM
F11.11	Opioid abuse, in remission	Diagnosis	ICD-10-CM
F11.120	Opioid abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.121	Opioid abuse with intoxication delirium	Diagnosis	ICD-10-CM
F11.122	Opioid abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.129	Opioid abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.13	Opioid abuse with withdrawal	Diagnosis	ICD-10-CM
F11.14	Opioid abuse with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.150	Opioid abuse with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.151	Opioid abuse with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.181	Opioid abuse with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.182	Opioid abuse with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.188	Opioid abuse with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.19	Opioid abuse with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F11.20	Opioid dependence, uncomplicated	Diagnosis	ICD-10-CM
F11.220	Opioid dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.221	Opioid dependence with intoxication delirium	Diagnosis	ICD-10-CM
F11.222	Opioid dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.229	Opioid dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.23	Opioid dependence with withdrawal	Diagnosis	ICD-10-CM
F11.24	Opioid dependence with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.250	Opioid dependence with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.251	Opioid dependence with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.281	Opioid dependence with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.282	Opioid dependence with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.288	Opioid dependence with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.29	Opioid dependence with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F11.90	Opioid use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F11.920	Opioid use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F11.921	Opioid use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F11.922	Opioid use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F11.929	Opioid use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F11.93	Opioid use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F11.94	Opioid use, unspecified with opioid-induced mood disorder	Diagnosis	ICD-10-CM
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F11.981	Opioid use, unspecified with opioid-induced sexual dysfunction	Diagnosis	ICD-10-CM
F11.982	Opioid use, unspecified with opioid-induced sleep disorder	Diagnosis	ICD-10-CM
F11.988	Opioid use, unspecified with other opioid-induced disorder	Diagnosis	ICD-10-CM
F11.99	Opioid use, unspecified with unspecified opioid-induced disorder	Diagnosis	ICD-10-CM
F12.10	Cannabis abuse, uncomplicated	Diagnosis	ICD-10-CM
F12.11	Cannabis abuse, in remission	Diagnosis	ICD-10-CM
F12.120	Cannabis abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.121	Cannabis abuse with intoxication delirium	Diagnosis	ICD-10-CM
F12.122	Cannabis abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F12.129	Cannabis abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F12.13	Cannabis abuse with withdrawal	Diagnosis	ICD-10-CM
F12.150	Cannabis abuse with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.151	Cannabis abuse with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.159	Cannabis abuse with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.180	Cannabis abuse with cannabis-induced anxiety disorder	Diagnosis	ICD-10-CM
F12.188	Cannabis abuse with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.19	Cannabis abuse with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.20	Cannabis dependence, uncomplicated	Diagnosis	ICD-10-CM
F12.220	Cannabis dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.221	Cannabis dependence with intoxication delirium	Diagnosis	ICD-10-CM
F12.222	Cannabis dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F12.229	Cannabis dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F12.250	Cannabis dependence with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.251	Cannabis dependence with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.259	Cannabis dependence with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.280	Cannabis dependence with cannabis-induced anxiety disorder	Diagnosis	ICD-10-CM
F12.288	Cannabis dependence with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.29	Cannabis dependence with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.90	Cannabis use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F12.920	Cannabis use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F12.921	Cannabis use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F12.922	Cannabis use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F12.929	Cannabis use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F12.950	Cannabis use, unspecified with psychotic disorder with delusions	Diagnosis	ICD-10-CM
F12.951	Cannabis use, unspecified with psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F12.959	Cannabis use, unspecified with psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F12.980	Cannabis use, unspecified with anxiety disorder	Diagnosis	ICD-10-CM
F12.988	Cannabis use, unspecified with other cannabis-induced disorder	Diagnosis	ICD-10-CM
F12.99	Cannabis use, unspecified with unspecified cannabis-induced disorder	Diagnosis	ICD-10-CM
F13.10	Sedative, hypnotic or anxiolytic abuse, uncomplicated	Diagnosis	ICD-10-CM
F13.11	Sedative, hypnotic or anxiolytic abuse, in remission	Diagnosis	ICD-10-CM
F13.120	Sedative, hypnotic or anxiolytic abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.121	Sedative, hypnotic or anxiolytic abuse with intoxication delirium	Diagnosis	ICD-10-CM
F13.129	Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.130	Sedative, hypnotic or anxiolytic abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.131	Sedative, hypnotic or anxiolytic abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F13.132	Sedative, hypnotic or anxiolytic abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F13.139	Sedative, hypnotic or anxiolytic abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.14	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM
F13.150	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.151	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.159	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.180	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM
F13.181	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis	ICD-10-CM
F13.182	Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.188	Sedative, hypnotic or anxiolytic abuse with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.19	Sedative, hypnotic or anxiolytic abuse with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.20	Sedative, hypnotic or anxiolytic dependence, uncomplicated	Diagnosis	ICD-10-CM
F13.220	Sedative, hypnotic or anxiolytic dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.221	Sedative, hypnotic or anxiolytic dependence with intoxication delirium	Diagnosis	ICD-10-CM
F13.229	Sedative, hypnotic or anxiolytic dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.230	Sedative, hypnotic or anxiolytic dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.231	Sedative, hypnotic or anxiolytic dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F13.232	Sedative, hypnotic or anxiolytic dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F13.239	Sedative, hypnotic or anxiolytic dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.24	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F13.250	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.251	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.259	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.26	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F13.27	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting dementia	Diagnosis	ICD-10-CM
F13.280	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM
F13.281	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis	ICD-10-CM
F13.282	Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.288	Sedative, hypnotic or anxiolytic dependence with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.29	Sedative, hypnotic or anxiolytic dependence with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.90	Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F13.920	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F13.921	Sedative, hypnotic or anxiolytic use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F13.929	Sedative, hypnotic or anxiolytic use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F13.930	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F13.931	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal delirium	Diagnosis	ICD-10-CM
F13.932	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal with perceptual disturbances	Diagnosis	ICD-10-CM
F13.939	Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, unspecified	Diagnosis	ICD-10-CM
F13.94	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood disorder	Diagnosis	ICD-10-CM
F13.950	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F13.951	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F13.959	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F13.96	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F13.97	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting dementia	Diagnosis	ICD-10-CM
F13.980	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced anxiety disorder	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F13.981	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sexual dysfunction	Diagnosis	ICD-10-CM
F13.982	Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sleep disorder	Diagnosis	ICD-10-CM
F13.988	Sedative, hypnotic or anxiolytic use, unspecified with other sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F13.99	Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic-induced disorder	Diagnosis	ICD-10-CM
F14.10	Cocaine abuse, uncomplicated	Diagnosis	ICD-10-CM
F14.11	Cocaine abuse, in remission	Diagnosis	ICD-10-CM
F14.120	Cocaine abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.121	Cocaine abuse with intoxication with delirium	Diagnosis	ICD-10-CM
F14.122	Cocaine abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F14.129	Cocaine abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.13	Cocaine abuse, unspecified with withdrawal	Diagnosis	ICD-10-CM
F14.14	Cocaine abuse with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.150	Cocaine abuse with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.151	Cocaine abuse with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.159	Cocaine abuse with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.180	Cocaine abuse with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.181	Cocaine abuse with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.182	Cocaine abuse with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.188	Cocaine abuse with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.19	Cocaine abuse with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.20	Cocaine dependence, uncomplicated	Diagnosis	ICD-10-CM
F14.220	Cocaine dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.221	Cocaine dependence with intoxication delirium	Diagnosis	ICD-10-CM
F14.222	Cocaine dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F14.229	Cocaine dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.23	Cocaine dependence with withdrawal	Diagnosis	ICD-10-CM
F14.24	Cocaine dependence with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.250	Cocaine dependence with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.251	Cocaine dependence with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.259	Cocaine dependence with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.280	Cocaine dependence with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.281	Cocaine dependence with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.282	Cocaine dependence with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.288	Cocaine dependence with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.29	Cocaine dependence with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.90	Cocaine use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F14.920	Cocaine use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F14.921	Cocaine use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F14.922	Cocaine use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F14.929	Cocaine use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F14.93	Cocaine use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F14.94	Cocaine use, unspecified with cocaine-induced mood disorder	Diagnosis	ICD-10-CM
F14.950	Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F14.951	Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F14.959	Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F14.980	Cocaine use, unspecified with cocaine-induced anxiety disorder	Diagnosis	ICD-10-CM
F14.981	Cocaine use, unspecified with cocaine-induced sexual dysfunction	Diagnosis	ICD-10-CM
F14.982	Cocaine use, unspecified with cocaine-induced sleep disorder	Diagnosis	ICD-10-CM
F14.988	Cocaine use, unspecified with other cocaine-induced disorder	Diagnosis	ICD-10-CM
F14.99	Cocaine use, unspecified with unspecified cocaine-induced disorder	Diagnosis	ICD-10-CM
F15.10	Other stimulant abuse, uncomplicated	Diagnosis	ICD-10-CM
F15.11	Other stimulant abuse, in remission	Diagnosis	ICD-10-CM
F15.120	Other stimulant abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.121	Other stimulant abuse with intoxication delirium	Diagnosis	ICD-10-CM
F15.122	Other stimulant abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F15.129	Other stimulant abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.13	Other stimulant abuse with withdrawal	Diagnosis	ICD-10-CM
F15.14	Other stimulant abuse with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.150	Other stimulant abuse with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.151	Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.159	Other stimulant abuse with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.180	Other stimulant abuse with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.181	Other stimulant abuse with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.182	Other stimulant abuse with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.188	Other stimulant abuse with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.19	Other stimulant abuse with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.20	Other stimulant dependence, uncomplicated	Diagnosis	ICD-10-CM
F15.220	Other stimulant dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.221	Other stimulant dependence with intoxication delirium	Diagnosis	ICD-10-CM
F15.222	Other stimulant dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F15.229	Other stimulant dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.23	Other stimulant dependence with withdrawal	Diagnosis	ICD-10-CM
F15.24	Other stimulant dependence with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.250	Other stimulant dependence with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.251	Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.259	Other stimulant dependence with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.280	Other stimulant dependence with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.281	Other stimulant dependence with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.282	Other stimulant dependence with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.288	Other stimulant dependence with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.29	Other stimulant dependence with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F15.90	Other stimulant use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F15.920	Other stimulant use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F15.921	Other stimulant use, unspecified with intoxication delirium	Diagnosis	ICD-10-CM
F15.922	Other stimulant use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F15.929	Other stimulant use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F15.93	Other stimulant use, unspecified with withdrawal	Diagnosis	ICD-10-CM
F15.94	Other stimulant use, unspecified with stimulant-induced mood disorder	Diagnosis	ICD-10-CM
F15.950	Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F15.951	Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F15.959	Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F15.980	Other stimulant use, unspecified with stimulant-induced anxiety disorder	Diagnosis	ICD-10-CM
F15.981	Other stimulant use, unspecified with stimulant-induced sexual dysfunction	Diagnosis	ICD-10-CM
F15.982	Other stimulant use, unspecified with stimulant-induced sleep disorder	Diagnosis	ICD-10-CM
F15.988	Other stimulant use, unspecified with other stimulant-induced disorder	Diagnosis	ICD-10-CM
F15.99	Other stimulant use, unspecified with unspecified stimulant-induced disorder	Diagnosis	ICD-10-CM
F16.10	Hallucinogen abuse, uncomplicated	Diagnosis	ICD-10-CM
F16.11	Hallucinogen abuse, in remission	Diagnosis	ICD-10-CM
F16.120	Hallucinogen abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.121	Hallucinogen abuse with intoxication with delirium	Diagnosis	ICD-10-CM
F16.122	Hallucinogen abuse with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F16.129	Hallucinogen abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.14	Hallucinogen abuse with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM
F16.150	Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.151	Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.159	Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.180	Hallucinogen abuse with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.183	Hallucinogen abuse with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.188	Hallucinogen abuse with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.19	Hallucinogen abuse with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.20	Hallucinogen dependence, uncomplicated	Diagnosis	ICD-10-CM
F16.220	Hallucinogen dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.221	Hallucinogen dependence with intoxication with delirium	Diagnosis	ICD-10-CM
F16.229	Hallucinogen dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.24	Hallucinogen dependence with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM
F16.250	Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.251	Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.259	Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.280	Hallucinogen dependence with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.283	Hallucinogen dependence with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.288	Hallucinogen dependence with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F16.29	Hallucinogen dependence with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.90	Hallucinogen use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F16.920	Hallucinogen use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F16.921	Hallucinogen use, unspecified with intoxication with delirium	Diagnosis	ICD-10-CM
F16.929	Hallucinogen use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F16.94	Hallucinogen use, unspecified with hallucinogen-induced mood disorder	Diagnosis	ICD-10-CM
F16.950	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F16.951	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F16.959	Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F16.980	Hallucinogen use, unspecified with hallucinogen-induced anxiety disorder	Diagnosis	ICD-10-CM
F16.983	Hallucinogen use, unspecified with hallucinogen persisting perception disorder (flashbacks)	Diagnosis	ICD-10-CM
F16.988	Hallucinogen use, unspecified with other hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F16.99	Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder	Diagnosis	ICD-10-CM
F18.10	Inhalant abuse, uncomplicated	Diagnosis	ICD-10-CM
F18.11	Inhalant abuse, in remission	Diagnosis	ICD-10-CM
F18.120	Inhalant abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F18.121	Inhalant abuse with intoxication delirium	Diagnosis	ICD-10-CM
F18.129	Inhalant abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.14	Inhalant abuse with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.150	Inhalant abuse with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.151	Inhalant abuse with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.159	Inhalant abuse with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.17	Inhalant abuse with inhalant-induced dementia	Diagnosis	ICD-10-CM
F18.180	Inhalant abuse with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F18.188	Inhalant abuse with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.19	Inhalant abuse with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.20	Inhalant dependence, uncomplicated	Diagnosis	ICD-10-CM
F18.220	Inhalant dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F18.221	Inhalant dependence with intoxication delirium	Diagnosis	ICD-10-CM
F18.229	Inhalant dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.24	Inhalant dependence with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.250	Inhalant dependence with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.251	Inhalant dependence with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.259	Inhalant dependence with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.27	Inhalant dependence with inhalant-induced dementia	Diagnosis	ICD-10-CM
F18.280	Inhalant dependence with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F18.288	Inhalant dependence with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.29	Inhalant dependence with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.90	Inhalant use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F18.920	Inhalant use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F18.921	Inhalant use, unspecified with intoxication with delirium	Diagnosis	ICD-10-CM
F18.929	Inhalant use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F18.94	Inhalant use, unspecified with inhalant-induced mood disorder	Diagnosis	ICD-10-CM
F18.950	Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F18.951	Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F18.959	Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F18.97	Inhalant use, unspecified with inhalant-induced persisting dementia	Diagnosis	ICD-10-CM
F18.980	Inhalant use, unspecified with inhalant-induced anxiety disorder	Diagnosis	ICD-10-CM
F18.988	Inhalant use, unspecified with other inhalant-induced disorder	Diagnosis	ICD-10-CM
F18.99	Inhalant use, unspecified with unspecified inhalant-induced disorder	Diagnosis	ICD-10-CM
F19.10	Other psychoactive substance abuse, uncomplicated	Diagnosis	ICD-10-CM
F19.11	Other psychoactive substance abuse, in remission	Diagnosis	ICD-10-CM
F19.120	Other psychoactive substance abuse with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.121	Other psychoactive substance abuse with intoxication delirium	Diagnosis	ICD-10-CM
F19.122	Other psychoactive substance abuse with intoxication with perceptual disturbances	Diagnosis	ICD-10-CM
F19.129	Other psychoactive substance abuse with intoxication, unspecified	Diagnosis	ICD-10-CM
F19.130	Other psychoactive substance abuse with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F19.131	Other psychoactive substance abuse with withdrawal delirium	Diagnosis	ICD-10-CM
F19.132	Other psychoactive substance abuse with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F19.139	Other psychoactive substance abuse with withdrawal, unspecified	Diagnosis	ICD-10-CM
F19.14	Other psychoactive substance abuse with psychoactive substance-induced mood disorder	Diagnosis	ICD-10-CM
F19.150	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.151	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.159	Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.16	Other psychoactive substance abuse with psychoactive substance-induced persisting amnesic disorder	Diagnosis	ICD-10-CM
F19.17	Other psychoactive substance abuse with psychoactive substance-induced persisting dementia	Diagnosis	ICD-10-CM
F19.180	Other psychoactive substance abuse with psychoactive substance-induced anxiety disorder	Diagnosis	ICD-10-CM
F19.181	Other psychoactive substance abuse with psychoactive substance-induced sexual dysfunction	Diagnosis	ICD-10-CM
F19.182	Other psychoactive substance abuse with psychoactive substance-induced sleep disorder	Diagnosis	ICD-10-CM
F19.188	Other psychoactive substance abuse with other psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.19	Other psychoactive substance abuse with unspecified psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.20	Other psychoactive substance dependence, uncomplicated	Diagnosis	ICD-10-CM
F19.21	Other psychoactive substance dependence, in remission	Diagnosis	ICD-10-CM
F19.220	Other psychoactive substance dependence with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.221	Other psychoactive substance dependence with intoxication delirium	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F19.222	Other psychoactive substance dependence with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F19.229	Other psychoactive substance dependence with intoxication, unspecified	Diagnosis	ICD-10-CM
F19.230	Other psychoactive substance dependence with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F19.231	Other psychoactive substance dependence with withdrawal delirium	Diagnosis	ICD-10-CM
F19.232	Other psychoactive substance dependence with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F19.239	Other psychoactive substance dependence with withdrawal, unspecified	Diagnosis	ICD-10-CM
F19.24	Other psychoactive substance dependence with psychoactive substance-induced mood disorder	Diagnosis	ICD-10-CM
F19.250	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM
F19.251	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.259	Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.26	Other psychoactive substance dependence with psychoactive substance-induced persisting amnesic disorder	Diagnosis	ICD-10-CM
F19.27	Other psychoactive substance dependence with psychoactive substance-induced persisting dementia	Diagnosis	ICD-10-CM
F19.280	Other psychoactive substance dependence with psychoactive substance-induced anxiety disorder	Diagnosis	ICD-10-CM
F19.281	Other psychoactive substance dependence with psychoactive substance-induced sexual dysfunction	Diagnosis	ICD-10-CM
F19.282	Other psychoactive substance dependence with psychoactive substance-induced sleep disorder	Diagnosis	ICD-10-CM
F19.288	Other psychoactive substance dependence with other psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.29	Other psychoactive substance dependence with unspecified psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.90	Other psychoactive substance use, unspecified, uncomplicated	Diagnosis	ICD-10-CM
F19.920	Other psychoactive substance use, unspecified with intoxication, uncomplicated	Diagnosis	ICD-10-CM
F19.921	Other psychoactive substance use, unspecified with intoxication with delirium	Diagnosis	ICD-10-CM
F19.922	Other psychoactive substance use, unspecified with intoxication with perceptual disturbance	Diagnosis	ICD-10-CM
F19.929	Other psychoactive substance use, unspecified with intoxication, unspecified	Diagnosis	ICD-10-CM
F19.930	Other psychoactive substance use, unspecified with withdrawal, uncomplicated	Diagnosis	ICD-10-CM
F19.931	Other psychoactive substance use, unspecified with withdrawal delirium	Diagnosis	ICD-10-CM
F19.932	Other psychoactive substance use, unspecified with withdrawal with perceptual disturbance	Diagnosis	ICD-10-CM
F19.939	Other psychoactive substance use, unspecified with withdrawal, unspecified	Diagnosis	ICD-10-CM
F19.94	Other psychoactive substance use, unspecified with psychoactive substance-induced mood disorder	Diagnosis	ICD-10-CM
F19.950	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with delusions	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
F19.951	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with hallucinations	Diagnosis	ICD-10-CM
F19.959	Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder, unspecified	Diagnosis	ICD-10-CM
F19.96	Other psychoactive substance use, unspecified with psychoactive substance-induced persisting amnestic disorder	Diagnosis	ICD-10-CM
F19.97	Other psychoactive substance use, unspecified with psychoactive substance-induced persisting dementia	Diagnosis	ICD-10-CM
F19.980	Other psychoactive substance use, unspecified with psychoactive substance-induced anxiety disorder	Diagnosis	ICD-10-CM
F19.981	Other psychoactive substance use, unspecified with psychoactive substance-induced sexual dysfunction	Diagnosis	ICD-10-CM
F19.982	Other psychoactive substance use, unspecified with psychoactive substance-induced sleep disorder	Diagnosis	ICD-10-CM
F19.988	Other psychoactive substance use, unspecified with other psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
F19.99	Other psychoactive substance use, unspecified with unspecified psychoactive substance-induced disorder	Diagnosis	ICD-10-CM
HZ2ZZZZ	Detoxification Services for Substance Abuse Treatment	Procedure	ICD-10-PCS
HZ30ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ31ZZZ	Individual Counseling for Substance Abuse Treatment, Behavioral	Procedure	ICD-10-PCS
HZ32ZZZ	Individual Counseling for Substance Abuse Treatment, Cognitive-Behavioral	Procedure	ICD-10-PCS
HZ33ZZZ	Individual Counseling for Substance Abuse Treatment, 12-Step	Procedure	ICD-10-PCS
HZ34ZZZ	Individual Counseling for Substance Abuse Treatment, Interpersonal	Procedure	ICD-10-PCS
HZ35ZZZ	Individual Counseling for Substance Abuse Treatment, Vocational	Procedure	ICD-10-PCS
HZ36ZZZ	Individual Counseling for Substance Abuse Treatment, Psychoeducation	Procedure	ICD-10-PCS
HZ37ZZZ	Individual Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure	ICD-10-PCS
HZ38ZZZ	Individual Counseling for Substance Abuse Treatment, Confrontational	Procedure	ICD-10-PCS
HZ39ZZZ	Individual Counseling for Substance Abuse Treatment, Continuing Care	Procedure	ICD-10-PCS
HZ3BZZZ	Individual Counseling for Substance Abuse Treatment, Spiritual	Procedure	ICD-10-PCS
HZ40ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ41ZZZ	Group Counseling for Substance Abuse Treatment, Behavioral	Procedure	ICD-10-PCS
HZ42ZZZ	Group Counseling for Substance Abuse Treatment, Cognitive-Behavioral	Procedure	ICD-10-PCS
HZ43ZZZ	Group Counseling for Substance Abuse Treatment, 12-Step	Procedure	ICD-10-PCS
HZ44ZZZ	Group Counseling for Substance Abuse Treatment, Interpersonal	Procedure	ICD-10-PCS
HZ45ZZZ	Group Counseling for Substance Abuse Treatment, Vocational	Procedure	ICD-10-PCS
HZ46ZZZ	Group Counseling for Substance Abuse Treatment, Psychoeducation	Procedure	ICD-10-PCS
HZ47ZZZ	Group Counseling for Substance Abuse Treatment, Motivational Enhancement	Procedure	ICD-10-PCS
HZ48ZZZ	Group Counseling for Substance Abuse Treatment, Confrontational	Procedure	ICD-10-PCS
HZ49ZZZ	Group Counseling for Substance Abuse Treatment, Continuing Care	Procedure	ICD-10-PCS
HZ4BZZZ	Group Counseling for Substance Abuse Treatment, Spiritual	Procedure	ICD-10-PCS
HZ50ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Cognitive	Procedure	ICD-10-PCS
HZ51ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Behavioral	Procedure	ICD-10-PCS



