Disclaimer

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

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

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

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

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Request ID: cder_mpl1r_wp296_nsdp_v01

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

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis module (CIDA), version 14.2.0**.**

Data Source: We distributed this request to 13 Sentinel Data Partners on May 22, 2025. The study period included data from January 1, 2019 to December 31, 2024. Report 1 includes NMEs approved from January 1, 2019 to August 31, 2019. 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 NMEs of interest. 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 the relevant drug. The analyses characterized dispensing patterns by examining cumulative exposure episode duration, first exposure episode duration, all exposure episode durations, days supplied per dispensing, and lengths of gaps between episodes, overall and stratified by age group 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 to December 31, 2019, administered or dispensed in any care setting. These were defined using National Drug Codes (NDCs), Healthcare Common Procedure Coding System (HCPCS) procedure codes and International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) procedure codes. Please see Appendix B for a list of non-proprietary and proprietary names of medical products, Appendix B.1 for a list of NDCs, 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 study 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, race/ethnicity and calendar year on the day of each index NME exposure. We also described 33 clinical characteristics based on history recorded in the six months prior to the index exposure. The set of clinical characteristics included 28 chronic conditions and 5 lifestyle-related conditions. Most of the chronic conditions (26 out of 28) were defined using Centers for Medicare and Medicaid Services' (CMS) Chronic Conditions Data Warehouse[1] (CCW) algorithms and included: acute myocardial infarction, Alzheimer's disease, non-Alzheimer's disease, 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, osteoporosis, and liver disease. History of cardiac arrest, and history of coronary angioplasty or bypass were also included. Lifestyle-related conditions included: obesity, overweight, smoking, alcohol abuse or dependence and drug abuse or dependence. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes, 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, Appendix E for a list of non-proprietary and proprietary names of medical products, and Appendix E.1 for a list of NDCs used to define baseline characteristics in this request.

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

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.

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

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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 Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Tenapanor	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	11,663	N/A
Demographic Characteristics		
Age (years)	56.8	15.1
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	1,660	14.2%
41-64 years	5,746	49.3%
≥ 65 years	3,902	33.5%
Sex		
Female	8,123	69.6%
Male	3,540	30.4%
Race[2]		
American Indian or Alaska Native	59	0.5%
Asian	467	4.0%
Black or African American	1,898	16.3%
Multi-racial	108	0.9%
Native Hawaiian or Other Pacific Islander	18	0.2%
Unknown	2,541	21.8%
White	6,572	56.3%
Hispanic origin		
Yes	771	6.6%
No	7,440	63.8%
Unknown	3,452	29.6%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
2022	1,108	9.5%
2023	3,609	30.9%
2024	6,946	59.6%
Health Characteristics		
Acute Myocardial Infarction	168	1.4%
Alzheimer's Disease	72	0.6%
Non-Alzheimer's Dementia	330	2.8%
Atrial Fibrillation	791	6.8%

Table 1a. Aggregated Characteristics of Tenapanor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Tenapanor	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes Mellitus	3,838	32.9%
Heart Failure	2,116	18.1%
Hyperlipidemia	4,641	39.8%
Hypertension	6,109	52.4%
Depression	4,051	34.7%
Ischemic Heart Disease	2,481	21.3%
Rheumatoid Arthritis/Osteoarthritis	2,741	23.5%
Stroke/Transient Ishemic Attack (TIA)	346	3.0%
Breast Cancer	254	2.2%
Colorectal Cancer	60	0.5%
Prostate Cancer	120	1.0%
Lung Cancer	43	0.4%
Endometrial Cancer	18	0.2%
Acquired Hypothyroidism	1,747	15.0%
Anemia	5,251	45.0%
Asthma	1,009	8.7%
Benign Prostatic Hyperplasia	478	4.1%
Chronic Kidney Disease	4,169	35.7%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,145	9.8%
Glaucoma	962	8.2%
Osteoporosis	620	5.3%
Obesity (Diagnosis or Procedure Codes)	3,327	28.5%
Obesity (Dispensing Codes)	1,118	9.6%
Overweight	1,467	12.6%
Smoking (Diagnosis or Procedure Codes)	2,665	22.9%
Smoking (Dispensing Codes)	92	0.8%
Alcohol Abuse or Dependence	250	2.1%
Drug Abuse or Dependence	735	6.3%
History of Cardiac Arrest	48	0.4%
History of Coronary Angioplasty or Bypass	709	6.1%
Liver Disease CCW	879	7.5%
Liver Disease Extended	896	7.7%

Table 1a. Aggregated Characteristics of Tenapanor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Tenapanor	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	42.7	41.5
Mean number of emergency room encounters	0.8	1.8
Mean number of inpatient hospital encounters	0.2	0.7
Mean number of non-acute institutional encounters	0	0.2
Mean number of other ambulatory encounters	7.2	11.4
Mean number of filled prescriptions	32.2	27.5
Mean number of generics dispensed	12.7	7.6
Mean number of unique drug classes dispensed	11.8	6.7

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1b. Aggregated Characteristics of Trifarotene Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Trifarotene	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	33,642	N/A
Demographic Characteristics		
Age (years)	24.2	10.9
Age		
0-17 years	12,933	38.4%
18-24 years	9,151	27.2%
25-40 years	8,380	24.9%
41-64 years	2,971	8.8%
≥ 65 years	207	0.6%
Sex		
Female	24,645	73.3%
Male	8,997	26.7%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	1,430	4.3%
Black or African American	1,786	5.3%
Multi-racial	1,357	4.0%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	16,148	48.0%
White	12,855	38.2%
Hispanic origin		
Yes	1,598	4.8%
No	11,516	34.2%
Unknown	20,528	61.0%
Year		
2019	113	0.3%
2020	5,452	16.2%
2021	8,032	23.9%
2022	7,555	22.5%
2023	6,215	18.5%
2024	6,275	18.7%
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Non-Alzheimer's Dementia	*****	*****
Atrial Fibrillation	27	0.1%

Table 1b. Aggregated Characteristics of Trifarotene Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Trifarotene	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes	313	0.9%
Heart Failure	43	0.1%
Hyperlipidemia	662	2.0%
Hypertension	540	1.6%
Depression	3,955	11.8%
Ischemic Heart Disease	104	0.3%
Rheumatoid Arthritis/Osteoarthritis	429	1.3%
Stroke/Transient Ishemic Attack (TIA)	20	0.1%
Breast Cancer	67	0.2%
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	483	1.4%
Anemia	991	2.9%
Asthma	539	1.6%
Benign Prostatic Hyperplasia	26	0.1%
Chronic Kidney Disease	71	0.2%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	39	0.1%
Glaucoma	228	0.7%
Osteoporosis	42	0.1%
Obesity (Diagnosis or Procedure Codes)	1,335	4.0%
Obesity (Dispensing Codes)	368	1.1%
Overweight	911	2.7%
Smoking (Diagnosis or Procedure Codes)	442	1.3%
Smoking (Dispensing Codes)	26	0.1%
Alcohol Abuse or Dependence	212	0.6%
Drug Abuse or Dependence	246	0.7%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	14	0.0%
Liver Disease CCW	95	0.3%
Liver Disease Extended	99	0.3%

Table 1b. Aggregated Characteristics of Trifarotene Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Trifarotene	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	6.7	8.3
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	0.0
Mean number of other ambulatory encounters	1.4	3.6
Mean number of filled prescriptions	6.4	8.2
Mean number of generics dispensed	3.4	3.4
Mean number of unique drug classes dispensed	3.2	3.1

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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Table 1c. Aggregated Characteristics of Brolucizumab–dbll Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brolucizumab–dbll	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	17,889	N/A
Demographic Characteristics		
Age (years)	80.5	8
Age		
0-17 years	*****	*****
18-24 years	0	0.0%
25-40 years	*****	*****
41-64 years	343	1.9%
≥ 65 years	17,534	98.0%
Sex		
Female	10,491	58.6%
Male	7,398	41.4%
Race[2]		
American Indian or Alaska Native	50	0.3%
Asian	219	1.2%
Black or African American	176	1.0%
Multi-racial	22	0.1%
Native Hawaiian or Other Pacific Islander	13	0.1%
Unknown	863	4.8%
White	16,546	92.5%
Hispanic origin		
Yes	124	0.7%
No	16,313	91.2%
Unknown	1,452	8.1%
Year		
2019	207	1.2%
2020	14,589	81.6%
2021	1,725	9.6%
2022	779	4.4%
2023	445	2.5%
2024	144	0.8%
Health Characteristics		
Acute Myocardial Infarction	74	0.4%
Alzheimer's Disease	252	1.4%
Non-Alzheimer's Dementia	716	4.0%
Atrial Fibrillation	2,331	13.0%

Table 1c. Aggregated Characteristics of Brolucizumab–dbll Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brolucizumab–dbll	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes	3,591	20.1%
Heart Failure	1,955	10.9%
Hyperlipidemia	7,001	39.1%
Hypertension	9,392	52.5%
Depression	2,228	12.5%
Ischemic Heart Disease	4,129	23.1%
Rheumatoid Arthritis/Osteoarthritis	3,183	17.8%
Stroke/Transient Ishemic Attack (TIA)	441	2.5%
Breast Cancer	570	3.2%
Colorectal Cancer	164	0.9%
Prostate Cancer	615	3.4%
Lung Cancer	183	1.0%
Endometrial Cancer	48	0.3%
Acquired Hypothyroidism	2,439	13.6%
Anemia	2,920	16.3%
Asthma	558	3.1%
Benign Prostatic Hyperplasia	1,057	5.9%
Chronic Kidney Disease	2,194	12.3%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,634	9.1%
Glaucoma	3,197	17.9%
Osteoporosis	1,056	5.9%
Obesity (Diagnosis or Procedure Codes)	2,539	14.2%
Obesity (Dispensing Codes)	136	0.8%
Overweight	1,727	9.7%
Smoking (Diagnosis or Procedure Codes)	3,182	17.8%
Smoking (Dispensing Codes)	39	0.2%
Alcohol Abuse or Dependence	132	0.7%
Drug Abuse or Dependence	180	1.0%
History of Cardiac Arrest	18	0.1%
History of Coronary Angioplasty or Bypass	1,205	6.7%
Liver Disease CCW	229	1.3%
Liver Disease Extended	234	1.3%

Table 1c. Aggregated Characteristics of Brolucizumab–dbll Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brolucizumab–dbll	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	15.1	11.5
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	3.0	6.6
Mean number of filled prescriptions	15.9	14.3
Mean number of generics dispensed	7.1	4.4
Mean number of unique drug classes dispensed	6.8	4.1

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1d. Aggregated Characteristics of Afamelanotide Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Afamelanotide	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	66	N/A
Demographic Characteristics		
Age (years)	46.5	16.1
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	19	28.8%
41-64 years	23	34.8%
≥ 65 years	*****	*****
Sex		
Female	33	50.0%
Male	33	50.0%
Race[2]		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	0	0.0%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	*****	*****
White	45	68.2%
Hispanic origin		
Yes	0	0.0%
No	37	56.1%
Unknown	29	43.9%
Year		
2019	0	0.0%
2020	*****	*****
2021	22	33.3%
2022	16	24.2%
2023	14	21.2%
2024	*****	*****
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Non-Alzheimer's Dementia	*****	*****
Atrial Fibrillation	*****	*****

Table 1d. Aggregated Characteristics of Afamelanotide Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Afamelanotide	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes	*****	*****
Heart Failure	*****	*****
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Depression	*****	*****
Ischemic Heart Disease	*****	*****
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/Transient Ishemic Attack (TIA)	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	*****	*****
Acquired Hypothyroidism	*****	*****
Anemia	*****	*****
Asthma	*****	*****
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	*****	*****
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	*****	*****
Glaucoma	*****	*****
Osteoporosis	*****	*****
Obesity (Diagnosis or Procedure Codes)	*****	*****
Obesity (Dispensing Codes)	0	0.0%
Overweight	*****	*****
Smoking (Diagnosis or Procedure Codes)	*****	*****
Smoking (Dispensing Codes)	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	0	0.0%
Liver Disease CCW	*****	*****
Liver Disease Extended	*****	*****

Table 1d. Aggregated Characteristics of Afamelanotide Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Afamelanotide	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	9.2	7.4
Mean number of emergency room encounters	0.1	0.3
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	3.6	3.9
Mean number of filled prescriptions	9.7	10.2
Mean number of generics dispensed	4.8	4.0
Mean number of unique drug classes dispensed	4.4	3.6

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

*****Data are not presented in these cells due to a small sample size or to assure a small cell cannot be recalculated through the cells presented.
 Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 1e. Aggregated Characteristics of Fluorodopa F-18 Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fluorodopa F-18	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	128	N/A
Demographic Characteristics		
Age (years)	75.7	7.4
Age		
0-17 years	0	0.0%
18-24 years	0	0.0%
25-40 years	0	0.0%
41-64 years	*****	*****
≥ 65 years	*****	*****
Sex		
Female	58	45.3%
Male	70	54.7%
Race[2]		
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	*****	*****
White	106	82.8%
Hispanic origin		
Yes	*****	*****
No	112	87.5%
Unknown	*****	*****
Year		
2019	*****	*****
2020	0	0.0%
2021	*****	*****
2022	*****	*****
2023	69	53.9%
2024	*****	*****
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	*****	*****
Non-Alzheimer's Dementia	17	13.3%
Atrial Fibrillation	20	15.6%

Table 1e. Aggregated Characteristics of Fluorodopa F-18 Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fluorodopa F-18	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes	32	25.0%
Heart Failure	16	12.5%
Hyperlipidemia	74	57.8%
Hypertension	75	58.6%
Depression	50	39.1%
Ischemic Heart Disease	45	35.2%
Rheumatoid Arthritis/Osteoarthritis	42	32.8%
Stroke/Transient Ishemic Attack (TIA)	16	12.5%
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	23	18.0%
Anemia	39	30.5%
Asthma	*****	*****
Benign Prostatic Hyperplasia	25	19.5%
Chronic Kidney Disease	15	11.7%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	*****	*****
Glaucoma	24	18.8%
Osteoporosis	12	9.4%
Obesity (Diagnosis or Procedure Codes)	20	15.6%
Obesity (Dispensing Codes)	*****	*****
Overweight	*****	*****
Smoking (Diagnosis or Procedure Codes)	16	12.5%
Smoking (Dispensing Codes)	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	*****	*****
History of Cardiac Arrest	0	0.0%
History of Coronary Angioplasty or Bypass	15	11.7%
Liver Disease CCW	*****	*****
Liver Disease Extended	*****	*****

Table 1e. Aggregated Characteristics of Fluorodopa F-18 Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fluorodopa F-18	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	25.3	15.9
Mean number of emergency room encounters	0.3	0.7
Mean number of inpatient hospital encounters	0.3	0.6
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	11.2	13.6
Mean number of filled prescriptions	21.6	16.6
Mean number of generics dispensed	10.0	5.4
Mean number of unique drug classes dispensed	9.5	4.9

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1f. Aggregated Characteristics of Lasmiditan Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lasmiditan	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	10,488	N/A
Demographic Characteristics		
Age (years)	49.1	12.8
Age		
0-17 years	49	0.5%
18-24 years	454	4.3%
25-40 years	2,562	24.4%
41-64 years	5,834	55.6%
≥ 65 years	1,589	15.2%
Sex		
Female	8,985	85.7%
Male	1,503	14.3%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	97	0.9%
Black or African American	496	4.7%
Multi-racial	200	1.9%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	2,718	25.9%
White	6,925	66.0%
Hispanic origin		
Yes	333	3.2%
No	6,502	62.0%
Unknown	3,653	34.8%
Year		
2019	0	0.0%
2020	2,555	24.4%
2021	3,188	30.4%
2022	1,886	18.0%
2023	1,729	16.5%
2024	1,130	10.8%
Health Characteristics		
Acute Myocardial Infarction	42	0.4%
Alzheimer's Disease	16	0.2%
Non-Alzheimer's Dementia	113	1.1%
Atrial Fibrillation	270	2.6%

Table 1f. Aggregated Characteristics of Lasmiditan Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lasmiditan	
	Number/Mean	Percent/ Standard Deviation[1]
Diabetes	1,363	13.0%
Heart Failure	462	4.4%
Hyperlipidemia	2,159	20.6%
Hypertension	2,753	26.2%
Depression	4,729	45.1%
Ischemic Heart Disease	921	8.8%
Rheumatoid Arthritis/Osteoarthritis	2,329	22.2%
Stroke/Transient Ishemic Attack (TIA)	465	4.4%
Breast Cancer	164	1.6%
Colorectal Cancer	21	0.2%
Prostate Cancer	39	0.4%
Lung Cancer	17	0.2%
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	1,277	12.2%
Anemia	1,512	14.4%
Asthma	980	9.3%
Benign Prostatic Hyperplasia	87	0.8%
Chronic Kidney Disease	572	5.5%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	552	5.3%
Glaucoma	430	4.1%
Osteoporosis	345	3.3%
Obesity (Diagnosis or Procedure Codes)	2,694	25.7%
Obesity (Dispensing Codes)	539	5.1%
Overweight	852	8.1%
Smoking (Diagnosis or Procedure Codes)	1,794	17.1%
Smoking (Dispensing Codes)	192	1.8%
Alcohol Abuse or Dependence	175	1.7%
Drug Abuse or Dependence	765	7.3%
History of Cardiac Arrest	27	0.3%
History of Coronary Angioplasty or Bypass	257	2.5%
Liver Disease CCW	284	2.7%
Liver Disease Extended	289	2.8%

Table 1f. Aggregated Characteristics of Lasmiditan Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lasmiditan	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	18.3	14.8
Mean number of emergency room encounters	0.9	2.7
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	5.7	12.8
Mean number of filled prescriptions	40.1	28.5
Mean number of generics dispensed	14.5	7.9
Mean number of unique drug classes dispensed	13.0	6.8

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Elexacaftor Ivacaftor Tezacaftor	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	14,185	N/A
Demographic Characteristics		
Age (years)	24.6	12.2
Age		
0-17 years	5,468	38.5%
18-24 years	2,841	20.0%
25-40 years	4,213	29.7%
41-64 years	1,303	9.2%
≥ 65 years	360	2.5%
Sex		
Female	6,978	49.2%
Male	7,207	50.8%
Race[2]		
American Indian or Alaska Native	82	0.6%
Asian	*****	*****
Black or African American	370	2.6%
Multi-racial	151	1.1%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	4,869	34.3%
White	8,673	61.1%
Hispanic origin		
Yes	942	6.6%
No	8,764	61.8%
Unknown	4,479	31.6%
Year		
2019	3,357	23.7%
2020	4,160	29.3%
2021	4,114	29.0%
2022	901	6.4%
2023	981	6.9%
2024	672	4.7%
Health Characteristics		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease	*****	*****
Non-Alzheimer's Dementia	13	0.1%

Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Elexacaftor Ivacaftor Tezacaftor	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	58	0.4%
Diabetes	2,768	19.5%
Heart Failure	236	1.7%
Hyperlipidemia	289	2.0%
Hypertension	723	5.1%
Depression	2,644	18.6%
Ischemic Heart Disease	120	0.8%
Rheumatoid Arthritis/Osteoarthritis	237	1.7%
Stroke/Transient Ishemic Attack (TIA)	33	0.2%
Breast Cancer	24	0.2%
Colorectal Cancer	23	0.2%
Prostate Cancer	13	0.1%
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	300	2.1%
Anemia	1,093	7.7%
Asthma	1,914	13.5%
Benign Prostatic Hyperplasia	44	0.3%
Chronic Kidney Disease	391	2.8%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	2,795	19.7%
Glaucoma	135	1.0%
Osteoporosis	357	2.5%
Obesity (Diagnosis or Procedure Codes)	356	2.5%
Obesity (Dispensing Codes)	30	0.2%
Overweight	275	1.9%
Smoking (Diagnosis or Procedure Codes)	468	3.3%
Smoking (Dispensing Codes)	36	0.3%
Alcohol Abuse or Dependence	203	1.4%
Drug Abuse or Dependence	457	3.2%
History of Cardiac Arrest	13	0.1%
History of Coronary Angioplasty or Bypass	34	0.2%
Liver Disease CCW	971	6.8%
Liver Disease Extended	980	6.9%

Table 1g. Aggregated Characteristics of Elexacaftor Ivacaftor Tezacaftor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Elexacaftor Ivacaftor Tezacaftor	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	8.7	10.7
Mean number of emergency room encounters	0.3	1.1
Mean number of inpatient hospital encounters	0.4	0.9
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	11.6	23.8
Mean number of filled prescriptions	28.4	22.6
Mean number of generics dispensed	9.4	5.8
Mean number of unique drug classes dispensed	9.0	5.3

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1h. Aggregated Characteristics of Air Polymer-Type A Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Air Polymer-Type A	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	156	N/A
Demographic Characteristics		
Age (years)	34.3	4.6
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	144	92.3%
41-64 years	*****	*****
≥ 65 years	0	0.0%
Sex		
Female	*****	*****
Male	*****	*****
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	16	10.3%
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	85	54.5%
White	39	25.0%
Hispanic origin		
Yes	*****	*****
No	*****	*****
Unknown	143	91.7%
Year		
2019	0	0.0%
2020	0	0.0%
2021	0	0.0%
2022	13	8.3%
2023	59	37.8%
2024	84	53.8%
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Non-Alzheimer's Dementia	0	0.0%

Table 1h. Aggregated Characteristics of Air Polymer-Type A Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Air Polymer-Type A	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	0	0.0%
Diabetes	*****	*****
Heart Failure	0	0.0%
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Depression	16	10.3%
Ischemic Heart Disease	0	0.0%
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/Transient Ishemic Attack (TIA)	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%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	0	0.0%
Glaucoma	0	0.0%
Osteoporosis	0	0.0%
Obesity (Diagnosis or Procedure Codes)	17	10.9%
Obesity (Dispensing Codes)	*****	*****
Overweight	*****	*****
Smoking (Diagnosis or Procedure Codes)	*****	*****
Smoking (Dispensing Codes)	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%
Liver Disease CCW	0	0.0%
Liver Disease Extended	0	0.0%

Table 1h. Aggregated Characteristics of Air Polymer-Type A Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Air Polymer-Type A	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	8.7	7.7
Mean number of emergency room encounters	0.2	0.5
Mean number of inpatient hospital encounters	0.0	0.1
Mean number of non-acute institutional encounters	0.0	NaN
Mean number of other ambulatory encounters	0.9	1.6
Mean number of filled prescriptions	3.9	5.2
Mean number of generics dispensed	2.4	2.6
Mean number of unique drug classes dispensed	2.3	2.5

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

 Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 1i. Aggregated Characteristics of Luspatercept–amt Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Luspatercept–amt	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	9,368	N/A
Demographic Characteristics		
Age (years)	77.4	9.5
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	128	1.4%
41-64 years	477	5.1%
≥ 65 years	8,712	93.0%
Sex		
Female	4,124	44.0%
Male	5,244	56.0%
Race[2]		
American Indian or Alaska Native	16	0.2%
Asian	261	2.8%
Black or African American	487	5.2%
Multi-racial	24	0.3%
Native Hawaiian or Other Pacific Islander	14	0.1%
Unknown	677	7.2%
White	7,889	84.2%
Hispanic origin		
Yes	116	1.2%
No	7,876	84.1%
Unknown	1,376	14.7%
Year		
2019	*****	*****
2020	1,669	17.8%
2021	1,523	16.3%
2022	*****	*****
2023	2,533	27.0%
2024	2,195	23.4%
Health Characteristics		
Acute Myocardial Infarction	207	2.2%
Alzheimer's Disease	148	1.6%
Non-Alzheimer's Dementia	495	5.3%

Table 1i. Aggregated Characteristics of Luspatercept–amt Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Luspatercept–amt	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	2,050	21.9%
Diabetes	2,387	25.5%
Heart Failure	2,626	28.0%
Hyperlipidemia	4,211	45.0%
Hypertension	5,703	60.9%
Depression	1,712	18.3%
Ischemic Heart Disease	3,270	34.9%
Rheumatoid Arthritis/Osteoarthritis	2,135	22.8%
Stroke/Transient Ishemic Attack (TIA)	395	4.2%
Breast Cancer	446	4.8%
Colorectal Cancer	220	2.3%
Prostate Cancer	643	6.9%
Lung Cancer	231	2.5%
Endometrial Cancer	50	0.5%
Acquired Hypothyroidism	1,758	18.8%
Anemia	9,311	99.4%
Asthma	433	4.6%
Benign Prostatic Hyperplasia	1,090	11.6%
Chronic Kidney Disease	3,040	32.5%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,520	16.2%
Glaucoma	1,008	10.8%
Osteoporosis	813	8.7%
Obesity (Diagnosis or Procedure Codes)	1,530	16.3%
Obesity (Dispensing Codes)	81	0.9%
Overweight	1,149	12.3%
Smoking (Diagnosis or Procedure Codes)	3,406	36.4%
Smoking (Dispensing Codes)	22	0.2%
Alcohol Abuse or Dependence	271	2.9%
Drug Abuse or Dependence	210	2.2%
History of Cardiac Arrest	41	0.4%
History of Coronary Angioplasty or Bypass	1,200	12.8%
Liver Disease CCW	777	8.3%
Liver Disease Extended	785	8.4%

Table 1i. Aggregated Characteristics of Luspatercept–amt Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Luspatercept–amt	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	33.2	18.6
Mean number of emergency room encounters	0.8	1.6
Mean number of inpatient hospital encounters	0.5	1.0
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	9.1	12.9
Mean number of filled prescriptions	19.1	15.7
Mean number of generics dispensed	8.7	5.3
Mean number of unique drug classes dispensed	8.2	4.8

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1j. Aggregated Characteristics of Zanubrutinib Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Zanubrutinib	
Patient Characteristics	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	11,764	N/A
Demographic Characteristics		
Age (years)	75.6	8.3
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	1,042	8.9%
≥ 65 years	10,710	91.0%
Sex		
Female	4,755	40.4%
Male	7,009	59.6%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	132	1.1%
Black or African American	618	5.3%
Multi-racial	44	0.4%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	1,000	8.5%
White	9,937	84.5%
Hispanic origin		
Yes	144	1.2%
No	9,453	80.4%
Unknown	2,167	18.4%
Year		
2019	0	0.0%
2020	199	1.7%
2021	968	8.2%
2022	1,824	15.5%
2023	4,518	38.4%
2024	4,255	36.2%
Health Characteristics		
Acute Myocardial Infarction	147	1.2%
Alzheimer's Disease	127	1.1%
Non-Alzheimer's Dementia	473	4.0%

Table 1j. Aggregated Characteristics of Zanubrutinib Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Number/Mean	Percent/ Standard Deviation[1]
	Zanubrutinib	
Atrial Fibrillation	1,977	16.8%
Diabetes	2,399	20.4%
Heart Failure	1,913	16.3%
Hyperlipidemia	4,812	40.9%
Hypertension	6,225	52.9%
Depression	1,992	16.9%
Ischemic Heart Disease	3,007	25.6%
Rheumatoid Arthritis/Osteoarthritis	2,026	17.2%
Stroke/Transient Ishemic Attack (TIA)	356	3.0%
Breast Cancer	438	3.7%
Colorectal Cancer	199	1.7%
Prostate Cancer	804	6.8%
Lung Cancer	205	1.7%
Endometrial Cancer	42	0.4%
Acquired Hypothyroidism	1,757	14.9%
Anemia	6,646	56.5%
Asthma	545	4.6%
Benign Prostatic Hyperplasia	1,463	12.4%
Chronic Kidney Disease	2,451	20.8%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,260	10.7%
Glaucoma	1,344	11.4%
Osteoporosis	710	6.0%
Obesity (Diagnosis or Procedure Codes)	1,858	15.8%
Obesity (Dispensing Codes)	189	1.6%
Overweight	1,257	10.7%
Smoking (Diagnosis or Procedure Codes)	3,225	27.4%
Smoking (Dispensing Codes)	15	0.1%
Alcohol Abuse or Dependence	211	1.8%
Drug Abuse or Dependence	259	2.2%
History of Cardiac Arrest	31	0.3%
History of Coronary Angioplasty or Bypass	857	7.3%
Liver Disease CCW	717	6.1%
Liver Disease Extended	720	6.1%

Table 1j. Aggregated Characteristics of Zanubrutinib Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Zanubrutinib	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	20.0	13.9
Mean number of emergency room encounters	0.5	1.1
Mean number of inpatient hospital encounters	0.4	0.8
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	7.0	9.6
Mean number of filled prescriptions	17.8	13.7
Mean number of generics dispensed	8.7	5.2
Mean number of unique drug classes dispensed	8.2	4.7

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1k. Aggregated Characteristics of Cefiderocol Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Cefiderocol	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	2,077	N/A
Demographic Characteristics		
Age (years)	65.3	14.5
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	175	8.4%
41-64 years	638	30.7%
≥ 65 years	1,243	59.8%
Sex		
Female	902	43.4%
Male	1,175	56.6%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	65	3.1%
Black or African American	447	21.5%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	275	13.2%
White	1,273	61.3%
Hispanic origin		
Yes	97	4.7%
No	1,686	81.2%
Unknown	294	14.2%
Year		
2019	0	0.0%
2020	28	1.3%
2021	480	23.1%
2022	600	28.9%
2023	616	29.7%
2024	353	17.0%
Health Characteristics		
Acute Myocardial Infarction	188	9.1%
Alzheimer's Disease	55	2.6%
Non-Alzheimer's Dementia	432	20.8%

Table 1k. Aggregated Characteristics of Cefiderocol Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Cefiderocol	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	661	31.8%
Diabetes	1,160	55.8%
Heart Failure	1,070	51.5%
Hyperlipidemia	1,250	60.2%
Hypertension	1,717	82.7%
Depression	882	42.5%
Ischemic Heart Disease	904	43.5%
Rheumatoid Arthritis/Osteoarthritis	562	27.1%
Stroke/Transient Ischemic Attack (TIA)	431	20.8%
Breast Cancer	75	3.6%
Colorectal Cancer	50	2.4%
Prostate Cancer	73	3.5%
Lung Cancer	51	2.5%
Endometrial Cancer	21	1.0%
Acquired Hypothyroidism	510	24.6%
Anemia	1,626	78.3%
Asthma	276	13.3%
Benign Prostatic Hyperplasia	370	17.8%
Chronic Kidney Disease	1,041	50.1%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	818	39.4%
Glaucoma	137	6.6%
Osteoporosis	179	8.6%
Obesity (Diagnosis or Procedure Codes)	783	37.7%
Obesity (Dispensing Codes)	61	2.9%
Overweight	266	12.8%
Smoking (Diagnosis or Procedure Codes)	801	38.6%
Smoking (Dispensing Codes)	*****	*****
Alcohol Abuse or Dependence	133	6.4%
Drug Abuse or Dependence	243	11.7%
History of Cardiac Arrest	178	8.6%
History of Coronary Angioplasty or Bypass	277	13.3%
Liver Disease CCW	422	20.3%
Liver Disease Extended	424	20.4%

Table 1k. Aggregated Characteristics of Cefiderocol Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Number/Mean	Percent/Standard Deviation[1]
Cefiderocol		
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	26.1	26.1
Mean number of emergency room encounters	1.8	4.9
Mean number of inpatient hospital encounters	2.2	2.0
Mean number of non-acute institutional encounters	1.0	1.4
Mean number of other ambulatory encounters	54.2	44.6
Mean number of filled prescriptions	36.6	34.8
Mean number of generics dispensed	13.7	8.0
Mean number of unique drug classes dispensed	12.3	6.9