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
HZ52ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Cognitive-Behavioral	Procedure	ICD-10-PCS
HZ53ZZZ	Individual Psychotherapy for Substance Abuse Treatment, 12-Step	Procedure	ICD-10-PCS
HZ54ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Interpersonal	Procedure	ICD-10-PCS
HZ55ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Interactive	Procedure	ICD-10-PCS
HZ56ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychoeducation	Procedure	ICD-10-PCS
HZ57ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Motivational Enhancement	Procedure	ICD-10-PCS
HZ58ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Confrontational	Procedure	ICD-10-PCS
HZ59ZZZ	Individual Psychotherapy for Substance Abuse Treatment, Supportive	Procedure	ICD-10-PCS
HZ5BZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychoanalysis	Procedure	ICD-10-PCS
HZ5CZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychodynamic	Procedure	ICD-10-PCS
HZ5DZZZ	Individual Psychotherapy for Substance Abuse Treatment, Psychophysiological	Procedure	ICD-10-PCS
HZ63ZZZ	Family Counseling for Substance Abuse Treatment	Procedure	ICD-10-PCS
HZ83ZZZ	Medication Management for Substance Abuse Treatment, Antabuse	Procedure	ICD-10-PCS
HZ86ZZZ	Medication Management for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
HZ88ZZZ	Medication Management for Substance Abuse Treatment, Psychiatric Medication	Procedure	ICD-10-PCS
HZ89ZZZ	Medication Management for Substance Abuse Treatment, Other Replacement Medication	Procedure	ICD-10-PCS
HZ93ZZZ	Pharmacotherapy for Substance Abuse Treatment, Antabuse	Procedure	ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
HZ98ZZZ	Pharmacotherapy for Substance Abuse Treatment, Psychiatric Medication	Procedure	ICD-10-PCS
HZ99ZZZ	Pharmacotherapy for Substance Abuse Treatment, Other Replacement Medication	Procedure	ICD-10-PCS
O35.5XX0	Maternal care for (suspected) damage to fetus by drugs, not applicable or unspecified	Diagnosis	ICD-10-CM
O35.5XX1	Maternal care for (suspected) damage to fetus by drugs, fetus 1	Diagnosis	ICD-10-CM
O35.5XX2	Maternal care for (suspected) damage to fetus by drugs, fetus 2	Diagnosis	ICD-10-CM
O35.5XX3	Maternal care for (suspected) damage to fetus by drugs, fetus 3	Diagnosis	ICD-10-CM
O35.5XX4	Maternal care for (suspected) damage to fetus by drugs, fetus 4	Diagnosis	ICD-10-CM
O35.5XX5	Maternal care for (suspected) damage to fetus by drugs, fetus 5	Diagnosis	ICD-10-CM
O35.5XX9	Maternal care for (suspected) damage to fetus by drugs, other fetus	Diagnosis	ICD-10-CM
T40.0X1A	Poisoning by opium, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.0X2A	Poisoning by opium, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.0X3A	Poisoning by opium, assault, initial encounter	Diagnosis	ICD-10-CM
T40.0X4A	Poisoning by opium, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.0X5A	Adverse effect of opium, initial encounter	Diagnosis	ICD-10-CM
T40.0X5S	Adverse effect of opium, sequela	Diagnosis	ICD-10-CM
T40.1X1A	Poisoning by heroin, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.1X2A	Poisoning by heroin, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.1X3A	Poisoning by heroin, assault, initial encounter	Diagnosis	ICD-10-CM
T40.1X4A	Poisoning by heroin, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.2X1A	Poisoning by other opioids, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.2X2A	Poisoning by other opioids, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.2X3A	Poisoning by other opioids, assault, initial encounter	Diagnosis	ICD-10-CM
T40.2X4A	Poisoning by other opioids, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.3X1A	Poisoning by methadone, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.3X2A	Poisoning by methadone, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
T40.3X3A	Poisoning by methadone, assault, initial encounter	Diagnosis	ICD-10-CM
T40.3X4A	Poisoning by methadone, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.3X5A	Adverse effect of methadone, initial encounter	Diagnosis	ICD-10-CM
T40.3X5S	Adverse effect of methadone, sequela	Diagnosis	ICD-10-CM
T40.411A	Poisoning by fentanyl or fentanyl analogs, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.412A	Poisoning by fentanyl or fentanyl analogs, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.413A	Poisoning by fentanyl or fentanyl analogs, assault, initial encounter	Diagnosis	ICD-10-CM
T40.414A	Poisoning by fentanyl or fentanyl analogs, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.415A	Adverse effect of fentanyl or fentanyl analogs, initial encounter	Diagnosis	ICD-10-CM
T40.421A	Poisoning by tramadol, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.422A	Poisoning by tramadol, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.423A	Poisoning by tramadol, assault, initial encounter	Diagnosis	ICD-10-CM
T40.424A	Poisoning by tramadol, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.425A	Adverse effect of tramadol, initial encounter	Diagnosis	ICD-10-CM
T40.491A	Poisoning by other synthetic narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.492A	Poisoning by other synthetic narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.493A	Poisoning by other synthetic narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.494A	Poisoning by other synthetic narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.495A	Adverse effect of other synthetic narcotics, initial encounter	Diagnosis	ICD-10-CM
T40.4X1A	Poisoning by other synthetic narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.4X2A	Poisoning by other synthetic narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.4X3A	Poisoning by other synthetic narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.4X4A	Poisoning by other synthetic narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.601A	Poisoning by unspecified narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.602A	Poisoning by unspecified narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.603A	Poisoning by unspecified narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.604A	Poisoning by unspecified narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.691A	Poisoning by other narcotics, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.692A	Poisoning by other narcotics, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T40.693A	Poisoning by other narcotics, assault, initial encounter	Diagnosis	ICD-10-CM
T40.694A	Poisoning by other narcotics, undetermined, initial encounter	Diagnosis	ICD-10-CM
T40.711A	Poisoning by cannabis, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.721A	Poisoning by synthetic cannabinoids, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.7X1A	Poisoning by cannabis (derivatives), accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.8X1A	Poisoning by lysergide [LSD], accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.901A	Poisoning by unspecified psychodysleptics [hallucinogens], accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T40.991A	Poisoning by other psychodysleptics [hallucinogens], accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
V65.42	Counseling on substance use and abuse	Diagnosis	ICD-9-CM
Z71.51	Drug abuse counseling and surveillance of drug abuser	Diagnosis	ICD-10-CM
<b>Endometrial Cancer</b>			
182.0	Malignant neoplasm of corpus uteri, except isthmus	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
233.2	Carcinoma in situ of other and unspecified parts of uterus	Diagnosis	ICD-9-CM
C54.0	Malignant neoplasm of isthmus uteri	Diagnosis	ICD-10-CM
C54.1	Malignant neoplasm of endometrium	Diagnosis	ICD-10-CM
C54.2	Malignant neoplasm of myometrium	Diagnosis	ICD-10-CM
C54.3	Malignant neoplasm of fundus uteri	Diagnosis	ICD-10-CM
C54.8	Malignant neoplasm of overlapping sites of corpus uteri	Diagnosis	ICD-10-CM
C54.9	Malignant neoplasm of corpus uteri, unspecified	Diagnosis	ICD-10-CM
D07.0	Carcinoma in situ of endometrium	Diagnosis	ICD-10-CM
V10.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-9-CM
Z85.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-10-CM
<b>Glaucoma</b>			
365.00	Unspecified preglaucoma	Diagnosis	ICD-9-CM
365.01	Borderline glaucoma, open angle with borderline findings, low risk	Diagnosis	ICD-9-CM
365.02	Borderline glaucoma with anatomical narrow angle	Diagnosis	ICD-9-CM
365.03	Borderline glaucoma with steroid responders	Diagnosis	ICD-9-CM
365.04	Borderline glaucoma with ocular hypertension	Diagnosis	ICD-9-CM
365.10	Unspecified open-angle glaucoma	Diagnosis	ICD-9-CM
365.11	Primary open-angle glaucoma	Diagnosis	ICD-9-CM
365.12	Low tension open-angle glaucoma	Diagnosis	ICD-9-CM
365.13	Pigmentary open-angle glaucoma	Diagnosis	ICD-9-CM
365.15	Residual stage of open angle glaucoma	Diagnosis	ICD-9-CM
365.20	Unspecified primary angle-closure glaucoma	Diagnosis	ICD-9-CM
365.21	Intermittent angle-closure glaucoma	Diagnosis	ICD-9-CM
365.22	Acute angle-closure glaucoma	Diagnosis	ICD-9-CM
365.23	Chronic angle-closure glaucoma	Diagnosis	ICD-9-CM
365.24	Residual stage of angle-closure glaucoma	Diagnosis	ICD-9-CM
365.31	Corticosteroid-induced glaucoma, glaucomatous stage	Diagnosis	ICD-9-CM
365.32	Corticosteroid-induced glaucoma, residual stage	Diagnosis	ICD-9-CM
365.41	Glaucoma associated with chamber angle anomalies	Diagnosis	ICD-9-CM
365.42	Glaucoma associated with anomalies of iris	Diagnosis	ICD-9-CM
365.43	Glaucoma associated with other anterior segment anomalies	Diagnosis	ICD-9-CM
365.51	Phacolytic glaucoma	Diagnosis	ICD-9-CM
365.52	Pseudoexfoliation glaucoma	Diagnosis	ICD-9-CM
365.59	Glaucoma associated with other lens disorders	Diagnosis	ICD-9-CM
365.60	Glaucoma associated with unspecified ocular disorder	Diagnosis	ICD-9-CM
365.61	Glaucoma associated with pupillary block	Diagnosis	ICD-9-CM
365.62	Glaucoma associated with ocular inflammations	Diagnosis	ICD-9-CM
365.63	Glaucoma associated with vascular disorders of eye	Diagnosis	ICD-9-CM
365.64	Glaucoma associated with tumors or cysts	Diagnosis	ICD-9-CM
365.65	Glaucoma associated with ocular trauma	Diagnosis	ICD-9-CM
365.81	Hypersecretion glaucoma	Diagnosis	ICD-9-CM
365.82	Glaucoma with increased episcleral venous pressure	Diagnosis	ICD-9-CM
365.83	Aqueous misdirection	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
365.89	Other specified glaucoma	Diagnosis	ICD-9-CM
365.9	Unspecified glaucoma	Diagnosis	ICD-9-CM
377.14	Glaucomatous atrophy (cupping) of optic disc	Diagnosis	ICD-9-CM
H40.001	Preglaucoma, unspecified, right eye	Diagnosis	ICD-10-CM
H40.002	Preglaucoma, unspecified, left eye	Diagnosis	ICD-10-CM
H40.003	Preglaucoma, unspecified, bilateral	Diagnosis	ICD-10-CM
H40.009	Preglaucoma, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H40.011	Open angle with borderline findings, low risk, right eye	Diagnosis	ICD-10-CM
H40.012	Open angle with borderline findings, low risk, left eye	Diagnosis	ICD-10-CM
H40.013	Open angle with borderline findings, low risk, bilateral	Diagnosis	ICD-10-CM
H40.019	Open angle with borderline findings, low risk, unspecified eye	Diagnosis	ICD-10-CM
H40.021	Open angle with borderline findings, high risk, right eye	Diagnosis	ICD-10-CM
H40.022	Open angle with borderline findings, high risk, left eye	Diagnosis	ICD-10-CM
H40.023	Open angle with borderline findings, high risk, bilateral	Diagnosis	ICD-10-CM
H40.029	Open angle with borderline findings, high risk, unspecified eye	Diagnosis	ICD-10-CM
H40.031	Anatomical narrow angle, right eye	Diagnosis	ICD-10-CM
H40.032	Anatomical narrow angle, left eye	Diagnosis	ICD-10-CM
H40.033	Anatomical narrow angle, bilateral	Diagnosis	ICD-10-CM
H40.039	Anatomical narrow angle, unspecified eye	Diagnosis	ICD-10-CM
H40.041	Steroid responder, right eye	Diagnosis	ICD-10-CM
H40.042	Steroid responder, left eye	Diagnosis	ICD-10-CM
H40.043	Steroid responder, bilateral	Diagnosis	ICD-10-CM
H40.049	Steroid responder, unspecified eye	Diagnosis	ICD-10-CM
H40.051	Ocular hypertension, right eye	Diagnosis	ICD-10-CM
H40.052	Ocular hypertension, left eye	Diagnosis	ICD-10-CM
H40.053	Ocular hypertension, bilateral	Diagnosis	ICD-10-CM
H40.059	Ocular hypertension, unspecified eye	Diagnosis	ICD-10-CM
H40.10X0	Unspecified open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.10X1	Unspecified open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.10X2	Unspecified open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.10X3	Unspecified open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1111	Primary open-angle glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1112	Primary open-angle glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1113	Primary open-angle glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1121	Primary open-angle glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1122	Primary open-angle glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1123	Primary open-angle glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H40.1131	Primary open-angle glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1132	Primary open-angle glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1133	Primary open-angle glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1134	Primary open-angle glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1190	Primary open-angle glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1191	Primary open-angle glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1192	Primary open-angle glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1193	Primary open-angle glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1194	Primary open-angle glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.11X0	Primary open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.11X1	Primary open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.11X2	Primary open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.11X3	Primary open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.11X4	Primary open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1210	Low-tension glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1211	Low-tension glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1212	Low-tension glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1213	Low-tension glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1214	Low-tension glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1220	Low-tension glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1221	Low-tension glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1222	Low-tension glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1223	Low-tension glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1224	Low-tension glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1230	Low-tension glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1231	Low-tension glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1232	Low-tension glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1233	Low-tension glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1290	Low-tension glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1291	Low-tension glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1292	Low-tension glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1293	Low-tension glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1294	Low-tension glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1310	Pigmentary glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1311	Pigmentary glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1312	Pigmentary glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1313	Pigmentary glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1314	Pigmentary glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1320	Pigmentary glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1321	Pigmentary glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1322	Pigmentary glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1323	Pigmentary glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H40.1324	Pigmentary glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1330	Pigmentary glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1331	Pigmentary glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1332	Pigmentary glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1333	Pigmentary glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1334	Pigmentary glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1390	Pigmentary glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1391	Pigmentary glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1392	Pigmentary glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1393	Pigmentary glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1394	Pigmentary glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1410	Capsular glaucoma with pseudoexfoliation of lens, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1411	Capsular glaucoma with pseudoexfoliation of lens, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1412	Capsular glaucoma with pseudoexfoliation of lens, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1413	Capsular glaucoma with pseudoexfoliation of lens, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1414	Capsular glaucoma with pseudoexfoliation of lens, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1420	Capsular glaucoma with pseudoexfoliation of lens, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1421	Capsular glaucoma with pseudoexfoliation of lens, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1422	Capsular glaucoma with pseudoexfoliation of lens, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1423	Capsular glaucoma with pseudoexfoliation of lens, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1424	Capsular glaucoma with pseudoexfoliation of lens, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1430	Capsular glaucoma with pseudoexfoliation of lens, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1431	Capsular glaucoma with pseudoexfoliation of lens, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1432	Capsular glaucoma with pseudoexfoliation of lens, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1433	Capsular glaucoma with pseudoexfoliation of lens, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1434	Capsular glaucoma with pseudoexfoliation of lens, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1490	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1491	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1492	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1493	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1494	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.151	Residual stage of open-angle glaucoma, right eye	Diagnosis	ICD-10-CM
H40.152	Residual stage of open-angle glaucoma, left eye	Diagnosis	ICD-10-CM
H40.153	Residual stage of open-angle glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.159	Residual stage of open-angle glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.20X0	Unspecified primary angle-closure glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.211	Acute angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.212	Acute angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.213	Acute angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H40.219	Acute angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.2223	Chronic angle-closure glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.2224	Chronic angle-closure glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2230	Chronic angle-closure glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.2290	Chronic angle-closure glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.231	Intermittent angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.232	Intermittent angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.233	Intermittent angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.239	Intermittent angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.241	Residual stage of angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.242	Residual stage of angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.243	Residual stage of angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.249	Residual stage of angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.30X0	Glaucoma secondary to eye trauma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.30X1	Glaucoma secondary to eye trauma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.30X2	Glaucoma secondary to eye trauma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.30X3	Glaucoma secondary to eye trauma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.30X4	Glaucoma secondary to eye trauma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.31X0	Glaucoma secondary to eye trauma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.31X1	Glaucoma secondary to eye trauma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.31X2	Glaucoma secondary to eye trauma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.31X3	Glaucoma secondary to eye trauma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.31X4	Glaucoma secondary to eye trauma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.32X0	Glaucoma secondary to eye trauma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.32X1	Glaucoma secondary to eye trauma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.32X2	Glaucoma secondary to eye trauma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.32X3	Glaucoma secondary to eye trauma, left eye, severe stage	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H40.32X4	Glaucoma secondary to eye trauma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.33X0	Glaucoma secondary to eye trauma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.33X1	Glaucoma secondary to eye trauma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.33X2	Glaucoma secondary to eye trauma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.33X3	Glaucoma secondary to eye trauma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.33X4	Glaucoma secondary to eye trauma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.40X0	Glaucoma secondary to eye inflammation, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.40X1	Glaucoma secondary to eye inflammation, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.40X2	Glaucoma secondary to eye inflammation, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.40X3	Glaucoma secondary to eye inflammation, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.40X4	Glaucoma secondary to eye inflammation, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.41X0	Glaucoma secondary to eye inflammation, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.41X1	Glaucoma secondary to eye inflammation, right eye, mild stage	Diagnosis	ICD-10-CM
H40.41X2	Glaucoma secondary to eye inflammation, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.41X3	Glaucoma secondary to eye inflammation, right eye, severe stage	Diagnosis	ICD-10-CM
H40.41X4	Glaucoma secondary to eye inflammation, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.42X0	Glaucoma secondary to eye inflammation, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.42X1	Glaucoma secondary to eye inflammation, left eye, mild stage	Diagnosis	ICD-10-CM