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1l. Aggregated Characteristics of Crizanlizumab-tmca Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Crizanlizumab-tmca	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	2,936	N/A
Demographic Characteristics		
Age (years)	33.3	10.7
Age		
0-17 years	173	5.9%
18-24 years	584	19.9%
25-40 years	1,523	51.9%
41-64 years	610	20.8%
≥ 65 years	46	1.6%
Sex		
Female	1,744	59.4%
Male	1,192	40.6%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	2,108	71.8%
Multi-racial	15	0.5%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	725	24.7%
White	76	2.6%
Hispanic origin		
Yes	143	4.9%
No	2,083	70.9%
Unknown	710	24.2%
Year		
2019	*****	*****
2020	1,126	38.4%
2021	1,030	35.1%
2022	344	11.7%
2023	278	9.5%
2024	*****	*****
Health Characteristics		
Acute Myocardial Infarction	20	0.7%
Alzheimer's Disease	*****	*****
Non-Alzheimer's Dementia	*****	*****

Patient Characteristics	Crizanlizumab-tmca	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	53	1.8%
Diabetes	139	4.7%
Heart Failure	306	10.4%
Hyperlipidemia	120	4.1%
Hypertension	767	26.1%
Depression	949	32.3%
Ischemic Heart Disease	138	4.7%
Rheumatoid Arthritis/Osteoarthritis	222	7.6%
Stroke/Transient Ishemic Attack (TIA)	115	3.9%
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	76	2.6%
Anemia	2,923	99.6%
Asthma	736	25.1%
Benign Prostatic Hyperplasia	13	0.4%
Chronic Kidney Disease	275	9.4%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	139	4.7%
Glaucoma	50	1.7%
Osteoporosis	48	1.6%
Obesity (Diagnosis or Procedure Codes)	441	15.0%
Obesity (Dispensing Codes)	11	0.4%
Overweight	175	6.0%
Smoking (Diagnosis or Procedure Codes)	726	24.7%
Smoking (Dispensing Codes)	29	1.0%
Alcohol Abuse or Dependence	38	1.3%
Drug Abuse or Dependence	875	29.8%
History of Cardiac Arrest	18	0.6%
History of Coronary Angioplasty or Bypass	26	0.9%
Liver Disease CCW	250	8.5%
Liver Disease Extended	252	8.6%

Table 1l. Aggregated Characteristics of Crizanlizumab-tmca Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Crizanlizumab-tmca	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	21.6	20.5
Mean number of emergency room encounters	4.5	10.1
Mean number of inpatient hospital encounters	2.4	2.8
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	21.2	27.1
Mean number of filled prescriptions	23.7	17.7
Mean number of generics dispensed	8.2	4.9
Mean number of unique drug classes dispensed	7.2	4.4

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1m. Aggregated Characteristics of Givosiran Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Givosiran	
Patient Characteristics	**Number/Mean**	**Percent/ Standard Deviation**[1]
Unique patients	221	N/A
Demographic Characteristics		
Age (years)	46.1	12.8
Age		
0-17 years	0	0.0%
18-24 years	14	6.3%
25-40 years	74	33.5%
41-64 years	108	48.9%
≥ 65 years	25	11.3%
Sex		
Female	170	76.9%
Male	51	23.1%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	57	25.8%
White	141	63.8%
Hispanic origin		
Yes	*****	*****
No	145	65.6%
Unknown	*****	*****
Year		
2019	0	0.0%
2020	68	30.8%
2021	66	29.9%
2022	36	16.3%
2023	26	11.8%
2024	25	11.3%
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Non-Alzheimer's Dementia	*****	*****

Table 1m. Aggregated Characteristics of Givosiran Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Givosiran	
Patient Characteristics	**Number/Mean**	**Percent/ Standard Deviation[1]**
Atrial Fibrillation	*****	*****
Diabetes	23	10.4%
Heart Failure	*****	*****
Hyperlipidemia	36	16.3%
Hypertension	82	37.1%
Depression	74	33.5%
Ischemic Heart Disease	18	8.1%
Rheumatoid Arthritis/Osteoarthritis	24	10.9%
Stroke/Transient Ishemic Attack (TIA)	*****	*****
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	*****	*****
Lung Cancer	0	0.0%
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	21	9.5%
Anemia	80	36.2%
Asthma	16	7.2%
Benign Prostatic Hyperplasia	*****	*****
Chronic Kidney Disease	38	17.2%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	*****	*****
Glaucoma	*****	*****
Osteoporosis	*****	*****
Obesity (Diagnosis or Procedure Codes)	41	18.6%
Obesity (Dispensing Codes)	*****	*****
Overweight	19	8.6%
Smoking (Diagnosis or Procedure Codes)	64	29.0%
Smoking (Dispensing Codes)	*****	*****
Alcohol Abuse or Dependence	*****	*****
Drug Abuse or Dependence	49	22.2%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	*****	*****
Liver Disease CCW	24	10.9%
Liver Disease Extended	24	10.9%

Table 1m. Aggregated Characteristics of Givosiran Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Givosiran	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	21.4	17.6
Mean number of emergency room encounters	1.4	2.4
Mean number of inpatient hospital encounters	0.9	1.8
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	12.5	23.8
Mean number of filled prescriptions	24.8	19.4
Mean number of generics dispensed	8.8	5.5
Mean number of unique drug classes dispensed	8.1	5.1

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1n. Aggregated Characteristics of Cenobamate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Cenobamate	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	16,249	N/A
Demographic Characteristics		
Age (years)	41.8	14.8
Age		
0-17 years	744	4.6%
18-24 years	1,976	12.2%
25-40 years	5,738	35.3%
41-64 years	6,111	37.6%
≥ 65 years	1,680	10.3%
Sex		
Female	8,176	50.3%
Male	8,073	49.7%
Race[2]		
American Indian or Alaska Native	109	0.7%
Asian	378	2.3%
Black or African American	1,601	9.9%
Multi-racial	149	0.9%
Native Hawaiian or Other Pacific Islander	29	0.2%
Unknown	4,065	25.0%
White	9,918	61.0%
Hispanic origin		
Yes	1,190	7.3%
No	10,998	67.7%
Unknown	4,061	25.0%
Year		
2019	0	0.0%
2020	1,696	10.4%
2021	5,434	33.4%
2022	2,725	16.8%
2023	3,764	23.2%
2024	2,630	16.2%
Health Characteristics		
Acute Myocardial Infarction	41	0.3%
Alzheimer's Disease	88	0.5%
Non-Alzheimer's Dementia	564	3.5%

Table 1n. Aggregated Characteristics of Cenobamate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Cenobamate	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	291	1.8%
Diabetes	1,116	6.9%
Heart Failure	457	2.8%
Hyperlipidemia	2,437	15.0%
Hypertension	2,909	17.9%
Depression	4,338	26.7%
Ischemic Heart Disease	704	4.3%
Rheumatoid Arthritis/Osteoarthritis	1,030	6.3%
Stroke/Transient Ishemic Attack (TIA)	598	3.7%
Breast Cancer	107	0.7%
Colorectal Cancer	54	0.3%
Prostate Cancer	50	0.3%
Lung Cancer	41	0.3%
Endometrial Cancer	13	0.1%
Acquired Hypothyroidism	1,247	7.7%
Anemia	1,838	11.3%
Asthma	679	4.2%
Benign Prostatic Hyperplasia	318	2.0%
Chronic Kidney Disease	562	3.5%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	466	2.9%
Glaucoma	494	3.0%
Osteoporosis	470	2.9%
Obesity (Diagnosis or Procedure Codes)	2,657	16.4%
Obesity (Dispensing Codes)	176	1.1%
Overweight	993	6.1%
Smoking (Diagnosis or Procedure Codes)	2,191	13.5%
Smoking (Dispensing Codes)	83	0.5%
Alcohol Abuse or Dependence	354	2.2%
Drug Abuse or Dependence	774	4.8%
History of Cardiac Arrest	60	0.4%
History of Coronary Angioplasty or Bypass	176	1.1%
Liver Disease CCW	298	1.8%
Liver Disease Extended	304	1.9%

Table 1n. Aggregated Characteristics of Cenobamate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Cenobamate	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	11.8	14.6
Mean number of emergency room encounters	0.8	1.8
Mean number of inpatient hospital encounters	0.3	0.7
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	12.6	30.0
Mean number of filled prescriptions	28.3	22.3
Mean number of generics dispensed	8.1	5.2
Mean number of unique drug classes dispensed	7.8	4.8

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

Table 1o. Aggregated Characteristics of Voxelotor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Voxelotor	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	4,447	N/A
Demographic Characteristics		
Age (years)	33.5	12.7
Age		
0-17 years	728	16.4%
18-24 years	611	13.7%
25-40 years	1,856	41.7%
41-64 years	1,135	25.5%
≥ 65 years	117	2.6%
Sex		
Female	2,601	58.5%
Male	1,846	41.5%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	*****	*****
Black or African American	3,267	73.5%
Multi-racial	19	0.4%
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	1,054	23.7%
White	83	1.9%
Hispanic origin		
Yes	260	5.8%
No	3,247	73.0%
Unknown	940	21.1%
Year		
2019	21	0.5%
2020	1,840	41.4%
2021	1,475	33.2%
2022	453	10.2%
2023	433	9.7%
2024	225	5.1%
Health Characteristics		
Acute Myocardial Infarction	28	0.6%
Alzheimer's Disease	*****	*****
Non-Alzheimer's Dementia	30	0.7%

Table 1o. Aggregated Characteristics of Voxelotor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Voxelotor	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	138	3.1%
Diabetes	180	4.0%
Heart Failure	550	12.4%
Hyperlipidemia	190	4.3%
Hypertension	1,058	23.8%
Depression	968	21.8%
Ischemic Heart Disease	184	4.1%
Rheumatoid Arthritis/Osteoarthritis	245	5.5%
Stroke/Transient Ishemic Attack (TIA)	151	3.4%
Breast Cancer	*****	*****
Colorectal Cancer	*****	*****
Prostate Cancer	13	0.3%
Lung Cancer	*****	*****
Endometrial Cancer	0	0.0%
Acquired Hypothyroidism	125	2.8%
Anemia	4,403	99.0%
Asthma	887	19.9%
Benign Prostatic Hyperplasia	37	0.8%
Chronic Kidney Disease	669	15.0%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	216	4.9%
Glaucoma	117	2.6%
Osteoporosis	64	1.4%
Obesity (Diagnosis or Procedure Codes)	376	8.5%
Obesity (Dispensing Codes)	*****	*****
Overweight	220	4.9%
Smoking (Diagnosis or Procedure Codes)	779	17.5%
Smoking (Dispensing Codes)	32	0.7%
Alcohol Abuse or Dependence	42	0.9%
Drug Abuse or Dependence	907	20.4%
History of Cardiac Arrest	25	0.6%
History of Coronary Angioplasty or Bypass	31	0.7%
Liver Disease CCW	398	8.9%
Liver Disease Extended	401	9.0%

Table 1o. Aggregated Characteristics of Voxelotor Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Voxelotor	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	18.2	21.5
Mean number of emergency room encounters	2.6	7.6
Mean number of inpatient hospital encounters	1.6	2.3
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	16.5	26.2
Mean number of filled prescriptions	22.2	17.3
Mean number of generics dispensed	7.7	4.8
Mean number of unique drug classes dispensed	7.0	4.3

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1p. Aggregated Characteristics of Golodirsen Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Golodirsen	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	89	N/A
Demographic Characteristics		
Age (years)	14.8	6.5
Age		
0-17 years	71	79.8%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	*****	*****
≥ 65 years	*****	*****
Sex		
Female	*****	*****
Male	*****	*****
Race[2]		
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	56	62.9%
White	*****	*****
Hispanic origin		
Yes	39	43.8%
No	32	36.0%
Unknown	18	20.2%
Year		
2019	0	0.0%
2020	*****	*****
2021	42	47.2%
2022	*****	*****
2023	*****	*****
2024	*****	*****
Health Characteristics		
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Non-Alzheimer's Dementia	0	0.0%

Table 1p. Aggregated Characteristics of Golodirsen Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Golodirsen	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	*****	*****
Diabetes	0	0.0%
Heart Failure	15	16.9%
Hyperlipidemia	*****	*****
Hypertension	*****	*****
Depression	*****	*****
Ischemic Heart Disease	*****	*****
Rheumatoid Arthritis/Osteoarthritis	*****	*****
Stroke/Transient Ishemic Attack (TIA)	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	*****	*****
Benign Prostatic Hyperplasia	0	0.0%
Chronic Kidney Disease	0	0.0%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	0	0.0%
Glaucoma	0	0.0%
Osteoporosis	*****	*****
Obesity (Diagnosis or Procedure Codes)	*****	*****
Obesity (Dispensing Codes)	0	0.0%
Overweight	*****	*****
Smoking (Diagnosis or Procedure Codes)	*****	*****
Smoking (Dispensing Codes)	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%
Liver Disease CCW	0	0.0%
Liver Disease Extended	0	0.0%

Table 1p. Aggregated Characteristics of Golodirsen Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Golodirsen	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	12.6	13.5
Mean number of emergency room encounters	0.3	0.8
Mean number of inpatient hospital encounters	0.1	0.3
Mean number of non-acute institutional encounters	0.0	NaN
Mean number of other ambulatory encounters	28.0	44.5
Mean number of filled prescriptions	15.2	15.3
Mean number of generics dispensed	4.7	4.3
Mean number of unique drug classes dispensed	4.6	4.0

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

 Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Enfortumab Vedotin-ejfv	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	9,287	N/A
Demographic Characteristics		
Age (years)	74.1	7.9
Age		
0-17 years	0	0.0%
18-24 years	0	0.0%
25-40 years	25	0.3%
41-64 years	1,024	11.0%
≥ 65 years	8,238	88.7%
Sex		
Female	2,539	27.3%
Male	6,748	72.7%
Race[2]		
American Indian or Alaska Native	11	0.1%
Asian	195	2.1%
Black or African American	448	4.8%
Multi-racial	28	0.3%
Native Hawaiian or Other Pacific Islander	19	0.2%
Unknown	995	10.7%
White	7,591	81.7%
Hispanic origin		
Yes	105	1.1%
No	7,391	79.6%
Unknown	1,791	19.3%
Year		
2019	0	0.0%
2020	947	10.2%
2021	1,321	14.2%
2022	1,379	14.8%
2023	2,823	30.4%
2024	2,817	30.3%
Health Characteristics		
Acute Myocardial Infarction	142	1.5%
Alzheimer's Disease	52	0.6%
Non-Alzheimer's Dementia	275	3.0%

Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Enfortumab Vedotin-ejfv	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	1,433	15.4%
Diabetes	2,436	26.2%
Heart Failure	1,422	15.3%
Hyperlipidemia	4,973	53.5%
Hypertension	6,328	68.1%
Depression	1,754	18.9%
Ischemic Heart Disease	3,224	34.7%
Rheumatoid Arthritis/Osteoarthritis	1,701	18.3%
Stroke/Transient Ishemic Attack (TIA)	324	3.5%
Breast Cancer	314	3.4%
Colorectal Cancer	276	3.0%
Prostate Cancer	1,668	18.0%
Lung Cancer	599	6.4%
Endometrial Cancer	44	0.5%
Acquired Hypothyroidism	1,731	18.6%
Anemia	5,654	60.9%
Asthma	434	4.7%
Benign Prostatic Hyperplasia	1,875	20.2%
Chronic Kidney Disease	4,190	45.1%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,634	17.6%
Glaucoma	789	8.5%
Osteoporosis	375	4.0%
Obesity (Diagnosis or Procedure Codes)	1,794	19.3%
Obesity (Dispensing Codes)	133	1.4%
Overweight	1,194	12.9%
Smoking (Diagnosis or Procedure Codes)	5,109	55.0%
Smoking (Dispensing Codes)	62	0.7%
Alcohol Abuse or Dependence	246	2.6%
Drug Abuse or Dependence	358	3.9%
History of Cardiac Arrest	31	0.3%
History of Coronary Angioplasty or Bypass	1,189	12.8%
Liver Disease CCW	1,272	13.7%
Liver Disease Extended	1,289	13.9%

Table 1q. Aggregated Characteristics of Enfortumab Vedotin-ejfv Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Enfortumab Vedotin-ejfv	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	29.9	14.6
Mean number of emergency room encounters	0.8	1.5
Mean number of inpatient hospital encounters	0.7	1.1
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	10.0	11.0
Mean number of filled prescriptions	20.1	13.7
Mean number of generics dispensed	10.4	5.5
Mean number of unique drug classes dispensed	9.4	4.8

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brilliant Blue G Ophthalmic Solution	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	1,526	N/A
Demographic Characteristics		
Age (years)	66	10.8
Age		
0-17 years	*****	*****
18-24 years	*****	*****
25-40 years	32	2.1%
41-64 years	595	39.0%
≥ 65 years	886	58.1%
Sex		
Female	813	53.3%
Male	713	46.7%
Race[2]		
American Indian or Alaska Native	*****	*****
Asian	78	5.1%
Black or African American	106	6.9%
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	*****	*****
Unknown	380	24.9%
White	928	60.8%
Hispanic origin		
Yes	63	4.1%
No	585	38.3%
Unknown	878	57.5%
Year		
2019	0	0.0%
2020	106	6.9%
2021	301	19.7%
2022	309	20.2%
2023	397	26.0%
2024	413	27.1%
Health Characteristics		
Acute Myocardial Infarction	*****	*****
Alzheimer's Disease	*****	*****
Non-Alzheimer's Dementia	15	1.0%

Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brilliant Blue G Ophthalmic Solution	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	88	5.8%
Diabetes	341	22.3%
Heart Failure	88	5.8%
Hyperlipidemia	550	36.0%
Hypertension	653	42.8%
Depression	205	13.4%
Ischemic Heart Disease	210	13.8%
Rheumatoid Arthritis/Osteoarthritis	206	13.5%
Stroke/Transient Ishemic Attack (TIA)	25	1.6%
Breast Cancer	38	2.5%
Colorectal Cancer	11	0.7%
Prostate Cancer	34	2.2%
Lung Cancer	*****	*****
Endometrial Cancer	*****	*****
Acquired Hypothyroidism	149	9.8%
Anemia	198	13.0%
Asthma	50	3.3%
Benign Prostatic Hyperplasia	77	5.0%
Chronic Kidney Disease	135	8.8%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	62	4.1%
Glaucoma	295	19.3%
Osteoporosis	56	3.7%
Obesity (Diagnosis or Procedure Codes)	296	19.4%
Obesity (Dispensing Codes)	61	4.0%
Overweight	140	9.2%
Smoking (Diagnosis or Procedure Codes)	224	14.7%
Smoking (Dispensing Codes)	*****	*****
Alcohol Abuse or Dependence	27	1.8%
Drug Abuse or Dependence	28	1.8%
History of Cardiac Arrest	*****	*****
History of Coronary Angioplasty or Bypass	54	3.5%
Liver Disease CCW	35	2.3%
Liver Disease Extended	35	2.3%

Table 1r. Aggregated Characteristics of Brilliant Blue G Ophthalmic Solution Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Brilliant Blue G Ophthalmic Solution	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	13.8	13.4
Mean number of emergency room encounters	0.2	0.6
Mean number of inpatient hospital encounters	0.1	0.3
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	2.2	3.8
Mean number of filled prescriptions	15.0	13.0
Mean number of generics dispensed	7.3	4.9
Mean number of unique drug classes dispensed	6.8	4.5

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1s. Aggregated Characteristics of Lumateperone Tosylate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lumateperone Tosylate	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	40,179	N/A
Demographic Characteristics		
Age (years)	45.7	13.9
Age		
0-17 years	212	0.5%
18-24 years	3,215	8.0%
25-40 years	12,752	31.7%
41-64 years	19,662	48.9%
≥ 65 years	4,338	10.8%
Sex		
Female	24,416	60.8%
Male	15,763	39.2%
Race[2]		
American Indian or Alaska Native	281	0.7%
Asian	586	1.5%
Black or African American	4,318	10.7%
Multi-racial	343	0.9%
Native Hawaiian or Other Pacific Islander	48	0.1%
Unknown	8,203	20.4%
White	26,400	65.7%
Hispanic origin		
Yes	1,866	4.6%
No	28,739	71.5%
Unknown	9,574	23.8%
Year		
2019	0	0.0%
2020	4,330	10.8%
2021	8,109	20.2%
2022	8,722	21.7%
2023	10,858	27.0%
2024	8,160	20.3%
Health Characteristics		
Acute Myocardial Infarction	97	0.2%
Alzheimer's Disease	217	0.5%
Non-Alzheimer's Dementia	1,119	2.8%

Table 1s. Aggregated Characteristics of Lumateperone Tosylate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lumateperone Tosylate	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	642	1.6%
Diabetes	7,284	18.1%
Heart Failure	1,719	4.3%
Hyperlipidemia	9,074	22.6%
Hypertension	11,243	28.0%
Depression	29,313	73.0%
Ischemic Heart Disease	2,388	5.9%
Rheumatoid Arthritis/Osteoarthritis	5,310	13.2%
Stroke/Transient Ishemic Attack (TIA)	557	1.4%
Breast Cancer	333	0.8%
Colorectal Cancer	71	0.2%
Prostate Cancer	94	0.2%
Lung Cancer	87	0.2%
Endometrial Cancer	39	0.1%
Acquired Hypothyroidism	4,640	11.5%
Anemia	5,434	13.5%
Asthma	2,940	7.3%
Benign Prostatic Hyperplasia	677	1.7%
Chronic Kidney Disease	2,091	5.2%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	3,130	7.8%
Glaucoma	1,300	3.2%
Osteoporosis	585	1.5%
Obesity (Diagnosis or Procedure Codes)	11,927	29.7%
Obesity (Dispensing Codes)	2,410	6.0%
Overweight	2,944	7.3%
Smoking (Diagnosis or Procedure Codes)	11,381	28.3%
Smoking (Dispensing Codes)	1,143	2.8%
Alcohol Abuse or Dependence	3,790	9.4%
Drug Abuse or Dependence	6,956	17.3%
History of Cardiac Arrest	55	0.1%
History of Coronary Angioplasty or Bypass	466	1.2%
Liver Disease CCW	1,308	3.3%
Liver Disease Extended	1,328	3.3%

Table 1s. Aggregated Characteristics of Lumateperone Tosylate Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lumateperone Tosylate	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	17.0	17.2
Mean number of emergency room encounters	0.9	2.2
Mean number of inpatient hospital encounters	0.2	0.7
Mean number of non-acute institutional encounters	0.1	0.5
Mean number of other ambulatory encounters	9.3	19.2
Mean number of filled prescriptions	37.4	28.1
Mean number of generics dispensed	11.6	7.0
Mean number of unique drug classes dispensed	10.7	6.3

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

Table 1t. Aggregated Characteristics of Lemborexant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lemborexant	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	31,011	N/A
Demographic Characteristics		
Age (years)	58.2	13.5
Age		
0-17 years	40	0.1%
18-24 years	688	2.2%
25-40 years	4,450	14.3%
41-64 years	13,621	43.9%
≥ 65 years	12,212	39.4%
Sex		
Female	20,026	64.6%
Male	10,985	35.4%
Race[2]		
American Indian or Alaska Native	161	0.5%
Asian	623	2.0%
Black or African American	1,575	5.1%
Multi-racial	255	0.8%
Native Hawaiian or Other Pacific Islander	16	0.1%
Unknown	7,135	23.0%
White	21,246	68.5%
Hispanic origin		
Yes	1,011	3.3%
No	19,631	63.3%
Unknown	10,369	33.4%
Year		
2019	0	0.0%
2020	2,826	9.1%
2021	10,327	33.3%
2022	6,125	19.8%
2023	6,086	19.6%
2024	5,647	18.2%
Health Characteristics		
Acute Myocardial Infarction	108	0.3%
Alzheimer's Disease	345	1.1%
Non-Alzheimer's Dementia	1,116	3.6%

Table 1t. Aggregated Characteristics of Lemborexant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lemborexant	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	1,658	5.3%
Diabetes	5,746	18.5%
Heart Failure	2,330	7.5%
Hyperlipidemia	9,532	30.7%
Hypertension	11,651	37.6%
Depression	15,775	50.9%
Ischemic Heart Disease	4,047	13.1%
Rheumatoid Arthritis/Osteoarthritis	7,472	24.1%
Stroke/Transient Ishemic Attack (TIA)	698	2.3%
Breast Cancer	613	2.0%
Colorectal Cancer	137	0.4%
Prostate Cancer	445	1.4%
Lung Cancer	163	0.5%
Endometrial Cancer	41	0.1%
Acquired Hypothyroidism	4,212	13.6%
Anemia	5,340	17.2%
Asthma	1,953	6.3%
Benign Prostatic Hyperplasia	1,255	4.0%
Chronic Kidney Disease	2,645	8.5%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	2,651	8.5%
Glaucoma	1,870	6.0%
Osteoporosis	1,345	4.3%
Obesity (Diagnosis or Procedure Codes)	7,326	23.6%
Obesity (Dispensing Codes)	2,066	6.7%
Overweight	3,082	9.9%
Smoking (Diagnosis or Procedure Codes)	5,961	19.2%
Smoking (Dispensing Codes)	506	1.6%
Alcohol Abuse or Dependence	1,455	4.7%
Drug Abuse or Dependence	3,156	10.2%
History of Cardiac Arrest	51	0.2%
History of Coronary Angioplasty or Bypass	1,015	3.3%
Liver Disease CCW	1,120	3.6%
Liver Disease Extended	1,131	3.6%

Table 1t. Aggregated Characteristics of Lemborexant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Lemborexant	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	16.2	15.4
Mean number of emergency room encounters	0.5	1.6
Mean number of inpatient hospital encounters	0.2	0.5
Mean number of non-acute institutional encounters	0.0	0.3
Mean number of other ambulatory encounters	6.1	14.5
Mean number of filled prescriptions	33.3	25.7
Mean number of generics dispensed	12.1	6.9
Mean number of unique drug classes dispensed	11.1	6.1

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fam-Trastuzumab Deruxtecan-nxki	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	16,627	N/A
Demographic Characteristics		
Age (years)	65.9	10.7
Age		
0-17 years	0	0.0%
18-24 years	*****	*****
25-40 years	*****	*****
41-64 years	5,553	33.4%
≥ 65 years	10,406	62.6%
Sex		
Female	14,744	88.7%
Male	1,883	11.3%
Race[2]		
American Indian or Alaska Native	53	0.3%
Asian	543	3.3%
Black or African American	1,789	10.8%
Multi-racial	96	0.6%
Native Hawaiian or Other Pacific Islander	33	0.2%
Unknown	2,840	17.1%
White	11,273	67.8%
Hispanic origin		
Yes	516	3.1%
No	12,301	74.0%
Unknown	3,810	22.9%
Year		
2019	0	0.0%
2020	1,191	7.2%
2021	1,858	11.2%
2022	4,500	27.1%
2023	5,410	32.5%
2024	3,668	22.1%
Health Characteristics		
Acute Myocardial Infarction	90	0.5%
Alzheimer's Disease	40	0.2%
Non-Alzheimer's Dementia	263	1.6%

Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fam-Trastuzumab Deruxtecan-nxki	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	964	5.8%
Diabetes	3,010	18.1%
Heart Failure	2,359	14.2%
Hyperlipidemia	4,651	28.0%
Hypertension	6,894	41.5%
Depression	3,805	22.9%
Ischemic Heart Disease	2,108	12.7%
Rheumatoid Arthritis/Osteoarthritis	2,198	13.2%
Stroke/Transient Ishemic Attack (TIA)	584	3.5%
Breast Cancer	13,404	80.6%
Colorectal Cancer	611	3.7%
Prostate Cancer	148	0.9%
Lung Cancer	1,320	7.9%
Endometrial Cancer	525	3.2%
Acquired Hypothyroidism	2,622	15.8%
Anemia	7,477	45.0%
Asthma	785	4.7%
Benign Prostatic Hyperplasia	292	1.8%
Chronic Kidney Disease	1,657	10.0%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1,241	7.5%
Glaucoma	1,045	6.3%
Osteoporosis	1,138	6.8%
Obesity (Diagnosis or Procedure Codes)	2,458	14.8%
Obesity (Dispensing Codes)	174	1.0%
Overweight	1,446	8.7%
Smoking (Diagnosis or Procedure Codes)	4,280	25.7%
Smoking (Dispensing Codes)	39	0.2%
Alcohol Abuse or Dependence	254	1.5%
Drug Abuse or Dependence	546	3.3%
History of Cardiac Arrest	28	0.2%
History of Coronary Angioplasty or Bypass	384	2.3%
Liver Disease CCW	2,507	15.1%
Liver Disease Extended	2,536	15.3%

Table 1u. Aggregated Characteristics of Fam-Trastuzumab Deruxtecan-nxki Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Fam-Trastuzumab Deruxtecan-nxki	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	28.8	13.7
Mean number of emergency room encounters	0.6	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	8.2	11.0
Mean number of filled prescriptions	20.6	15.6
Mean number of generics dispensed	9.5	5.5
Mean number of unique drug classes dispensed	8.8	4.8

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

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

Table 1v. Aggregated Characteristics of Ubrogepant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Ubrogepant	
	Number/Mean	Percent/ Standard Deviation[1]
Unique patients	209,902	N/A
Demographic Characteristics		
Age (years)	48.2	13.1
Age		
0-17 years	1,021	0.5%
18-24 years	11,795	5.6%
25-40 years	56,646	27.0%
41-64 years	108,113	51.5%
≥ 65 years	32,327	15.4%
Sex		
Female	181,327	86.4%
Male	28,575	13.6%
Race[2]		
American Indian or Alaska Native	855	0.4%
Asian	2,846	1.4%
Black or African American	14,190	6.8%
Multi-racial	4,917	2.3%
Native Hawaiian or Other Pacific Islander	178	0.1%
Unknown	66,963	31.9%
White	119,953	57.1%
Hispanic origin		
Yes	9,557	4.6%
No	112,635	53.7%
Unknown	87,710	41.8%
Year		
2019	0	0.0%
2020	35,161	16.8%
2021	50,720	24.2%
2022	38,571	18.4%
2023	42,752	20.4%
2024	42,698	20.3%
Health Characteristics		
Acute Myocardial Infarction	472	0.2%
Alzheimer's Disease	570	0.3%
Non-Alzheimer's Dementia	2,467	1.2%

Table 1v. Aggregated Characteristics of Ubrogepant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Ubrogepant	
	Number/Mean	Percent/ Standard Deviation[1]
Atrial Fibrillation	4,678	2.2%
Diabetes	24,170	11.5%
Heart Failure	7,878	3.8%
Hyperlipidemia	41,845	19.9%
Hypertension	50,988	24.3%
Depression	72,416	34.5%
Ischemic Heart Disease	15,070	7.2%
Rheumatoid Arthritis/Osteoarthritis	37,775	18.0%
Stroke/Transient Ishemic Attack (TIA)	6,979	3.3%
Breast Cancer	2,869	1.4%
Colorectal Cancer	433	0.2%
Prostate Cancer	515	0.2%
Lung Cancer	462	0.2%
Endometrial Cancer	242	0.1%
Acquired Hypothyroidism	21,429	10.2%
Anemia	27,765	13.2%
Asthma	15,167	7.2%
Benign Prostatic Hyperplasia	1,929	0.9%
Chronic Kidney Disease	8,557	4.1%
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	10,433	5.0%
Glaucoma	8,125	3.9%
Osteoporosis	5,565	2.7%
Obesity (Diagnosis or Procedure Codes)	50,698	24.2%
Obesity (Dispensing Codes)	11,805	5.6%
Overweight	18,318	8.7%
Smoking (Diagnosis or Procedure Codes)	28,898	13.8%
Smoking (Dispensing Codes)	2,378	1.1%
Alcohol Abuse or Dependence	3,126	1.5%
Drug Abuse or Dependence	10,355	4.9%
History of Cardiac Arrest	239	0.1%
History of Coronary Angioplasty or Bypass	3,497	1.7%
Liver Disease CCW	5,270	2.5%
Liver Disease Extended	5,362	2.6%