H40.42X2	Glaucoma secondary to eye inflammation, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.42X3	Glaucoma secondary to eye inflammation, left eye, severe stage	Diagnosis	ICD-10-CM
H40.42X4	Glaucoma secondary to eye inflammation, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.43X0	Glaucoma secondary to eye inflammation, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.43X1	Glaucoma secondary to eye inflammation, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.43X2	Glaucoma secondary to eye inflammation, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.43X3	Glaucoma secondary to eye inflammation, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.43X4	Glaucoma secondary to eye inflammation, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.50X0	Glaucoma secondary to other eye disorders, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.50X1	Glaucoma secondary to other eye disorders, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.50X2	Glaucoma secondary to other eye disorders, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.50X3	Glaucoma secondary to other eye disorders, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.50X4	Glaucoma secondary to other eye disorders, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.51X0	Glaucoma secondary to other eye disorders, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.51X1	Glaucoma secondary to other eye disorders, right eye, mild stage	Diagnosis	ICD-10-CM
H40.51X2	Glaucoma secondary to other eye disorders, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.51X3	Glaucoma secondary to other eye disorders, right eye, severe stage	Diagnosis	ICD-10-CM
H40.51X4	Glaucoma secondary to other eye disorders, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.52X0	Glaucoma secondary to other eye disorders, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.52X1	Glaucoma secondary to other eye disorders, left eye, mild stage	Diagnosis	ICD-10-CM
H40.52X2	Glaucoma secondary to other eye disorders, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.52X3	Glaucoma secondary to other eye disorders, left eye, severe stage	Diagnosis	ICD-10-CM
H40.52X4	Glaucoma secondary to other eye disorders, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.53X0	Glaucoma secondary to other eye disorders, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.53X1	Glaucoma secondary to other eye disorders, bilateral, mild stage	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H40.53X2	Glaucoma secondary to other eye disorders, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.53X3	Glaucoma secondary to other eye disorders, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.53X4	Glaucoma secondary to other eye disorders, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.60X0	Glaucoma secondary to drugs, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.60X1	Glaucoma secondary to drugs, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.60X2	Glaucoma secondary to drugs, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.60X3	Glaucoma secondary to drugs, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.60X4	Glaucoma secondary to drugs, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.61X0	Glaucoma secondary to drugs, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.61X1	Glaucoma secondary to drugs, right eye, mild stage	Diagnosis	ICD-10-CM
H40.61X2	Glaucoma secondary to drugs, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.61X3	Glaucoma secondary to drugs, right eye, severe stage	Diagnosis	ICD-10-CM
H40.61X4	Glaucoma secondary to drugs, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.62X0	Glaucoma secondary to drugs, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.62X1	Glaucoma secondary to drugs, left eye, mild stage	Diagnosis	ICD-10-CM
H40.62X2	Glaucoma secondary to drugs, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.62X3	Glaucoma secondary to drugs, left eye, severe stage	Diagnosis	ICD-10-CM
H40.62X4	Glaucoma secondary to drugs, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.63X0	Glaucoma secondary to drugs, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.63X1	Glaucoma secondary to drugs, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.63X2	Glaucoma secondary to drugs, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.63X3	Glaucoma secondary to drugs, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.63X4	Glaucoma secondary to drugs, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.811	Glaucoma with increased episcleral venous pressure, right eye	Diagnosis	ICD-10-CM
H40.812	Glaucoma with increased episcleral venous pressure, left eye	Diagnosis	ICD-10-CM
H40.813	Glaucoma with increased episcleral venous pressure, bilateral	Diagnosis	ICD-10-CM
H40.819	Glaucoma with increased episcleral venous pressure, unspecified eye	Diagnosis	ICD-10-CM
H40.821	Hypersecretion glaucoma, right eye	Diagnosis	ICD-10-CM
H40.822	Hypersecretion glaucoma, left eye	Diagnosis	ICD-10-CM
H40.823	Hypersecretion glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.829	Hypersecretion glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.831	Aqueous misdirection, right eye	Diagnosis	ICD-10-CM
H40.832	Aqueous misdirection, left eye	Diagnosis	ICD-10-CM
H40.833	Aqueous misdirection, bilateral	Diagnosis	ICD-10-CM
H40.839	Aqueous misdirection, unspecified eye	Diagnosis	ICD-10-CM
H40.89	Other specified glaucoma	Diagnosis	ICD-10-CM
H40.9	Unspecified glaucoma	Diagnosis	ICD-10-CM
H42	Glaucoma in diseases classified elsewhere	Diagnosis	ICD-10-CM
H44.511	Absolute glaucoma, right eye	Diagnosis	ICD-10-CM
H44.512	Absolute glaucoma, left eye	Diagnosis	ICD-10-CM
H44.513	Absolute glaucoma, bilateral	Diagnosis	ICD-10-CM
H44.519	Absolute glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H47.231	Glaucomatous optic atrophy, right eye	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
H47.232	Glaucomatous optic atrophy, left eye	Diagnosis	ICD-10-CM
H47.233	Glaucomatous optic atrophy, bilateral	Diagnosis	ICD-10-CM
H47.239	Glaucomatous optic atrophy, unspecified eye	Diagnosis	ICD-10-CM
Q15.0	Congenital glaucoma	Diagnosis	ICD-10-CM
<b>Heart Failure</b>			
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
428.0	Congestive heart failure, unspecified	Diagnosis	ICD-9-CM
428.1	Left heart failure	Diagnosis	ICD-9-CM
428.20	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
428.30	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.40	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I42.5	Other restrictive cardiomyopathy	Diagnosis	ICD-10-CM
I42.6	Alcoholic cardiomyopathy	Diagnosis	ICD-10-CM
I42.7	Cardiomyopathy due to drug and external agent	Diagnosis	ICD-10-CM
I42.8	Other cardiomyopathies	Diagnosis	ICD-10-CM
I43	Cardiomyopathy in diseases classified elsewhere	Diagnosis	ICD-10-CM
I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50.811	Acute right heart failure	Diagnosis	ICD-10-CM
I50.812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I50.82	Biventricular heart failure	Diagnosis	ICD-10-CM
I50.83	High output heart failure	Diagnosis	ICD-10-CM
I50.84	End stage heart failure	Diagnosis	ICD-10-CM
I50.89	Other heart failure	Diagnosis	ICD-10-CM
I50.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
P29.0	Neonatal cardiac failure	Diagnosis	ICD-10-CM
<b>Hyperlipidemia</b>			
272.0	Pure hypercholesterolemia	Diagnosis	ICD-9-CM
272.1	Pure hyperglyceridemia	Diagnosis	ICD-9-CM
272.2	Mixed hyperlipidemia	Diagnosis	ICD-9-CM
272.3	Hyperchylomicronemia	Diagnosis	ICD-9-CM
272.4	Other and unspecified hyperlipidemia	Diagnosis	ICD-9-CM
E78.0	Pure hypercholesterolemia	Diagnosis	ICD-10-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.3	Hyperchylomicronemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.41	Elevated Lipoprotein(a)	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
E78.49	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
<b>Hypertension</b>			
362.11	Hypertensive retinopathy	Diagnosis	ICD-9-CM
401.0	Essential hypertension, malignant	Diagnosis	ICD-9-CM
401.1	Essential hypertension, benign	Diagnosis	ICD-9-CM
401.9	Unspecified essential hypertension	Diagnosis	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	Diagnosis	ICD-9-CM
405.09	Other secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	Diagnosis	ICD-9-CM
405.19	Other secondary hypertension, benign	Diagnosis	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	Diagnosis	ICD-9-CM
405.99	Other secondary hypertension, unspecified	Diagnosis	ICD-9-CM
437.2	Hypertensive encephalopathy	Diagnosis	ICD-9-CM
H35.031	Hypertensive retinopathy, right eye	Diagnosis	ICD-10-CM
H35.032	Hypertensive retinopathy, left eye	Diagnosis	ICD-10-CM
H35.033	Hypertensive retinopathy, bilateral	Diagnosis	ICD-10-CM
H35.039	Hypertensive retinopathy, unspecified eye	Diagnosis	ICD-10-CM
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I15.0	Renovascular hypertension	Diagnosis	ICD-10-CM
I15.1	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM
I15.2	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
I15.8	Other secondary hypertension	Diagnosis	ICD-10-CM
I15.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I67.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
<b>Ischemic Heart Disease</b>			
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
411.0	Postmyocardial infarction syndrome	Diagnosis	ICD-9-CM
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
411.81	Acute coronary occlusion without myocardial infarction	Diagnosis	ICD-9-CM
411.89	Other acute and subacute form of ischemic heart disease	Diagnosis	ICD-9-CM
412	Old myocardial infarction	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	Diagnosis	ICD-9-CM
414.01	Coronary atherosclerosis of native coronary artery	Diagnosis	ICD-9-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	Diagnosis	ICD-9-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	Diagnosis	ICD-9-CM
414.04	Coronary atherosclerosis of artery bypass graft	Diagnosis	ICD-9-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	Diagnosis	ICD-9-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	Diagnosis	ICD-9-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
414.12	Dissection of coronary artery	Diagnosis	ICD-9-CM
414.2	Chronic total occlusion of coronary artery	Diagnosis	ICD-9-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-9-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-9-CM
414.8	Other specified forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.9	Unspecified chronic ischemic heart disease	Diagnosis	ICD-9-CM
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
I24.1	Dressler's syndrome	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I24.9	Acute ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.2	Old myocardial infarction	Diagnosis	ICD-10-CM
I25.3	Aneurysm of heart	Diagnosis	ICD-10-CM
I25.41	Coronary artery aneurysm	Diagnosis	ICD-10-CM
I25.42	Coronary artery dissection	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
<b>Lung Cancer</b>			
162.2	Malignant neoplasm of main bronchus	Diagnosis	ICD-9-CM
162.3	Malignant neoplasm of upper lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.4	Malignant neoplasm of middle lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.5	Malignant neoplasm of lower lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.8	Malignant neoplasm of other parts of bronchus or lung	Diagnosis	ICD-9-CM
162.9	Malignant neoplasm of bronchus and lung, unspecified site	Diagnosis	ICD-9-CM
231.2	Carcinoma in situ of bronchus and lung	Diagnosis	ICD-9-CM
C34.00	Malignant neoplasm of unspecified main bronchus	Diagnosis	ICD-10-CM
C34.01	Malignant neoplasm of right main bronchus	Diagnosis	ICD-10-CM
C34.02	Malignant neoplasm of left main bronchus	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.2	Malignant neoplasm of middle lobe, bronchus or lung	Diagnosis	ICD-10-CM
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung	Diagnosis	ICD-10-CM
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung	Diagnosis	ICD-10-CM
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung	Diagnosis	ICD-10-CM
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung	Diagnosis	ICD-10-CM
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung	Diagnosis	ICD-10-CM
D02.20	Carcinoma in situ of unspecified bronchus and lung	Diagnosis	ICD-10-CM
D02.21	Carcinoma in situ of right bronchus and lung	Diagnosis	ICD-10-CM
D02.22	Carcinoma in situ of left bronchus and lung	Diagnosis	ICD-10-CM
V10.11	Personal history of malignant neoplasm of bronchus and lung	Diagnosis	ICD-9-CM
Z85.110	Personal history of malignant carcinoid tumor of bronchus and lung	Diagnosis	ICD-10-CM
Z85.118	Personal history of other malignant neoplasm of bronchus and lung	Diagnosis	ICD-10-CM
<b>Obesity</b>			
0D16079	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1607L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160J9	Bypass Stomach to Duodenum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JA	Bypass Stomach to Jejunum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JB	Bypass Stomach to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D160K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D160Z9	Bypass Stomach to Duodenum, Open Approach	Procedure	ICD-10-PCS
0D160ZA	Bypass Stomach to Jejunum, Open Approach	Procedure	ICD-10-PCS
0D160ZB	Bypass Stomach to Ileum, Open Approach	Procedure	ICD-10-PCS
0D160ZL	Bypass Stomach to Transverse Colon, Open Approach	Procedure	ICD-10-PCS
0D16479	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1647A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1647B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
0D1647L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164J9	Bypass Stomach to Duodenum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JA	Bypass Stomach to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JB	Bypass Stomach to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164Z9	Bypass Stomach to Duodenum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZA	Bypass Stomach to Jejunum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZB	Bypass Stomach to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D164ZL	Bypass Stomach to Transverse Colon, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D16879	Bypass Stomach to Duodenum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1687A	Bypass Stomach to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1687B	Bypass Stomach to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1687L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168J9	Bypass Stomach to Duodenum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JA	Bypass Stomach to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JB	Bypass Stomach to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168JL	Bypass Stomach to Transverse Colon with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168K9	Bypass Stomach to Duodenum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168KA	Bypass Stomach to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168KB	Bypass Stomach to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
0D168KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168Z9	Bypass Stomach to Duodenum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168ZA	Bypass Stomach to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168ZB	Bypass Stomach to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D168ZL	Bypass Stomach to Transverse Colon, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D19079	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1907A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1907B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D190J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D190JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D190JB	Bypass Duodenum to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D190K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D190KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D190KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D190Z9	Bypass Duodenum to Duodenum, Open Approach	Procedure	ICD-10-PCS
0D190ZA	Bypass Duodenum to Jejunum, Open Approach	Procedure	ICD-10-PCS
0D190ZB	Bypass Duodenum to Ileum, Open Approach	Procedure	ICD-10-PCS
0D19479	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1947A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1947B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194JB	Bypass Duodenum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194Z9	Bypass Duodenum to Duodenum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194ZA	Bypass Duodenum to Jejunum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D194ZB	Bypass Duodenum to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D19879	Bypass Duodenum to Duodenum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1987A	Bypass Duodenum to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
0D1987B	Bypass Duodenum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198J9	Bypass Duodenum to Duodenum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198JA	Bypass Duodenum to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198JB	Bypass Duodenum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198K9	Bypass Duodenum to Duodenum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198KA	Bypass Duodenum to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198KB	Bypass Duodenum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198Z9	Bypass Duodenum to Duodenum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198ZA	Bypass Duodenum to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D198ZB	Bypass Duodenum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A07A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A07B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A0JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A0JB	Bypass Jejunum to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A0KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A0KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1A0ZA	Bypass Jejunum to Jejunum, Open Approach	Procedure	ICD-10-PCS
0D1A0ZB	Bypass Jejunum to Ileum, Open Approach	Procedure	ICD-10-PCS
0D1A47A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A47B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4JB	Bypass Jejunum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4ZA	Bypass Jejunum to Jejunum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A4ZB	Bypass Jejunum to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1A87A	Bypass Jejunum to Jejunum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A87B	Bypass Jejunum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8JA	Bypass Jejunum to Jejunum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
0D1A8JB	Bypass Jejunum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8KA	Bypass Jejunum to Jejunum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8KB	Bypass Jejunum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8ZA	Bypass Jejunum to Jejunum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8ZB	Bypass Jejunum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1A8ZH	Bypass Jejunum to Cecum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B07B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0JB	Bypass Ileum to Ileum with Synthetic Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
0D1B0ZB	Bypass Ileum to Ileum, Open Approach	Procedure	ICD-10-PCS
0D1B47B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4JB	Bypass Ileum to Ileum with Synthetic Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B4ZB	Bypass Ileum to Ileum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D1B87B	Bypass Ileum to Ileum with Autologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8JB	Bypass Ileum to Ileum with Synthetic Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8KB	Bypass Ileum to Ileum with Nonautologous Tissue Substitute, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8ZB	Bypass Ileum to Ileum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0D1B8ZH	Bypass Ileum to Cecum, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0DB60Z3	Excision of Stomach, Open Approach, Vertical	Procedure	ICD-10-PCS
0DB60ZZ	Excision of Stomach, Open Approach	Procedure	ICD-10-PCS
0DB63Z3	Excision of Stomach, Percutaneous Approach, Vertical	Procedure	ICD-10-PCS
0DB63ZZ	Excision of Stomach, Percutaneous Approach	Procedure	ICD-10-PCS
0DB67Z3	Excision of Stomach, Via Natural or Artificial Opening, Vertical	Procedure	ICD-10-PCS
0DB67ZZ	Excision of Stomach, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0DB68Z3	Excision of Stomach, Via Natural or Artificial Opening Endoscopic, Vertical	Procedure	ICD-10-PCS
0DB80ZZ	Excision of Small Intestine, Open Approach	Procedure	ICD-10-PCS
0DB90ZZ	Excision of Duodenum, Open Approach	Procedure	ICD-10-PCS
0DBB0ZZ	Excision of Ileum, Open Approach	Procedure	ICD-10-PCS
0DQ64ZZ	Repair Stomach, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0DV64CZ	Restriction of Stomach with Extraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0F190Z3	Bypass Common Bile Duct to Duodenum, Open Approach	Procedure	ICD-10-PCS
0TRB07Z	Replacement of Bladder with Autologous Tissue Substitute, Open Approach	Procedure	ICD-10-PCS
278.0	Overweight and obesity	Diagnosis	ICD-9-CM
278.00	Obesity, unspecified	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates 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
43644	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (roux limb 150 cm or less)	Procedure	CPT-4
43645	Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption	Procedure	CPT-4
43770	Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric restrictive device (eg, gastric band and subcutaneous port components)	Procedure	CPT-4
43842	Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty	Procedure	CPT-4
43843	Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded gastroplasty	Procedure	CPT-4
43845	Gastric restrictive procedure with partial gastrectomy, pylorus-preserving duodenoileostomy and ileoileostomy (50 to 100 cm common channel) to limit absorption (biliopancreatic diversion with duodenal switch)	Procedure	CPT-4
43846	Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy	Procedure	CPT-4
43847	Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption	Procedure	CPT-4
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
E66.8	Other obesity	Diagnosis	ICD-10-CM
E66.9	Obesity, unspecified	Diagnosis	ICD-10-CM
K95.01	Infection due to gastric band procedure	Diagnosis	ICD-10-CM
K95.09	Other complications of gastric band procedure	Diagnosis	ICD-10-CM
K95.81	Infection due to other bariatric procedure	Diagnosis	ICD-10-CM
K95.89	Other complications of other bariatric procedure	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
O99.840	Bariatric surgery status complicating pregnancy, unspecified trimester	Diagnosis	ICD-10-CM
O99.841	Bariatric surgery status complicating pregnancy, first trimester	Diagnosis	ICD-10-CM
O99.842	Bariatric surgery status complicating pregnancy, second trimester	Diagnosis	ICD-10-CM
O99.843	Bariatric surgery status complicating pregnancy, third trimester	Diagnosis	ICD-10-CM
O99.844	Bariatric surgery status complicating childbirth	Diagnosis	ICD-10-CM
O99.845	Bariatric surgery status 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