Table 1v. Aggregated Characteristics of Ubrogepant Users in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

Patient Characteristics	Ubrogepant	
	Number/Mean	Percent/ Standard Deviation[1]
Health Service Utilization Intensity Metrics		
Mean number of ambulatory encounters	13.9	12.6
Mean number of emergency room encounters	0.6	1.7
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	4.0	10.4
Mean number of filled prescriptions	27.7	24.2
Mean number of generics dispensed	10.7	6.9
Mean number of unique drug classes dispensed	9.9	6.2

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

[2]Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

N/A: Not Applicable

Table 2a. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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
Tenapanor	38,403	34,806	90.6%	*****	*****	2,676	7.0%	*****	*****
Trifarotene	62,803	60,754	96.7%	1,481	2.4%	*****	*****	*****	*****
Brolucizumab–dbll	105,908	105,801	99.9%	*****	*****	*****	*****	0	0.0%
Afamelanotide	441	441	100.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	129	129	100.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	46,621	45,407	97.4%	888	1.9%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	247,292	243,263	98.4%	1,906	0.8%	2,023	0.8%	100	0.0%
Air Polymer-Type A	157	157	100.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	107,209	106,848	99.7%	345	0.3%	*****	*****	*****	*****
Zanubrutinib	100,211	99,948	99.7%	160	0.2%	103	0.1%	0	0.0%
Cefiderocol	6,165	6,165	100.0%	0	0.0%	0	0.0%	0	0.0%
Crizanlizumab-tmca	27,282	27,263	99.9%	*****	*****	*****	*****	0	0.0%
Givosiran	3,061	3,061	100.0%	0	0.0%	0	0.0%	0	0.0%
Cenobamate	160,730	143,847	89.5%	8,712	5.4%	7,703	4.8%	468	0.3%
Voxelotor	32,782	32,465	99.0%	159	0.5%	158	0.5%	0	0.0%
Golodirsen	2,353	*****	*****	*****	*****	0	0.0%	0	0.0%
Enfortumab Vedotin-ejfv	106,854	*****	*****	*****	*****	0	0.0%	0	0.0%
Brilliant Blue G Ophthalmic Solution	1,624	1,624	100.0%	0	0.0%	0	0.0%	0	0.0%

Table 2a. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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
Lumateperone Tosylate	232,977	223,509	95.9%	3,086	1.3%	6,361	2.7%	21	0.0%
Lemborexant	150,744	144,119	95.6%	1,157	0.8%	5,455	3.6%	13	0.0%
Fam-Trastuzumab Deruxtecan-nxki	150,407	*****	*****	*****	*****	0	0.0%	0	0.0%
Ubrogepant	1,147,158	1,118,871	97.5%	15,728	1.4%	12,510	1.1%	49	0.0%

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

Table 2b. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	38,403	1	30	30	30	120	33.0	16.7
Trifarotene	62,803	1	30	30	30	365	30.1	7.3
Brolucizumab–dbll	105,908	1	1	1	1	84	1.1	1.9
Afamelanotide	441	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	129	1	1	1	1	1	1.0	0.0
Lasmiditan	46,621	1	8	30	30	181	21.9	12.7
Elexacaftor Ivacaftor Tezacaftor	247,292	1	28	28	28	294	28.1	6.7
Air Polymer-Type A	157	1	1	1	1	1	1.0	0.0
Luspatercept–amt	107,209	1	1	1	1	180	1.7	4.2
Zanubrutinib	100,211	1	30	30	30	90	28.9	5.1
Cefiderocol	6,165	1	1	1	1	27	1.7	1.9
Crizanlizumab-tmca	27,282	1	1	1	1	90	3.3	7.5
Givosiran	3,061	1	1	1	1	30	7.5	11.8
Cenobamate	160,730	1	28	30	30	316	32.3	16.2
Voxelotor	32,782	1	30	30	30	90	29.6	5.9
Golodirsen	2,353	1	1	1	7	35	6.9	10.7
Enfortumab Vedotin-ejfv	106,854	1	1	1	1	56	1.0	1.1
Brilliant Blue G Ophthalmic Solution	1,624	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	232,977	1	30	30	30	180	29.4	11.9
Lemborexant	150,744	1	30	30	30	180	30.7	12.7
Fam-Trastuzumab Deruxtecan-nxki	150,407	1	1	1	1	42	1.2	1.8
Ubrogepant	1,147,158	1	10	30	30	365	23.4	12.3

Table 2c. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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
Tenapanor	**38,403**	**34,806**	**100.0%**	*****	*****	**2,676**	**100.0%**	*****	*****
Female	28,059	25,391	73.0%	*****	*****	2,027	75.7%	*****	*****
Male	10,344	9,415	27.0%	*****	*****	649	24.3%	*****	*****
Trifarotene	**62,803**	**60,754**	**100.0%**	**1,481**	**100.0%**	*****	*****	*****	*****
Female	45,019	43,510	71.6%	1,099	74.2%	*****	*****	*****	*****
Male	17,784	17,244	28.4%	382	25.8%	*****	*****	*****	*****
Brolucizumab–dbll	**105,908**	**105,801**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	59,887	59,795	56.5%	*****	*****	*****	*****	0	NaN
Male	46,021	46,006	43.5%	*****	*****	*****	*****	0	NaN
Afamelanotide	**441**	**441**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	219	219	49.7%	0	NaN	0	NaN	0	NaN
Male	222	222	50.3%	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**129**	**129**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	59	59	45.7%	0	NaN	0	NaN	0	NaN
Male	70	70	54.3%	0	NaN	0	NaN	0	NaN
Lasmiditan	**46,621**	**45,407**	**100.0%**	**888**	**100.0%**	*****	*****	*****	*****
Female	40,084	39,072	86.0%	736	82.9%	*****	*****	*****	*****
Male	6,537	6,335	14.0%	152	17.1%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**247,292**	**243,263**	**100.0%**	**1,906**	**100.0%**	**2,023**	**100.0%**	**100**	**100.0%**
Female	121,127	119,143	49.0%	933	49.0%	990	48.9%	61	61.0%
Male	126,165	124,120	51.0%	973	51.0%	1,033	51.1%	39	39.0%

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	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
Air Polymer-Type A	**157**	**157**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	*****	*****	*****	0	NaN	0	NaN	0	NaN
Luspatercept–amt	**107,209**	**106,848**	**100.0%**	**345**	**100.0%**	*****	*****	*****	*****
Female	49,676	49,570	46.4%	99	28.7%	*****	*****	*****	*****
Male	57,533	57,278	53.6%	246	71.3%	*****	*****	*****	*****
Zanubrutinib	**100,211**	**99,948**	**100.0%**	**160**	**100.0%**	**103**	**100.0%**	**0**	**NaN**
Female	39,950	39,869	39.9%	57	35.6%	24	23.3%	0	NaN
Male	60,261	60,079	60.1%	103	64.4%	79	76.7%	0	NaN
Cefiderocol	**6,165**	**6,165**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	2,691	2,691	43.6%	0	NaN	0	NaN	0	NaN
Male	3,474	3,474	56.4%	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**27,282**	**27,263**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	15,927	15,917	58.4%	*****	*****	*****	*****	0	NaN
Male	11,355	11,346	41.6%	*****	*****	*****	*****	0	NaN
Givosiran	**3,061**	**3,061**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	2,474	2,474	80.8%	0	NaN	0	NaN	0	NaN
Male	587	587	19.2%	0	NaN	0	NaN	0	NaN
Cenobamate	**160,730**	**143,847**	**100.0%**	**8,712**	**100.0%**	**7,703**	**100.0%**	**468**	**100.0%**
Female	77,738	69,609	48.4%	4,043	46.4%	3,868	50.2%	218	46.6%
Male	82,992	74,238	51.6%	4,669	53.6%	3,835	49.8%	250	53.4%
Voxelotor	**32,782**	**32,465**	**100.0%**	**159**	**100.0%**	**158**	**100.0%**	**0**	**NaN**

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Table 2c. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	18,918	18,747	57.7%	78	49.1%	93	58.9%	0	NaN
Male	13,864	13,718	42.3%	81	50.9%	65	41.1%	0	NaN
Golodirsen	**2,353**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	*****	*****	*****	*****	*****	0	NaN	0	NaN
Male	*****	*****	*****	*****	*****	0	NaN	0	NaN
Enfortumab Vedotin-ejfv	**106,854**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	29,575	*****	*****	*****	*****	0	NaN	0	NaN
Male	77,279	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,624**	**1,624**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	864	864	53.2%	0	NaN	0	NaN	0	NaN
Male	760	760	46.8%	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**232,977**	**223,509**	**100.0%**	**3,086**	**100.0%**	**6,361**	**100.0%**	**21**	**100.0%**
Female	134,467	128,999	57.7%	*****	*****	3,959	62.2%	*****	*****
Male	98,510	94,510	42.3%	*****	*****	2,402	37.8%	*****	*****
Lemborexant	**150,744**	**144,119**	**100.0%**	**1,157**	**100.0%**	**5,455**	**100.0%**	**13**	**100.0%**
Female	97,149	93,272	64.7%	*****	*****	3,204	58.7%	*****	*****
Male	53,595	50,847	35.3%	*****	*****	2,251	41.3%	*****	*****
Fam-Trastuzumab Deruxtecan-nxki	**150,407**	*****	*****	*****	*****	**0**	**NaN**	**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 December 31, 2024, by Sex

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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	138,587	*****	*****	*****	*****	0	NaN	0	NaN
Male	11,820	11,820	*****	0	0.0%	0	NaN	0	NaN
Ubrogepant	**1,147,158**	**1,118,871**	**100.0%**	**15,728**	**100.0%**	**12,510**	**100.0%**	**49**	**100.0%**
Female	1,004,112	979,582	87.6%	13,770	87.6%	*****	*****	*****	*****
Male	143,046	139,289	12.4%	1,958	12.4%	*****	*****	*****	*****

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**38,403**	**1**	**30**	**30**	**30**	**120**	**33.0**	**16.7**
Female	28,059	1	30	30	30	120	33.2	16.8
Male	10,344	1	30	30	30	90	32.2	16.4
Trifarotene	**62,803**	**1**	**30**	**30**	**30**	**365**	**30.1**	**7.3**
Female	45,019	1	30	30	30	365	30.1	7.3
Male	17,784	1	30	30	30	180	30.1	7.1
Brolucizumab–dbll	**105,908**	**1**	**1**	**1**	**1**	**84**	**1.1**	**1.9**
Female	59,887	1	1	1	1	60	1.1	2.3
Male	46,021	1	1	1	1	84	1.0	1.2
Afamelanotide	**441**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	219	1	1	1	1	1	1.0	0.0
Male	222	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	**129**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	59	1	1	1	1	1	1.0	0.0
Male	70	1	1	1	1	1	1.0	0.0
Lasmiditan	**46,621**	**1**	**8**	**30**	**30**	**181**	**21.9**	**12.7**
Female	40,084	1	8	30	30	120	21.9	12.6
Male	6,537	1	8	30	30	181	22.1	13.1
Tezacaftor	**247,292**	**1**	**28**	**28**	**28**	**294**	**28.1**	**6.7**
Female	121,127	1	28	28	28	280	28.1	6.7
Male	126,165	1	28	28	28	294	28.1	6.8
Air Polymer-Type A	**157**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	*****	1	1	1	1	1	1.0	*****
Male	*****	1	1	1	1	1	1.0	*****

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Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**107,209**	**1**	**1**	**1**	**1**	**180**	**1.7**	**4.2**
Female	49,676	1	1	1	1	180	1.7	4.0
Male	57,533	1	1	1	1	84	1.7	4.3
Zanubrutinib	**100,211**	**1**	**30**	**30**	**30**	**90**	**28.9**	**5.1**
Female	39,950	1	30	30	30	90	28.9	5.0
Male	60,261	1	30	30	30	90	29.0	5.1
Cefiderocol	**6,165**	**1**	**1**	**1**	**1**	**27**	**1.7**	**1.9**
Female	2,691	1	1	1	1	27	1.6	1.8
Male	3,474	1	1	1	1	26	1.7	2.0
Crizanlizumab-tmca	**27,282**	**1**	**1**	**1**	**1**	**90**	**3.3**	**7.5**
Female	15,927	1	1	1	1	90	3.4	7.7
Male	11,355	1	1	1	1	90	3.1	7.2
Givosiran	**3,061**	**1**	**1**	**1**	**1**	**30**	**7.5**	**11.8**
Female	2,474	1	1	1	1	30	7.3	11.7
Male	587	1	1	1	17	30	8.2	12.3
Cenobamate	**160,730**	**1**	**28**	**30**	**30**	**316**	**32.3**	**16.2**
Female	77,738	1	28	30	30	316	32.4	16.3
Male	82,992	1	28	30	30	180	32.2	16.1
Voxelotor	**32,782**	**1**	**30**	**30**	**30**	**90**	**29.6**	**5.9**
Female	18,918	1	30	30	30	90	29.6	5.9
Male	13,864	1	30	30	30	90	29.6	5.8
Golodirsen	**2,353**	**1**	**1**	**1**	**7**	**35**	**6.9**	**10.7**
Female	*****	1	1	1	1	1	1.0	0.0
Male	*****	1	1	1	7	35	6.9	10.7

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Table 2d. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**106,854**	**1**	**1**	**1**	**1**	**56**	**1.0**	**1.1**
Female	29,575	1	1	1	1	56	1.0	1.1
Male	77,279	1	1	1	1	28	1.0	1.1
Brilliant Blue G Ophthalmic Solution	**1,624**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	864	1	1	1	1	1	1.0	0.0
Male	760	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**232,977**	**1**	**30**	**30**	**30**	**180**	**29.4**	**11.9**
Female	134,467	1	30	30	30	180	29.6	12.3
Male	98,510	1	30	30	30	180	29.1	11.5
Lemborexant	**150,744**	**1**	**30**	**30**	**30**	**180**	**30.7**	**12.7**
Female	97,149	1	30	30	30	180	30.5	12.2
Male	53,595	1	30	30	30	180	31.1	13.5
Fam-Trastuzumab Deruxtecan-nxki	**150,407**	**1**	**1**	**1**	**1**	**42**	**1.2**	**1.8**
Female	138,587	1	1	1	1	42	1.2	1.8
Male	11,820	1	1	1	1	21	1.2	1.9
Ubrogepant	**1,147,158**	**1**	**10**	**30**	**30**	**365**	**23.4**	**12.3**
Female	1,004,112	1	10	30	30	365	23.3	12.2
Male	143,046	1	12	30	30	120	23.6	12.5

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

Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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
Tenapanor	**38,403**	**34,806**	**100.0%**	*****	*****	**2,676**	**100.0%**	*****	*****
0-17 years	22	*****	*****	0	0.0%	*****	*****	0	0.0%
18-24 years	1,210	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	5,212	4,821	13.9%	*****	*****	276	10.3%	*****	*****
41-64 years	19,967	18,157	52.2%	*****	*****	1,362	50.9%	*****	*****
≥ 65 years	11,992	10,690	30.7%	*****	*****	971	36.3%	*****	*****
Trifarotene	**62,803**	**60,754**	**100.0%**	**1,481**	**100.0%**	*****	*****	*****	*****
0-17 years	25,717	24,863	40.9%	635	42.9%	*****	*****	*****	*****
18-24 years	16,329	15,746	25.9%	417	28.2%	*****	*****	*****	*****
25-40 years	14,582	14,206	23.4%	*****	*****	*****	*****	*****	*****
41-64 years	5,816	5,595	9.2%	162	10.9%	59	10.6%	0	0.0%
≥ 65 years	359	344	0.6%	*****	*****	*****	*****	*****	*****
Brolucizumab–dbll	**105,908**	**105,801**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	*****	*****	*****	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	1,588	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	104,276	104,176	98.5%	*****	*****	*****	*****	0	NaN
Afamelanotide	**441**	**441**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	54	54	12.2%	0	NaN	0	NaN	0	NaN
25-40 years	98	98	22.2%	0	NaN	0	NaN	0	NaN

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Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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	213	213	48.3%	0	NaN	0	NaN	0	NaN
≥ 65 years	76	76	17.2%	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**129**	**129**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
Lasmiditan	**46,621**	**45,407**	**100.0%**	**888**	**100.0%**	*****	*****	*****	*****
0-17 years	117	*****	*****	*****	*****	*****	*****	0	0.0%
18-24 years	1,373	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	10,202	9,971	22.0%	184	20.7%	47	*****	0	0.0%
41-64 years	28,473	27,785	61.2%	514	57.9%	*****	*****	*****	*****
≥ 65 years	6,456	6,187	13.6%	176	19.8%	93	*****	0	0.0%
Elexacaftor Ivacaftor Tezacaftor	**247,292**	**243,263**	**100.0%**	**1,906**	**100.0%**	**2,023**	**100.0%**	**100**	**100.0%**
0-17 years	75,836	74,841	30.8%	485	25.4%	494	24.4%	16	16.0%
18-24 years	45,445	44,677	18.4%	332	17.4%	*****	*****	*****	*****
25-40 years	86,401	85,017	34.9%	643	33.7%	706	34.9%	35	35.0%
41-64 years	31,947	31,300	12.9%	302	15.8%	316	15.6%	29	29.0%
≥ 65 years	7,663	7,428	3.1%	144	7.6%	*****	*****	*****	*****
Air Polymer-Type A	**157**	**157**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN

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Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	145	145	92.4%	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
Luspatercept–amt	**107,209**	**106,848**	**100.0%**	**345**	**100.0%**	*****	*****	*****	*****
0-17 years	65	65	0.1%	0	0.0%	0	0.0%	0	0.0%
18-24 years	369	369	0.3%	0	0.0%	0	0.0%	0	0.0%
25-40 years	1,717	1,717	1.6%	0	0.0%	0	0.0%	0	0.0%
41-64 years	5,278	5,257	4.9%	*****	*****	*****	*****	0	0.0%
≥ 65 years	99,780	99,440	93.1%	*****	*****	*****	*****	*****	*****
Zanubrutinib	**100,211**	**99,948**	**100.0%**	**160**	**100.0%**	**103**	**100.0%**	**0**	**NaN**
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	33	33	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	101	101	0.1%	0	0.0%	0	0.0%	0	NaN
41-64 years	8,786	8,754	8.8%	*****	*****	*****	*****	0	NaN
≥ 65 years	91,291	91,060	91.1%	*****	*****	*****	*****	0	NaN
Cefiderocol	**6,165**	**6,165**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	766	766	12.4%	0	NaN	0	NaN	0	NaN
41-64 years	2,201	2,201	35.7%	0	NaN	0	NaN	0	NaN
≥ 65 years	3,080	3,080	50.0%	0	NaN	0	NaN	0	NaN

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Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , 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
Crizanlizumab-tmca	**27,282**	**27,263**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	1,200	*****	*****	*****	*****	0	0.0%	0	NaN
18-24 years	4,187	*****	*****	*****	*****	0	0.0%	0	NaN
25-40 years	14,938	*****	*****	*****	*****	*****	*****	0	NaN
41-64 years	6,380	*****	*****	*****	*****	*****	*****	0	NaN
≥ 65 years	577	577	2.1%	0	0.0%	0	0.0%	0	NaN
Givosiran	**3,061**	**3,061**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN
18-24 years	190	190	6.2%	0	NaN	0	NaN	0	NaN
25-40 years	1,077	1,077	35.2%	0	NaN	0	NaN	0	NaN
41-64 years	1,452	1,452	47.4%	0	NaN	0	NaN	0	NaN
≥ 65 years	342	342	11.2%	0	NaN	0	NaN	0	NaN
Cenobamate	**160,730**	**143,847**	**100.0%**	**8,712**	**100.0%**	**7,703**	**100.0%**	**468**	**100.0%**
0-17 years	5,489	4,964	3.5%	327	3.8%	186	2.4%	12	2.6%
18-24 years	17,113	15,212	10.6%	930	10.7%	905	11.7%	66	14.1%
25-40 years	58,375	51,770	36.0%	3,408	39.1%	3,024	39.3%	173	37.0%
41-64 years	64,635	57,929	40.3%	3,444	39.5%	3,085	40.0%	177	37.8%
≥ 65 years	15,118	13,972	9.7%	603	6.9%	503	6.5%	40	8.5%
Voxelotor	**32,782**	**32,465**	**100.0%**	**159**	**100.0%**	**158**	**100.0%**	**0**	**NaN**
0-17 years	5,361	5,324	16.4%	*****	*****	*****	*****	0	NaN
18-24 years	3,624	*****	*****	15	9.4%	*****	*****	0	NaN
25-40 years	12,608	12,467	38.4%	76	47.8%	65	41.1%	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 December 31, 2024 , by Age Group

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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	10,212	10,110	31.1%	37	23.3%	65	41.1%	0	NaN
≥ 65 years	977	*****	*****	*****	*****	*****	*****	0	NaN
Golodirsen	**2,353**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
0-17 years	2,026	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	231	231	*****	0	0.0%	0	NaN	0	NaN
25-40 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN
Enfortumab Vedotin-ejfv	**106,854**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
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	184	184	*****	0	0.0%	0	NaN	0	NaN
41-64 years	11,634	11,634	*****	0	0.0%	0	NaN	0	NaN
≥ 65 years	95,036	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,624**	**1,624**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
18-24 years	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	37	37	2.3%	0	NaN	0	NaN	0	NaN
41-64 years	627	627	38.6%	0	NaN	0	NaN	0	NaN
≥ 65 years	946	946	58.3%	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**232,977**	**223,509**	**100.0%**	**3,086**	**100.0%**	**6,361**	**100.0%**	**21**	**100.0%**

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Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , 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
0-17 years	1,054	1,006	0.5%	*****	*****	*****	*****	*****	*****
18-24 years	14,804	14,038	6.3%	*****	*****	537	8.4%	*****	*****
25-40 years	70,260	67,236	30.1%	*****	*****	1,935	30.4%	*****	*****
41-64 years	121,932	117,100	52.4%	*****	*****	3,368	52.9%	*****	*****
≥ 65 years	24,927	24,129	10.8%	*****	*****	*****	*****	*****	*****
Lemborexant	**150,744**	**144,119**	**100.0%**	**1,157**	**100.0%**	**5,455**	**100.0%**	**13**	**100.0%**
0-17 years	168	168	0.1%	0	0.0%	0	0.0%	0	0.0%
18-24 years	3,321	3,232	2.2%	32	2.8%	57	1.0%	0	0.0%
25-40 years	21,346	20,815	14.4%	123	10.6%	408	7.5%	0	0.0%
41-64 years	72,511	69,789	48.4%	*****	*****	2,246	41.2%	*****	*****
≥ 65 years	53,398	50,115	34.8%	*****	*****	2,744	50.3%	*****	*****
Fam-Trastuzumab Deruxtecan-nxki	**150,407**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	61	61	0.0%	0	0.0%	0	NaN	0	NaN
25-40 years	5,547	5,547	*****	0	0.0%	0	NaN	0	NaN
41-64 years	50,844	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	93,955	93,955	*****	0	0.0%	0	NaN	0	NaN
Ubrogepant	**1,147,158**	**1,118,871**	**100.0%**	**15,728**	**100.0%**	**12,510**	**100.0%**	**49**	**100.0%**
0-17 years	4,013	3,908	0.3%	55	0.3%	50	0.4%	0	0.0%
18-24 years	47,303	46,365	4.1%	591	3.8%	*****	*****	*****	*****
25-40 years	290,323	284,186	25.4%	3,817	24.3%	*****	*****	*****	*****

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Table 2e. Categorical Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

| | | Number of Dispensings by Days Supplied | | | | | | | |
| | | 1-30 Days | | 31-60 Days | | 61-90 Days | | 91+ Days | |
	Total Number of Dispensings	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	652,475	636,311	56.9%	8,928	56.8%	7,205	57.6%	31	63.3%
≥ 65 years	153,044	148,101	13.2%	2,337	14.9%	*****	*****	*****	*****

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**38,403**	**1**	**30**	**30**	**30**	**120**	**33.0**	**16.7**
0-17 years	22	5	30	30	30	90	29.9	15.1
18-24 years	1,210	1	30	30	30	90	32.3	15.3
25-40 years	5,212	1	30	30	30	100	31.8	15.0
41-64 years	19,967	1	30	30	30	120	32.8	16.5
≥ 65 years	11,992	1	30	30	30	120	33.8	17.8
Trifarotene	**62,803**	**1**	**30**	**30**	**30**	**365**	**30.1**	**7.3**
0-17 years	25,717	1	30	30	30	209	30.2	6.9
18-24 years	16,329	1	30	30	30	180	30.2	7.3
25-40 years	14,582	1	30	30	30	365	29.9	7.6
41-64 years	5,816	1	30	30	30	90	30.3	7.4
≥ 65 years	359	3	30	30	30	180	30.2	11.3
Brolucizumab–dbll	**105,908**	**1**	**1**	**1**	**1**	**84**	**1.1**	**1.9**
0-17 years	*****	1	1	1	1	1	1.0	*****
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	*****	1	1	1	1	1	1.0	*****
41-64 years	1,588	1	1	1	1	56	1.5	4.4
≥ 65 years	104,276	1	1	1	1	84	1.1	1.9
Afamelanotide	**441**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	54	1	1	1	1	1	1.0	0.0
25-40 years	98	1	1	1	1	1	1.0	0.0
41-64 years	213	1	1	1	1	1	1.0	0.0
≥ 65 years	76	1	1	1	1	1	1.0	0.0

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Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	**129**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
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	*****	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	1	1	1	1	1	1.0	0.0
Lasmiditan	**46,621**	**1**	**8**	**30**	**30**	**181**	**21.9**	**12.7**
0-17 years	117	1	8	28	30	60	20.8	11.3
18-24 years	1,373	1	10	30	30	90	23.1	12.0
25-40 years	10,202	1	8	30	30	90	22.1	12.2
41-64 years	28,473	1	8	30	30	181	21.9	12.5
≥ 65 years	6,456	1	8	28	30	90	21.3	14.4
Elexacaftor Ivacaftor Tezacaftor	**247,292**	**1**	**28**	**28**	**28**	**294**	**28.1**	**6.7**
0-17 years	75,836	1	28	28	28	180	27.8	6.4
18-24 years	45,445	1	28	28	28	280	28.2	7.2
25-40 years	86,401	1	28	28	28	294	28.2	6.6
41-64 years	31,947	1	28	28	28	196	28.4	7.1
≥ 65 years	7,663	1	28	28	28	112	28.7	7.8
Air Polymer-Type A	**157**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	*****
25-40 years	145	1	1	1	1	1	1.0	0.0
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**107,209**	**1**	**1**	**1**	**1**	**180**	**1.7**	**4.2**
0-17 years	65	1	1	1	1	1	1.0	0.0
18-24 years	369	1	1	1	1	21	3.5	6.6
25-40 years	1,717	1	1	1	1	21	1.4	2.9
41-64 years	5,278	1	1	1	1	84	2.0	5.1
≥ 65 years	99,780	1	1	1	1	180	1.7	4.1
Zanubrutinib	**100,211**	**1**	**30**	**30**	**30**	**90**	**28.9**	**5.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	33	13	30	30	30	30	28.6	4.6
25-40 years	101	7	30	30	30	30	28.4	4.8
41-64 years	8,786	1	30	30	30	90	28.7	5.3
≥ 65 years	91,291	1	30	30	30	90	29.0	5.0
Cefiderocol	**6,165**	**1**	**1**	**1**	**1**	**27**	**1.7**	**1.9**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	7	1.4	1.4
25-40 years	766	1	1	1	1	14	1.7	1.8
41-64 years	2,201	1	1	1	1	26	1.7	1.8
≥ 65 years	3,080	1	1	1	1	27	1.7	2.0
Crizanlizumab-tmca	**27,282**	**1**	**1**	**1**	**1**	**90**	**3.3**	**7.5**
0-17 years	1,200	1	1	1	1	56	3.9	8.2
18-24 years	4,187	1	1	1	1	34	3.4	7.6
25-40 years	14,938	1	1	1	1	90	3.3	7.6
41-64 years	6,380	1	1	1	1	90	3.1	7.3
≥ 65 years	577	1	1	1	1	28	1.4	3.1

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Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**3,061**	**1**	**1**	**1**	**1**	**30**	**7.5**	**11.8**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	190	1	1	1	1	30	6.8	11.4
25-40 years	1,077	1	1	1	1	30	7.7	12.0
41-64 years	1,452	1	1	1	1	30	7.6	11.9
≥ 65 years	342	1	1	1	1	30	7.0	11.5
Cenobamate	**160,730**	**1**	**28**	**30**	**30**	**316**	**32.3**	**16.2**
0-17 years	5,489	1	28	30	30	180	30.9	14.6
18-24 years	17,113	1	29	30	30	180	32.9	16.9
25-40 years	58,375	1	30	30	30	316	33.0	16.5
41-64 years	64,635	1	28	30	30	208	32.1	16.1
≥ 65 years	15,118	1	28	30	30	180	30.3	14.7
Voxelotor	**32,782**	**1**	**30**	**30**	**30**	**90**	**29.6**	**5.9**
0-17 years	5,361	1	30	30	30	90	29.2	5.3
18-24 years	3,624	1	30	30	30	90	29.5	6.1
25-40 years	12,608	1	30	30	30	90	29.6	5.9
41-64 years	10,212	1	30	30	30	90	29.7	6.1
≥ 65 years	977	1	30	30	30	90	29.4	4.5
Golodirsen	**2,353**	**1**	**1**	**1**	**7**	**35**	**6.9**	**10.7**
0-17 years	2,026	1	1	1	1	35	5.8	9.7
18-24 years	231	1	1	1	28	28	8.8	12.0
25-40 years	*****	1	28	28	28	30	26.4	5.9
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	*****	1	1	1	1	1	1.0	*****

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Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**106,854**	**1**	**1**	**1**	**1**	**56**	**1.0**	**1.1**
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	184	1	1	1	1	28	2.2	5.5
41-64 years	11,634	1	1	1	1	28	1.1	1.2
≥ 65 years	95,036	1	1	1	1	56	1.0	1.0
Brilliant Blue G Ophthalmic Solution	**1,624**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	1	1.0	0.0
25-40 years	37	1	1	1	1	1	1.0	0.0
41-64 years	627	1	1	1	1	1	1.0	0.0
≥ 65 years	946	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**232,977**	**1**	**30**	**30**	**30**	**180**	**29.4**	**11.9**
0-17 years	1,054	1	30	30	30	180	31.0	13.5
18-24 years	14,804	1	30	30	30	180	30.7	12.9
25-40 years	70,260	1	30	30	30	180	29.6	11.9
41-64 years	121,932	1	30	30	30	180	29.5	11.9
≥ 65 years	24,927	1	29	30	30	120	27.6	11.5
Lemborexant	**150,744**	**1**	**30**	**30**	**30**	**180**	**30.7**	**12.7**
0-17 years	168	5	30	30	30	30	28.4	5.3
18-24 years	3,321	1	30	30	30	90	29.5	9.6
25-40 years	21,346	1	30	30	30	90	29.4	10.2
41-64 years	72,511	1	30	30	30	180	30.5	11.8

Table 2f. Continuous Summary of Days Supplied per Dispensing for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024 , by Age Group

	Total Number of Dispensings	Distribution of Days Supplied by Dispensing						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	53,398	1	30	30	30	180	31.7	14.6
Fam-Trastuzumab Deruxtecan-nxki	**150,407**	**1**	**1**	**1**	**1**	**42**	**1.2**	**1.8**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	61	1	1	1	1	1	1.0	0.0
25-40 years	5,547	1	1	1	1	21	1.3	2.5
41-64 years	50,844	1	1	1	1	42	1.2	1.9
≥ 65 years	93,955	1	1	1	1	21	1.1	1.7
Ubrogepant	**1,147,158**	**1**	**10**	**30**	**30**	**365**	**23.4**	**12.3**
0-17 years	4,013	1	12	30	30	90	23.3	12.7
18-24 years	47,303	1	14	30	30	120	23.4	11.4
25-40 years	290,323	1	10	30	30	180	23.2	11.7
41-64 years	652,475	1	10	30	30	365	23.4	12.3
≥ 65 years	153,044	1	10	30	30	135	23.7	13.3