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
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
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
<b>Osteoporosis</b>			
733.00	Unspecified osteoporosis	Diagnosis	ICD-9-CM
733.01	Senile osteoporosis	Diagnosis	ICD-9-CM
733.02	Idiopathic osteoporosis	Diagnosis	ICD-9-CM
733.03	Disuse osteoporosis	Diagnosis	ICD-9-CM
733.09	Other osteoporosis	Diagnosis	ICD-9-CM
M80.00X	Age-related osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.011	Age-related osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.012	Age-related osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M80.019 A	Age-related osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.021 A	Age-related osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.022 A	Age-related osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.029 A	Age-related osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.031 A	Age-related osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.032 A	Age-related osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.039 A	Age-related osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.041 A	Age-related osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.042 A	Age-related osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.049 A	Age-related osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.051 A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.052 A	Age-related osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.059 A	Age-related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.061 A	Age-related osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.062 A	Age-related osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.069 A	Age-related osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.071 A	Age-related osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.072 A	Age-related osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.079 A	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.08X A	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0AX A	Age-related osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M80.80X A	Other osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.811 A	Other osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.812 A	Other osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.819 A	Other osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.821 A	Other osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.822 A	Other osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.829 A	Other osteoporosis with current pathological fracture, unspecified humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.831 A	Other osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.832 A	Other osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.839 A	Other osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.841 A	Other osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.842 A	Other osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.849 A	Other osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.851 A	Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.852 A	Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.859 A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.861 A	Other osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.862 A	Other osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.869 A	Other osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.871 A	Other osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.872 A	Other osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M80.879 A	Other osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.88X A	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.8AX A	Other osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M81.0	Age-related osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
M81.6	Localized osteoporosis [Lequesne]	Diagnosis	ICD-10-CM
M81.8	Other osteoporosis without current pathological fracture	Diagnosis	ICD-10-CM
<b>Overweight</b>			
E66.3	Overweight	Diagnosis	ICD-10-CM
Z68.25	Body mass index (BMI) 25.0-25.9, adult	Diagnosis	ICD-10-CM
Z68.26	Body mass index (BMI) 26.0-26.9, adult	Diagnosis	ICD-10-CM
Z68.27	Body mass index (BMI) 27.0-27.9, adult	Diagnosis	ICD-10-CM
Z68.28	Body mass index (BMI) 28.0-28.9, adult	Diagnosis	ICD-10-CM
Z68.29	Body mass index (BMI) 29.0-29.9, adult	Diagnosis	ICD-10-CM
<b>Prostate</b>			
185	Malignant neoplasm of prostate	Diagnosis	ICD-9-CM
233.4	Carcinoma in situ of prostate	Diagnosis	ICD-9-CM
C61	Malignant neoplasm of prostate	Diagnosis	ICD-10-CM
D07.5	Carcinoma in situ of prostate	Diagnosis	ICD-10-CM
V10.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-9-CM
Z85.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-10-CM
<b>Rheumatoid Arthritis</b>			
714.0	Rheumatoid arthritis	Diagnosis	ICD-9-CM
714.1	Felty's syndrome	Diagnosis	ICD-9-CM
714.2	Other rheumatoid arthritis with visceral or systemic involvement	Diagnosis	ICD-9-CM
714.30	Polyarticular juvenile rheumatoid arthritis, chronic or unspecified	Diagnosis	ICD-9-CM
714.31	Polyarticular juvenile rheumatoid arthritis, acute	Diagnosis	ICD-9-CM
714.32	Pauciarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
714.33	Monoarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
715.00	Generalized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.04	Generalized osteoarthritis, involving hand	Diagnosis	ICD-9-CM
715.09	Generalized osteoarthritis, involving multiple sites	Diagnosis	ICD-9-CM
715.10	Primary localized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.11	Primary localized osteoarthritis, shoulder region	Diagnosis	ICD-9-CM
715.12	Primary localized osteoarthritis, upper arm	Diagnosis	ICD-9-CM
715.13	Primary localized osteoarthritis, forearm	Diagnosis	ICD-9-CM
715.14	Primary localized osteoarthritis, hand	Diagnosis	ICD-9-CM
715.15	Primary localized osteoarthritis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.16	Primary localized osteoarthritis, lower leg	Diagnosis	ICD-9-CM
715.17	Primary localized osteoarthritis, ankle and foot	Diagnosis	ICD-9-CM
715.18	Primary localized osteoarthritis, other specified sites	Diagnosis	ICD-9-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
715.20	Secondary localized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.21	Secondary localized osteoarthritis, shoulder region	Diagnosis	ICD-9-CM
715.22	Secondary localized osteoarthritis, upper arm	Diagnosis	ICD-9-CM
715.23	Secondary localized osteoarthritis, forearm	Diagnosis	ICD-9-CM
715.24	Secondary localized osteoarthritis, involving hand	Diagnosis	ICD-9-CM
715.25	Secondary localized osteoarthritis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.26	Secondary localized osteoarthritis, lower leg	Diagnosis	ICD-9-CM
715.27	Secondary localized osteoarthritis, ankle and foot	Diagnosis	ICD-9-CM
715.28	Secondary localized osteoarthritis, other specified site	Diagnosis	ICD-9-CM
715.30	Localized osteoarthritis not specified whether primary or secondary, unspecified site	Diagnosis	ICD-9-CM
715.31	Localized osteoarthritis not specified whether primary or secondary, shoulder region	Diagnosis	ICD-9-CM
715.32	Localized osteoarthritis not specified whether primary or secondary, upper arm	Diagnosis	ICD-9-CM
715.33	Localized osteoarthritis not specified whether primary or secondary, forearm	Diagnosis	ICD-9-CM
715.34	Localized osteoarthritis not specified whether primary or secondary, hand	Diagnosis	ICD-9-CM
715.35	Localized osteoarthritis not specified whether primary or secondary, pelvic region and thigh	Diagnosis	ICD-9-CM
715.36	Localized osteoarthritis not specified whether primary or secondary, lower leg	Diagnosis	ICD-9-CM
715.37	Localized osteoarthritis not specified whether primary or secondary, ankle and foot	Diagnosis	ICD-9-CM
715.38	Localized osteoarthritis not specified whether primary or secondary, other specified sites	Diagnosis	ICD-9-CM
715.80	Osteoarthritis involving more than one site, but not specified as generalized, unspecified site	Diagnosis	ICD-9-CM
715.89	Osteoarthritis involving multiple sites, but not specified as generalized	Diagnosis	ICD-9-CM
715.90	Osteoarthritis, unspecified whether generalized or localized, unspecified site	Diagnosis	ICD-9-CM
715.91	Osteoarthritis, unspecified whether generalized or localized, shoulder region	Diagnosis	ICD-9-CM
715.92	Osteoarthritis, unspecified whether generalized or localized, upper arm	Diagnosis	ICD-9-CM
715.93	Osteoarthritis, unspecified whether generalized or localized, forearm	Diagnosis	ICD-9-CM
715.94	Osteoarthritis, unspecified whether generalized or localized, hand	Diagnosis	ICD-9-CM
715.95	Osteoarthritis, unspecified whether generalized or localized, pelvic region and thigh	Diagnosis	ICD-9-CM
715.96	Osteoarthritis, unspecified whether generalized or localized, lower leg	Diagnosis	ICD-9-CM
715.97	Osteoarthritis, unspecified whether generalized or localized, ankle and foot	Diagnosis	ICD-9-CM
715.98	Osteoarthritis, unspecified whether generalized or localized, other specified sites	Diagnosis	ICD-9-CM
720.0	Ankylosing spondylitis	Diagnosis	ICD-9-CM
721.0	Cervical spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.1	Cervical spondylosis with myelopathy	Diagnosis	ICD-9-CM
721.2	Thoracic spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.3	Lumbosacral spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.90	Spondylosis of unspecified site without mention of myelopathy	Diagnosis	ICD-9-CM
721.91	Spondylosis of unspecified site with myelopathy	Diagnosis	ICD-9-CM
L40.50	Arthropathic psoriasis, unspecified	Diagnosis	ICD-10-CM
L40.51	Distal interphalangeal psoriatic arthropathy	Diagnosis	ICD-10-CM
L40.54	Psoriatic juvenile arthropathy	Diagnosis	ICD-10-CM
L40.59	Other psoriatic arthropathy	Diagnosis	ICD-10-CM
M05.00	Felty's syndrome, unspecified site	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.011	Felty's syndrome, right shoulder	Diagnosis	ICD-10-CM
M05.012	Felty's syndrome, left shoulder	Diagnosis	ICD-10-CM
M05.019	Felty's syndrome, unspecified shoulder	Diagnosis	ICD-10-CM
M05.021	Felty's syndrome, right elbow	Diagnosis	ICD-10-CM
M05.022	Felty's syndrome, left elbow	Diagnosis	ICD-10-CM
M05.029	Felty's syndrome, unspecified elbow	Diagnosis	ICD-10-CM
M05.031	Felty's syndrome, right wrist	Diagnosis	ICD-10-CM
M05.032	Felty's syndrome, left wrist	Diagnosis	ICD-10-CM
M05.039	Felty's syndrome, unspecified wrist	Diagnosis	ICD-10-CM
M05.041	Felty's syndrome, right hand	Diagnosis	ICD-10-CM
M05.042	Felty's syndrome, left hand	Diagnosis	ICD-10-CM
M05.049	Felty's syndrome, unspecified hand	Diagnosis	ICD-10-CM
M05.051	Felty's syndrome, right hip	Diagnosis	ICD-10-CM
M05.052	Felty's syndrome, left hip	Diagnosis	ICD-10-CM
M05.059	Felty's syndrome, unspecified hip	Diagnosis	ICD-10-CM
M05.061	Felty's syndrome, right knee	Diagnosis	ICD-10-CM
M05.062	Felty's syndrome, left knee	Diagnosis	ICD-10-CM
M05.069	Felty's syndrome, unspecified knee	Diagnosis	ICD-10-CM
M05.071	Felty's syndrome, right ankle and foot	Diagnosis	ICD-10-CM
M05.072	Felty's syndrome, left ankle and foot	Diagnosis	ICD-10-CM
M05.079	Felty's syndrome, unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.09	Felty's syndrome, multiple sites	Diagnosis	ICD-10-CM
M05.10	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.111	Rheumatoid lung disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.112	Rheumatoid lung disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.119	Rheumatoid lung disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.121	Rheumatoid lung disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.122	Rheumatoid lung disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.129	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.131	Rheumatoid lung disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.132	Rheumatoid lung disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.139	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.141	Rheumatoid lung disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.142	Rheumatoid lung disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.149	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.151	Rheumatoid lung disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.152	Rheumatoid lung disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.159	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.161	Rheumatoid lung disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.162	Rheumatoid lung disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.169	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.171	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.172	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.179	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.19	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement	Diagnosis	ICD-10-CM
M05.741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	Diagnosis	ICD-10-CM
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	Diagnosis	ICD-10-CM
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	Diagnosis	ICD-10-CM
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder	Diagnosis	ICD-10-CM
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow	Diagnosis	ICD-10-CM
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	Diagnosis	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand	Diagnosis	ICD-10-CM
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand	Diagnosis	ICD-10-CM
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	Diagnosis	ICD-10-CM
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip	Diagnosis	ICD-10-CM
M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip	Diagnosis	ICD-10-CM
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	Diagnosis	ICD-10-CM
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee	Diagnosis	ICD-10-CM
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee	Diagnosis	ICD-10-CM
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	Diagnosis	ICD-10-CM
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	Diagnosis	ICD-10-CM
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	Diagnosis	ICD-10-CM
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M05.8A	Other rheumatoid arthritis with rheumatoid factor of other specified site	Diagnosis	ICD-10-CM
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	Diagnosis	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder	Diagnosis	ICD-10-CM
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder	Diagnosis	ICD-10-CM
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	Diagnosis	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist	Diagnosis	ICD-10-CM
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist	Diagnosis	ICD-10-CM
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	Diagnosis	ICD-10-CM
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand	Diagnosis	ICD-10-CM
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand	Diagnosis	ICD-10-CM
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	Diagnosis	ICD-10-CM
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip	Diagnosis	ICD-10-CM
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip	Diagnosis	ICD-10-CM
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	Diagnosis	ICD-10-CM
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee	Diagnosis	ICD-10-CM
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee	Diagnosis	ICD-10-CM
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	Diagnosis	ICD-10-CM
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	Diagnosis	ICD-10-CM
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	Diagnosis	ICD-10-CM
M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	Diagnosis	ICD-10-CM
M06.0A	Rheumatoid arthritis without rheumatoid factor, other specified site	Diagnosis	ICD-10-CM
M06.1	Adult-onset Still's disease	Diagnosis	ICD-10-CM
M06.20	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M06.211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06.212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06.219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.221	Rheumatoid bursitis, right elbow	Diagnosis	ICD-10-CM
M06.222	Rheumatoid bursitis, left elbow	Diagnosis	ICD-10-CM
M06.229	Rheumatoid bursitis, unspecified elbow	Diagnosis	ICD-10-CM
M06.231	Rheumatoid bursitis, right wrist	Diagnosis	ICD-10-CM
M06.232	Rheumatoid bursitis, left wrist	Diagnosis	ICD-10-CM
M06.239	Rheumatoid bursitis, unspecified wrist	Diagnosis	ICD-10-CM
M06.241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM
M06.242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06.249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M06.251	Rheumatoid bursitis, right hip	Diagnosis	ICD-10-CM
M06.252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM
M06.259	Rheumatoid bursitis, unspecified hip	Diagnosis	ICD-10-CM
M06.261	Rheumatoid bursitis, right knee	Diagnosis	ICD-10-CM
M06.262	Rheumatoid bursitis, left knee	Diagnosis	ICD-10-CM
M06.269	Rheumatoid bursitis, unspecified knee	Diagnosis	ICD-10-CM
M06.271	Rheumatoid bursitis, right ankle and foot	Diagnosis	ICD-10-CM
M06.272	Rheumatoid bursitis, left ankle and foot	Diagnosis	ICD-10-CM
M06.279	Rheumatoid bursitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.28	Rheumatoid bursitis, vertebrae	Diagnosis	ICD-10-CM
M06.29	Rheumatoid bursitis, multiple sites	Diagnosis	ICD-10-CM
M06.30	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M06.311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06.312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06.319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M06.321	Rheumatoid nodule, right elbow	Diagnosis	ICD-10-CM
M06.322	Rheumatoid nodule, left elbow	Diagnosis	ICD-10-CM
M06.329	Rheumatoid nodule, unspecified elbow	Diagnosis	ICD-10-CM
M06.331	Rheumatoid nodule, right wrist	Diagnosis	ICD-10-CM
M06.332	Rheumatoid nodule, left wrist	Diagnosis	ICD-10-CM
M06.339	Rheumatoid nodule, unspecified wrist	Diagnosis	ICD-10-CM
M06.341	Rheumatoid nodule, right hand	Diagnosis	ICD-10-CM
M06.342	Rheumatoid nodule, left hand	Diagnosis	ICD-10-CM
M06.349	Rheumatoid nodule, unspecified hand	Diagnosis	ICD-10-CM
M06.351	Rheumatoid nodule, right hip	Diagnosis	ICD-10-CM
M06.352	Rheumatoid nodule, left hip	Diagnosis	ICD-10-CM
M06.359	Rheumatoid nodule, unspecified hip	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M06.361	Rheumatoid nodule, right knee	Diagnosis	ICD-10-CM
M06.362	Rheumatoid nodule, left knee	Diagnosis	ICD-10-CM
M06.369	Rheumatoid nodule, unspecified knee	Diagnosis	ICD-10-CM
M06.371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM
M06.372	Rheumatoid nodule, left ankle and foot	Diagnosis	ICD-10-CM
M06.379	Rheumatoid nodule, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.38	Rheumatoid nodule, vertebrae	Diagnosis	ICD-10-CM
M06.39	Rheumatoid nodule, multiple sites	Diagnosis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.821	Other specified rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M06.822	Other specified rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M06.829	Other specified rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M06.831	Other specified rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M06.832	Other specified rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M06.839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M06.842	Other specified rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M06.849	Other specified rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M06.851	Other specified rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M06.852	Other specified rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M06.859	Other specified rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M06.861	Other specified rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M06.862	Other specified rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M06.869	Other specified rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M06.8A	Other specified rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.041	Unspecified juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.042	Unspecified juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.051	Unspecified juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.052	Unspecified juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.061	Unspecified juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.062	Unspecified juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.1	Juvenile ankylosing spondylitis	Diagnosis	ICD-10-CM
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site	Diagnosis	ICD-10-CM
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder	Diagnosis	ICD-10-CM
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder	Diagnosis	ICD-10-CM
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder	Diagnosis	ICD-10-CM
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow	Diagnosis	ICD-10-CM
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow	Diagnosis	ICD-10-CM
M08.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow	Diagnosis	ICD-10-CM
M08.231	Juvenile rheumatoid arthritis with systemic onset, right wrist	Diagnosis	ICD-10-CM
M08.232	Juvenile rheumatoid arthritis with systemic onset, left wrist	Diagnosis	ICD-10-CM
M08.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist	Diagnosis	ICD-10-CM
M08.241	Juvenile rheumatoid arthritis with systemic onset, right hand	Diagnosis	ICD-10-CM
M08.242	Juvenile rheumatoid arthritis with systemic onset, left hand	Diagnosis	ICD-10-CM
M08.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand	Diagnosis	ICD-10-CM
M08.251	Juvenile rheumatoid arthritis with systemic onset, right hip	Diagnosis	ICD-10-CM
M08.252	Juvenile rheumatoid arthritis with systemic onset, left hip	Diagnosis	ICD-10-CM
M08.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip	Diagnosis	ICD-10-CM
M08.261	Juvenile rheumatoid arthritis with systemic onset, right knee	Diagnosis	ICD-10-CM
M08.262	Juvenile rheumatoid arthritis with systemic onset, left knee	Diagnosis	ICD-10-CM
M08.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee	Diagnosis	ICD-10-CM
M08.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot	Diagnosis	ICD-10-CM
M08.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot	Diagnosis	ICD-10-CM
M08.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae	Diagnosis	ICD-10-CM
M08.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites	Diagnosis	ICD-10-CM
M08.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site	Diagnosis	ICD-10-CM
M08.3	Juvenile rheumatoid polyarthritis (seronegative)	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M08.40	Pauciarticular juvenile rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.411	Pauciarticular juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.412	Pauciarticular juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.419	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.421	Pauciarticular juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.422	Pauciarticular juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.429	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.431	Pauciarticular juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.432	Pauciarticular juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.439	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.441	Pauciarticular juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.442	Pauciarticular juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.449	Pauciarticular juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.451	Pauciarticular juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.452	Pauciarticular juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.459	Pauciarticular juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.461	Pauciarticular juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.462	Pauciarticular juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.469	Pauciarticular juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.471	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.472	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.4A	Pauciarticular juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.80	Other juvenile arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.811	Other juvenile arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.812	Other juvenile arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.819	Other juvenile arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.821	Other juvenile arthritis, right elbow	Diagnosis	ICD-10-CM
M08.822	Other juvenile arthritis, left elbow	Diagnosis	ICD-10-CM
M08.829	Other juvenile arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.831	Other juvenile arthritis, right wrist	Diagnosis	ICD-10-CM
M08.832	Other juvenile arthritis, left wrist	Diagnosis	ICD-10-CM
M08.839	Other juvenile arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.841	Other juvenile arthritis, right hand	Diagnosis	ICD-10-CM
M08.842	Other juvenile arthritis, left hand	Diagnosis	ICD-10-CM
M08.849	Other juvenile arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.851	Other juvenile arthritis, right hip	Diagnosis	ICD-10-CM
M08.852	Other juvenile arthritis, left hip	Diagnosis	ICD-10-CM
M08.859	Other juvenile arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.861	Other juvenile arthritis, right knee	Diagnosis	ICD-10-CM
M08.862	Other juvenile arthritis, left knee	Diagnosis	ICD-10-CM
M08.869	Other juvenile arthritis, unspecified knee	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M08.871	Other juvenile arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.872	Other juvenile arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.879	Other juvenile arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.88	Other juvenile arthritis, other specified site	Diagnosis	ICD-10-CM
M08.89	Other juvenile arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.90	Juvenile arthritis, unspecified, unspecified site	Diagnosis	ICD-10-CM
M08.911	Juvenile arthritis, unspecified, right shoulder	Diagnosis	ICD-10-CM
M08.912	Juvenile arthritis, unspecified, left shoulder	Diagnosis	ICD-10-CM
M08.919	Juvenile arthritis, unspecified, unspecified shoulder	Diagnosis	ICD-10-CM
M08.921	Juvenile arthritis, unspecified, right elbow	Diagnosis	ICD-10-CM
M08.922	Juvenile arthritis, unspecified, left elbow	Diagnosis	ICD-10-CM
M08.929	Juvenile arthritis, unspecified, unspecified elbow	Diagnosis	ICD-10-CM
M08.931	Juvenile arthritis, unspecified, right wrist	Diagnosis	ICD-10-CM
M08.932	Juvenile arthritis, unspecified, left wrist	Diagnosis	ICD-10-CM
M08.939	Juvenile arthritis, unspecified, unspecified wrist	Diagnosis	ICD-10-CM
M08.941	Juvenile arthritis, unspecified, right hand	Diagnosis	ICD-10-CM
M08.942	Juvenile arthritis, unspecified, left hand	Diagnosis	ICD-10-CM
M08.949	Juvenile arthritis, unspecified, unspecified hand	Diagnosis	ICD-10-CM
M08.951	Juvenile arthritis, unspecified, right hip	Diagnosis	ICD-10-CM
M08.952	Juvenile arthritis, unspecified, left hip	Diagnosis	ICD-10-CM
M08.959	Juvenile arthritis, unspecified, unspecified hip	Diagnosis	ICD-10-CM
M08.961	Juvenile arthritis, unspecified, right knee	Diagnosis	ICD-10-CM
M08.962	Juvenile arthritis, unspecified, left knee	Diagnosis	ICD-10-CM
M08.969	Juvenile arthritis, unspecified, unspecified knee	Diagnosis	ICD-10-CM
M08.971	Juvenile arthritis, unspecified, right ankle and foot	Diagnosis	ICD-10-CM
M08.972	Juvenile arthritis, unspecified, left ankle and foot	Diagnosis	ICD-10-CM
M08.979	Juvenile arthritis, unspecified, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.98	Juvenile arthritis, unspecified, vertebrae	Diagnosis	ICD-10-CM
M08.99	Juvenile arthritis, unspecified, multiple sites	Diagnosis	ICD-10-CM
M08.9A	Juvenile arthritis, unspecified, other specified site	Diagnosis	ICD-10-CM
M15.0	Primary generalized (osteo)arthritis	Diagnosis	ICD-10-CM
M15.1	Heberden's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M15.2	Bouchard's nodes (with arthropathy)	Diagnosis	ICD-10-CM
M15.3	Secondary multiple arthritis	Diagnosis	ICD-10-CM
M15.4	Erosive (osteo)arthritis	Diagnosis	ICD-10-CM
M15.8	Other polyosteoarthritis	Diagnosis	ICD-10-CM
M15.9	Polyosteoarthritis, unspecified	Diagnosis	ICD-10-CM
M16.0	Bilateral primary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.10	Unilateral primary osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M16.11	Unilateral primary osteoarthritis, right hip	Diagnosis	ICD-10-CM
M16.12	Unilateral primary osteoarthritis, left hip	Diagnosis	ICD-10-CM
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	Diagnosis	ICD-10-CM
M16.30	Unilateral osteoarthritis resulting from hip dysplasia, unspecified hip	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M16.31	Unilateral osteoarthritis resulting from hip dysplasia, right hip	Diagnosis	ICD-10-CM
M16.32	Unilateral osteoarthritis resulting from hip dysplasia, left hip	Diagnosis	ICD-10-CM
M16.4	Bilateral post-traumatic osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.50	Unilateral post-traumatic osteoarthritis, unspecified hip	Diagnosis	ICD-10-CM
M16.51	Unilateral post-traumatic osteoarthritis, right hip	Diagnosis	ICD-10-CM
M16.52	Unilateral post-traumatic osteoarthritis, left hip	Diagnosis	ICD-10-CM
M16.6	Other bilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.7	Other unilateral secondary osteoarthritis of hip	Diagnosis	ICD-10-CM
M16.9	Osteoarthritis of hip, unspecified	Diagnosis	ICD-10-CM
M17.0	Bilateral primary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.10	Unilateral primary osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M17.11	Unilateral primary osteoarthritis, right knee	Diagnosis	ICD-10-CM
M17.12	Unilateral primary osteoarthritis, left knee	Diagnosis	ICD-10-CM
M17.2	Bilateral post-traumatic osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.30	Unilateral post-traumatic osteoarthritis, unspecified knee	Diagnosis	ICD-10-CM
M17.31	Unilateral post-traumatic osteoarthritis, right knee	Diagnosis	ICD-10-CM
M17.32	Unilateral post-traumatic osteoarthritis, left knee	Diagnosis	ICD-10-CM
M17.4	Other bilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.5	Other unilateral secondary osteoarthritis of knee	Diagnosis	ICD-10-CM
M17.9	Osteoarthritis of knee, unspecified	Diagnosis	ICD-10-CM
M18.0	Bilateral primary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.10	Unilateral primary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.11	Unilateral primary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.12	Unilateral primary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.2	Bilateral post-traumatic osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.30	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.31	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.32	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.50	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.51	Other unilateral secondary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.52	Other unilateral secondary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.9	Osteoarthritis of first carpometacarpal joint, unspecified	Diagnosis	ICD-10-CM
M19.011	Primary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.012	Primary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.019	Primary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.021	Primary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.022	Primary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.029	Primary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.031	Primary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.032	Primary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.039	Primary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.041	Primary osteoarthritis, right hand	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M19.042	Primary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.049	Primary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.071	Primary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.072	Primary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.079	Primary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.09	Primary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.111	Post-traumatic osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.112	Post-traumatic osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.119	Post-traumatic osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.121	Post-traumatic osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.122	Post-traumatic osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.129	Post-traumatic osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.131	Post-traumatic osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.132	Post-traumatic osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.139	Post-traumatic osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.141	Post-traumatic osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.142	Post-traumatic osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.149	Post-traumatic osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.171	Post-traumatic osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.172	Post-traumatic osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.179	Post-traumatic osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.19	Post-traumatic osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.211	Secondary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.212	Secondary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.219	Secondary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.221	Secondary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.222	Secondary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.229	Secondary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.231	Secondary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.232	Secondary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.239	Secondary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.241	Secondary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.242	Secondary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.249	Secondary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.271	Secondary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.272	Secondary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.279	Secondary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.29	Secondary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.90	Unspecified osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.91	Primary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.92	Post-traumatic osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.93	Secondary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M45.0	Ankylosing spondylitis of multiple sites in spine	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M45.1	Ankylosing spondylitis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.2	Ankylosing spondylitis of cervical region	Diagnosis	ICD-10-CM
M45.3	Ankylosing spondylitis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.4	Ankylosing spondylitis of thoracic region	Diagnosis	ICD-10-CM
M45.5	Ankylosing spondylitis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.6	Ankylosing spondylitis lumbar region	Diagnosis	ICD-10-CM
M45.7	Ankylosing spondylitis of lumbosacral region	Diagnosis	ICD-10-CM
M45.8	Ankylosing spondylitis sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.9	Ankylosing spondylitis of unspecified sites in spine	Diagnosis	ICD-10-CM
M45.A0	Non-radiographic axial spondyloarthritis of unspecified sites in spine	Diagnosis	ICD-10-CM
M45.A1	Non-radiographic axial spondyloarthritis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.A2	Non-radiographic axial spondyloarthritis of cervical region	Diagnosis	ICD-10-CM
M45.A3	Non-radiographic axial spondyloarthritis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.A4	Non-radiographic axial spondyloarthritis of thoracic region	Diagnosis	ICD-10-CM
M45.A5	Non-radiographic axial spondyloarthritis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.A6	Non-radiographic axial spondyloarthritis of lumbar region	Diagnosis	ICD-10-CM
M45.A7	Non-radiographic axial spondyloarthritis of lumbosacral region	Diagnosis	ICD-10-CM
M45.A8	Non-radiographic axial spondyloarthritis of sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.AB	Non-radiographic axial spondyloarthritis of multiple sites in spine	Diagnosis	ICD-10-CM
M46.80	Other specified inflammatory spondylopathies, site unspecified	Diagnosis	ICD-10-CM
M46.81	Other specified inflammatory spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.82	Other specified inflammatory spondylopathies, cervical region	Diagnosis	ICD-10-CM
M46.83	Other specified inflammatory spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM
M46.84	Other specified inflammatory spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M46.85	Other specified inflammatory spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M46.86	Other specified inflammatory spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M46.87	Other specified inflammatory spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M46.88	Other specified inflammatory spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M46.89	Other specified inflammatory spondylopathies, multiple sites in spine	Diagnosis	ICD-10-CM
M46.90	Unspecified inflammatory spondylopathy, site unspecified	Diagnosis	ICD-10-CM
M46.91	Unspecified inflammatory spondylopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M46.92	Unspecified inflammatory spondylopathy, cervical region	Diagnosis	ICD-10-CM
M46.93	Unspecified inflammatory spondylopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M46.94	Unspecified inflammatory spondylopathy, thoracic region	Diagnosis	ICD-10-CM
M46.95	Unspecified inflammatory spondylopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M46.96	Unspecified inflammatory spondylopathy, lumbar region	Diagnosis	ICD-10-CM
M46.97	Unspecified inflammatory spondylopathy, lumbosacral region	Diagnosis	ICD-10-CM
M46.98	Unspecified inflammatory spondylopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M46.99	Unspecified inflammatory spondylopathy, multiple sites in spine	Diagnosis	ICD-10-CM
M47.011	Anterior spinal artery compression syndromes, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.012	Anterior spinal artery compression syndromes, cervical region	Diagnosis	ICD-10-CM
M47.013	Anterior spinal artery compression syndromes, cervicothoracic region	Diagnosis	ICD-10-CM
M47.014	Anterior spinal artery compression syndromes, thoracic region	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M47.015	Anterior spinal artery compression syndromes, thoracolumbar region	Diagnosis	ICD-10-CM
M47.016	Anterior spinal artery compression syndromes, lumbar region	Diagnosis	ICD-10-CM
M47.019	Anterior spinal artery compression syndromes, site unspecified	Diagnosis	ICD-10-CM
M47.021	Vertebral artery compression syndromes, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.022	Vertebral artery compression syndromes, cervical region	Diagnosis	ICD-10-CM
M47.029	Vertebral artery compression syndromes, site unspecified	Diagnosis	ICD-10-CM
M47.10	Other spondylosis with myelopathy, site unspecified	Diagnosis	ICD-10-CM
M47.11	Other spondylosis with myelopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.12	Other spondylosis with myelopathy, cervical region	Diagnosis	ICD-10-CM
M47.13	Other spondylosis with myelopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.14	Other spondylosis with myelopathy, thoracic region	Diagnosis	ICD-10-CM
M47.15	Other spondylosis with myelopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.16	Other spondylosis with myelopathy, lumbar region	Diagnosis	ICD-10-CM
M47.20	Other spondylosis with radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.21	Other spondylosis with radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.22	Other spondylosis with radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.23	Other spondylosis with radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.24	Other spondylosis with radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.25	Other spondylosis with radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.26	Other spondylosis with radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.27	Other spondylosis with radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.28	Other spondylosis with radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.811	Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.818	Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.891	Other spondylosis, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.892	Other spondylosis, cervical region	Diagnosis	ICD-10-CM
M47.893	Other spondylosis, cervicothoracic region	Diagnosis	ICD-10-CM
M47.894	Other spondylosis, thoracic region	Diagnosis	ICD-10-CM
M47.895	Other spondylosis, thoracolumbar region	Diagnosis	ICD-10-CM
M47.896	Other spondylosis, lumbar region	Diagnosis	ICD-10-CM
M47.897	Other spondylosis, lumbosacral region	Diagnosis	ICD-10-CM
M47.898	Other spondylosis, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.899	Other spondylosis, site unspecified	Diagnosis	ICD-10-CM
M47.9	Spondylosis, unspecified	Diagnosis	ICD-10-CM
M48.8X1	Other specified spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M48.8X2	Other specified spondylopathies, cervical region	Diagnosis	ICD-10-CM



**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
M48.8X3	Other specified spondylopathies, cervicothoracic region	Diagnosis	ICD-10-CM
M48.8X4	Other specified spondylopathies, thoracic region	Diagnosis	ICD-10-CM
M48.8X5	Other specified spondylopathies, thoracolumbar region	Diagnosis	ICD-10-CM
M48.8X6	Other specified spondylopathies, lumbar region	Diagnosis	ICD-10-CM
M48.8X7	Other specified spondylopathies, lumbosacral region	Diagnosis	ICD-10-CM
M48.8X8	Other specified spondylopathies, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M48.8X9	Other specified spondylopathies, site unspecified	Diagnosis	ICD-10-CM
<b>Smoking</b>			
1034F	Current tobacco smoker (CAD, CAP, COPD, PV) (DM)	Procedure	CPT-2
4001F	Tobacco use cessation intervention, pharmacologic therapy (COPD, CAD, CAP, PV, Asthma) (DM) (PV)	Procedure	CPT-2
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-2
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
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
F17.210	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
F17.219	Nicotine dependence, cigarettes, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.223	Nicotine dependence, chewing tobacco, with withdrawal	Diagnosis	ICD-10-CM
F17.228	Nicotine dependence, chewing tobacco, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.229	Nicotine dependence, chewing tobacco, with unspecified nicotine-induced disorders	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
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis	ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
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
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