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 3a. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Tenapanor	11,663	3,787	32.5%	3,731	32.0%	3,661	31.4%	466	4.0%	18	0.2%
Trifarotene	33,642	19,032	56.6%	10,970	32.6%	3,564	10.6%	*****	*****	*****	*****
Brolucizumab–dbll	17,889	17,670	98.8%	191	1.1%	*****	*****	*****	*****	*****	*****
Afamelanotide	66	66	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	128	128	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	10,488	4,981	47.5%	2,647	25.2%	2,298	21.9%	425	4.1%	137	1.3%
Elexacaftor Ivacaftor Tezacaftor	14,185	814	5.7%	1,405	9.9%	4,924	34.7%	3,865	27.2%	3,177	22.4%
Air Polymer-Type A	156	156	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	9,368	8,271	88.3%	878	9.4%	157	1.7%	42	0.4%	20	0.2%
Zanubrutinib	11,764	1,596	13.6%	2,211	18.8%	5,193	44.1%	2,122	18.0%	642	5.5%
Cefiderocol	2,077	1,988	95.7%	*****	*****	*****	*****	0	0.0%	0	0.0%
Crizanlizumab-tmca	2,936	2,543	86.6%	200	6.8%	140	4.8%	*****	*****	*****	*****
Givosiran	221	143	64.7%	37	16.7%	19	8.6%	*****	*****	*****	*****
Cenobamate	16,249	2,516	15.5%	2,998	18.5%	5,730	35.3%	2,784	17.1%	2,221	13.7%
Voxelotor	4,447	886	19.9%	1,014	22.8%	1,762	39.6%	565	12.7%	220	4.9%
Golodirsen	89	24	27.0%	22	24.7%	28	31.5%	*****	*****	*****	*****
Enfortumab Vedotin-ejfv	9,287	8,683	93.5%	576	6.2%	*****	*****	*****	*****	0	0.0%
Brilliant Blue G Ophthalmic Solution	1,526	1,526	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Table 3a. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Lumateperone Tosylate	40,179	11,856	29.5%	10,153	25.3%	12,796	31.8%	4,044	10.1%	1,330	3.3%
Lemborexant	31,011	12,179	39.3%	7,123	23.0%	8,324	26.8%	2,382	7.7%	1,003	3.2%
Fam-Trastuzumab Deruxtecan-nxki	16,627	15,948	95.9%	585	3.5%	77	0.5%	17	0.1%	0	0.0%
Ubrogepant	209,902	76,514	36.5%	54,845	26.1%	61,223	29.2%	13,778	6.6%	3,542	1.7%

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

Table 3b. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	11,663	1	30	63	140	835	108.5	112.9
Trifarotene	33,642	1	30	30	60	887	56.2	49.2
Brolucizumab–dbll	17,889	1	1	3	8	732	6.4	15.0
Afamelanotide	66	1	2	6	10	23	6.7	5.4
Fluorodopa F-18	128	1	1	1	1	2	1.0	0.1
Lasmiditan	10,488	1	24	38	106	1,571	97.4	150.2
Elexacaftor Ivacaftor Tezacaftor	14,185	1	143	364	700	1,915	490.0	437.3
Air Polymer-Type A	156	1	1	1	1	2	1.0	0.1
Luspatercept–amt	9,368	1	3	7	16	1,470	19.4	65.2
Zanubrutinib	11,764	1	69	164	350	1,612	246.4	235.1
Cefiderocol	2,077	1	1	1	2	286	5.0	12.2
Crizanlizumab-tmca	2,936	1	3	6	15	1,219	30.2	92.9
Givosiran	221	1	4	15	52	1,347	103.5	238.1
Cenobamate	16,249	1	60	180	450	1,682	319.5	342.9
Voxelotor	4,447	1	60	120	285	1,651	217.9	251.2
Golodirsen	89	1	28	80	272	1,336	182.2	220.5
Enfortumab Vedotin-ejfv	9,287	1	4	8	16	548	12.0	15.0
Brilliant Blue G Ophthalmic Solution	1,526	1	1	1	1	3	1.1	0.3
Lumateperone Tosylate	40,179	1	30	90	210	1,669	170.5	213.2
Lemborexant	31,011	1	30	60	180	1,473	149.5	207.9
Fam-Trastuzumab Deruxtecan-	16,627	1	3	6	13	643	10.5	22.4
Ubrogepant	209,902	1	30	60	153	1,700	127.7	171.8

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Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Tenapanor	**11,663**	**3,787**	**100.0%**	**3,731**	**100.0%**	**3,661**	**100.0%**	**466**	**100.0%**	**18**	**100.0%**
Female	8,123	2,548	67.3%	2,543	68.2%	2,646	72.3%	*****	*****	*****	*****
Male	3,540	1,239	32.7%	1,188	31.8%	1,015	27.7%	*****	*****	*****	*****
Trifarotene	**33,642**	**19,032**	**100.0%**	**10,970**	**100.0%**	**3,564**	**100.0%**	*****	*****	*****	*****
Female	24,645	14,156	74.4%	7,974	72.7%	2,472	69.4%	*****	*****	*****	*****
Male	8,997	4,876	25.6%	2,996	27.3%	1,092	30.6%	*****	*****	*****	*****
Brolucizumab–dbll	**17,889**	**17,670**	**100.0%**	**191**	**100.0%**	*****	*****	*****	*****	*****	*****
Female	10,491	10,366	58.7%	*****	*****	*****	*****	*****	*****	*****	*****
Male	7,398	7,304	41.3%	*****	*****	*****	*****	0	0.0%	0	0.0%
Afamelanotide	**66**	**66**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	33	33	50.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	33	33	50.0%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**128**	**128**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	58	58	45.3%	0	NaN	0	NaN	0	NaN	0	NaN
Male	70	70	54.7%	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**10,488**	**4,981**	**100.0%**	**2,647**	**100.0%**	**2,298**	**100.0%**	**425**	**100.0%**	**137**	**100.0%**
Female	8,985	4,244	85.2%	2,269	85.7%	1,982	86.2%	376	88.5%	114	83.2%
Male	1,503	737	14.8%	378	14.3%	316	13.8%	49	11.5%	23	16.8%
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**814**	**100.0%**	**1,405**	**100.0%**	**4,924**	**100.0%**	**3,865**	**100.0%**	**3,177**	**100.0%**
Female	6,978	405	49.8%	702	50.0%	2,446	49.7%	1,857	48.0%	1,568	49.4%
Male	7,207	409	50.2%	703	50.0%	2,478	50.3%	2,008	52.0%	1,609	50.6%
Air Polymer-Type A	**156**	**156**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**

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Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Luspatercept–amt	**9,368**	**8,271**	**100.0%**	**878**	**100.0%**	**157**	**100.0%**	**42**	**100.0%**	**20**	**100.0%**
Female	4,124	3,582	43.3%	447	50.9%	70	44.6%	*****	*****	*****	*****
Male	5,244	4,689	56.7%	431	49.1%	87	55.4%	*****	*****	*****	*****
Zanubrutinib	**11,764**	**1,596**	**100.0%**	**2,211**	**100.0%**	**5,193**	**100.0%**	**2,122**	**100.0%**	**642**	**100.0%**
Female	4,755	622	39.0%	935	42.3%	2,098	40.4%	854	40.2%	246	38.3%
Male	7,009	974	61.0%	1,276	57.7%	3,095	59.6%	1,268	59.8%	396	61.7%
Cefiderocol	**2,077**	**1,988**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	902	868	43.7%	34	*****	0	0.0%	0	NaN	0	NaN
Male	1,175	1,120	56.3%	*****	*****	*****	*****	0	NaN	0	NaN
Crizanlizumab-tmca	**2,936**	**2,543**	**100.0%**	**200**	**100.0%**	**140**	**100.0%**	*****	*****	*****	*****
Female	1,744	1,504	59.1%	121	60.5%	85	60.7%	*****	*****	*****	*****
Male	1,192	1,039	40.9%	79	39.5%	55	39.3%	*****	*****	*****	*****
Givosiran	**221**	**143**	**100.0%**	**37**	**100.0%**	**19**	**100.0%**	*****	*****	*****	*****
Female	170	111	77.6%	*****	*****	*****	*****	*****	*****	*****	*****
Male	51	32	22.4%	*****	*****	*****	*****	*****	*****	*****	*****
Cenobamate	**16,249**	**2,516**	**100.0%**	**2,998**	**100.0%**	**5,730**	**100.0%**	**2,784**	**100.0%**	**2,221**	**100.0%**
Female	8,176	1,348	53.6%	1,515	50.5%	2,919	50.9%	1,347	48.4%	1,047	47.1%
Male	8,073	1,168	46.4%	1,483	49.5%	2,811	49.1%	1,437	51.6%	1,174	52.9%
Voxelotor	**4,447**	**886**	**100.0%**	**1,014**	**100.0%**	**1,762**	**100.0%**	**565**	**100.0%**	**220**	**100.0%**
Female	2,601	545	61.5%	589	58.1%	1,012	57.4%	322	57.0%	133	60.5%

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Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	1,846	341	38.5%	425	41.9%	750	42.6%	243	43.0%	87	39.5%
Golodirsen	**89**	**24**	**100.0%**	**22**	**100.0%**	**28**	**100.0%**	*****	*****	*****	*****
Female	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Male	*****	*****	*****	22	100.0%	28	100.0%	*****	*****	*****	*****
Enfortumab Vedotin-ejfv	**9,287**	**8,683**	**100.0%**	**576**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	2,539	2,362	27.2%	170	29.5%	*****	*****	*****	*****	0	NaN
Male	6,748	6,321	72.8%	406	70.5%	*****	*****	*****	*****	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,526**	**1,526**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	813	813	53.3%	0	NaN	0	NaN	0	NaN	0	NaN
Male	713	713	46.7%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**40,179**	**11,856**	**100.0%**	**10,153**	**100.0%**	**12,796**	**100.0%**	**4,044**	**100.0%**	**1,330**	**100.0%**
Female	24,416	7,580	63.9%	6,144	60.5%	7,573	59.2%	2,451	60.6%	668	50.2%
Male	15,763	4,276	36.1%	4,009	39.5%	5,223	40.8%	1,593	39.4%	662	49.8%
Lemborexant	**31,011**	**12,179**	**100.0%**	**7,123**	**100.0%**	**8,324**	**100.0%**	**2,382**	**100.0%**	**1,003**	**100.0%**
Female	20,026	7,921	65.0%	4,618	64.8%	5,345	64.2%	1,498	62.9%	644	64.2%
Male	10,985	4,258	35.0%	2,505	35.2%	2,979	35.8%	884	37.1%	359	35.8%
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**15,948**	**100.0%**	**585**	**100.0%**	**77**	**100.0%**	**17**	**100.0%**	**0**	**NaN**
Female	14,744	14,094	88.4%	*****	*****	*****	*****	17	100.0%	0	NaN
Male	1,883	1,854	11.6%	*****	*****	*****	*****	0	0.0%	0	NaN

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Table 3c. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Ubrogepant	**209,902**	**76,514**	**100.0%**	**54,845**	**100.0%**	**61,223**	**100.0%**	**13,778**	**100.0%**	**3,542**	**100.0%**
Female	181,327	64,874	84.8%	47,548	86.7%	53,701	87.7%	12,121	88.0%	3,083	87.0%
Male	28,575	11,640	15.2%	7,297	13.3%	7,522	12.3%	1,657	12.0%	459	13.0%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**11,663**	**1**	**30**	**63**	**140**	**835**	**108.5**	**112.9**
Female	8,123	1	30	71	150	810	114.8	118.8
Male	3,540	1	30	60	120	835	93.9	96.3
Trifarotene	**33,642**	**1**	**30**	**30**	**60**	**887**	**56.2**	**49.2**
Female	24,645	1	30	30	60	887	55.1	46.9
Male	8,997	1	30	30	60	870	59.5	55.0
Brolucizumab–dbll	**17,889**	**1**	**1**	**3**	**8**	**732**	**6.4**	**15.0**
Female	10,491	1	1	3	8	732	6.4	17.6
Male	7,398	1	1	3	9	314	6.5	10.1
Afamelanotide	**66**	**1**	**2**	**6**	**10**	**23**	**6.7**	**5.4**
Female	33	1	2	5	10	21	6.6	5.0
Male	33	1	2	6	8	23	6.7	5.9
Fluorodopa F-18	**128**	**1**	**1**	**1**	**1**	**2**	**1.0**	**0.1**
Female	58	1	1	1	1	2	1.0	0.1
Male	70	1	1	1	1	1	1.0	0.0
Lasmiditan	**10,488**	**1**	**24**	**38**	**106**	**1,571**	**97.4**	**150.2**
Female	8,985	1	24	38	109	1,571	97.7	148.7
Male	1,503	1	24	32	93	1,410	96.1	159.2
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**1**	**143**	**364**	**700**	**1,915**	**490.0**	**437.3**
Female	6,978	1	141	361	700	1,915	488.1	436.3
Male	7,207	1	144	368	700	1,913	492.0	438.3
Air Polymer-Type A	**156**	**1**	**1**	**1**	**1**	**2**	**1.0**	**0.1**
Female	*****	1	1	1	1	2	1.0	*****
Male	*****	1	1	1	1	1	1.0	*****

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Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**9,368**	**1**	**3**	**7**	**16**	**1,470**	**19.4**	**65.2**
Female	4,124	1	3	8	17	1,470	20.0	67.7
Male	5,244	1	3	7	15	1,262	19.0	63.1
Zanubrutinib	**11,764**	**1**	**69**	**164**	**350**	**1,612**	**246.4**	**235.1**
Female	4,755	1	66	159	344	1,451	242.7	233.7
Male	7,009	1	70	166	356	1,612	249.0	236.0
Cefiderocol	**2,077**	**1**	**1**	**1**	**2**	**286**	**5.0**	**12.2**
Female	902	1	1	1	2	86	4.8	9.6
Male	1,175	1	1	1	2	286	5.1	13.9
Crizanlizumab-tmca	**2,936**	**1**	**3**	**6**	**15**	**1,219**	**30.2**	**92.9**
Female	1,744	1	3	6	16	1,038	31.0	93.0
Male	1,192	1	3	6	15	1,219	29.1	92.9
Givosiran	**221**	**1**	**4**	**15**	**52**	**1,347**	**103.5**	**238.1**
Female	170	1	4	15	52	1,347	106.4	249.9
Male	51	1	4	18	56	971	94.0	195.5
Cenobamate	**16,249**	**1**	**60**	**180**	**450**	**1,682**	**319.5**	**342.9**
Female	8,176	1	58	174	426	1,682	307.9	336.4
Male	8,073	1	63	195	476	1,667	331.3	349.0
Voxelotor	**4,447**	**1**	**60**	**120**	**285**	**1,651**	**217.9**	**251.2**
Female	2,601	2	60	120	272	1,650	215.0	249.8
Male	1,846	1	60	127	300	1,651	222.0	253.1
Golodirsen	**89**	**1**	**28**	**80**	**272**	**1,336**	**182.2**	**220.5**
Female	*****	1	1	1	1	1	1.0	0.0
Male	*****	1	28	87	278	1,336	186.3	221.3

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Table 3d. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**9,287**	**1**	**4**	**8**	**16**	**548**	**12.0**	**15.0**
Female	2,539	1	4	8	16	315	12.2	14.9
Male	6,748	1	4	8	16	548	12.0	15.1
Brilliant Blue G Ophthalmic Solution	**1,526**	**1**	**1**	**1**	**1**	**3**	**1.1**	**0.3**
Female	813	1	1	1	1	3	1.1	0.3
Male	713	1	1	1	1	3	1.1	0.3
Lumateperone Tosylate	**40,179**	**1**	**30**	**90**	**210**	**1,669**	**170.5**	**213.2**
Female	24,416	1	30	88	210	1,669	163.1	202.5
Male	15,763	1	30	90	225	1,550	182.1	228.4
Lemborexant	**31,011**	**1**	**30**	**60**	**180**	**1,473**	**149.5**	**207.9**
Female	20,026	1	30	60	177	1,468	148.2	206.8
Male	10,985	1	30	60	180	1,473	151.9	210.0
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**1**	**3**	**6**	**13**	**643**	**10.5**	**22.4**
Female	14,744	1	3	7	13	643	10.9	23.1
Male	1,883	1	2	4	8	313	7.3	15.3
Ubrogepant	**209,902**	**1**	**30**	**60**	**153**	**1,700**	**127.7**	**171.8**
Female	181,327	1	30	60	158	1,700	129.3	172.5
Male	28,575	1	30	60	140	1,575	118.0	167.3

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
Tenapanor	**11,663**	**3,787**	**100.0%**	**3,731**	**100.0%**	**3,661**	**100.0%**	**466**	**100.0%**	**18**	**100.0%**
0-17 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	*****	*****	16	3.4%	*****	*****
25-40 years	1,660	547	14.4%	559	15.0%	*****	*****	48	10.3%	*****	*****
41-64 years	5,746	1,729	45.7%	1,876	50.3%	*****	*****	250	53.6%	*****	*****
≥ 65 years	3,902	1,404	37.1%	1,180	31.6%	*****	*****	152	32.6%	*****	*****
Trifarotene	**33,642**	**19,032**	**100.0%**	**10,970**	**100.0%**	**3,564**	**100.0%**	*****	*****	*****	*****
0-17 years	12,933	6,799	35.7%	4,488	40.9%	1,614	45.3%	*****	*****	*****	*****
18-24 years	9,151	5,350	28.1%	2,945	26.8%	837	23.5%	19	*****	0	0.0%
25-40 years	8,380	5,081	26.7%	2,569	23.4%	717	20.1%	*****	*****	*****	*****
41-64 years	2,971	1,670	8.8%	914	8.3%	375	10.5%	*****	*****	*****	*****
≥ 65 years	207	132	0.7%	54	0.5%	21	0.6%	0	0.0%	0	0.0%
Brolucizumab–dbll	**17,889**	**17,670**	**100.0%**	**191**	**100.0%**	*****	*****	*****	*****	*****	*****
0-17 years	*****	*****	*****	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	0.0%	0	0.0%
25-40 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
41-64 years	343	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
≥ 65 years	17,534	17,319	98.0%	*****	*****	*****	*****	*****	*****	*****	*****
Afamelanotide	**66**	**66**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	19	19	28.8%	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 December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
41-64 years	23	23	34.8%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**128**	**128**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**10,488**	**4,981**	**100.0%**	**2,647**	**100.0%**	**2,298**	**100.0%**	**425**	**100.0%**	**137**	**100.0%**
0-17 years	49	31	0.6%	*****	*****	*****	*****	*****	*****	*****	*****
18-24 years	454	264	5.3%	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	2,562	1,278	25.7%	657	24.8%	517	22.5%	84	19.8%	26	19.0%
41-64 years	5,834	2,540	51.0%	1,507	56.9%	1,420	61.8%	275	64.7%	92	67.2%
≥ 65 years	1,589	868	17.4%	362	13.7%	289	12.6%	53	12.5%	17	12.4%
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**814**	**100.0%**	**1,405**	**100.0%**	**4,924**	**100.0%**	**3,865**	**100.0%**	**3,177**	**100.0%**
0-17 years	5,468	275	33.8%	585	41.6%	2,354	47.8%	1,516	39.2%	738	23.2%
18-24 years	2,841	187	23.0%	283	20.1%	965	19.6%	894	23.1%	512	16.1%
25-40 years	4,213	261	32.1%	398	28.3%	1,195	24.3%	1,093	28.3%	1,266	39.8%
41-64 years	1,303	60	7.4%	110	7.8%	313	6.4%	285	7.4%	535	16.8%
≥ 65 years	360	31	3.8%	29	2.1%	97	2.0%	77	2.0%	126	4.0%
Air Polymer-Type A	**156**	**156**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN

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Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	144	144	92.3%	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
Luspatercept–amt	**9,368**	**8,271**	**100.0%**	**878**	**100.0%**	**157**	**100.0%**	**42**	**100.0%**	**20**	**100.0%**
0-17 years	*****	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	128	110	1.3%	*****	*****	*****	*****	*****	*****	0	0.0%
41-64 years	477	414	5.0%	44	5.0%	*****	*****	*****	*****	0	0.0%
≥ 65 years	8,712	7,701	93.1%	817	93.1%	138	87.9%	36	85.7%	20	100.0%
Zanubrutinib	**11,764**	**1,596**	**100.0%**	**2,211**	**100.0%**	**5,193**	**100.0%**	**2,122**	**100.0%**	**642**	**100.0%**
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	1,042	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	10,710	1,452	91.0%	2,005	90.7%	4,735	91.2%	1,934	91.1%	584	91.0%
Cefiderocol	**2,077**	**1,988**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
0-17 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
18-24 years	*****	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
25-40 years	175	162	8.1%	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	638	600	30.2%	38	*****	0	0.0%	0	NaN	0	NaN
≥ 65 years	1,243	1,207	60.7%	*****	*****	*****	*****	0	NaN	0	NaN

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Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Crizanlizumab-tmca	**2,936**	**2,543**	**100.0%**	**200**	**100.0%**	**140**	**100.0%**	*****	*****	*****	*****
0-17 years	173	149	5.9%	*****	*****	12	8.6%	*****	*****	0	0.0%
18-24 years	584	525	20.6%	*****	*****	29	20.7%	*****	*****	0	0.0%
25-40 years	1,523	1,307	51.4%	113	56.5%	*****	*****	24	*****	*****	*****
41-64 years	610	523	20.6%	48	24.0%	26	18.6%	*****	*****	*****	*****
≥ 65 years	46	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
Givosiran	**221**	**143**	**100.0%**	**37**	**100.0%**	**19**	**100.0%**	*****	*****	*****	*****
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	14	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	74	49	34.3%	*****	*****	*****	*****	*****	*****	*****	*****
41-64 years	108	69	48.3%	20	54.1%	*****	*****	*****	*****	*****	*****
≥ 65 years	25	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
Cenobamate	**16,249**	**2,516**	**100.0%**	**2,998**	**100.0%**	**5,730**	**100.0%**	**2,784**	**100.0%**	**2,221**	**100.0%**
0-17 years	744	107	4.3%	155	5.2%	340	5.9%	104	3.7%	38	1.7%
18-24 years	1,976	277	11.0%	369	12.3%	793	13.8%	351	12.6%	186	8.4%
25-40 years	5,738	761	30.2%	1,032	34.4%	2,094	36.5%	993	35.7%	858	38.6%
41-64 years	6,111	970	38.6%	1,103	36.8%	2,003	35.0%	1,089	39.1%	946	42.6%
≥ 65 years	1,680	401	15.9%	339	11.3%	500	8.7%	247	8.9%	193	8.7%
Voxelotor	**4,447**	**886**	**100.0%**	**1,014**	**100.0%**	**1,762**	**100.0%**	**565**	**100.0%**	**220**	**100.0%**
0-17 years	728	*****	*****	131	12.9%	357	20.3%	116	20.5%	*****	*****
18-24 years	611	147	16.6%	151	14.9%	240	13.6%	55	9.7%	18	8.2%
25-40 years	1,856	404	45.6%	463	45.7%	701	39.8%	200	35.4%	88	40.0%

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Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
41-64 years	1,135	207	23.4%	241	23.8%	420	23.8%	174	30.8%	93	42.3%
≥ 65 years	117	*****	*****	28	2.8%	44	2.5%	20	3.5%	*****	*****
Golodirsen	**89**	**24**	**100.0%**	**22**	**100.0%**	**28**	**100.0%**	*****	*****	*****	*****
0-17 years	71	17	70.8%	*****	*****	22	78.6%	*****	*****	*****	*****
18-24 years	*****	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
25-40 years	*****	*****	*****	0	0.0%	*****	*****	0	0.0%	*****	*****
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
≥ 65 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Enfortumab Vedotin-ejfv	**9,287**	**8,683**	**100.0%**	**576**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
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	25	*****	*****	0	0.0%	*****	*****	0	0.0%	0	NaN
41-64 years	1,024	*****	*****	58	10.1%	*****	*****	0	0.0%	0	NaN
≥ 65 years	8,238	7,696	88.6%	518	89.9%	*****	*****	*****	*****	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,526**	**1,526**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	32	32	2.1%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	595	595	39.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	886	886	58.1%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**40,179**	**11,856**	**100.0%**	**10,153**	**100.0%**	**12,796**	**100.0%**	**4,044**	**100.0%**	**1,330**	**100.0%**

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Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	
	Total Number of 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	Number of Patients	Percent of Total Patients
0-17 years	212	66	0.6%	60	0.6%	62	0.5%	*****	*****	*****	*****
18-24 years	3,215	1,081	9.1%	878	8.6%	945	7.4%	*****	*****	*****	*****
25-40 years	12,752	3,774	31.8%	3,290	32.4%	4,141	32.4%	1,168	28.9%	379	28.5%
41-64 years	19,662	5,563	46.9%	4,820	47.5%	6,323	49.4%	2,189	54.1%	767	57.7%
≥ 65 years	4,338	1,372	11.6%	1,105	10.9%	1,325	10.4%	421	10.4%	115	8.6%
Lemborexant	**31,011**	**12,179**	**100.0%**	**7,123**	**100.0%**	**8,324**	**100.0%**	**2,382**	**100.0%**	**1,003**	**100.0%**
0-17 years	40	15	0.1%	13	0.2%	*****	*****	*****	*****	*****	*****
18-24 years	688	226	1.9%	189	2.7%	*****	*****	*****	*****	*****	*****
25-40 years	4,450	1,616	13.3%	1,096	15.4%	1,320	15.9%	319	13.4%	99	9.9%
41-64 years	13,621	4,790	39.3%	3,216	45.1%	3,930	47.2%	1,190	50.0%	495	49.4%
≥ 65 years	12,212	5,532	45.4%	2,609	36.6%	2,853	34.3%	827	34.7%	391	39.0%
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**15,948**	**100.0%**	**585**	**100.0%**	**77**	**100.0%**	**17**	**100.0%**	**0**	**NaN**
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	*****	*****	*****	18	3.1%	*****	*****	*****	*****	0	NaN
41-64 years	5,553	5,309	33.3%	211	36.1%	*****	*****	*****	*****	0	NaN
≥ 65 years	10,406	9,997	62.7%	356	60.9%	*****	*****	*****	*****	0	NaN
Ubrogepant	**209,902**	**76,514**	**100.0%**	**54,845**	**100.0%**	**61,223**	**100.0%**	**13,778**	**100.0%**	**3,542**	**100.0%**
0-17 years	1,021	439	0.6%	283	0.5%	263	0.4%	*****	*****	*****	*****
18-24 years	11,795	5,139	6.7%	3,213	5.9%	2,953	4.8%	*****	*****	*****	*****
25-40 years	56,646	20,980	27.4%	15,308	27.9%	16,403	26.8%	3,236	23.5%	719	20.3%

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Table 3e. Categorical Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
41-64 years	108,113	35,693	46.6%	28,001	51.1%	33,840	55.3%	8,352	60.6%	2,227	62.9%
≥ 65 years	32,327	14,263	18.6%	8,040	14.7%	7,764	12.7%	1,723	12.5%	537	15.2%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**11,663**	**1**	**30**	**63**	**140**	**835**	**108.5**	**112.9**
0-17 years	*****	13	26	75	132	180	82.1	62.2
18-24 years	*****	3	30	79	150	786	112.6	115.6
25-40 years	1,660	2	30	60	123	810	99.9	100.9
41-64 years	5,746	1	30	74	150	800	113.9	117.9
≥ 65 years	3,902	1	30	60	129	835	103.9	109.5
Trifarotene	**33,642**	**1**	**30**	**30**	**60**	**887**	**56.2**	**49.2**
0-17 years	12,933	1	30	30	60	887	60.0	52.6
18-24 years	9,151	1	30	30	60	660	53.9	45.6
25-40 years	8,380	1	30	30	60	749	52.0	44.3
41-64 years	2,971	1	30	30	60	870	59.2	56.4
≥ 65 years	207	3	30	30	60	349	52.3	46.6
Brolucizumab–dbll	**17,889**	**1**	**1**	**3**	**8**	**732**	**6.4**	**15.0**
0-17 years	*****	1	1	1	1	1	1.0	*****
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	*****	1	2	4	5	10	3.9	2.6
41-64 years	343	1	1	3	6	280	6.7	21.7
≥ 65 years	17,534	1	1	3	8	732	6.4	14.8
Afamelanotide	**66**	**1**	**2**	**6**	**10**	**23**	**6.7**	**5.4**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	2	5	10	15	6.0	5.0
25-40 years	19	1	2	3	7	15	5.2	4.5
41-64 years	23	2	5	7	12	23	9.3	6.0
≥ 65 years	*****	1	2	4	7	19	5.1	4.7

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Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	128	1	1	1	1	2	1.0	0.1
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	*****	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	1	1	1	1	2	1.0	0.1
Lasmiditan	10,488	1	24	38	106	1,571	97.4	150.2
0-17 years	49	1	10	30	60	369	49.7	64.0
18-24 years	454	3	23	30	68	1,252	69.8	112.2
25-40 years	2,562	1	24	31	90	1,571	88.2	143.3
41-64 years	5,834	1	28	48	120	1,393	107.0	156.8
≥ 65 years	1,589	1	16	30	88	1,320	86.5	144.9
Elexacaftor Ivacaftor Tezacaftor	14,185	1	143	364	700	1,915	490.0	437.3
0-17 years	5,468	1	134	256	584	1,908	385.5	346.1
18-24 years	2,841	2	145	364	664	1,880	450.6	376.0
25-40 years	4,213	1	168	444	800	1,915	577.7	489.7
41-64 years	1,303	1	207	581	1,133	1,888	697.5	547.3
≥ 65 years	360	1	151	435	1,011	1,724	611.9	523.8
Air Polymer-Type A	156	1	1	1	1	2	1.0	0.1
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	*****
25-40 years	144	1	1	1	1	2	1.0	0.1
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**9,368**	**1**	**3**	**7**	**16**	**1,470**	**19.4**	**65.2**
0-17 years	*****	1	1	1	6	54	9.3	19.8
18-24 years	*****	1	2	8	18	441	29.4	83.3
25-40 years	128	1	5	9	22	420	19.3	41.1
41-64 years	477	1	3	6	14	714	22.5	63.8
≥ 65 years	8,712	1	3	7	16	1,470	19.2	65.4
Zanubrutinib	**11,764**	**1**	**69**	**164**	**350**	**1,612**	**246.4**	**235.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	120	120	472	823	823	471.5	497.1
25-40 years	*****	10	74	209	390	1,049	287.0	306.7
41-64 years	1,042	1	70	165	360	1,290	241.9	229.7
≥ 65 years	10,710	1	69	163	349	1,612	246.8	235.5
Cefiderocol	**2,077**	**1**	**1**	**1**	**2**	**286**	**5.0**	**12.2**
0-17 years	*****	1	1	1	2	5	2.0	1.7
18-24 years	*****	1	1	1	6	73	9.2	19.6
25-40 years	175	1	1	1	6	210	7.4	19.1
41-64 years	638	1	1	1	4	81	5.7	10.8
≥ 65 years	1,243	1	1	1	2	286	4.2	11.5
Crizanlizumab-tmca	**2,936**	**1**	**3**	**6**	**15**	**1,219**	**30.2**	**92.9**
0-17 years	173	1	2	5	10	572	26.8	74.6
18-24 years	584	1	2	5	11	642	24.2	72.4
25-40 years	1,523	1	3	7	17	1,219	32.5	100.8
41-64 years	610	1	3	7	17	924	32.3	97.7
≥ 65 years	46	1	4	8	22	154	17.3	25.3