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
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
O99.330	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
S4995	Smoking cessation gum	Procedure	HCPCS
S9075	Smoking cessation treatment	Procedure	HCPCS
S9453	Smoking cessation classes, nonphysician provider, per session	Procedure	HCPCS
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
Z71.6	Tobacco abuse counseling	Diagnosis	ICD-10-CM
Z87.891	Personal history of nicotine dependence	Diagnosis	ICD-10-CM
<b>Transient Ischemic Attack</b>			
430	Subarachnoid hemorrhage	Diagnosis	ICD-9-CM
431	Intracerebral hemorrhage	Diagnosis	ICD-9-CM
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	Diagnosis	ICD-9-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	Diagnosis	ICD-9-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction	Diagnosis	ICD-9-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
434.00	Cerebral thrombosis without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.01	Cerebral thrombosis with cerebral infarction	Diagnosis	ICD-9-CM
434.10	Cerebral embolism without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.11	Cerebral embolism with cerebral infarction	Diagnosis	ICD-9-CM
434.90	Unspecified cerebral artery occlusion without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	Diagnosis	ICD-9-CM
435.0	Basilar artery syndrome	Diagnosis	ICD-9-CM
435.1	Vertebral artery syndrome	Diagnosis	ICD-9-CM
435.3	Vertebrobasilar artery syndrome	Diagnosis	ICD-9-CM
435.8	Other specified transient cerebral ischemias	Diagnosis	ICD-9-CM
435.9	Unspecified transient cerebral ischemia	Diagnosis	ICD-9-CM
436	Acute, but ill-defined, cerebrovascular disease	Diagnosis	ICD-9-CM
997.02	Iatrogenic cerebrovascular infarction or hemorrhage	Diagnosis	ICD-9-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
G45.0	Vertebro-basilar artery syndrome	Diagnosis	ICD-10-CM
G45.1	Carotid artery syndrome (hemispheric)	Diagnosis	ICD-10-CM
G45.2	Multiple and bilateral precerebral artery syndromes	Diagnosis	ICD-10-CM
G45.3	Amaurosis fugax	Diagnosis	ICD-10-CM
G45.8	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
G46.0	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.1	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.3	Brain stem stroke syndrome	Diagnosis	ICD-10-CM
G46.4	Cerebellar stroke syndrome	Diagnosis	ICD-10-CM
G46.5	Pure motor lacunar syndrome	Diagnosis	ICD-10-CM
G46.6	Pure sensory lacunar syndrome	Diagnosis	ICD-10-CM
G46.7	Other lacunar syndromes	Diagnosis	ICD-10-CM
G46.8	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure	Diagnosis	ICD-10-CM
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure	Diagnosis	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery	Diagnosis	ICD-10-CM
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery	Diagnosis	ICD-10-CM
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery	Diagnosis	ICD-10-CM
I60.20	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery	Diagnosis	ICD-10-CM
I60.21	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery	Diagnosis	ICD-10-CM
I60.22	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery	Diagnosis	ICD-10-CM
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I61.3	Nontraumatic intracerebral hemorrhage in brain stem	Diagnosis	ICD-10-CM
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum	Diagnosis	ICD-10-CM
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular	Diagnosis	ICD-10-CM
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized	Diagnosis	ICD-10-CM
I61.8	Other nontraumatic intracerebral hemorrhage	Diagnosis	ICD-10-CM
I61.9	Nontraumatic intracerebral hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.00	Nontraumatic subdural hemorrhage, unspecified	Diagnosis	ICD-10-CM
I62.01	Nontraumatic acute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.02	Nontraumatic subacute subdural hemorrhage	Diagnosis	ICD-10-CM
I62.9	Nontraumatic intracranial hemorrhage, unspecified	Diagnosis	ICD-10-CM
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.011	Cerebral infarction due to thrombosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.012	Cerebral infarction due to thrombosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.02	Cerebral infarction due to thrombosis of basilar artery	Diagnosis	ICD-10-CM
I63.031	Cerebral infarction due to thrombosis of right carotid artery	Diagnosis	ICD-10-CM
I63.032	Cerebral infarction due to thrombosis of left carotid artery	Diagnosis	ICD-10-CM
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM
I63.139	Cerebral infarction due to embolism of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.19	Cerebral infarction due to embolism of other precerebral artery	Diagnosis	ICD-10-CM
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries	Diagnosis	ICD-10-CM
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral artery	Diagnosis	ICD-10-CM
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral artery	Diagnosis	ICD-10-CM
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries	Diagnosis	ICD-10-CM
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar artery	Diagnosis	ICD-10-CM
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries	Diagnosis	ICD-10-CM
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries	Diagnosis	ICD-10-CM
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.323	Cerebral infarction due to thrombosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.333	Cerebral infarction to thrombosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.343	Cerebral infarction to thrombosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.39	Cerebral infarction due to thrombosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.411	Cerebral infarction due to embolism of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.412	Cerebral infarction due to embolism of left middle cerebral artery	Diagnosis	ICD-10-CM
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.441	Cerebral infarction due to embolism of right cerebellar artery	Diagnosis	ICD-10-CM
I63.442	Cerebral infarction due to embolism of left cerebellar artery	Diagnosis	ICD-10-CM
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.49	Cerebral infarction due to embolism of other cerebral artery	Diagnosis	ICD-10-CM
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM