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Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**221**	**1**	**4**	**15**	**52**	**1,347**	**103.5**	**238.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	14	1	6	27	90	677	91.8	177.3
25-40 years	74	1	4	14	51	1,155	111.2	247.8
41-64 years	108	1	5	16	49	1,347	101.6	245.5
≥ 65 years	25	1	1	11	48	978	95.4	215.9
Cenobamate	**16,249**	**1**	**60**	**180**	**450**	**1,682**	**319.5**	**342.9**
0-17 years	744	2	58	146	309	1,425	227.8	239.4
18-24 years	1,976	1	70	174	393	1,656	285.3	303.9
25-40 years	5,738	1	71	200	473	1,682	335.7	352.3
41-64 years	6,111	1	60	200	496	1,667	339.3	357.3
≥ 65 years	1,680	1	38	126	383	1,440	273.0	324.7
Voxelotor	**4,447**	**1**	**60**	**120**	**285**	**1,651**	**217.9**	**251.2**
0-17 years	728	1	71	150	309	1,290	214.7	194.8
18-24 years	611	2	34	105	228	1,504	174.7	203.3
25-40 years	1,856	2	60	120	241	1,595	201.3	241.3
41-64 years	1,135	3	60	150	360	1,651	267.6	308.4
≥ 65 years	117	2	60	150	344	1,177	245.4	251.5
Golodirsen	**89**	**1**	**28**	**80**	**272**	**1,336**	**182.2**	**220.5**
0-17 years	71	1	35	74	270	739	165.0	174.3
18-24 years	*****	8	27	131	302	452	167.7	159.9
25-40 years	*****	3	168	572	1,074	1,336	620.8	581.1
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	*****	1	1	1	1	1	1.0	*****

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Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of Cumulative Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**9,287**	**1**	**4**	**8**	**16**	**548**	**12.0**	**15.0**
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	25	1	3	5	13	224	16.0	43.8
41-64 years	1,024	1	4	8	16	168	12.1	13.6
≥ 65 years	8,238	1	4	8	16	548	12.0	15.0
Brilliant Blue G Ophthalmic Solution	**1,526**	**1**	**1**	**1**	**1**	**3**	**1.1**	**0.3**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	2	1.1	0.4
25-40 years	32	1	1	1	1	2	1.2	0.4
41-64 years	595	1	1	1	1	2	1.1	0.2
≥ 65 years	886	1	1	1	1	3	1.1	0.3
Lumateperone Tosylate	**40,179**	**1**	**30**	**90**	**210**	**1,669**	**170.5**	**213.2**
0-17 years	212	7	30	83	180	1,070	153.9	195.0
18-24 years	3,215	1	30	61	180	1,550	141.4	176.4
25-40 years	12,752	1	30	90	210	1,669	163.2	205.5
41-64 years	19,662	1	30	90	240	1,552	182.8	225.4
≥ 65 years	4,338	1	30	80	197	1,467	158.6	200.6
Lemborexant	**31,011**	**1**	**30**	**60**	**180**	**1,473**	**149.5**	**207.9**
0-17 years	40	5	30	58	127	943	119.2	182.6
18-24 years	688	1	30	60	177	1,445	142.2	193.3
25-40 years	4,450	1	30	60	176	1,420	141.1	186.0
41-64 years	13,621	1	30	69	186	1,473	162.3	217.7

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Table 3f. Continuous Summary of Patients' Cumulative Treatment Episode Durations for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

		Distribution of Cumulative Treatment Episode Duration, days						
	Total Number of Patients	**Minimum**	**Q1**	**Median**	**Q3**	**Maximum**	**Mean**	**Standard Deviation**
≥ 65 years	12,212	1	30	60	150	1,411	138.7	204.5
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**1**	**3**	**6**	**13**	**643**	**10.5**	**22.4**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	4	9	16	16	8.7	5.7
25-40 years	*****	1	3	6	12	516	11.0	29.2
41-64 years	5,553	1	3	6	13	643	10.7	25.5
≥ 65 years	10,406	1	3	6	13	550	10.3	19.9
Ubrogepant	**209,902**	**1**	**30**	**60**	**153**	**1,700**	**127.7**	**171.8**
0-17 years	1,021	1	30	49	120	1,368	91.7	121.3
18-24 years	11,795	1	30	48	120	1,365	94.0	123.6
25-40 years	56,646	1	30	60	150	1,625	118.9	158.5
41-64 years	108,113	1	30	66	180	1,700	141.0	183.3
≥ 65 years	32,327	1	30	48	120	1,593	112.3	166.7

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 4a. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Tenapanor	20,145	11,661	57.9%	5,563	27.6%	2,720	13.5%	*****	*****	*****	*****
Trifarotene	56,042	50,507	90.1%	4,817	8.6%	700	1.2%	*****	*****	*****	*****
Brolucizumab–dbll	105,585	105,513	99.9%	54	0.1%	*****	*****	*****	*****	0	0.0%
Afamelanotide	441	441	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	34,868	29,990	86.0%	3,665	10.5%	1,103	3.2%	91	0.3%	19	0.1%
Tezacaftor	73,899	39,494	53.4%	18,147	24.6%	12,868	17.4%	2,237	3.0%	1,153	1.6%
Air Polymer-Type A	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	104,056	103,485	99.5%	358	0.3%	188	0.2%	*****	*****	*****	*****
Zanubrutinib	36,117	18,302	50.7%	10,021	27.7%	6,955	19.3%	712	2.0%	127	0.4%
Cefiderocol	3,025	2,986	98.7%	39	1.3%	0	0.0%	0	0.0%	0	0.0%
Crizanlizumab-tmca	25,731	25,303	98.3%	305	1.2%	*****	*****	*****	*****	0	0.0%
Givosiran	2,479	2,352	94.9%	76	3.1%	*****	*****	*****	*****	*****	*****
Cenobamate	42,902	21,282	49.6%	10,858	25.3%	7,244	16.9%	2,111	4.9%	1,407	3.3%
Voxelotor	16,688	11,273	67.6%	3,631	21.8%	1,574	9.4%	172	1.0%	38	0.2%
Golodirsen	1,849	1,741	94.2%	63	3.4%	*****	*****	*****	*****	0	0.0%
Enfortumab Vedotin-ejfv	106,609	106,569	100.0%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brilliant Blue G Ophthalmic Solution	1,624	1,624	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Table 4a. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Lumateperone Tosylate	90,942	51,467	56.6%	23,568	25.9%	13,425	14.8%	1,995	2.2%	487	0.5%
Lemborexant	82,244	57,833	70.3%	16,615	20.2%	6,661	8.1%	893	1.1%	242	0.3%
Fam-Trastuzumab Deruxtecan-nxki	149,248	149,023	99.8%	165	0.1%	*****	*****	*****	*****	0	0.0%
Ubrogepant	779,021	644,043	82.7%	95,754	12.3%	34,934	4.5%	3,565	0.5%	725	0.1%

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

Table 4b. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	20,145	1	30	30	74	835	62.8	69.0
Trifarotene	56,042	1	30	30	30	857	33.8	20.6
Brolucizumab–dbll	105,585	1	1	1	1	702	1.1	3.4
Afamelanotide	441	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	*****	1	1	1	1	1	1.0	0.0
Lasmiditan	34,868	1	8	28	30	1,363	29.3	46.9
Elexacaftor Ivacaftor Tezacaftor	73,899	1	28	28	84	1,915	94.1	166.5
Air Polymer-Type A	*****	1	1	1	1	1	1.0	0.0
Luspatercept–amt	104,056	1	1	1	1	1,092	1.8	12.9
Zanubrutinib	36,117	1	30	30	90	1,456	80.3	100.7
Cefiderocol	3,025	1	1	1	1	84	3.4	6.6
Crizanlizumab-tmca	25,731	1	1	1	1	584	3.5	15.4
Givosiran	2,479	1	1	1	1	895	9.2	42.1
Cenobamate	42,902	1	30	33	92	1,667	121.0	208.8
Voxelotor	16,688	1	30	30	60	1,651	58.1	81.9
Golodirsen	1,849	1	1	1	1	392	8.8	33.1
Enfortumab Vedotin-ejfv	106,609	1	1	1	1	168	1.0	1.6
Brilliant Blue G Ophthalmic Solution	1,624	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	90,942	1	30	30	82	1,669	75.3	109.4
Lemborexant	82,244	1	30	30	60	1,438	56.4	83.7
Fam-Trastuzumab Deruxtecan-nxki	149,248	1	1	1	1	399	1.2	4.2
Ubrogepant	779,021	1	10	30	30	1,677	34.4	56.9

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

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Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Tenapanor	**20,145**	**11,661**	**100.0%**	**5,563**	**100.0%**	**2,720**	**100.0%**	*****	*****	*****	*****
Female	14,636	8,491	72.8%	4,011	72.1%	1,974	72.6%	*****	*****	*****	*****
Male	5,509	3,170	27.2%	1,552	27.9%	746	27.4%	*****	*****	*****	*****
Trifarotene	**56,042**	**50,507**	**100.0%**	**4,817**	**100.0%**	**700**	**100.0%**	*****	*****	*****	*****
Female	40,422	36,523	72.3%	3,406	70.7%	484	69.1%	*****	*****	*****	*****
Male	15,620	13,984	27.7%	1,411	29.3%	216	30.9%	*****	*****	*****	*****
Brolucizumab–dbll	**105,585**	**105,513**	**100.0%**	**54**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	59,705	59,647	56.5%	*****	*****	*****	*****	*****	*****	0	NaN
Male	45,880	45,866	43.5%	*****	*****	*****	*****	0	0.0%	0	NaN
Afamelanotide	**441**	**441**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	219	219	49.7%	0	NaN	0	NaN	0	NaN	0	NaN
Male	222	222	50.3%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	70	70	*****	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**34,868**	**29,990**	**100.0%**	**3,665**	**100.0%**	**1,103**	**100.0%**	**91**	**100.0%**	**19**	**100.0%**
Female	29,994	25,810	86.1%	3,148	85.9%	943	85.5%	*****	*****	*****	*****
Male	4,874	4,180	13.9%	517	14.1%	160	14.5%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**73,899**	**39,494**	**100.0%**	**18,147**	**100.0%**	**12,868**	**100.0%**	**2,237**	**100.0%**	**1,153**	**100.0%**
Female	36,400	19,455	49.3%	8,963	49.4%	6,331	49.2%	1,092	48.8%	559	48.5%
Male	37,499	20,039	50.7%	9,184	50.6%	6,537	50.8%	1,145	51.2%	594	51.5%

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Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Air Polymer-Type A	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Luspatercept–amt	104,056	103,485	100.0%	358	100.0%	188	100.0%	*****	*****	*****	*****
Female	48,372	48,092	46.5%	190	53.1%	*****	*****	*****	*****	*****	*****
Male	55,684	55,393	53.5%	168	46.9%	*****	*****	*****	*****	*****	*****
Zanubrutinib	36,117	18,302	100.0%	10,021	100.0%	6,955	100.0%	712	100.0%	127	100.0%
Female	14,710	7,608	41.6%	4,069	40.6%	2,700	38.8%	286	40.2%	47	37.0%
Male	21,407	10,694	58.4%	5,952	59.4%	4,255	61.2%	426	59.8%	80	63.0%
Cefiderocol	3,025	2,986	100.0%	39	100.0%	0	NaN	0	NaN	0	NaN
Female	1,320	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	1,705	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	25,731	25,303	100.0%	305	100.0%	*****	*****	*****	*****	0	NaN
Female	15,010	14,739	58.3%	194	63.6%	*****	*****	*****	*****	0	NaN
Male	10,721	10,564	41.7%	111	36.4%	*****	*****	*****	*****	0	NaN
Givosiran	2,479	2,352	100.0%	76	100.0%	*****	*****	*****	*****	*****	*****
Female	2,006	1,902	80.9%	*****	*****	*****	*****	*****	*****	*****	*****
Male	473	450	19.1%	*****	*****	*****	*****	*****	*****	0	0.0%
Cenobamate	42,902	21,282	100.0%	10,858	100.0%	7,244	100.0%	2,111	100.0%	1,407	100.0%
Female	21,646	11,069	52.0%	5,360	49.4%	3,543	48.9%	1,008	47.7%	666	47.3%
Male	21,256	10,213	48.0%	5,498	50.6%	3,701	51.1%	1,103	52.3%	741	52.7%
Voxelotor	16,688	11,273	100.0%	3,631	100.0%	1,574	100.0%	172	100.0%	38	100.0%

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Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	9,741	6,659	59.1%	2,072	57.1%	889	56.5%	99	57.6%	22	57.9%
Male	6,947	4,614	40.9%	1,559	42.9%	685	43.5%	73	42.4%	16	42.1%
Golodirsen	**1,849**	**1,741**	**100.0%**	**63**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
Male	*****	*****	*****	63	100.0%	*****	*****	*****	*****	0	NaN
Enfortumab Vedotin-ejfv	**106,609**	**106,569**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	29,514	29,501	27.7%	*****	*****	*****	*****	0	NaN	0	NaN
Male	77,095	77,068	72.3%	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,624**	**1,624**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	864	864	53.2%	0	NaN	0	NaN	0	NaN	0	NaN
Male	760	760	46.8%	0	NaN	0	NaN	0	NaN	0	NaN
Tosylate	**90,942**	**51,467**	**100.0%**	**23,568**	**100.0%**	**13,425**	**100.0%**	**1,995**	**100.0%**	**487**	**100.0%**
Female	54,371	31,030	60.3%	14,078	59.7%	7,908	58.9%	1,114	55.8%	241	49.5%
Male	36,571	20,437	39.7%	9,490	40.3%	5,517	41.1%	881	44.2%	246	50.5%
Lemborexant	**82,244**	**57,833**	**100.0%**	**16,615**	**100.0%**	**6,661**	**100.0%**	**893**	**100.0%**	**242**	**100.0%**
Female	52,545	36,818	63.7%	10,699	64.4%	4,301	64.6%	575	64.4%	152	62.8%
Male	29,699	21,015	36.3%	5,916	35.6%	2,360	35.4%	318	35.6%	90	37.2%
Fam-Trastuzumab Deruxtecan-nxki	**149,248**	**149,023**	**100.0%**	**165**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	137,545	137,336	92.2%	*****	*****	*****	*****	*****	*****	0	NaN
Male	11,703	11,687	7.8%	*****	*****	*****	*****	0	0.0%	0	NaN

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Table 4c. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Ubrogepant	**779,021**	**644,043**	**100.0%**	**95,754**	**100.0%**	**34,934**	**100.0%**	**3,565**	**100.0%**	**725**	**100.0%**
Female	683,719	565,623	87.8%	83,995	87.7%	30,409	87.0%	3,069	86.1%	623	85.9%
Male	95,302	78,420	12.2%	11,759	12.3%	4,525	13.0%	496	13.9%	102	14.1%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**20,145**	**1**	**30**	**30**	**74**	**835**	**62.8**	**69.0**
Female	14,636	1	30	30	75	760	63.7	70.7
Male	5,509	1	30	30	68	835	60.4	64.4
Trifarotene	**56,042**	**1**	**30**	**30**	**30**	**857**	**33.8**	**20.6**
Female	40,422	1	30	30	30	857	33.6	19.7
Male	15,620	1	30	30	30	749	34.2	22.7
Brolucizumab–dbll	**105,585**	**1**	**1**	**1**	**1**	**702**	**1.1**	**3.4**
Female	59,705	1	1	1	1	702	1.1	4.4
Male	45,880	1	1	1	1	168	1.0	1.5
Afamelanotide	**441**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	219	1	1	1	1	1	1.0	0.0
Male	222	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	*****	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	*****	1	1	1	1	1	1.0	0.0
Male	70	1	1	1	1	1	1.0	0.0
Lasmiditan	**34,868**	**1**	**8**	**28**	**30**	**1,363**	**29.3**	**46.9**
Female	29,994	1	8	28	30	1,363	29.3	46.7
Male	4,874	1	8	25	30	1,200	29.6	47.7
Elexacaftor Ivacaftor Tezacaftor	**73,899**	**1**	**28**	**28**	**84**	**1,915**	**94.1**	**166.5**
Female	36,400	1	28	28	84	1,915	93.6	164.5
Male	37,499	1	28	28	84	1,913	94.6	168.5
Air Polymer-Type A	*****	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	*****	1	1	1	1	1	1.0	*****
Male	*****	1	1	1	1	1	1.0	*****

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Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**104,056**	**1**	**1**	**1**	**1**	**1,092**	**1.8**	**12.9**
Female	48,372	1	1	1	1	937	1.7	10.8
Male	55,684	1	1	1	1	1,092	1.8	14.5
Zanubrutinib	**36,117**	**1**	**30**	**30**	**90**	**1,456**	**80.3**	**100.7**
Female	14,710	1	30	30	90	1,399	78.4	98.8
Male	21,407	1	30	31	90	1,456	81.5	101.9
Cefiderocol	**3,025**	**1**	**1**	**1**	**1**	**84**	**3.4**	**6.6**
Female	1,320	1	1	1	2	52	3.3	5.6
Male	1,705	1	1	1	1	84	3.5	7.3
Crizanlizumab-tmca	**25,731**	**1**	**1**	**1**	**1**	**584**	**3.5**	**15.4**
Female	15,010	1	1	1	1	476	3.6	15.6
Male	10,721	1	1	1	1	584	3.2	15.1
Givosiran	**2,479**	**1**	**1**	**1**	**1**	**895**	**9.2**	**42.1**
Female	2,006	1	1	1	1	895	9.0	41.2
Male	473	1	1	1	1	647	10.1	45.9
Cenobamate	**42,902**	**1**	**30**	**33**	**92**	**1,667**	**121.0**	**208.8**
Female	21,646	1	30	30	90	1,667	116.3	203.2
Male	21,256	1	30	43	106	1,656	125.8	214.3
Voxelotor	**16,688**	**1**	**30**	**30**	**60**	**1,651**	**58.1**	**81.9**
Female	9,741	1	30	30	60	1,565	57.4	80.9
Male	6,947	1	30	30	60	1,651	59.0	83.3
Golodirsen	**1,849**	**1**	**1**	**1**	**1**	**392**	**8.8**	**33.1**
Female	*****	1	1	1	1	1	1.0	0.0
Male	*****	1	1	1	1	392	8.8	33.2

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Table 4d. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**106,609**	**1**	**1**	**1**	**1**	**168**	**1.0**	**1.6**
Female	29,514	1	1	1	1	112	1.1	1.5
Male	77,095	1	1	1	1	168	1.0	1.7
Brilliant Blue G Ophthalmic Solution	**1,624**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	864	1	1	1	1	1	1.0	0.0
Male	760	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**90,942**	**1**	**30**	**30**	**82**	**1,669**	**75.3**	**109.4**
Female	54,371	1	30	30	76	1,669	73.2	103.5
Male	36,571	1	30	30	88	1,539	78.5	117.5
Lemborexant	**82,244**	**1**	**30**	**30**	**60**	**1,438**	**56.4**	**83.7**
Female	52,545	1	30	30	60	1,411	56.5	83.5
Male	29,699	1	30	30	60	1,438	56.2	84.0
Fam-Trastuzumab Deruxtecan-nxki	**149,248**	**1**	**1**	**1**	**1**	**399**	**1.2**	**4.2**
Female	137,545	1	1	1	1	399	1.2	4.2
Male	11,703	1	1	1	1	273	1.2	4.9
Ubrogepant	**779,021**	**1**	**10**	**30**	**30**	**1,677**	**34.4**	**56.9**
Female	683,719	1	10	30	30	1,677	34.3	56.5
Male	95,302	1	10	30	30	1,575	35.4	59.5

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

		Number of Treatment Episodes by Duration									
		1-30 Days		31-90 Days		91-365 Days		366-730 Days		731+ Days	
	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
Tenapanor	20,145	11,661	100.0%	5,563	100.0%	2,720	100.0%	*****	*****	*****	*****
0-17 years	15	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	583	323	2.8%	160	2.9%	*****	*****	*****	*****	0	0.0%
25-40 years	2,807	1,622	13.9%	812	14.6%	358	13.2%	15	*****	0	0.0%
41-64 years	10,178	5,781	49.6%	*****	*****	1,437	52.8%	*****	*****	*****	*****
≥ 65 years	6,562	*****	*****	1,731	31.1%	834	30.7%	71	*****	*****	*****
Trifarotene	56,042	50,507	100.0%	4,817	100.0%	700	100.0%	*****	*****	*****	*****
0-17 years	22,817	20,543	40.7%	1,955	40.6%	*****	*****	*****	*****	*****	*****
18-24 years	14,781	13,314	26.4%	1,309	27.2%	*****	*****	*****	*****	0	0.0%
25-40 years	13,062	11,853	23.5%	1,061	22.0%	*****	*****	*****	*****	*****	*****
41-64 years	5,054	4,501	8.9%	*****	*****	87	12.4%	*****	*****	0	0.0%
≥ 65 years	328	296	0.6%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brolucizumab–dbll	105,585	105,513	100.0%	54	100.0%	*****	*****	*****	*****	0	NaN
0-17 years	*****	*****	*****	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	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
41-64 years	1,579	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	103,962	103,895	98.5%	*****	*****	*****	*****	*****	*****	0	NaN
Afamelanotide	441	441	100.0%	0	NaN	0	NaN	0	NaN	0	NaN
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	54	54	12.2%	0	NaN	0	NaN	0	NaN	0	NaN

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	98	98	22.2%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	213	213	48.3%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	76	76	17.2%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**34,868**	**29,990**	**100.0%**	**3,665**	**100.0%**	**1,103**	**100.0%**	**91**	**100.0%**	**19**	**100.0%**
0-17 years	95	84	0.3%	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	1,008	860	2.9%	109	3.0%	*****	*****	*****	*****	*****	*****
25-40 years	7,493	6,444	21.5%	*****	*****	240	21.8%	19	20.9%	*****	*****
41-64 years	21,188	18,193	60.7%	2,250	61.4%	*****	*****	62	68.1%	*****	*****
≥ 65 years	5,084	4,409	14.7%	513	14.0%	151	13.7%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**73,899**	**39,494**	**100.0%**	**18,147**	**100.0%**	**12,868**	**100.0%**	**2,237**	**100.0%**	**1,153**	**100.0%**
0-17 years	22,342	11,597	29.4%	5,395	29.7%	4,279	33.3%	770	34.4%	301	26.1%
18-24 years	16,358	9,332	23.6%	4,055	22.3%	2,468	19.2%	356	15.9%	147	12.7%
25-40 years	26,440	14,451	36.6%	6,591	36.3%	4,253	33.1%	714	31.9%	431	37.4%
41-64 years	7,271	3,510	8.9%	1,739	9.6%	1,492	11.6%	316	14.1%	214	18.6%

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	1,488	604	1.5%	367	2.0%	376	2.9%	81	3.6%	60	5.2%
Air Polymer-Type A	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
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	145	145	*****	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
Luspatercept–amt	104,056	103,485	100.0%	358	100.0%	188	100.0%	*****	*****	*****	*****
0-17 years	65	65	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	344	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	1,690	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
41-64 years	5,062	5,014	4.8%	29	8.1%	19	10.1%	0	0.0%	0	0.0%
≥ 65 years	96,895	96,390	93.1%	314	87.7%	166	88.3%	*****	*****	*****	*****
Zanubrutinib	36,117	18,302	100.0%	10,021	100.0%	6,955	100.0%	712	100.0%	127	100.0%
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	13	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	43	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
41-64 years	3,096	1,574	8.6%	840	8.4%	608	8.7%	58	8.1%	16	12.6%
≥ 65 years	32,965	16,698	91.2%	9,166	91.5%	6,336	91.1%	654	91.9%	111	87.4%
Cefiderocol	3,025	2,986	100.0%	39	100.0%	0	NaN	0	NaN	0	NaN
0-17 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	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	*****	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	*****	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	990	975	32.7%	15	38.5%	0	NaN	0	NaN	0	NaN
≥ 65 years	1,718	1,700	56.9%	18	46.2%	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**25,731**	**25,303**	**100.0%**	**305**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	1,129	1,104	4.4%	13	4.3%	12	*****	0	0.0%	0	NaN
18-24 years	3,987	*****	*****	*****	*****	11	*****	*****	*****	0	NaN
25-40 years	14,035	13,786	54.5%	180	59.0%	*****	*****	*****	*****	0	NaN
41-64 years	6,014	5,926	23.4%	60	19.7%	*****	*****	*****	*****	0	NaN
≥ 65 years	566	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
Givosiran	**2,479**	**2,352**	**100.0%**	**76**	**100.0%**	**43**	**100.0%**	*****	*****	*****	*****
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	163	*****	*****	*****	*****	0	0.0%	*****	*****	0	0.0%
25-40 years	870	824	35.0%	*****	*****	16	37.2%	*****	*****	0	0.0%
41-64 years	1,162	1,098	46.7%	39	51.3%	*****	*****	0	0.0%	*****	*****
≥ 65 years	284	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
Cenobamate	**42,902**	**21,282**	**100.0%**	**10,858**	**100.0%**	**7,244**	**100.0%**	**2,111**	**100.0%**	**1,407**	**100.0%**
0-17 years	1,640	781	3.7%	438	4.0%	323	4.5%	72	3.4%	26	1.8%
18-24 years	4,999	2,514	11.8%	1,272	11.7%	847	11.7%	240	11.4%	126	9.0%
25-40 years	15,510	7,620	35.8%	3,931	36.2%	2,647	36.5%	763	36.1%	549	39.0%
41-64 years	16,564	8,186	38.5%	4,183	38.5%	2,762	38.1%	831	39.4%	602	42.8%

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	4,189	2,181	10.2%	1,034	9.5%	665	9.2%	205	9.7%	104	7.4%
Voxelotor	**16,688**	**11,273**	**100.0%**	**3,631**	**100.0%**	**1,574**	**100.0%**	**172**	**100.0%**	**38**	**100.0%**
0-17 years	2,471	1,531	13.6%	593	16.3%	314	19.9%	*****	*****	*****	*****
18-24 years	1,993	1,419	12.6%	391	10.8%	*****	*****	*****	*****	*****	*****
25-40 years	6,954	4,875	43.2%	1,487	41.0%	524	33.3%	53	30.8%	15	39.5%
41-64 years	4,802	3,130	27.8%	1,069	29.4%	519	33.0%	66	38.4%	18	47.4%
≥ 65 years	468	318	2.8%	91	2.5%	*****	*****	*****	*****	*****	*****
Golodirsen	**1,849**	**1,741**	**100.0%**	**63**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	1,652	1,574	90.4%	44	69.8%	*****	*****	*****	*****	0	NaN
18-24 years	163	148	8.5%	*****	*****	*****	*****	0	0.0%	0	NaN
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
≥ 65 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
Enfortumab Vedotin-ejfv	**106,609**	**106,569**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
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	182	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
41-64 years	11,593	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	94,834	94,801	89.0%	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,624**	**1,624**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

| | | Number of Treatment Episodes by Duration | | | | | | | | | |
| | | 1-30 Days | | 31-90 Days | | 91-365 Days | | 366-730 Days | | 731+ Days | |
	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
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	37	37	2.3%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	627	627	38.6%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	946	946	58.3%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**90,942**	**51,467**	**100.0%**	**23,568**	**100.0%**	**13,425**	**100.0%**	**1,995**	**100.0%**	**487**	**100.0%**
0-17 years	413	215	0.4%	124	0.5%	63	0.5%	*****	*****	*****	*****
18-24 years	6,619	3,897	7.6%	1,697	7.2%	890	6.6%	*****	*****	*****	*****
25-40 years	28,558	16,392	31.8%	7,401	31.4%	4,071	30.3%	553	27.7%	141	29.0%
41-64 years	46,089	25,723	50.0%	12,003	50.9%	6,960	51.8%	1,117	56.0%	286	58.7%
≥ 65 years	9,263	5,240	10.2%	2,343	9.9%	1,441	10.7%	197	9.9%	42	8.6%
Lemborexant	**82,244**	**57,833**	**100.0%**	**16,615**	**100.0%**	**6,661**	**100.0%**	**893**	**100.0%**	**242**	**100.0%**
0-17 years	98	67	0.1%	*****	*****	*****	*****	*****	*****	0	0.0%
18-24 years	1,767	1,243	2.1%	*****	*****	*****	*****	19	2.1%	*****	*****
25-40 years	11,960	8,546	14.8%	2,394	14.4%	893	13.4%	*****	*****	*****	*****
41-64 years	38,335	26,527	45.9%	8,031	48.3%	3,207	48.1%	436	48.8%	134	55.4%
≥ 65 years	30,084	21,450	37.1%	5,805	34.9%	2,417	36.3%	333	37.3%	79	32.6%
Fam-Trastuzumab Deruxtecan-nxki	**149,248**	**149,023**	**100.0%**	**165**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	61	61	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN

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Table 4e. Categorical Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	5,484	5,466	3.7%	*****	*****	*****	*****	0	0.0%	0	NaN
41-64 years	50,415	50,341	33.8%	51	30.9%	*****	*****	*****	*****	0	NaN
≥ 65 years	93,288	93,155	62.5%	*****	*****	32	*****	*****	*****	0	NaN
Ubrogepant	**779,021**	**644,043**	**100.0%**	**95,754**	**100.0%**	**34,934**	**100.0%**	**3,565**	**100.0%**	**725**	**100.0%**
0-17 years	2,982	2,495	0.4%	372	0.4%	*****	*****	*****	*****	*****	*****
18-24 years	34,262	28,760	4.5%	4,105	4.3%	*****	*****	*****	*****	*****	*****
25-40 years	201,022	167,276	26.0%	24,218	25.3%	8,581	24.6%	816	22.9%	131	18.1%
41-64 years	435,363	357,651	55.5%	54,689	57.1%	20,440	58.5%	2,143	60.1%	440	60.7%
≥ 65 years	105,392	87,861	13.6%	12,370	12.9%	4,516	12.9%	502	14.1%	143	19.7%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**20,145**	**1**	**30**	**30**	**74**	**835**	**62.8**	**69.0**
0-17 years	15	5	23	30	60	150	43.8	36.8
18-24 years	583	1	30	30	90	545	67.0	73.5
25-40 years	2,807	2	30	30	63	630	59.1	58.3
41-64 years	10,178	1	30	30	78	760	64.3	71.1
≥ 65 years	6,562	1	30	30	68	835	61.8	69.5
Trifarotene	**56,042**	**1**	**30**	**30**	**30**	**857**	**33.8**	**20.6**
0-17 years	22,817	1	30	30	30	857	34.0	21.5
18-24 years	14,781	1	30	30	30	377	33.4	17.2
25-40 years	13,062	1	30	30	30	749	33.3	20.4
41-64 years	5,054	1	30	30	30	630	34.8	25.2
≥ 65 years	328	3	30	30	30	270	33.0	20.0
Brolucizumab–dbll	**105,585**	**1**	**1**	**1**	**1**	**702**	**1.1**	**3.4**
0-17 years	*****	1	1	1	1	1	1.0	*****
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	*****	1	1	1	1	1	1.0	*****
41-64 years	1,579	1	1	1	1	168	1.5	5.6
≥ 65 years	103,962	1	1	1	1	702	1.1	3.4
Afamelanotide	**441**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	54	1	1	1	1	1	1.0	0.0
25-40 years	98	1	1	1	1	1	1.0	0.0
41-64 years	213	1	1	1	1	1	1.0	0.0
≥ 65 years	76	1	1	1	1	1	1.0	0.0

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Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	*****	1	1	1	1	1	1.0	0.0
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	*****	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	1	1	1	1	1	1.0	0.0
Lasmiditan	**34,868**	**1**	**8**	**28**	**30**	**1,363**	**29.3**	**46.9**
0-17 years	95	1	8	25	30	301	25.6	32.4
18-24 years	1,008	2	8	30	30	1,252	31.4	51.7
25-40 years	7,493	1	8	28	30	1,290	30.1	50.9
41-64 years	21,188	1	8	28	30	1,363	29.5	45.7
≥ 65 years	5,084	1	8	16	30	1,200	27.0	44.3
Elexacaftor Ivacaftor Tezacaftor	**73,899**	**1**	**28**	**28**	**84**	**1,915**	**94.1**	**166.5**
0-17 years	22,342	1	28	28	84	1,908	94.4	152.3
18-24 years	16,358	1	28	28	84	1,814	78.3	130.9
25-40 years	26,440	1	28	28	84	1,915	92.1	170.4
41-64 years	7,271	1	28	56	112	1,808	125.0	228.0
≥ 65 years	1,488	1	28	56	146	1,724	148.0	245.0
Air Polymer-Type A	*****	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	*****
25-40 years	145	1	1	1	1	1	1.0	0.0
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**104,056**	**1**	**1**	**1**	**1**	**1,092**	**1.8**	**12.9**
0-17 years	65	1	1	1	1	1	1.0	0.0
18-24 years	344	1	1	1	1	189	3.8	14.4
25-40 years	1,690	1	1	1	1	315	1.5	8.4
41-64 years	5,062	1	1	1	1	315	2.1	11.3
≥ 65 years	96,895	1	1	1	1	1,092	1.7	13.0
Zanubrutinib	**36,117**	**1**	**30**	**30**	**90**	**1,456**	**80.3**	**100.7**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	13	30	30	60	90	165	72.5	49.8
25-40 years	43	10	30	30	90	300	66.7	60.6
41-64 years	3,096	1	30	30	90	1,290	81.4	106.3
≥ 65 years	32,965	1	30	30	90	1,456	80.2	100.2
Cefiderocol	**3,025**	**1**	**1**	**1**	**1**	**84**	**3.4**	**6.6**
0-17 years	*****	1	1	1	1	2	1.1	0.3
18-24 years	*****	1	1	1	7	52	5.7	11.0
25-40 years	*****	1	1	1	5	84	4.6	9.3
41-64 years	990	1	1	1	2	81	3.7	6.8
≥ 65 years	1,718	1	1	1	1	62	3.1	5.8
Crizanlizumab-tmca	**25,731**	**1**	**1**	**1**	**1**	**584**	**3.5**	**15.4**
0-17 years	1,129	1	1	1	1	278	4.1	17.2
18-24 years	3,987	1	1	1	1	584	3.5	17.0
25-40 years	14,035	1	1	1	1	448	3.5	14.8
41-64 years	6,014	1	1	1	1	476	3.3	15.8
≥ 65 years	566	1	1	1	1	126	1.4	5.9

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Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**2,479**	**1**	**1**	**1**	**1**	**895**	**9.2**	**42.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	163	1	1	1	1	647	7.9	51.6
25-40 years	870	1	1	1	1	480	9.5	37.1
41-64 years	1,162	1	1	1	1	895	9.4	43.3
≥ 65 years	284	1	1	1	1	510	8.4	45.6
Cenobamate	**42,902**	**1**	**30**	**33**	**92**	**1,667**	**121.0**	**208.8**
0-17 years	1,640	1	28	42	100	1,403	103.4	159.6
18-24 years	4,999	1	30	30	90	1,656	112.8	194.3
25-40 years	15,510	1	30	38	99	1,667	124.2	215.3
41-64 years	16,564	1	30	34	97	1,555	125.2	216.2
≥ 65 years	4,189	1	28	30	90	1,380	109.5	186.2
Voxelotor	**16,688**	**1**	**30**	**30**	**60**	**1,651**	**58.1**	**81.9**
0-17 years	2,471	1	30	30	60	840	63.3	77.7
18-24 years	1,993	1	30	30	60	1,504	53.6	74.1
25-40 years	6,954	1	30	30	60	1,565	53.7	74.9
41-64 years	4,802	2	30	30	60	1,651	63.3	95.1
≥ 65 years	468	1	30	30	60	1,110	61.4	85.1
Golodirsen	**1,849**	**1**	**1**	**1**	**1**	**392**	**8.8**	**33.1**
0-17 years	1,652	1	1	1	1	392	7.1	29.1
18-24 years	163	1	1	1	1	280	12.3	35.5
25-40 years	*****	1	28	28	84	364	77.6	92.9
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	*****	1	1	1	1	1	1.0	*****

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Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	106,609	1	1	1	1	168	1.0	1.6
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	182	1	1	1	1	56	2.2	6.9
41-64 years	11,593	1	1	1	1	168	1.1	2.2
≥ 65 years	94,834	1	1	1	1	140	1.0	1.5
Brilliant Blue G Ophthalmic Solution	1,624	1	1	1	1	1	1.0	0.0
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	1	1.0	0.0
25-40 years	37	1	1	1	1	1	1.0	0.0
41-64 years	627	1	1	1	1	1	1.0	0.0
≥ 65 years	946	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	90,942	1	30	30	82	1,669	75.3	109.4
0-17 years	413	4	30	30	90	768	79.0	97.8
18-24 years	6,619	1	30	30	60	1,140	68.7	91.5
25-40 years	28,558	1	30	30	70	1,669	72.9	106.2
41-64 years	46,089	1	30	30	90	1,539	78.0	114.3
≥ 65 years	9,263	1	30	30	83	1,467	74.3	105.7
Lemborexant	82,244	1	30	30	60	1,438	56.4	83.7
0-17 years	98	5	30	30	60	540	48.6	58.1
18-24 years	1,767	1	30	30	60	1,365	55.4	88.4
25-40 years	11,960	1	30	30	60	1,420	52.5	73.5
41-64 years	38,335	1	30	30	60	1,438	57.7	86.4

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Table 4f. Continuous Summary of All Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	30,084	1	30	30	60	1,411	56.3	83.7
Fam-Trastuzumab Deruxtecan-nxki	**149,248**	**1**	**1**	**1**	**1**	**399**	**1.2**	**4.2**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	61	1	1	1	1	1	1.0	0.0
25-40 years	5,484	1	1	1	1	210	1.3	5.2
41-64 years	50,415	1	1	1	1	399	1.2	4.8
≥ 65 years	93,288	1	1	1	1	399	1.2	3.8
Ubrogepant	**779,021**	**1**	**10**	**30**	**30**	**1,677**	**34.4**	**56.9**
0-17 years	2,982	1	10	30	30	1,094	31.4	42.8
18-24 years	34,262	1	10	30	30	1,047	32.4	44.8
25-40 years	201,022	1	10	30	30	1,563	33.5	52.7
41-64 years	435,363	1	10	30	30	1,677	35.0	58.9
≥ 65 years	105,392	1	10	30	30	1,593	34.5	60.1

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

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Table 5a. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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	
	Total Number of 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	Number of Patients	Percent of Total Patients
Tenapanor	11,663	6,392	54.8%	3,320	28.5%	1,799	15.4%	*****	*****	*****	*****
Trifarotene	33,642	30,277	90.0%	2,913	8.7%	*****	*****	*****	*****	*****	*****
Brolucizumab–dbll	17,889	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
Afamelanotide	66	66	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	128	128	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	10,488	8,886	84.7%	1,184	11.3%	375	3.6%	32	0.3%	11	0.1%
Tezacaftor	14,185	5,324	37.5%	3,163	22.3%	3,914	27.6%	1,028	7.2%	756	5.3%
Air Polymer-Type A	156	156	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	9,368	9,208	98.3%	89	1.0%	59	0.6%	*****	*****	*****	*****
Zanubrutinib	11,764	5,313	45.2%	3,012	25.6%	2,940	25.0%	418	3.6%	81	0.7%
Cefiderocol	2,077	2,055	98.9%	22	1.1%	0	0.0%	0	0.0%	0	0.0%
Crizanlizumab-tmca	2,936	2,877	98.0%	38	1.3%	21	0.7%	0	0.0%	0	0.0%
Givosiran	221	200	90.5%	*****	*****	*****	*****	*****	*****	0	0.0%
Cenobamate	16,249	7,838	48.2%	4,104	25.3%	2,679	16.5%	912	5.6%	716	4.4%
Voxelotor	4,447	2,795	62.9%	1,006	22.6%	541	12.2%	83	1.9%	22	0.5%
Golodirsen	89	67	75.3%	*****	*****	*****	*****	0	0.0%	0	0.0%
Enfortumab Vedotin-ejfv	9,287	9,271	99.8%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brilliant Blue G Ophthalmic Solution	1,526	1,526	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Table 5a. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Lumateperone Tosylate	40,179	23,003	57.3%	9,741	24.2%	6,105	15.2%	1,033	2.6%	297	0.7%
Lemborexant	31,011	22,465	72.4%	5,413	17.5%	2,568	8.3%	412	1.3%	153	0.5%
Deruxtecan-nxki	16,627	16,563	99.6%	42	0.3%	*****	*****	*****	*****	0	0.0%
Ubrogepant	209,902	168,940	80.5%	27,577	13.1%	11,675	5.6%	1,422	0.7%	288	0.1%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 5b. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	11,663	1	30	30	90	835	67.8	75.6
Trifarotene	33,642	1	30	30	30	749	34.0	21.0
Brolucizumab–dbll	17,889	1	1	1	1	60	1.1	1.5
Afamelanotide	66	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	128	1	1	1	1	1	1.0	0.0
Lasmiditan	10,488	1	8	30	30	1,290	32.3	52.1
Elexacaftor Ivacaftor Tezacaftor	14,185	1	28	56	173	1,915	174.0	275.2
Air Polymer-Type A	156	1	1	1	1	1	1.0	0.0
Luspatercept–amt	9,368	1	1	1	1	1,092	3.8	28.8
Zanubrutinib	11,764	1	30	60	120	1,456	99.9	126.4
Cefiderocol	2,077	1	1	1	1	81	2.6	5.6
Crizanlizumab-tmca	2,936	1	1	1	1	322	4.2	16.3
Givosiran	221	1	1	1	1	480	15.5	43.6
Cenobamate	16,249	1	28	42	112	1,667	136.2	238.3
Voxelotor	4,447	1	30	30	60	1,651	70.3	111.0
Golodirsen	89	1	1	7	30	332	40.1	70.5
Enfortumab Vedotin-ejfv	9,287	1	1	1	1	168	1.2	3.8
Brilliant Blue G Ophthalmic Solution	1,526	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	40,179	1	30	30	84	1,669	79.5	121.6
Lemborexant	31,011	1	30	30	60	1,438	58.3	97.5
Fam-Trastuzumab Deruxtecan-nxki	16,627	1	1	1	1	399	1.4	7.1
Ubrogepant	209,902	1	10	30	30	1,677	39.2	66.2

Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Tenapanor	**11,663**	**6,392**	**100.0%**	**3,320**	**100.0%**	**1,799**	**100.0%**	*****	*****	*****	*****
Female	8,123	4,426	69.2%	2,311	69.6%	1,264	70.3%	*****	*****	*****	*****
Male	3,540	1,966	30.8%	1,009	30.4%	535	29.7%	*****	*****	*****	*****
Trifarotene	**33,642**	**30,277**	**100.0%**	**2,913**	**100.0%**	*****	*****	*****	*****	*****	*****
Female	24,645	22,229	73.4%	2,098	72.0%	*****	*****	*****	*****	0	0.0%
Male	8,997	8,048	26.6%	815	28.0%	*****	*****	*****	*****	*****	*****
Brolucizumab–dbll	**17,889**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	10,491	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	7,398	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Afamelanotide	**66**	**66**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	33	33	50.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	33	33	50.0%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**128**	**128**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	58	58	45.3%	0	NaN	0	NaN	0	NaN	0	NaN
Male	70	70	54.7%	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**10,488**	**8,886**	**100.0%**	**1,184**	**100.0%**	**375**	**100.0%**	**32**	**100.0%**	**11**	**100.0%**
Female	8,985	7,614	85.7%	1,007	85.1%	*****	*****	*****	*****	11	100.0%
Male	1,503	1,272	14.3%	177	14.9%	*****	*****	*****	*****	0	0.0%
Tezacaftor	**14,185**	**5,324**	**100.0%**	**3,163**	**100.0%**	**3,914**	**100.0%**	**1,028**	**100.0%**	**756**	**100.0%**
Female	6,978	2,615	49.1%	1,552	49.1%	1,942	49.6%	510	49.6%	359	47.5%
Male	7,207	2,709	50.9%	1,611	50.9%	1,972	50.4%	518	50.4%	397	52.5%
Air Polymer-Type A	**156**	**156**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**

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Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Luspatercept–amt	**9,368**	**9,208**	**100.0%**	**89**	**100.0%**	**59**	**100.0%**	*****	*****	*****	*****
Female	4,124	4,060	44.1%	44	49.4%	*****	*****	0	0.0%	*****	*****
Male	5,244	5,148	55.9%	45	50.6%	*****	*****	*****	*****	*****	*****
Zanubrutinib	**11,764**	**5,313**	**100.0%**	**3,012**	**100.0%**	**2,940**	**100.0%**	**418**	**100.0%**	**81**	**100.0%**
Female	4,755	2,173	40.9%	1,250	41.5%	1,140	38.8%	161	38.5%	31	38.3%
Male	7,009	3,140	59.1%	1,762	58.5%	1,800	61.2%	257	61.5%	50	61.7%
Cefiderocol	**2,077**	**2,055**	**100.0%**	**22**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	902	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	1,175	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**2,936**	**2,877**	**100.0%**	**38**	**100.0%**	**21**	**100.0%**	**0**	**NaN**	**0**	**NaN**
Female	1,744	1,709	59.4%	*****	*****	*****	*****	0	NaN	0	NaN
Male	1,192	1,168	40.6%	*****	*****	*****	*****	0	NaN	0	NaN
Givosiran	**221**	**200**	**100.0%**	*****	*****	*****	*****	*****	*****	**0**	**NaN**
Female	170	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
Male	51	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
Cenobamate	**16,249**	**7,838**	**100.0%**	**4,104**	**100.0%**	**2,679**	**100.0%**	**912**	**100.0%**	**716**	**100.0%**
Female	8,176	4,052	51.7%	2,038	49.7%	1,324	49.4%	441	48.4%	321	44.8%
Male	8,073	3,786	48.3%	2,066	50.3%	1,355	50.6%	471	51.6%	395	55.2%
Voxelotor	**4,447**	**2,795**	**100.0%**	**1,006**	**100.0%**	**541**	**100.0%**	**83**	**100.0%**	**22**	**100.0%**
Female	2,601	1,652	59.1%	583	58.0%	310	57.3%	*****	*****	*****	*****

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Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	1,846	1,143	40.9%	423	42.0%	231	42.7%	*****	*****	*****	*****
Golodirsen	**89**	**67**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
Male	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
Enfortumab Vedotin-ejfv	**9,287**	**9,271**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	2,539	*****	*****	*****	*****	0	0.0%	0	NaN	0	NaN
Male	6,748	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**1,526**	**1,526**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	813	813	53.3%	0	NaN	0	NaN	0	NaN	0	NaN
Male	713	713	46.7%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**40,179**	**23,003**	**100.0%**	**9,741**	**100.0%**	**6,105**	**100.0%**	**1,033**	**100.0%**	**297**	**100.0%**
Female	24,416	14,220	61.8%	5,865	60.2%	3,579	58.6%	604	58.5%	148	49.8%
Male	15,763	8,783	38.2%	3,876	39.8%	2,526	41.4%	429	41.5%	149	50.2%
Lemborexant	**31,011**	**22,465**	**100.0%**	**5,413**	**100.0%**	**2,568**	**100.0%**	**412**	**100.0%**	**153**	**100.0%**
Female	20,026	14,523	64.6%	3,517	65.0%	1,642	63.9%	243	59.0%	101	66.0%
Male	10,985	7,942	35.4%	1,896	35.0%	926	36.1%	169	41.0%	52	34.0%
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**16,563**	**100.0%**	**42**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	14,744	14,689	88.7%	*****	*****	*****	*****	*****	*****	0	NaN
Male	1,883	1,874	11.3%	*****	*****	*****	*****	0	0.0%	0	NaN
Ubrogepant	**209,902**	**168,940**	**100.0%**	**27,577**	**100.0%**	**11,675**	**100.0%**	**1,422**	**100.0%**	**288**	**100.0%**

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Table 5c. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	181,327	146,011	86.4%	23,792	86.3%	10,072	86.3%	1,208	85.0%	244	84.7%
Male	28,575	22,929	13.6%	3,785	13.7%	1,603	13.7%	214	15.0%	44	15.3%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**11,663**	**1**	**30**	**30**	**90**	**835**	**67.8**	**75.6**
Female	8,123	1	30	30	90	751	69.7	78.6
Male	3,540	1	30	30	88	835	63.6	67.8
Trifarotene	**33,642**	**1**	**30**	**30**	**30**	**749**	**34.0**	**21.0**
Female	24,645	1	30	30	30	600	33.8	19.9
Male	8,997	1	30	30	30	749	34.5	23.6
Brolucizumab–dbll	**17,889**	**1**	**1**	**1**	**1**	**60**	**1.1**	**1.5**
Female	10,491	1	1	1	1	56	1.1	1.5
Male	7,398	1	1	1	1	60	1.1	1.4
Afamelanotide	**66**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	33	1	1	1	1	1	1.0	0.0
Male	33	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	**128**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	58	1	1	1	1	1	1.0	0.0
Male	70	1	1	1	1	1	1.0	0.0
Lasmiditan	**10,488**	**1**	**8**	**30**	**30**	**1,290**	**32.3**	**52.1**
Female	8,985	1	8	30	30	1,290	32.5	53.6
Male	1,503	1	8	30	30	650	30.7	41.4
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**1**	**28**	**56**	**173**	**1,915**	**174.0**	**275.2**
Female	6,978	1	28	56	176	1,915	172.2	269.2
Male	7,207	1	28	56	172	1,913	175.7	280.9
Air Polymer-Type A	**156**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	*****	1	1	1	1	1	1.0	*****
Male	*****	1	1	1	1	1	1.0	*****

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Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**9,368**	**1**	**1**	**1**	**1**	**1,092**	**3.8**	**28.8**
Female	4,124	1	1	1	1	937	3.0	20.2
Male	5,244	1	1	1	1	1,092	4.3	34.1
Zanubrutinib	**11,764**	**1**	**30**	**60**	**120**	**1,456**	**99.9**	**126.4**
Female	4,755	1	30	60	120	1,399	97.1	123.4
Male	7,009	1	30	60	120	1,456	101.8	128.3
Cefiderocol	**2,077**	**1**	**1**	**1**	**1**	**81**	**2.6**	**5.6**
Female	902	1	1	1	1	52	2.4	4.9
Male	1,175	1	1	1	1	81	2.7	6.1
Crizanlizumab-tmca	**2,936**	**1**	**1**	**1**	**1**	**322**	**4.2**	**16.3**
Female	1,744	1	1	1	1	210	4.0	13.1
Male	1,192	1	1	1	1	322	4.5	20.0
Givosiran	**221**	**1**	**1**	**1**	**1**	**480**	**15.5**	**43.6**
Female	170	1	1	1	1	210	13.1	30.4
Male	51	1	1	1	28	480	23.5	71.7
Cenobamate	**16,249**	**1**	**28**	**42**	**112**	**1,667**	**136.2**	**238.3**
Female	8,176	1	28	35	99	1,667	129.1	228.4
Male	8,073	1	28	53	114	1,656	143.3	247.8
Voxelotor	**4,447**	**1**	**30**	**30**	**60**	**1,651**	**70.3**	**111.0**
Female	2,601	1	30	30	60	1,440	68.4	105.5
Male	1,846	1	30	30	60	1,651	73.1	118.3
Golodirsen	**89**	**1**	**1**	**7**	**30**	**332**	**40.1**	**70.5**
Female	*****	1	1	1	1	1	1.0	0.0
Male	*****	1	1	7	35	332	41.0	71.1

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Table 5d. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**9,287**	**1**	**1**	**1**	**1**	**168**	**1.2**	**3.8**
Female	2,539	1	1	1	1	84	1.2	2.9
Male	6,748	1	1	1	1	168	1.2	4.1
Brilliant Blue G Ophthalmic Solution	**1,526**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	813	1	1	1	1	1	1.0	0.0
Male	713	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**40,179**	**1**	**30**	**30**	**84**	**1,669**	**79.5**	**121.6**
Female	24,416	1	30	30	74	1,669	76.5	114.3
Male	15,763	1	30	30	90	1,539	84.1	131.8
Lemborexant	**31,011**	**1**	**30**	**30**	**60**	**1,438**	**58.3**	**97.5**
Female	20,026	1	30	30	60	1,411	57.8	97.1
Male	10,985	1	30	30	60	1,438	59.3	98.2
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**1**	**1**	**1**	**1**	**399**	**1.4**	**7.1**
Female	14,744	1	1	1	1	399	1.4	7.2
Male	1,883	1	1	1	1	147	1.5	6.1
Ubrogepant	**209,902**	**1**	**10**	**30**	**30**	**1,677**	**39.2**	**66.2**
Female	181,327	1	10	30	30	1,677	39.1	65.9
Male	28,575	1	10	30	30	1,575	40.1	68.4

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
Tenapanor	11,663	6,392	100.0%	3,320	100.0%	1,799	100.0%	*****	*****	*****	*****
0-17 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	*****	*****	*****	*****	*****	67	3.7%	*****	*****	0	0.0%
25-40 years	1,660	879	13.8%	519	15.6%	250	13.9%	12	*****	0	0.0%
41-64 years	5,746	3,066	48.0%	1,658	49.9%	*****	*****	78	*****	*****	*****
≥ 65 years	3,902	2,262	35.4%	1,047	31.5%	538	29.9%	*****	*****	*****	*****
Trifarotene	33,642	30,277	100.0%	2,913	100.0%	*****	*****	*****	*****	*****	*****
0-17 years	12,933	11,616	38.4%	*****	*****	180	*****	*****	*****	0	0.0%
18-24 years	9,151	8,225	27.2%	824	28.3%	*****	*****	*****	*****	0	0.0%
25-40 years	8,380	7,605	25.1%	674	23.1%	98	*****	*****	*****	*****	*****
41-64 years	2,971	2,645	8.7%	263	9.0%	*****	*****	*****	*****	0	0.0%
≥ 65 years	207	186	0.6%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brolucizumab–dbll	17,889	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
0-17 years	*****	*****	*****	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	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN
41-64 years	343	343	*****	0	0.0%	0	NaN	0	NaN	0	NaN
≥ 65 years	17,534	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Afamelanotide	66	66	100.0%	0	NaN	0	NaN	0	NaN	0	NaN
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

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| | | Number of Patients by First Treatment Episode Duration | | | | | | | | |
| | | 1-30 Days | | 31-90 Days | | 91-365 Days | | 366-730 Days | | 731+ Days | |
	Total Number of 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	Number of Patients	Percent of Total Patients
25-40 years	19	19	28.8%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	23	23	34.8%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	**128**	**128**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**10,488**	**8,886**	**100.0%**	**1,184**	**100.0%**	**375**	**100.0%**	**32**	**100.0%**	**11**	**100.0%**
0-17 years	49	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
18-24 years	454	*****	*****	47	4.0%	14	3.7%	*****	*****	*****	*****
25-40 years	2,562	2,174	24.5%	286	24.2%	*****	*****	*****	*****	*****	*****
41-64 years	5,834	4,895	55.1%	*****	*****	227	60.5%	23	71.9%	*****	*****
≥ 65 years	1,589	1,383	15.6%	160	13.5%	*****	*****	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**5,324**	**100.0%**	**3,163**	**100.0%**	**3,914**	**100.0%**	**1,028**	**100.0%**	**756**	**100.0%**
0-17 years	5,468	1,917	36.0%	1,168	36.9%	1,750	44.7%	417	40.6%	216	28.6%
18-24 years	2,841	1,225	23.0%	680	21.5%	663	16.9%	163	15.9%	110	14.6%
25-40 years	4,213	1,643	30.9%	971	30.7%	1,067	27.3%	276	26.8%	256	33.9%
41-64 years	1,303	423	7.9%	275	8.7%	330	8.4%	135	13.1%	140	18.5%

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Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
≥ 65 years	360	116	2.2%	69	2.2%	104	2.7%	37	3.6%	34	4.5%
Air Polymer-Type A	**156**	**156**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	144	144	92.3%	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
Luspatercept–amt	**9,368**	**9,208**	**100.0%**	**89**	**100.0%**	**59**	**100.0%**	*****	*****	*****	*****
0-17 years	*****	*****	*****	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%	0	0.0%
41-64 years	477	466	5.1%	*****	*****	*****	*****	0	0.0%	0	0.0%
≥ 65 years	8,712	8,565	93.0%	*****	*****	*****	*****	*****	*****	*****	*****
Zanubrutinib	**11,764**	**5,313**	**100.0%**	**3,012**	**100.0%**	**2,940**	**100.0%**	**418**	**100.0%**	**81**	**100.0%**
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%
41-64 years	1,042	452	8.5%	*****	*****	*****	*****	38	9.1%	13	16.0%
≥ 65 years	10,710	4,856	91.4%	2,738	90.9%	2,668	90.7%	380	90.9%	68	84.0%
Cefiderocol	**2,077**	**2,055**	**100.0%**	**22**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	*****	*****	*****	0	0.0%	0	NaN	0	NaN	0	NaN

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Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
18-24 years	*****	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
25-40 years	175	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	638	626	30.5%	*****	*****	0	NaN	0	NaN	0	NaN
≥ 65 years	1,243	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**2,936**	**2,877**	**100.0%**	**38**	**100.0%**	**21**	**100.0%**	**0**	**NaN**	**0**	**NaN**
0-17 years	173	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	584	572	19.9%	*****	*****	*****	*****	0	NaN	0	NaN
25-40 years	1,523	*****	*****	22	57.9%	*****	*****	0	NaN	0	NaN
41-64 years	610	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	46	*****	*****	0	0.0%	*****	*****	0	NaN	0	NaN
Givosiran	**221**	**200**	**100.0%**	*****	*****	*****	*****	*****	*****	**0**	**NaN**
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	14	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
25-40 years	74	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
41-64 years	108	97	48.5%	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	25	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
Cenobamate	**16,249**	**7,838**	**100.0%**	**4,104**	**100.0%**	**2,679**	**100.0%**	**912**	**100.0%**	**716**	**100.0%**
0-17 years	744	314	4.0%	205	5.0%	164	6.1%	42	4.6%	19	2.7%
18-24 years	1,976	962	12.3%	511	12.5%	312	11.6%	119	13.0%	72	10.1%
25-40 years	5,738	2,655	33.9%	1,507	36.7%	989	36.9%	317	34.8%	270	37.7%
41-64 years	6,111	2,981	38.0%	1,485	36.2%	1,001	37.4%	341	37.4%	303	42.3%

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Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
≥ 65 years	1,680	926	11.8%	396	9.6%	213	8.0%	93	10.2%	52	7.3%
Voxelotor	**4,447**	**2,795**	**100.0%**	**1,006**	**100.0%**	**541**	**100.0%**	**83**	**100.0%**	**22**	**100.0%**
0-17 years	728	397	14.2%	175	17.4%	136	25.1%	*****	*****	*****	*****
18-24 years	611	405	14.5%	130	12.9%	69	12.8%	*****	*****	*****	*****
25-40 years	1,856	1,236	44.2%	426	42.3%	157	29.0%	*****	*****	*****	*****
41-64 years	1,135	695	24.9%	243	24.2%	161	29.8%	*****	*****	*****	*****
≥ 65 years	117	62	2.2%	32	3.2%	18	3.3%	*****	*****	*****	*****
Golodirsen	**89**	**67**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
0-17 years	71	54	80.6%	*****	*****	*****	*****	0	NaN	0	NaN
18-24 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
Enfortumab Vedotin-ejfv	**9,287**	**9,271**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
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	25	25	0.3%	0	0.0%	0	0.0%	0	NaN	0	NaN
41-64 years	1,024	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN
≥ 65 years	8,238	*****	*****	*****	*****	*****	*****	0	NaN	0	NaN

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Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Brilliant Blue G Ophthalmic Solution	**1,526**	**1,526**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	32	32	2.1%	0	NaN	0	NaN	0	NaN	0	NaN
41-64 years	595	595	39.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	886	886	58.1%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**40,179**	**23,003**	**100.0%**	**9,741**	**100.0%**	**6,105**	**100.0%**	**1,033**	**100.0%**	**297**	**100.0%**
0-17 years	212	111	0.5%	60	0.6%	*****	*****	*****	*****	*****	*****
18-24 years	3,215	1,963	8.5%	757	7.8%	*****	*****	*****	*****	*****	*****
25-40 years	12,752	7,400	32.2%	3,120	32.0%	1,859	30.5%	285	27.6%	88	29.6%
41-64 years	19,662	11,089	48.2%	4,753	48.8%	3,091	50.6%	555	53.7%	174	58.6%
≥ 65 years	4,338	2,440	10.6%	1,051	10.8%	703	11.5%	117	11.3%	27	9.1%
Lemborexant	**31,011**	**22,465**	**100.0%**	**5,413**	**100.0%**	**2,568**	**100.0%**	**412**	**100.0%**	**153**	**100.0%**
0-17 years	40	28	0.1%	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	688	471	2.1%	*****	*****	69	2.7%	11	2.7%	*****	*****
25-40 years	4,450	3,152	14.0%	828	15.3%	*****	*****	56	13.6%	*****	*****
41-64 years	13,621	9,496	42.3%	2,598	48.0%	1,235	48.1%	208	50.5%	84	54.9%
≥ 65 years	12,212	9,318	41.5%	1,842	34.0%	866	33.7%	137	33.3%	49	32.0%
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**16,563**	**100.0%**	**42**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**

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Table 5e. Categorical Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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 | |
	Total Number of 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	Number of Patients	Percent of Total Patients
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	5,553	5,532	33.4%	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	10,406	10,367	62.6%	*****	*****	14	*****	*****	*****	0	NaN
Ubrogepant	**209,902**	**168,940**	**100.0%**	**27,577**	**100.0%**	**11,675**	**100.0%**	**1,422**	**100.0%**	**288**	**100.0%**
0-17 years	1,021	844	0.5%	128	0.5%	*****	*****	*****	*****	0	0.0%
18-24 years	11,795	9,782	5.8%	1,439	5.2%	*****	*****	52	3.7%	*****	*****
25-40 years	56,646	45,921	27.2%	7,264	26.3%	3,070	26.3%	*****	*****	*****	*****
41-64 years	108,113	85,721	50.7%	14,898	54.0%	6,512	55.8%	812	57.1%	170	59.0%
≥ 65 years	32,327	26,672	15.8%	3,848	14.0%	1,529	13.1%	213	15.0%	65	22.6%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**11,663**	**1**	**30**	**30**	**90**	**835**	**67.8**	**75.6**
0-17 years	*****	13	23	45	60	150	52.4	44.0
18-24 years	*****	3	30	30	90	545	73.0	76.7
25-40 years	1,660	2	30	30	85	630	63.5	62.6
41-64 years	5,746	1	30	30	90	751	70.3	78.8
≥ 65 years	3,902	1	30	30	90	835	65.5	75.5
Trifarotene	**33,642**	**1**	**30**	**30**	**30**	**749**	**34.0**	**21.0**
0-17 years	12,933	1	30	30	30	600	34.2	20.8
18-24 years	9,151	1	30	30	30	377	33.6	18.2
25-40 years	8,380	1	30	30	30	749	33.6	21.5
41-64 years	2,971	1	30	30	30	630	35.3	27.2
≥ 65 years	207	3	30	30	30	270	33.8	21.0
Brolucizumab–dbll	**17,889**	**1**	**1**	**1**	**1**	**60**	**1.1**	**1.5**
0-17 years	*****	1	1	1	1	1	1.0	*****
18-24 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
25-40 years	*****	1	1	1	1	1	1.0	*****
41-64 years	343	1	1	1	1	30	1.3	3.0
≥ 65 years	17,534	1	1	1	1	60	1.1	1.4
Afamelanotide	**66**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	0.0
25-40 years	19	1	1	1	1	1	1.0	0.0
41-64 years	23	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	1	1	1	1	1	1.0	0.0