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Code	Description	Code	
		Category	Code Type
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I63.89	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I66.01	Occlusion and stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I66.02	Occlusion and stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I66.03	Occlusion and stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I66.09	Occlusion and stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I66.11	Occlusion and stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I66.12	Occlusion and stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I66.13	Occlusion and stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I66.19	Occlusion and stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I66.21	Occlusion and stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM
I66.22	Occlusion and stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I66.23	Occlusion and stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I66.29	Occlusion and stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM

**Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Healthcare Common Procedure Coding System, Level II (HCPCS), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), and International Classification of Diseases, Tenth Revision, Procedural Coding System (ICD-10-PCS) Codes Used to Define Covariates in This Request**

Code	Description	Code	
		Category	Code Type
I66.3	Occlusion and stenosis of cerebellar arteries	Diagnosis	ICD-10-CM
I66.8	Occlusion and stenosis of other cerebral arteries	Diagnosis	ICD-10-CM
I66.9	Occlusion and stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery	Diagnosis	ICD-10-CM
I97.811	Intraoperative cerebrovascular infarction during other surgery	Diagnosis	ICD-10-CM
I97.820	Postprocedural cerebrovascular infarction following cardiac surgery	Diagnosis	ICD-10-CM
I97.821	Postprocedural cerebrovascular infarction following other surgery	Diagnosis	ICD-10-CM

**Appendix E. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Covariates in this Request**

<b>Non-Proprietary Name</b>	<b>Proprietary Name</b>
<b>Obesity</b>	
Amino Acids/Multivit-Minerals/Dietary Supplement/Protein Sup	Optifast 70
Benzphetamine HCl	Benzphetamine
Benzphetamine HCl	Regimex
Diethylpropion HCl	Diethylpropion
Diethylpropion HCl	Diethylpropion HCl (bulk)
Liraglutide	Saxenda
Liraglutide	Victoza 2-Pak
Liraglutide	Victoza 3-Pak
Lorcaserin HCl	Belviq
Lorcaserin HCl	Belviq XR
Naltrexone HCl/Bupropion HCl	Contrave
Orlistat	Alli
Orlistat	Xenical
Phendimetrazine Tartrate	Bontril PDM
Phendimetrazine Tartrate	Phendimetrazine Tartrate
Phentermine HCl	Adipex-P
Phentermine HCl	Lomaira
Phentermine HCl	Phentermine
Phentermine HCl	Phentermine HCl (bulk)
Phentermine HCl	Suprenza
Phentermine HCl/Topiramate	Qsymia
Resveratrol/Chromium Pico/Green Tea/EGCG/Caffeine/Digestive3	Resveratrol Diet
<b>Smoking</b>	
Nicotine	NTS Step 1
Nicotine	Nicoderm CQ
Nicotine	Nicotine
Nicotine	Nicotrol
Nicotine	Nicotrol NS
Nicotine Bitartrate	Nicotine Tartrate
Nicotine Polacrilex	Nicorelief
Nicotine Polacrilex	Nicorette
Nicotine Polacrilex	Nicotine (Polacrilex)
Nicotine Polacrilex	Nicotine Polacrilex (bulk)
Nicotine Polacrilex	Quit 2
Nicotine Polacrilex	Quit 4
Nicotine Polacrilex	Stop Smoking Aid
Varenicline Tartrate	Chantix
Varenicline Tartrate	Chantix Continuing Month Box
Varenicline Tartrate	Chantix Starting Month Box
Varenicline Tartrate	Tyrvaya
Varenicline Tartrate	Varenicline



**Appendix F. Specifications Defining Parameters for this Request**

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool, version 12.1.2, to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).