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	**128**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
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	*****	1	1	1	1	1	1.0	0.0
≥ 65 years	*****	1	1	1	1	1	1.0	0.0
Lasmiditan	**10,488**	**1**	**8**	**30**	**30**	**1,290**	**32.3**	**52.1**
0-17 years	49	1	8	22	30	71	23.2	17.0
18-24 years	454	2	8	30	30	1,252	33.0	68.1
25-40 years	2,562	1	8	30	30	1,290	32.9	57.0
41-64 years	5,834	1	8	30	30	954	33.1	50.0
≥ 65 years	1,589	1	8	28	30	1,005	28.5	46.3
Elexacaftor Ivacaftor Tezacaftor	**14,185**	**1**	**28**	**56**	**173**	**1,915**	**174.0**	**275.2**
0-17 years	5,468	1	28	82	173	1,908	159.7	224.7
18-24 years	2,841	2	28	56	140	1,814	141.4	228.6
25-40 years	4,213	1	28	56	168	1,915	181.1	302.0
41-64 years	1,303	1	28	84	308	1,808	261.5	392.6
≥ 65 years	360	1	28	84	254	1,724	248.4	368.8
Air Polymer-Type A	**156**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	*****
25-40 years	144	1	1	1	1	1	1.0	0.0
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**9,368**	**1**	**1**	**1**	**1**	**1,092**	**3.8**	**28.8**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	42	3.8	8.1
25-40 years	*****	1	1	1	1	45	2.0	5.2
41-64 years	477	1	1	1	1	231	4.1	19.8
≥ 65 years	8,712	1	1	1	1	1,092	3.8	29.5
Zanubrutinib	**11,764**	**1**	**30**	**60**	**120**	**1,456**	**99.9**	**126.4**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	60	60	75	90	90	75.0	21.2
25-40 years	*****	10	30	45	90	157	63.1	47.3
41-64 years	1,042	1	30	60	120	1,290	107.2	143.4
≥ 65 years	10,710	1	30	60	120	1,456	99.2	124.6
Cefiderocol	**2,077**	**1**	**1**	**1**	**1**	**81**	**2.6**	**5.6**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	1	1	1	1	52	4.6	12.7
25-40 years	175	1	1	1	1	77	3.3	7.9
41-64 years	638	1	1	1	1	81	3.1	6.8
≥ 65 years	1,243	1	1	1	1	42	2.2	4.3
Crizanlizumab-tmca	**2,936**	**1**	**1**	**1**	**1**	**322**	**4.2**	**16.3**
0-17 years	173	1	1	1	1	121	5.1	16.3
18-24 years	584	1	1	1	1	154	3.8	12.3
25-40 years	1,523	1	1	1	1	210	4.1	14.2
41-64 years	610	1	1	1	1	322	4.7	23.0
≥ 65 years	46	1	1	1	1	126	3.7	18.4

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**221**	**1**	**1**	**1**	**1**	**480**	**15.5**	**43.6**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	14	1	1	1	30	60	13.4	18.8
25-40 years	74	1	1	1	1	480	17.6	59.9
41-64 years	108	1	1	1	4	210	15.3	34.7
≥ 65 years	25	1	1	1	1	120	11.6	29.5
Cenobamate	**16,249**	**1**	**28**	**42**	**112**	**1,667**	**136.2**	**238.3**
0-17 years	744	2	28	56	121	1,403	124.1	188.6
18-24 years	1,976	1	28	42	98	1,656	128.6	228.5
25-40 years	5,738	1	28	56	114	1,667	141.7	247.6
41-64 years	6,111	1	28	42	114	1,555	141.3	246.3
≥ 65 years	1,680	1	28	30	86	1,380	112.8	203.6
Voxelotor	**4,447**	**1**	**30**	**30**	**60**	**1,651**	**70.3**	**111.0**
0-17 years	728	1	30	30	90	840	80.9	104.6
18-24 years	611	2	30	30	60	1,504	62.6	99.5
25-40 years	1,856	2	30	30	60	1,389	62.9	99.6
41-64 years	1,135	2	30	30	60	1,651	78.5	133.0
≥ 65 years	117	2	30	30	90	1,110	84.6	130.8
Golodirsen	**89**	**1**	**1**	**7**	**30**	**332**	**40.1**	**70.5**
0-17 years	71	1	1	1	30	308	37.1	64.7
18-24 years	*****	1	1	28	28	119	25.5	33.1
25-40 years	*****	1	29	147	285	332	156.8	154.6
41-64 years	*****	1	1	1	1	1	1.0	*****
≥ 65 years	*****	1	1	1	1	1	1.0	*****

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**9,287**	**1**	**1**	**1**	**1**	**168**	**1.2**	**3.8**
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	25	1	1	1	1	28	2.1	5.4
41-64 years	1,024	1	1	1	1	168	1.5	7.0
≥ 65 years	8,238	1	1	1	1	140	1.2	3.2
Brilliant Blue G Ophthalmic Solution	**1,526**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	*****	1	1	1	1	1	1.0	0.0
18-24 years	*****	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	595	1	1	1	1	1	1.0	0.0
≥ 65 years	886	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**40,179**	**1**	**30**	**30**	**84**	**1,669**	**79.5**	**121.6**
0-17 years	212	7	30	30	90	768	80.5	104.1
18-24 years	3,215	1	30	30	60	878	69.4	93.9
25-40 years	12,752	1	30	30	73	1,669	76.4	118.0
41-64 years	19,662	1	30	30	90	1,539	83.1	128.3
≥ 65 years	4,338	1	30	30	90	1,467	79.8	118.7
Lemborexant	**31,011**	**1**	**30**	**30**	**60**	**1,438**	**58.3**	**97.5**
0-17 years	40	5	30	30	54	186	43.3	31.0
18-24 years	688	1	30	30	60	930	59.8	93.7
25-40 years	4,450	1	30	30	60	1,420	57.6	91.8
41-64 years	13,621	1	30	30	60	1,438	62.1	104.1

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Table 5f. Continuous Summary of First Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	12,212	1	30	30	30	1,411	54.3	92.0
Fam-Trastuzumab Deruxtecan-nxki	**16,627**	**1**	**1**	**1**	**1**	**399**	**1.4**	**7.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	0.0
25-40 years	*****	1	1	1	1	210	1.7	9.2
41-64 years	5,553	1	1	1	1	189	1.3	5.3
≥ 65 years	10,406	1	1	1	1	399	1.5	7.7
Ubrogepant	**209,902**	**1**	**10**	**30**	**30**	**1,677**	**39.2**	**66.2**
0-17 years	1,021	1	10	30	30	500	32.6	38.6
18-24 years	11,795	1	10	30	30	1,047	34.8	49.9
25-40 years	56,646	1	10	30	30	1,563	37.8	60.3
41-64 years	108,113	1	10	30	30	1,677	40.8	69.9
≥ 65 years	32,327	1	10	30	30	1,593	38.1	69.2

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 6a. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	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
Tenapanor	8,482	5,269	62.1%	2,243	26.4%	921	10.9%	*****	*****	*****	*****
Trifarotene	22,400	20,230	90.3%	1,904	8.5%	*****	*****	*****	*****	*****	*****
Brolucizumab–dbll	87,696	87,629	99.9%	49	0.1%	*****	*****	*****	*****	0	0.0%
Afamelanotide	375	375	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	24,380	21,104	86.6%	2,481	10.2%	728	3.0%	*****	*****	*****	*****
Tezacaftor	59,714	34,170	57.2%	14,984	25.1%	8,954	15.0%	1,209	2.0%	397	0.7%
Air Polymer-Type A	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	94,688	94,277	99.6%	269	0.3%	129	0.1%	*****	*****	*****	*****
Zanubrutinib	24,353	12,989	53.3%	7,009	28.8%	4,015	16.5%	294	1.2%	46	0.2%
Cefiderocol	948	931	98.2%	17	1.8%	0	0.0%	0	0.0%	0	0.0%
Crizanlizumab-tmca	22,795	22,426	98.4%	267	1.2%	*****	*****	*****	*****	0	0.0%
Givosiran	2,258	2,152	95.3%	62	2.7%	*****	*****	*****	*****	*****	*****
Cenobamate	26,653	13,444	50.4%	6,754	25.3%	4,565	17.1%	1,199	4.5%	691	2.6%
Voxelotor	12,241	8,478	69.3%	2,625	21.4%	1,033	8.4%	89	0.7%	16	0.1%
Golodirsen	1,760	1,674	95.1%	53	3.0%	*****	*****	*****	*****	0	0.0%
Enfortumab Vedotin-ejfv	97,322	97,298	100.0%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brilliant Blue G Ophthalmic Solution	98	98	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Lumateperone Tosylate	50,763	28,464	56.1%	13,827	27.2%	7,320	14.4%	962	1.9%	190	0.4%
Lemborexant	51,233	35,368	69.0%	11,202	21.9%	4,093	8.0%	481	0.9%	89	0.2%
Fam-Trastuzumab Deruxtecan-nxki	132,621	132,460	99.9%	123	0.1%	*****	*****	*****	*****	0	0.0%

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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 December 31, 2024

	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
Ubrogepant	569,119	475,103	83.5%	68,177	12.0%	23,259	4.1%	2,143	0.4%	437	0.1%

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

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	8,482	1	30	30	60	760	55.9	58.2
Trifarotene	22,400	1	30	30	30	857	33.4	20.0
Brolucizumab–dbll	87,696	1	1	1	1	702	1.1	3.7
Afamelanotide	375	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	*****	1	1	1	1	1	1.0	*****
Lasmiditan	24,380	1	8	24	30	1,363	28.0	44.4
Elexacaftor Ivacaftor Tezacaftor	59,714	1	28	28	79	1,791	75.1	120.2
Air Polymer-Type A	*****	1	1	1	1	1	1.0	*****
Luspatercept–amt	94,688	1	1	1	1	1,050	1.6	10.0
Zanubrutinib	24,353	1	30	30	90	1,391	70.8	83.9
Cefiderocol	948	1	1	1	7	84	5.2	8.1
Crizanlizumab-tmca	22,795	1	1	1	1	584	3.4	15.3
Givosiran	2,258	1	1	1	1	895	8.6	41.9
Cenobamate	26,653	1	30	30	90	1,626	111.8	187.9
Voxelotor	12,241	1	30	30	60	1,565	53.6	67.8
Golodirsen	1,760	1	1	1	1	392	7.2	29.2
Enfortumab Vedotin-ejfv	97,322	1	1	1	1	112	1.0	1.2
Brilliant Blue G Ophthalmic Solution	98	1	1	1	1	1	1.0	0.0

Table 6b. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Lumateperone Tosylate	50,763	1	30	30	78	1,422	72.0	98.5
Lemborexant	51,233	1	30	30	60	1,397	55.2	74.0
Fam-Trastuzumab Deruxtecan-nxki	132,621	1	1	1	1	399	1.1	3.7
Ubrogepant	569,119	1	10	28	30	1,670	32.7	53.0

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Tenapanor	**8,482**	**5,269**	**100.0%**	**2,243**	**100.0%**	**921**	**100.0%**	*****	*****	*****	*****
Female	6,513	4,065	77.1%	1,700	75.8%	*****	*****	*****	*****	*****	*****
Male	1,969	1,204	22.9%	543	24.2%	*****	*****	*****	*****	0	0.0%
Trifarotene	**22,400**	**20,230**	**100.0%**	**1,904**	**100.0%**	*****	*****	*****	*****	*****	*****
Female	15,777	14,294	70.7%	1,308	68.7%	*****	*****	*****	*****	*****	*****
Male	6,623	5,936	29.3%	596	31.3%	*****	*****	*****	*****	0	0.0%
Brolucizumab–dbll	**87,696**	**87,629**	**100.0%**	**49**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	49,214	49,158	56.1%	*****	*****	*****	*****	*****	*****	0	NaN
Male	38,482	38,471	43.9%	*****	*****	*****	*****	0	0.0%	0	NaN
Afamelanotide	**375**	**375**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	186	186	49.6%	0	NaN	0	NaN	0	NaN	0	NaN
Male	189	189	50.4%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**24,380**	**21,104**	**100.0%**	**2,481**	**100.0%**	**728**	**100.0%**	*****	*****	*****	*****
Female	21,009	18,196	86.2%	2,141	86.3%	618	84.9%	*****	*****	*****	*****
Male	3,371	2,908	13.8%	340	13.7%	110	15.1%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**59,714**	**34,170**	**100.0%**	**14,984**	**100.0%**	**8,954**	**100.0%**	**1,209**	**100.0%**	**397**	**100.0%**
Female	29,422	16,840	49.3%	7,411	49.5%	4,389	49.0%	582	48.1%	200	50.4%
Male	30,292	17,330	50.7%	7,573	50.5%	4,565	51.0%	627	51.9%	197	49.6%
Air Polymer-Type A	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**

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Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Male	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
Luspatercept–amt	**94,688**	**94,277**	**100.0%**	**269**	**100.0%**	**129**	**100.0%**	*****	*****	*****	*****
Female	44,248	44,032	46.7%	146	54.3%	*****	*****	*****	*****	0	0.0%
Male	50,440	50,245	53.3%	123	45.7%	*****	*****	*****	*****	*****	*****
Zanubrutinib	**24,353**	**12,989**	**100.0%**	**7,009**	**100.0%**	**4,015**	**100.0%**	**294**	**100.0%**	**46**	**100.0%**
Female	9,955	5,435	41.8%	2,819	40.2%	1,560	38.9%	125	42.5%	16	34.8%
Male	14,398	7,554	58.2%	4,190	59.8%	2,455	61.1%	169	57.5%	30	65.2%
Cefiderocol	**948**	**931**	**100.0%**	**17**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	418	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Male	530	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**22,795**	**22,426**	**100.0%**	**267**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	13,266	13,030	58.1%	169	63.3%	*****	*****	*****	*****	0	NaN
Male	9,529	9,396	41.9%	98	36.7%	*****	*****	*****	*****	0	NaN
Givosiran	**2,258**	**2,152**	**100.0%**	**62**	**100.0%**	*****	*****	*****	*****	*****	*****
Female	1,836	1,747	81.2%	*****	*****	*****	*****	*****	*****	*****	*****
Male	422	405	18.8%	*****	*****	*****	*****	*****	*****	0	0.0%
Cenobamate	**26,653**	**13,444**	**100.0%**	**6,754**	**100.0%**	**4,565**	**100.0%**	**1,199**	**100.0%**	**691**	**100.0%**
Female	13,470	7,017	52.2%	3,322	49.2%	2,219	48.6%	567	47.3%	345	49.9%
Male	13,183	6,427	47.8%	3,432	50.8%	2,346	51.4%	632	52.7%	346	50.1%
Voxelotor	**12,241**	**8,478**	**100.0%**	**2,625**	**100.0%**	**1,033**	**100.0%**	**89**	**100.0%**	**16**	**100.0%**
Female	7,140	5,007	59.1%	1,489	56.7%	579	56.1%	*****	*****	*****	*****

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| | 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	5,101	3,471	40.9%	1,136	43.3%	454	43.9%	*****	*****	*****	*****
Golodirsen	**1,760**	**1,674**	**100.0%**	**53**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
Male	1,760	1,674	100.0%	53	100.0%	*****	*****	*****	*****	0	NaN
Enfortumab Vedotin-ejfv	**97,322**	**97,298**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
Female	26,975	26,966	27.7%	*****	*****	*****	*****	0	NaN	0	NaN
Male	70,347	70,332	72.3%	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**98**	**98**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
Female	51	51	52.0%	0	NaN	0	NaN	0	NaN	0	NaN
Male	47	47	48.0%	0	NaN	0	NaN	0	NaN	0	NaN
Lumateperone Tosylate	**50,763**	**28,464**	**100.0%**	**13,827**	**100.0%**	**7,320**	**100.0%**	**962**	**100.0%**	**190**	**100.0%**
Female	29,955	16,810	59.1%	8,213	59.4%	4,329	59.1%	510	53.0%	93	48.9%
Male	20,808	11,654	40.9%	5,614	40.6%	2,991	40.9%	452	47.0%	97	51.1%
Lemborexant	**51,233**	**35,368**	**100.0%**	**11,202**	**100.0%**	**4,093**	**100.0%**	**481**	**100.0%**	**89**	**100.0%**
Female	32,519	22,295	63.0%	7,182	64.1%	2,659	65.0%	332	69.0%	51	57.3%
Male	18,714	13,073	37.0%	4,020	35.9%	1,434	35.0%	149	31.0%	38	42.7%
Fam-Trastuzumab Deruxtecan-nxki	**132,621**	**132,460**	**100.0%**	**123**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
Female	122,801	*****	*****	*****	*****	*****	*****	*****	*****	0	NaN
Male	9,820	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
Ubrogepant	**569,119**	**475,103**	**100.0%**	**68,177**	**100.0%**	**23,259**	**100.0%**	**2,143**	**100.0%**	**437**	**100.0%**

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Table 6c. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	502,392	419,612	88.3%	60,203	88.3%	20,337	87.4%	1,861	86.8%	379	86.7%
Male	66,727	55,491	11.7%	7,974	11.7%	2,922	12.6%	282	13.2%	58	13.3%

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**8,482**	**1**	**30**	**30**	**60**	**760**	**55.9**	**58.2**
Female	6,513	1	30	30	60	760	56.4	58.5
Male	1,969	1	30	30	60	651	54.6	57.4
Trifarotene	**22,400**	**1**	**30**	**30**	**30**	**857**	**33.4**	**20.0**
Female	15,777	1	30	30	30	857	33.2	19.3
Male	6,623	1	30	30	30	540	33.9	21.4
Brolucizumab–dbll	**87,696**	**1**	**1**	**1**	**1**	**702**	**1.1**	**3.7**
Female	49,214	1	1	1	1	702	1.1	4.8
Male	38,482	1	1	1	1	168	1.0	1.5
Afamelanotide	**375**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	186	1	1	1	1	1	1.0	0.0
Male	189	1	1	1	1	1	1.0	0.0
Fluorodopa F-18	*****	**1**	**1**	**1**	**1**	**1**	**1.0**	*****
Female	*****	1	1	1	1	1	1.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Lasmiditan	**24,380**	**1**	**8**	**24**	**30**	**1,363**	**28.0**	**44.4**
Female	21,009	1	8	24	30	1,363	27.9	43.4
Male	3,371	1	8	23	30	1,200	29.1	50.2
Elexacaftor Ivacaftor Tezacaftor	**59,714**	**1**	**28**	**28**	**79**	**1,791**	**75.1**	**120.2**
Female	29,422	1	28	28	76	1,791	74.9	120.3
Male	30,292	1	28	28	81	1,752	75.2	120.1
Air Polymer-Type A	*****	**1**	**1**	**1**	**1**	**1**	**1.0**	*****
Female	*****	1	1	1	1	1	1.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**94,688**	**1**	**1**	**1**	**1**	**1,050**	**1.6**	**10.0**
Female	44,248	1	1	1	1	672	1.6	9.5
Male	50,440	1	1	1	1	1,050	1.5	10.5
Zanubrutinib	**24,353**	**1**	**30**	**30**	**90**	**1,391**	**70.8**	**83.9**
Female	9,955	1	30	30	84	1,391	69.5	83.2
Male	14,398	1	30	30	90	1,200	71.7	84.5
Cefiderocol	**948**	**1**	**1**	**1**	**7**	**84**	**5.2**	**8.1**
Female	418	1	1	1	7	43	5.1	6.5
Male	530	1	1	1	7	84	5.3	9.1
Crizanlizumab-tmca	**22,795**	**1**	**1**	**1**	**1**	**584**	**3.4**	**15.3**
Female	13,266	1	1	1	1	476	3.5	15.9
Male	9,529	1	1	1	1	584	3.1	14.4
Givosiran	**2,258**	**1**	**1**	**1**	**1**	**895**	**8.6**	**41.9**
Female	1,836	1	1	1	1	895	8.6	42.0
Male	422	1	1	1	1	647	8.5	41.5
Cenobamate	**26,653**	**1**	**30**	**30**	**90**	**1,626**	**111.8**	**187.9**
Female	13,470	1	30	30	90	1,626	108.5	185.8
Male	13,183	1	30	39	95	1,553	115.1	190.0
Voxelotor	**12,241**	**1**	**30**	**30**	**60**	**1,565**	**53.6**	**67.8**
Female	7,140	1	30	30	60	1,565	53.4	69.4
Male	5,101	1	30	30	60	1,064	53.9	65.5
Golodirsen	**1,760**	**1**	**1**	**1**	**1**	**392**	**7.2**	**29.2**
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	1,760	1	1	1	1	392	7.2	29.2

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Table 6d. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**97,322**	**1**	**1**	**1**	**1**	**112**	**1.0**	**1.2**
Female	26,975	1	1	1	1	112	1.0	1.3
Male	70,347	1	1	1	1	112	1.0	1.2
Brilliant Blue G Ophthalmic Solution	**98**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
Female	51	1	1	1	1	1	1.0	0.0
Male	47	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**50,763**	**1**	**30**	**30**	**78**	**1,422**	**72.0**	**98.5**
Female	29,955	1	30	30	79	1,304	70.5	93.5
Male	20,808	1	30	30	78	1,422	74.2	105.2
Lemborexant	**51,233**	**1**	**30**	**30**	**60**	**1,397**	**55.2**	**74.0**
Female	32,519	1	30	30	60	1,315	55.7	73.8
Male	18,714	1	30	30	60	1,397	54.3	74.3
Fam-Trastuzumab Deruxtecan-nxki	**132,621**	**1**	**1**	**1**	**1**	**399**	**1.1**	**3.7**
Female	122,801	1	1	1	1	399	1.1	3.6
Male	9,820	1	1	1	1	273	1.1	4.7
Ubrogepant	**569,119**	**1**	**10**	**28**	**30**	**1,670**	**32.7**	**53.0**
Female	502,392	1	10	28	30	1,670	32.6	52.7
Male	66,727	1	10	27	30	1,354	33.4	55.1

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Data represented by NaN (Not a Number) is due to their inability to be calculated.

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Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
Tenapanor	**8,482**	**5,269**	**100.0%**	**2,243**	**100.0%**	**921**	**100.0%**	*****	*****	*****	*****
0-17 years	*****	*****	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%
18-24 years	236	142	2.7%	*****	*****	23	2.5%	*****	*****	0	0.0%
25-40 years	*****	*****	*****	293	13.1%	108	11.7%	*****	*****	0	0.0%
41-64 years	4,432	2,715	51.5%	1,198	53.4%	494	53.6%	*****	*****	*****	*****
≥ 65 years	2,660	1,663	31.6%	684	30.5%	296	32.1%	17	*****	0	0.0%
Trifarotene	**22,400**	**20,230**	**100.0%**	**1,904**	**100.0%**	*****	*****	*****	*****	*****	*****
0-17 years	9,884	8,927	44.1%	822	43.2%	*****	*****	*****	*****	*****	*****
18-24 years	5,630	5,089	25.2%	485	25.5%	56	*****	0	0.0%	0	0.0%
25-40 years	4,682	4,248	21.0%	*****	*****	46	*****	*****	*****	0	0.0%
41-64 years	2,083	1,856	9.2%	200	10.5%	*****	*****	*****	*****	0	0.0%
≥ 65 years	121	110	0.5%	*****	*****	*****	*****	0	0.0%	0	0.0%
Brolucizumab–dbll	**87,696**	**87,629**	**100.0%**	**49**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
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	32	32	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
41-64 years	1,236	1,231	1.4%	*****	*****	*****	*****	0	0.0%	0	NaN
≥ 65 years	86,428	86,366	98.6%	*****	*****	*****	*****	*****	*****	0	NaN
Afamelanotide	**375**	**375**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
0-17 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
18-24 years	45	45	12.0%	0	NaN	0	NaN	0	NaN	0	NaN
25-40 years	79	79	21.1%	0	NaN	0	NaN	0	NaN	0	NaN

Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

| | | Number of Treatment Episodes by Duration (Excluding First Treatment Episode) | | | | | | | | | |
| | | 1-30 Days | | 31-90 Days | | 91-365 Days | | 366-730 Days | | 731+ Days | |
	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
41-64 years	190	190	50.7%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	61	61	16.3%	0	NaN	0	NaN	0	NaN	0	NaN
Fluorodopa F-18	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	*****	*****	*****	0	NaN	0	NaN	0	NaN	0	NaN
Lasmiditan	**24,380**	**21,104**	**100.0%**	**2,481**	**100.0%**	**728**	**100.0%**	**59**	**100.0%**	*****	*****
0-17 years	46	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
18-24 years	554	469	2.2%	62	2.5%	23	3.2%	0	0.0%	0	0.0%
25-40 years	4,931	4,270	20.2%	*****	*****	148	20.3%	*****	*****	*****	*****
41-64 years	15,354	13,298	63.0%	1,565	63.1%	*****	*****	39	66.1%	*****	*****
≥ 65 years	3,495	*****	*****	353	14.2%	109	15.0%	*****	*****	*****	*****
Elexacaftor Ivacaftor Tezacaftor	**59,714**	**34,170**	**100.0%**	**14,984**	**100.0%**	**8,954**	**100.0%**	**1,209**	**100.0%**	**397**	**100.0%**
0-17 years	16,874	9,680	28.3%	4,227	28.2%	2,529	28.2%	353	29.2%	85	21.4%
18-24 years	13,517	8,107	23.7%	3,375	22.5%	1,805	20.2%	193	16.0%	37	9.3%
25-40 years	22,227	12,808	37.5%	5,620	37.5%	3,186	35.6%	438	36.2%	175	44.1%
41-64 years	5,968	3,087	9.0%	1,464	9.8%	1,162	13.0%	181	15.0%	74	18.6%
≥ 65 years	1,128	488	1.4%	298	2.0%	272	3.0%	44	3.6%	26	6.5%
Air Polymer-Type A	*****	*****	*****	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**

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Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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
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	NaN	0	NaN	0	NaN	0	NaN
41-64 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
≥ 65 years	0	0	0.0%	0	NaN	0	NaN	0	NaN	0	NaN
Luspatercept–amt	**94,688**	**94,277**	**100.0%**	**269**	**100.0%**	**129**	**100.0%**	*****	*****	*****	*****
0-17 years	58	58	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	300	289	0.3%	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	1,562	1,557	1.7%	*****	*****	*****	*****	0	0.0%	0	0.0%
41-64 years	4,585	4,548	4.8%	*****	*****	*****	*****	0	0.0%	0	0.0%
≥ 65 years	88,183	87,825	93.2%	232	86.2%	113	87.6%	*****	*****	*****	*****
Zanubrutinib	**24,353**	**12,989**	**100.0%**	**7,009**	**100.0%**	**4,015**	**100.0%**	**294**	**100.0%**	**46**	**100.0%**
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	11	*****	*****	*****	*****	*****	*****	0	0.0%	0	0.0%
25-40 years	33	19	0.1%	*****	*****	*****	*****	0	0.0%	0	0.0%
41-64 years	2,054	*****	*****	571	8.1%	338	8.4%	20	6.8%	*****	*****
≥ 65 years	22,255	11,842	91.2%	6,428	91.7%	*****	*****	274	93.2%	*****	*****
Cefiderocol	**948**	**931**	**100.0%**	**17**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	107	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
41-64 years	352	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN

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Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	475	*****	*****	*****	*****	0	NaN	0	NaN	0	NaN
Crizanlizumab-tmca	**22,795**	**22,426**	**100.0%**	**267**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	956	*****	*****	11	4.1%	*****	*****	0	0.0%	0	NaN
18-24 years	3,403	3,351	14.9%	41	15.4%	*****	*****	*****	*****	0	NaN
25-40 years	12,512	12,294	54.8%	158	59.2%	*****	*****	*****	*****	0	NaN
41-64 years	5,404	5,326	23.7%	*****	*****	21	*****	*****	*****	0	NaN
≥ 65 years	520	*****	*****	*****	*****	0	0.0%	0	0.0%	0	NaN
Givosiran	**2,258**	**2,152**	**100.0%**	**62**	**100.0%**	*****	*****	*****	*****	*****	*****
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
18-24 years	149	*****	*****	*****	*****	0	0.0%	*****	*****	0	0.0%
25-40 years	796	757	35.2%	*****	*****	*****	*****	*****	*****	0	0.0%
41-64 years	1,054	1,001	46.5%	31	50.0%	*****	*****	0	0.0%	*****	*****
≥ 65 years	259	*****	*****	*****	*****	*****	*****	*****	*****	0	0.0%
Cenobamate	**26,653**	**13,444**	**100.0%**	**6,754**	**100.0%**	**4,565**	**100.0%**	**1,199**	**100.0%**	**691**	**100.0%**
0-17 years	896	467	3.5%	233	3.4%	159	3.5%	*****	*****	*****	*****
18-24 years	3,023	1,552	11.5%	761	11.3%	535	11.7%	121	10.1%	54	7.8%
25-40 years	9,772	4,965	36.9%	2,424	35.9%	1,658	36.3%	446	37.2%	279	40.4%
41-64 years	10,453	5,205	38.7%	2,698	39.9%	1,761	38.6%	490	40.9%	299	43.3%
≥ 65 years	2,509	1,255	9.3%	638	9.4%	452	9.9%	*****	*****	*****	*****
Voxelotor	**12,241**	**8,478**	**100.0%**	**2,625**	**100.0%**	**1,033**	**100.0%**	**89**	**100.0%**	**16**	**100.0%**
0-17 years	1,743	1,134	13.4%	418	15.9%	178	17.2%	13	14.6%	0	0.0%
18-24 years	1,382	1,014	12.0%	261	9.9%	95	9.2%	12	13.5%	0	0.0%

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Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

| | | Number of Treatment Episodes by Duration (Excluding First Treatment Episode) | | | | | | | | | |
| | | 1-30 Days | | 31-90 Days | | 91-365 Days | | 366-730 Days | | 731+ Days | |
	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
25-40 years	5,098	3,639	42.9%	1,061	40.4%	367	35.5%	*****	*****	*****	*****
41-64 years	3,667	2,435	28.7%	826	31.5%	*****	*****	38	42.7%	*****	*****
≥ 65 years	351	256	3.0%	59	2.2%	*****	*****	*****	*****	0	0.0%
Golodirsen	**1,760**	**1,674**	**100.0%**	**53**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**
0-17 years	1,581	1,520	90.8%	36	67.9%	*****	*****	*****	*****	0	NaN
18-24 years	151	138	8.2%	*****	*****	*****	*****	0	0.0%	0	NaN
25-40 years	*****	*****	*****	*****	*****	*****	*****	0	0.0%	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
≥ 65 years	*****	*****	*****	0	0.0%	0	0.0%	0	0.0%	0	NaN
Enfortumab Vedotin-ejfv	**97,322**	**97,298**	**100.0%**	*****	*****	*****	*****	**0**	**NaN**	**0**	**NaN**
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	NaN	0	NaN
41-64 years	*****	*****	*****	0	0.0%	0	0.0%	0	NaN	0	NaN
≥ 65 years	86,596	86,574	89.0%	*****	*****	*****	*****	0	NaN	0	NaN
Brilliant Blue G Ophthalmic Solution	**98**	**98**	**100.0%**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**	**0**	**NaN**
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	60	60	61.2%	0	NaN	0	NaN	0	NaN	0	NaN