**Query period:** 01/01/2019 - Most recent available data  
**Coverage requirement:** Medical and Drug Coverage  
**Pre-index enrollment requirement:** 183 days  
**Post-index requirement:** 0 days  
**Enrollment gap:** 45 days  
**Age groups:** 0-17, 18-24, 25-40, 41-64, 65+ years  
**Stratifications:** Age group, Sex, Calendar Month  
**Restrictions:** Male and Female  
**Distribution of index-defining codes:** No  
**Envelope macro:** Reclassify encounters during inpatient stay as inpatient  
**Freeze data:** No

**Exposure**

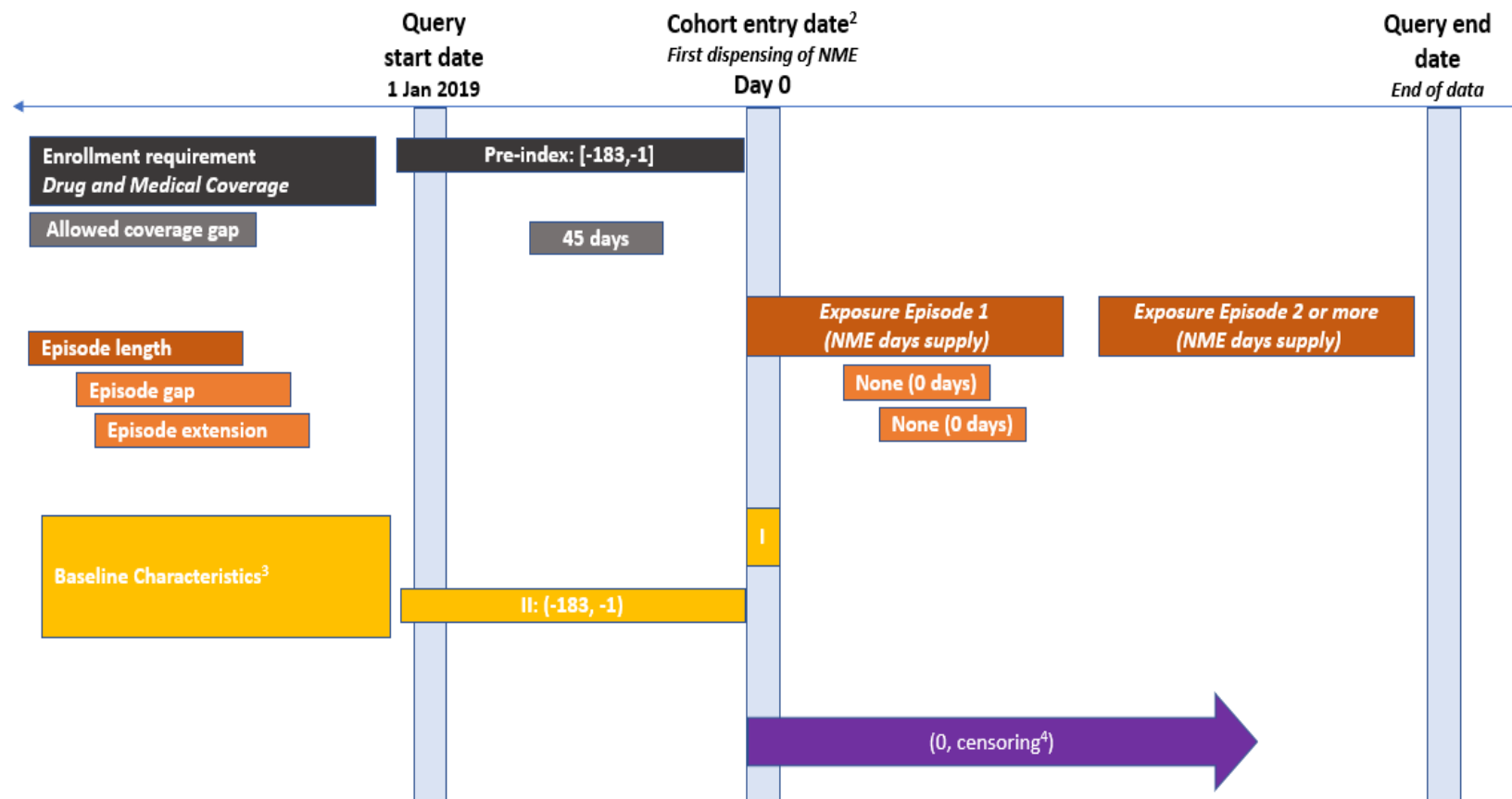
Scenario	Index Exposure/ Event	Cohort definition	Incident exposure washout period	Exclude evidence of days supply if exposure washout includes dispensing	Treatment episode gap	Treatment episode extension	Care setting	Principal diagnosis position	Create Baseline Table?	Censor treatment episode at evidence of:
1	Tenapanor	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
2	Trifarotene	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

Appendix F. Specifications Defining Parameters for this Request										
3	Brolucizumab-dbl l	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
4	Afamelanotide	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
5	Fluorodopa F-18	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
6	Lasmiditan	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
7	Elexacaftor Ivacaftor Tezacaftor	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
8	Air Polymer-Type A	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
9	Luspatercept-aa mt	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

Appendix F. Specifications Defining Parameters for this Request										
10	Zanubrutinib	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
11	Cefiderocol	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
12	Crizanlizumab-tmca	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
13	Givosiran	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
14	Cenobamate	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
15	Voxelotor	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
16	Golodirsen	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

Appendix F. Specifications Defining Parameters for this Request										
17	Enfortumab Vedotin-ejfv	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
18	Brilliant Blue G Ophthalmic Solution	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
19	Lumateperone Tosylate	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
20	Lemborexant	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
21	Fam-Trastuzumab Deruxtecan-nxki	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
22	Ubrogepant	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A	0 days	0 days	Any care setting	Any	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
<p>N/A: Not Applicable</p> <p>International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), Healthcare Common Procedure Coding System (HCPCS), and Current Procedural Terminology (CPT) codes are provided by Optum360.</p> <p>National Drug codes (NDC) codes are checked against First Data Bank's FDB MedKnowledge®.</p>										

### Appendix G. Design Diagram Used in this Request



<sup>1</sup> Includes all valid exposure during the query period; only the first valid episode's incidence is assessed using the washout period.

<sup>2</sup> 22 scenarios defined on initiation of NMEs approved in 2019 part 2 (one scenario per NME); Cohort entry date = first dispensing date for qualifying NME.

<sup>3</sup> Baseline characteristics:

Window I: Age, Sex, Year

Window II: Chronic Conditions Data Warehouse (CCW): Acute Myocardial Infarction, Alzheimer's Disease and related conditions, Atrial Fibrillation, Diabetes, Heart Failure, Hyperlipidemia, Hypertension, Depression, Ischemic Heart Disease, Rheumatoid Arthritis/Osteoarthritis, Stroke/Transient Ischemic Attack (TIA), Breast Cancer, Colorectal Cancer, Prostate Cancer, Lung Cancer, Endometrial Cancer, Acquired Hypothyroidism, Anemia, Asthma, Benign Prostatic Hyperplasia, Chronic Kidney Disease, COPD and Bronchiectasis, Glaucoma, Osteoporosis; and

Other: Obesity Diagnosis/Procedure, Obesity NDCs, Overweight, Smoking Diagnosis/Procedure, Smoking NDCs, Alcohol Abuse or Dependence, Drug Abuse or Dependence, History of Cardiac Arrest, History of Coronary Angioplasty or Bypass

<sup>4</sup> Censoring: earliest of death, disenrollment, data partner data end date, query end date

Appendix H. Specifications Defining Parameters for Baseline Characteristics in this Request

Covariates

Characteristic	Covariate Number	Care setting/ Principal diagnosis <sup>1</sup>	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensing	Number of instances the covariate should be found in evaluation period	Forced supply to attach to dispensing
<i>Chronic Conditions Data Warehouse</i>							
Acute Myocardial Infarction	1	IPP, IPS	-183	-1	n/a	1	N/A
Alzheimer's Disease and related conditions	2	Any	-183	-1	n/a	1	N/A
Atrial Fibrillation	3	IPP, IPS or	-183	-1	n/a	1	N/A
	4	AV*, ED*, OA*	-183	-1	n/a	2	N/A
	5	3 or 4	-183	-1	n/a	N/A	N/A
Diabetes	6	IP*, IS* or	-183	-1	n/a	1	N/A
	7	AV*, ED*, OA*	-183	-1	n/a	2	N/A
	8	6 or 7	-183	-1	n/a	N/A	N/A
Heart Failure	9	IP*, AV*, ED*, OA*	-183	-1	n/a	1	N/A
Hyperlipidemia	10	IP*, IS* or	-183	-1	n/a	1	N/A
	11	AV*, ED*, OA*	-183	-1	n/a	2	N/A
	12	10 or 11	-183	-1	n/a	N/A	N/A
Hypertension	13	IP*, IS* or	-183	-1	n/a	1	N/A
	14	AV*, ED*, OA*	-183	-1	n/a	2	N/A
	15	13 or 14	-183	-1	n/a	N/A	N/A
Depression	16	Any	-183	-1	n/a	1	N/A
Ischemic Heart Disease	17	Any	-183	-1	n/a	1	N/A
Rheumatoid Arthritis/Osteoarthritis	18	Any	-183	-1	n/a	2	N/A
Stroke/Transient Ischemic Attack (TIA)	19	IP*	-183	-1	n/a	1	N/A
	20	AV*, ED*, OA*	-183	-1	n/a	2	N/A
	21	19 or 20	-183	-1	n/a	N/A	N/A

Appendix H. Specifications Defining Parameters for Baseline Characteristics in this Request

Covariates

Characteristic	Covariate Number	Care setting/ Principal diagnosis <sup>1</sup>	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensing	Number of instances the covariate should be found in evaluation period	Forced supply to attach to dispensing
Breast Cancer	22	IP*, IS* or	-183	-1	n/a	1	N/A
	23	AV*, ED* OA*	-183	-1	n/a	2	N/A
	24	22 or 23	-183	-1	n/a	N/A	N/A
Colorectal Cancer	25	IP*, IS* or	-183	-1	n/a	1	N/A
	26	AV*, ED* OA*	-183	-1	n/a	2	N/A
	27	25 or 26	-183	-1	n/a	N/A	N/A
Prostate Cancer	28	IP*, IS* or	-183	-1	n/a	1	N/A
	29	AV*, ED* OA*	-183	-1	n/a	2	N/A
	30	28 or 29	-183	-1	n/a	N/A	N/A
Lung Cancer	31	IP*, IS* or	-183	-1	n/a	1	N/A
	32	AV*, ED* OA*	-183	-1	n/a	2	N/A
	33	31 or 32	-183	-1	n/a	N/A	N/A
Endometrial Cancer	34	IP*, IS* or	-183	-1	n/a	1	N/A
	35	AV*, ED* OA*	-183	-1	n/a	2	N/A
	36	34 or 35	-183	-1	n/a	N/A	N/A
Acquired Hypothyroidism	37	IP*, IS*, or	-183	-1	n/a	1	N/A
	38	AV*, ED* OA*	-183	-1	n/a	2	N/A
	39	37 or 38	-183	-1	n/a	N/A	N/A
Anemia	40	Any	-183	-1	n/a	1	N/A
Asthma	41	IP*, IS*, or	-183	-1	n/a	1	N/A
	42	AV*, ED* OA*	-183	-1	n/a	2	N/A
	43	41 or 42	-183	-1	n/a	N/A	N/A
Benign Prostatic Hyperplasia	44	IP*, IS*, or	-183	-1	n/a	1	N/A
	45	AV*, ED* OA*	-183	-1	n/a	2	N/A
	46	44 or 45	-183	-1	n/a	N/A	N/A
Chronic Kidney Disease	47	IP*, IS*, or	-183	-1	n/a	1	N/A
	48	AV*, ED* OA*	-183	-1	n/a	2	N/A
	49	47 or 48	-183	-1	n/a	N/A	N/A
	50	IP*, IS*, or	-183	-1	n/a	1	N/A

**Appendix H. Specifications Defining Parameters for Baseline Characteristics in this Request**

**Covariates**

Characteristic	Covariate Number	Care setting/ Principal diagnosis <sup>1</sup>	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensing	Number of instances the covariate should be found in evaluation period	Forced supply to attach to dispensing
COPD and Bronchiectasis	51	AV*, ED* OA*	-183	-1	n/a	2	N/A
	52	50 or 51	-183	-1	n/a	N/A	N/A
Glaucoma	53	AV*, ED*, OA*	-183	-1	n/a	1	N/A
Osteoporosis	54	IP*, IS*, or	-183	-1	n/a	1	N/A
	55	AV*, ED* OA*	-183	-1	n/a	2	N/A
	56	54 or 55	-183	-1	n/a	N/A	N/A
<i>Other</i>							
Obesity: diagnosed or identified by weight management procedures	57	Any	-183	-1	n/a	1	N/A
Obesity: identified by weight management-related prescriptions	58	Any	-183	-1	Evaluation period should search for evidence of days supply	1	N/A
Overweight	59	Any	-183	-1	n/a	1	N/A
Smoking: diagnosed or identified by smoking cessation procedures	60	Any	-183	-1	n/a	1	N/A
Smoking: identified by smoking-related prescriptions	61	Any	-183	-1	Evaluation period should search for evidence of days supply	1	N/A
Alcohol Abuse or Dependence	62	Any	-183	-1	n/a	1	N/A
Drug Abuse or Dependence	63	Any	-183	-1	n/a	1	N/A
History of Cardiac Arrest	64	Any	-183	-1	n/a	1	N/A
History of Coronary Angioplasty or Bypass	65	Any	-183	-1	n/a	1	N/A



**Appendix H. Specifications Defining Parameters for Baseline Characteristics in this Request**

**Covariates**

Characteristic	Covariate Number	Care setting/ Principal diagnosis <sup>1</sup>	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensing	Number of instances the covariate should be found in evaluation period	Forced supply to attach to dispensing
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N/A: Not Applicable

**\*The wildcard symbol (\*) can be used to represent 'any' values of either the care setting or principal discharge diagnosis flag. Wildcard does not restrict a specific principal diagnosis position. The principal discharge diagnosis flag is only relevant for diagnosis codes.**

**The (P) at the end of the care setting refers to the primary diagnosis position, while the (S) refers to the secondary diagnosis position. This indicates that only the first or second diagnosis on the claims should be used for specified codes. For example, IPP (Inpatient Primary) uses the first diagnosis position, and IPS (Inpatient Scndary) uses the second diagnosis position.**

**Appendix H. Specifications Defining Parameters for Baseline Characteristics in this Request**

**Covariates**

Characteristic	Covariate Number	Care setting/ Principal diagnosis <sup>1</sup>	Evaluation period start	Evaluation period end	Exclude evidence of days supply if covariate includes dispensing	Number of instances the covariate should be found in evaluation period	Forced supply to attach to dispensing
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<sup>1</sup>Caresetting/ Principal Diagnosis

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.

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 Care setting/PDX parameter.