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Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

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| | | 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
Lumateperone Tosylate	50,763	28,464	100.0%	13,827	100.0%	7,320	100.0%	962	100.0%	190	100.0%
0-17 years	201	104	0.4%	64	0.5%	*****	*****	*****	*****	0	0.0%
18-24 years	3,404	1,934	6.8%	940	6.8%	*****	*****	47	4.9%	*****	*****
25-40 years	15,806	8,992	31.6%	4,281	31.0%	2,212	30.2%	268	27.9%	53	27.9%
41-64 years	26,427	14,634	51.4%	7,250	52.4%	3,869	52.9%	562	58.4%	112	58.9%
≥ 65 years	4,925	2,800	9.8%	1,292	9.3%	738	10.1%	*****	*****	*****	*****
Lemborexant	51,233	35,368	100.0%	11,202	100.0%	4,093	100.0%	481	100.0%	89	100.0%
0-17 years	58	39	0.1%	*****	*****	*****	*****	*****	*****	0	0.0%
18-24 years	1,079	772	2.2%	*****	*****	*****	*****	*****	*****	*****	*****
25-40 years	7,510	5,394	15.3%	1,566	14.0%	496	12.1%	*****	*****	*****	*****
41-64 years	24,714	17,031	48.2%	5,433	48.5%	1,972	48.2%	228	47.4%	50	56.2%
≥ 65 years	17,872	12,132	34.3%	3,963	35.4%	1,551	37.9%	*****	*****	*****	*****
Fam-Trastuzumab Deruxtecan-nxki	132,621	132,460	100.0%	123	100.0%	*****	*****	*****	*****	0	NaN
0-17 years	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
18-24 years	54	54	0.0%	0	0.0%	0	0.0%	0	0.0%	0	NaN
25-40 years	4,823	4,809	3.6%	*****	*****	*****	*****	0	0.0%	0	NaN
41-64 years	44,862	44,809	33.8%	*****	*****	*****	*****	*****	*****	0	NaN
≥ 65 years	82,882	82,788	62.5%	76	61.8%	18	*****	0	0.0%	0	NaN
Ubrogepant	569,119	475,103	100.0%	68,177	100.0%	23,259	100.0%	2,143	100.0%	437	100.0%
0-17 years	1,961	1,651	0.3%	244	0.4%	*****	*****	*****	*****	*****	*****
18-24 years	22,467	18,978	4.0%	2,666	3.9%	*****	*****	*****	*****	*****	*****

Table 6e. Categorical Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, 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	144,376	121,355	25.5%	16,954	24.9%	5,511	23.7%	474	22.1%	82	18.8%
41-64 years	327,250	271,930	57.2%	39,791	58.4%	13,928	59.9%	1,331	62.1%	270	61.8%
≥ 65 years	73,065	61,189	12.9%	8,522	12.5%	2,987	12.8%	*****	*****	*****	*****

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**8,482**	**1**	**30**	**30**	**60**	**760**	**55.9**	**58.2**
0-17 years	*****	5	23	30	30	90	34.0	26.3
18-24 years	236	1	30	30	60	508	58.3	67.9
25-40 years	*****	2	30	30	60	479	52.7	50.8
41-64 years	4,432	1	30	30	60	760	56.5	58.8
≥ 65 years	2,660	1	30	30	60	651	56.2	59.3
Trifarotene	**22,400**	**1**	**30**	**30**	**30**	**857**	**33.4**	**20.0**
0-17 years	9,884	1	30	30	30	857	33.8	22.4
18-24 years	5,630	1	30	30	30	300	32.9	15.5
25-40 years	4,682	1	30	30	30	510	32.9	18.1
41-64 years	2,083	2	30	30	30	540	34.1	22.0
≥ 65 years	121	5	30	30	30	180	31.7	18.2
Brolucizumab–dbll	**87,696**	**1**	**1**	**1**	**1**	**702**	**1.1**	**3.7**
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	32	1	1	1	1	1	1.0	0.0
41-64 years	1,236	1	1	1	1	168	1.5	6.1
≥ 65 years	86,428	1	1	1	1	702	1.1	3.7
Afamelanotide	**375**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	45	1	1	1	1	1	1.0	0.0
25-40 years	79	1	1	1	1	1	1.0	0.0
41-64 years	190	1	1	1	1	1	1.0	0.0
≥ 65 years	61	1	1	1	1	1	1.0	0.0

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Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	*****	1	1	1	1	1	1.0	*****
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	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	*****	1	1	1	1	1	1.0	*****
Lasmiditan	24,380	1	8	24	30	1,363	28.0	44.4
0-17 years	46	2	8	28	30	301	28.2	43.3
18-24 years	554	2	8	30	30	330	30.2	32.8
25-40 years	4,931	1	8	25	30	1,277	28.7	47.4
41-64 years	15,354	1	8	24	30	1,363	28.1	43.9
≥ 65 years	3,495	1	8	15	30	1,200	26.4	43.4
Elexacaftor Ivacaftor Tezacaftor	59,714	1	28	28	79	1,791	75.1	120.2
0-17 years	16,874	1	28	28	73	1,733	73.2	111.9
18-24 years	13,517	1	28	28	56	1,693	65.0	93.5
25-40 years	22,227	1	28	28	61	1,791	75.2	124.4
41-64 years	5,968	1	28	28	84	1,752	95.2	157.3
≥ 65 years	1,128	3	28	56	118	1,585	116.0	177.9
Air Polymer-Type A	*****	1	1	1	1	1	1.0	*****
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	*****	1	1	1	1	1	1.0	*****
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**94,688**	**1**	**1**	**1**	**1**	**1,050**	**1.6**	**10.0**
0-17 years	58	1	1	1	1	1	1.0	0.0
18-24 years	300	1	1	1	1	189	3.8	15.1
25-40 years	1,562	1	1	1	1	315	1.4	8.6
41-64 years	4,585	1	1	1	1	315	1.9	10.0
≥ 65 years	88,183	1	1	1	1	1,050	1.5	10.0
Zanubrutinib	**24,353**	**1**	**30**	**30**	**90**	**1,391**	**70.8**	**83.9**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	11	30	30	30	105	165	72.1	54.1
25-40 years	33	28	30	30	60	300	67.8	64.7
41-64 years	2,054	1	30	30	82	922	68.3	78.2
≥ 65 years	22,255	1	30	30	90	1,391	71.0	84.5
Cefiderocol	**948**	**1**	**1**	**1**	**7**	**84**	**5.2**	**8.1**
0-17 years	*****	1	1	1	2	2	1.3	0.5
18-24 years	*****	1	1	5	11	21	7.4	7.9
25-40 years	107	1	1	1	8	84	6.7	11.1
41-64 years	352	1	1	1	6	43	4.7	6.8
≥ 65 years	475	1	1	1	7	62	5.3	8.1
Crizanlizumab-tmca	**22,795**	**1**	**1**	**1**	**1**	**584**	**3.4**	**15.3**
0-17 years	956	1	1	1	1	278	3.9	17.4
18-24 years	3,403	1	1	1	1	584	3.5	17.7
25-40 years	12,512	1	1	1	1	448	3.5	14.9
41-64 years	5,404	1	1	1	1	476	3.1	14.7
≥ 65 years	520	1	1	1	1	49	1.2	2.7

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Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**2,258**	**1**	**1**	**1**	**1**	**895**	**8.6**	**41.9**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	149	1	1	1	1	647	7.4	53.7
25-40 years	796	1	1	1	1	444	8.7	34.2
41-64 years	1,054	1	1	1	1	895	8.8	44.0
≥ 65 years	259	1	1	1	1	510	8.1	46.9
Cenobamate	**26,653**	**1**	**30**	**30**	**90**	**1,626**	**111.8**	**187.9**
0-17 years	896	1	30	30	90	1,397	86.2	128.3
18-24 years	3,023	1	30	30	90	1,460	102.4	167.5
25-40 years	9,772	1	30	30	90	1,626	113.9	193.0
41-64 years	10,453	1	30	31	90	1,553	115.8	195.9
≥ 65 years	2,509	1	30	30	90	1,372	107.2	173.6
Voxelotor	**12,241**	**1**	**30**	**30**	**60**	**1,565**	**53.6**	**67.8**
0-17 years	1,743	1	30	30	60	683	55.9	61.7
18-24 years	1,382	1	30	30	54	690	49.6	59.0
25-40 years	5,098	1	30	30	60	1,565	50.4	63.2
41-64 years	3,667	2	30	30	60	1,170	58.5	79.2
≥ 65 years	351	1	30	30	60	660	53.6	61.2
Golodirsen	**1,760**	**1**	**1**	**1**	**1**	**392**	**7.2**	**29.2**
0-17 years	1,581	1	1	1	1	392	5.7	25.6
18-24 years	151	1	1	1	1	280	11.3	35.6
25-40 years	*****	1	28	28	84	364	66.3	78.7
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 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 December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**97,322**	**1**	**1**	**1**	**1**	**112**	**1.0**	**1.2**
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	*****	1	1	1	1	56	2.2	7.2
41-64 years	*****	1	1	1	1	28	1.0	0.6
≥ 65 years	86,596	1	1	1	1	112	1.0	1.2
Brilliant Blue G Ophthalmic Solution	**98**	**1**	**1**	**1**	**1**	**1**	**1.0**	**0.0**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	1	1	1	1.0	*****
25-40 years	*****	1	1	1	1	1	1.0	*****
41-64 years	*****	1	1	1	1	1	1.0	0.0
≥ 65 years	60	1	1	1	1	1	1.0	0.0
Lumateperone Tosylate	**50,763**	**1**	**30**	**30**	**78**	**1,422**	**72.0**	**98.5**
0-17 years	201	4	30	30	90	540	77.5	90.9
18-24 years	3,404	1	30	30	64	1,140	68.1	89.2
25-40 years	15,806	1	30	30	68	1,422	70.0	95.6
41-64 years	26,427	1	30	30	87	1,312	74.2	102.4
≥ 65 years	4,925	1	30	30	72	1,176	69.4	92.6
Lemborexant	**51,233**	**1**	**30**	**30**	**60**	**1,397**	**55.2**	**74.0**
0-17 years	58	9	30	30	60	540	52.3	71.1
18-24 years	1,079	2	30	30	54	1,365	52.6	84.8
25-40 years	7,510	1	30	30	60	937	49.5	60.0
41-64 years	24,714	1	30	30	60	1,397	55.2	74.7

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Table 6f. Continuous Summary of Second and Subsequent Treatment Episodes for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Episodes	Distribution of Treatment Episode Durations Excluding First Treatment Episode, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	17,872	1	30	30	60	1,351	57.6	77.5
Fam-Trastuzumab Deruxtecan-nxki	**132,621**	**1**	**1**	**1**	**1**	**399**	**1.1**	**3.7**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	54	1	1	1	1	1	1.0	0.0
25-40 years	4,823	1	1	1	1	147	1.3	4.4
41-64 years	44,862	1	1	1	1	399	1.2	4.8
≥ 65 years	82,882	1	1	1	1	273	1.1	3.0
Ubrogepant	**569,119**	**1**	**10**	**28**	**30**	**1,670**	**32.7**	**53.0**
0-17 years	1,961	1	10	30	30	1,094	30.8	44.7
18-24 years	22,467	1	10	30	30	1,003	31.1	41.8
25-40 years	144,376	1	10	28	30	1,412	31.8	49.3
41-64 years	327,250	1	10	28	30	1,670	33.1	54.6
≥ 65 years	73,065	1	10	25	30	1,438	32.8	55.6

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 7a. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	8,482	1	4	11	30	684	28.4	51.9
Trifarotene	22,400	1	19	60	129	1,496	103.6	139.4
Brolucizumab–dbll	87,696	1	35	55	69	1,509	60.7	48.7
Afamelanotide	375	44	55	62	72	620	80.0	54.6
Fluorodopa F-18	*****	510	510	510	510	510	510.0	*****
Lasmiditan	24,380	1	10	23	50	1,456	47.8	84.5
Elexacaftor Ivacaftor Tezacaftor	59,714	1	3	7	18	1,511	22.7	66.9
Air Polymer-Type A	*****	7	7	7	7	7	7.0	*****
Luspatercept–amt	94,688	1	20	20	21	1,210	24.8	24.8
Zanubrutinib	24,353	1	2	5	13	1,273	16.9	46.1
Cefiderocol	948	1	4	13	50	1,052	46.8	90.0
Crizanlizumab-tmca	22,795	1	27	27	34	1,324	37.7	48.7
Givosiran	2,258	1	27	27	29	453	31.1	26.3
Cenobamate	26,653	1	2	5	14	1,375	20.2	62.5
Voxelotor	12,241	1	5	11	29	1,334	35.4	85.5
Golodirsen	1,760	1	6	6	7	271	8.9	12.1
Enfortumab Vedotin-ejfv	97,322	1	6	6	13	1,139	11.6	19.1
Brilliant Blue G Ophthalmic Solution	98	7	48	111	230	1,177	200.5	236.1
Lumateperone Tosylate	50,763	1	3	6	18	1,283	23.2	67.1
Lemborexant	51,233	1	3	9	26	1,530	29.2	68.7
Fam-Trastuzumab Deruxtecan-nxki	132,621	1	20	20	21	1,154	23.5	20.1
Ubrogepant	569,119	1	10	25	58	1,710	53.7	92.0

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Table 7a. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Distribution of Treatment Episode Gap Durations, days						
Total Number of Gaps	Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**8,482**	**1**	**4**	**11**	**30**	**684**	**28.4**	**51.9**
Female	6,513	1	4	11	31	684	29.8	55.1
Male	1,969	1	4	10	27	455	23.9	39.5
Trifarotene	**22,400**	**1**	**19**	**60**	**129**	**1,496**	**103.6**	**139.4**
Female	15,777	1	19	62	138	1,496	110.2	146.2
Male	6,623	1	18	47	107	1,211	87.8	120.2
Brolucizumab–dbll	**87,696**	**1**	**35**	**55**	**69**	**1,509**	**60.7**	**48.7**
Female	49,214	1	35	55	69	1,279	61.3	48.6
Male	38,482	1	34	55	69	1,509	59.9	48.7
Afamelanotide	**375**	**44**	**55**	**62**	**72**	**620**	**80.0**	**54.6**
Female	186	47	55	62	71	340	76.5	43.4
Male	189	44	57	62	72	620	83.4	63.7
Fluorodopa F-18	*****	**510**	**510**	**510**	**510**	**510**	**510.0**	*****
Female	*****	510	510	510	510	510	510.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Lasmiditan	**24,380**	**1**	**10**	**23**	**50**	**1,456**	**47.8**	**84.5**
Female	21,009	1	10	23	50	1,372	47.6	83.6
Male	3,371	1	10	24	50	1,456	49.1	89.8
Elexacaftor Ivacaftor Tezacaftor	**59,714**	**1**	**3**	**7**	**18**	**1,511**	**22.7**	**66.9**
Female	29,422	1	3	7	19	1,511	23.6	69.5
Male	30,292	1	3	7	17	1,491	21.9	64.2
Air Polymer-Type A	*****	**7**	**7**	**7**	**7**	**7**	**7.0**	*****
Female	*****	7	7	7	7	7	7.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**94,688**	**1**	**20**	**20**	**21**	**1,210**	**24.8**	**24.8**
Female	44,248	1	20	20	21	1,170	24.8	25.2
Male	50,440	1	20	20	21	1,210	24.8	24.4
Zanubrutinib	**24,353**	**1**	**2**	**5**	**13**	**1,273**	**16.9**	**46.1**
Female	9,955	1	2	5	15	742	17.4	45.5
Male	14,398	1	2	5	13	1,273	16.5	46.4
Cefiderocol	**948**	**1**	**4**	**13**	**50**	**1,052**	**46.8**	**90.0**
Female	418	1	4	13	56	1,052	49.8	100.2
Male	530	1	3	14	46	641	44.3	81.1
Crizanlizumab-tmca	**22,795**	**1**	**27**	**27**	**34**	**1,324**	**37.7**	**48.7**
Female	13,266	1	27	27	34	1,037	38.2	50.8
Male	9,529	1	27	27	34	1,324	37.0	45.5
Givosiran	**2,258**	**1**	**27**	**27**	**29**	**453**	**31.1**	**26.3**
Female	1,836	1	27	27	30	453	31.6	27.6
Male	422	1	27	27	29	352	29.2	19.7
Cenobamate	**26,653**	**1**	**2**	**5**	**14**	**1,375**	**20.2**	**62.5**
Female	13,470	1	2	5	15	1,375	21.0	63.5
Male	13,183	1	2	5	14	1,211	19.3	61.5
Voxelotor	**12,241**	**1**	**5**	**11**	**29**	**1,334**	**35.4**	**85.5**
Female	7,140	1	5	11	30	1,293	35.8	85.1
Male	5,101	1	4	11	28	1,334	35.0	86.0
Golodirsen	**1,760**	**1**	**6**	**6**	**7**	**271**	**8.9**	**12.1**
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	1,760	1	6	6	7	271	8.9	12.1

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Table 7b. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**97,322**	**1**	**6**	**6**	**13**	**1,139**	**11.6**	**19.1**
Female	26,975	1	6	6	13	778	11.3	16.8
Male	70,347	1	6	6	13	1,139	11.6	19.9
Brilliant Blue G Ophthalmic Solution	**98**	**7**	**48**	**111**	**230**	**1,177**	**200.5**	**236.1**
Female	51	7	55	118	223	1,177	192.1	218.0
Male	47	13	41	106	286	1,084	209.5	256.4
Lumateperone Tosylate	**50,763**	**1**	**3**	**6**	**18**	**1,283**	**23.2**	**67.1**
Female	29,955	1	3	6	18	1,283	23.5	66.7
Male	20,808	1	3	6	18	1,251	22.9	67.7
Lemborexant	**51,233**	**1**	**3**	**9**	**26**	**1,530**	**29.2**	**68.7**
Female	32,519	1	3	8	26	1,530	28.6	67.9
Male	18,714	1	3	9	28	1,312	30.2	70.2
Fam-Trastuzumab Deruxtecan-nxki	**132,621**	**1**	**20**	**20**	**21**	**1,154**	**23.5**	**20.1**
Female	122,801	1	20	20	21	1,154	23.5	20.1
Male	9,820	1	20	20	21	846	23.9	20.6
Ubrogepant	**569,119**	**1**	**10**	**25**	**58**	**1,710**	**53.7**	**92.0**
Female	502,392	1	10	25	58	1,710	53.7	91.8
Male	66,727	1	9	24	57	1,655	53.5	93.0

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**8,482**	**1**	**4**	**11**	**30**	**684**	**28.4**	**51.9**
0-17 years	*****	4	9	11	97	276	63.0	99.4
18-24 years	*****	1	5	12	34	413	28.5	47.4
25-40 years	1,147	1	4	12	32	627	30.2	57.4
41-64 years	4,432	1	4	10	27	542	26.0	47.0
≥ 65 years	2,660	1	4	12	34	684	31.6	57.0
Trifarotene	**22,400**	**1**	**19**	**60**	**129**	**1,496**	**103.6**	**139.4**
0-17 years	9,884	1	19	58	124	1,496	101.5	138.2
18-24 years	5,630	1	19	59	124	1,419	100.1	131.9
25-40 years	4,682	1	19	61	133	1,276	105.9	140.7
41-64 years	2,083	1	19	61	147	1,310	117.1	158.6
≥ 65 years	121	1	25	60	123	909	109.8	152.6
Brolucizumab–dbll	**87,696**	**1**	**35**	**55**	**69**	**1,509**	**60.7**	**48.7**
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	32	27	39	65	97	226	74.2	45.0
41-64 years	1,236	2	34	55	69	909	63.1	58.7
≥ 65 years	86,428	1	35	55	69	1,509	60.6	48.5
Afamelanotide	**375**	**44**	**55**	**62**	**72**	**620**	**80.0**	**54.6**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	45	52	55	62	69	201	74.9	36.2
25-40 years	79	47	55	62	76	315	85.4	57.4
41-64 years	190	44	55	62	70	620	78.5	57.8
≥ 65 years	61	50	57	62	75	340	81.0	52.3

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Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	*****	510	510	510	510	510	510.0	*****
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	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	*****	510	510	510	510	510	510.0	*****
Lasmiditan	24,380	1	10	23	50	1,456	47.8	84.5
0-17 years	46	2	26	53	112	976	99.3	160.1
18-24 years	554	1	11	29	74	1,000	61.1	97.9
25-40 years	4,931	1	9	24	52	1,456	48.9	86.8
41-64 years	15,354	1	9	23	48	1,328	45.9	80.9
≥ 65 years	3,495	1	11	24	53	1,147	51.9	92.1
Elexacaftor Ivacaftor Tezacaftor	59,714	1	3	7	18	1,511	22.7	66.9
0-17 years	16,874	1	3	7	17	1,351	20.3	54.6
18-24 years	13,517	1	3	8	21	1,511	25.6	69.7
25-40 years	22,227	1	3	7	17	1,471	22.7	71.2
41-64 years	5,968	1	3	6	15	1,178	21.8	69.9
≥ 65 years	1,128	1	2	6	15	1,167	28.3	88.4
Air Polymer-Type A	*****	7	7	7	7	7	7.0	*****
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	*****	7	7	7	7	7	7.0	*****
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**94,688**	**1**	**20**	**20**	**21**	**1,210**	**24.8**	**24.8**
0-17 years	58	13	20	20	22	79	23.9	11.3
18-24 years	300	1	20	20	27	172	25.5	16.6
25-40 years	1,562	1	20	20	23	526	26.4	26.3
41-64 years	4,585	1	20	20	21	1,106	24.7	29.7
≥ 65 years	88,183	1	20	20	21	1,210	24.7	24.5
Zanubrutinib	**24,353**	**1**	**2**	**5**	**13**	**1,273**	**16.9**	**46.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	11	1	2	3	6	20	5.5	6.1
25-40 years	33	1	2	6	17	70	13.5	17.0
41-64 years	2,054	1	2	5	13	650	13.7	33.8
≥ 65 years	22,255	1	2	5	13	1,273	17.2	47.0
Cefiderocol	**948**	**1**	**4**	**13**	**50**	**1,052**	**46.8**	**90.0**
0-17 years	*****	3	5	13	39	58	21.5	25.3
18-24 years	*****	1	6	32	84	236	69.7	89.8
25-40 years	107	1	3	10	39	587	44.2	93.0
41-64 years	352	1	4	11	39	1,052	42.9	88.2
≥ 65 years	475	1	4	16	56	941	49.9	91.1
Crizanlizumab-tmca	**22,795**	**1**	**27**	**27**	**34**	**1,324**	**37.7**	**48.7**
0-17 years	956	1	27	27	33	326	31.6	22.3
18-24 years	3,403	1	27	27	37	990	39.1	49.7
25-40 years	12,512	1	27	27	34	1,037	39.3	53.2
41-64 years	5,404	1	27	27	32	1,324	34.8	41.7
≥ 65 years	520	1	27	27	27	404	30.6	20.3

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Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**2,258**	**1**	**27**	**27**	**29**	**453**	**31.1**	**26.3**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	149	2	27	27	34	318	35.8	33.6
25-40 years	796	1	27	27	29	363	31.7	31.6
41-64 years	1,054	1	27	27	30	453	30.6	23.4
≥ 65 years	259	1	27	27	28	118	28.6	9.8
Cenobamate	**26,653**	**1**	**2**	**5**	**14**	**1,375**	**20.2**	**62.5**
0-17 years	896	1	2	6	16	909	18.8	53.9
18-24 years	3,023	1	2	5	15	1,098	21.3	62.0
25-40 years	9,772	1	2	5	15	1,143	19.9	59.0
41-64 years	10,453	1	2	5	14	1,211	20.0	64.9
≥ 65 years	2,509	1	2	5	14	1,375	20.9	69.0
Voxelotor	**12,241**	**1**	**5**	**11**	**29**	**1,334**	**35.4**	**85.5**
0-17 years	1,743	1	4	10	26	1,107	26.4	53.7
18-24 years	1,382	1	5	12	33	1,064	33.6	70.5
25-40 years	5,098	1	5	12	34	1,334	42.0	100.4
41-64 years	3,667	1	4	10	26	1,276	31.4	77.9
≥ 65 years	351	1	4	10	23	832	34.8	100.6
Golodirsen	**1,760**	**1**	**6**	**6**	**7**	**271**	**8.9**	**12.1**
0-17 years	1,581	1	6	6	6	271	8.3	11.0
18-24 years	151	1	6	6	14	123	15.0	19.2
25-40 years	*****	1	3	6	9	57	9.4	11.7
41-64 years	*****	*****	*****	*****	*****	*****	*****	*****
≥ 65 years	*****	*****	*****	*****	*****	*****	*****	*****

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Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**97,322**	**1**	**6**	**6**	**13**	**1,139**	**11.6**	**19.1**
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	157	3	6	12	25	100	14.8	12.7
41-64 years	10,569	1	6	6	13	1,139	11.4	17.8
≥ 65 years	86,596	1	6	6	13	1,019	11.6	19.3
Brilliant Blue G Ophthalmic Solution	**98**	**7**	**48**	**111**	**230**	**1,177**	**200.5**	**236.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	538	538	538	538	538	538.0	*****
25-40 years	*****	27	105	111	147	164	110.8	52.9
41-64 years	32	13	62	139	234	657	183.9	166.2
≥ 65 years	60	7	48	108	230	1,177	211.1	272.2
Lumateperone Tosylate	**50,763**	**1**	**3**	**6**	**18**	**1,283**	**23.2**	**67.1**
0-17 years	201	1	3	8	20	353	20.3	42.0
18-24 years	3,404	1	3	8	19	945	21.7	58.3
25-40 years	15,806	1	3	6	18	1,283	22.5	65.1
41-64 years	26,427	1	3	6	18	1,277	23.9	70.2
≥ 65 years	4,925	1	2	6	17	1,022	23.0	63.3
Lemborexant	**51,233**	**1**	**3**	**9**	**26**	**1,530**	**29.2**	**68.7**
0-17 years	58	1	3	8	26	99	18.3	24.4
18-24 years	1,079	1	3	9	31	1,221	32.4	77.8
25-40 years	7,510	1	4	9	26	1,530	27.7	66.0
41-64 years	24,714	1	3	8	25	1,312	27.9	67.2

Table 7c. Continuous Summary of All Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Gaps	Distribution of Treatment Episode Gap Durations, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	17,872	1	3	9	29	1,123	31.4	71.4
Fam-Trastuzumab Deruxtecan-nxki	**132,621**	**1**	**20**	**20**	**21**	**1,154**	**23.5**	**20.1**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	54	17	20	20	27	103	25.9	14.8
25-40 years	4,823	1	20	20	23	875	25.0	27.9
41-64 years	44,862	1	20	20	21	1,119	23.7	21.2
≥ 65 years	82,882	1	20	20	20	1,154	23.4	18.9
Ubrogepant	**569,119**	**1**	**10**	**25**	**58**	**1,710**	**53.7**	**92.0**
0-17 years	1,961	1	12	28	72	1,066	61.2	89.2
18-24 years	22,467	1	11	29	68	1,502	60.3	96.9
25-40 years	144,376	1	10	25	58	1,628	52.5	88.9
41-64 years	327,250	1	10	25	56	1,710	51.9	89.9
≥ 65 years	73,065	1	11	27	65	1,517	61.5	104.1

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 8a. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	4,211	1	4	11	31	684	30.5	56.0
Trifarotene	12,364	1	20	62	136	1,496	108.5	144.5
Brolucizumab–dbll	12,690	1	28	35	55	1,118	52.6	62.5
Afamelanotide	59	49	60	62	83	620	98.0	92.6
Fluorodopa F-18	*****	510	510	510	510	510	510.0	*****
Lasmiditan	5,551	1	11	27	68	1,456	64.7	114.2
Elexacaftor Ivacaftor Tezacaftor	10,248	1	3	6	18	1,511	32.0	103.3
Air Polymer-Type A	*****	7	7	7	7	7	7.0	*****
Luspatercept–amt	8,337	1	20	20	21	838	25.4	30.7
Zanubrutinib	7,160	1	2	6	17	1,069	20.6	55.5
Cefiderocol	514	1	6	19	61	941	55.3	96.8
Crizanlizumab-tmca	2,555	1	13	25	32	946	36.8	63.4
Givosiran	184	1	26	27	31	356	36.8	47.7
Cenobamate	9,083	1	3	7	20	1,211	28.1	79.3
Voxelotor	2,999	1	5	12	35	1,334	45.4	112.8
Golodirsen	77	1	6	6	8	77	10.0	11.3
Enfortumab Vedotin-ejfv	8,613	1	6	6	6	390	8.5	10.7

Table 8a. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Brilliant Blue G Ophthalmic Solution	93	7	48	111	237	1,177	207.1	240.3
Lumateperone Tosylate	18,276	1	3	7	20	1,283	30.1	86.2
Lemborexant	14,559	1	3	10	31	1,530	37.6	90.8
Fam-Trastuzumab Deruxtecan-nxki	14,550	1	20	20	21	806	23.8	22.5
Ubrogepant	129,049	1	11	31	77	1,710	70.8	120.1

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Tenapanor	**4,211**	**1**	**4**	**11**	**31**	**684**	**30.5**	**56.0**
Female	3,074	1	4	11	32	684	32.4	60.3
Male	1,137	1	4	12	30	455	25.4	41.6
Trifarotene	**12,364**	**1**	**20**	**62**	**136**	**1,496**	**108.5**	**144.5**
Female	8,865	1	22	64	145	1,496	114.4	150.3
Male	3,499	1	19	51	113	1,211	93.5	127.5
Brolucizumab–dbll	**12,690**	**1**	**28**	**35**	**55**	**1,118**	**52.6**	**62.5**
Female	7,335	1	28	35	55	1,094	52.5	59.7
Male	5,355	1	28	35	55	1,118	52.7	66.1
Afamelanotide	**59**	**49**	**60**	**62**	**83**	**620**	**98.0**	**92.6**
Female	31	49	61	67	82	340	89.1	63.6
Male	28	54	60	62	93	620	107.9	117.2
Fluorodopa F-18	*****	**510**	**510**	**510**	**510**	**510**	**510.0**	*****
Female	*****	510	510	510	510	510	510.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Lasmiditan	**5,551**	**1**	**11**	**27**	**68**	**1,456**	**64.7**	**114.2**
Female	4,770	1	11	27	67	1,372	63.7	110.6
Male	781	1	11	28	71	1,456	71.0	133.6
Elexacaftor Ivacaftor Tezacaftor	**10,248**	**1**	**3**	**6**	**18**	**1,511**	**32.0**	**103.3**
Female	5,021	1	3	7	20	1,511	36.0	112.2
Male	5,227	1	3	6	17	1,491	28.2	93.9
Air Polymer-Type A	*****	**7**	**7**	**7**	**7**	**7**	**7.0**	*****
Female	*****	7	7	7	7	7	7.0	*****
Male	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**8,337**	**1**	**20**	**20**	**21**	**838**	**25.4**	**30.7**
Female	3,666	1	20	20	21	821	25.9	32.3
Male	4,671	1	20	20	21	838	24.9	29.5
Zanubrutinib	**7,160**	**1**	**2**	**6**	**17**	**1,069**	**20.6**	**55.5**
Female	2,929	1	3	6	18	742	21.2	53.8
Male	4,231	1	2	5	15	1,069	20.2	56.7
Cefiderocol	**514**	**1**	**6**	**19**	**61**	**941**	**55.3**	**96.8**
Female	224	1	6	17	64	941	57.4	103.5
Male	290	1	7	21	59	641	53.7	91.4
Crizanlizumab-tmca	**2,555**	**1**	**13**	**25**	**32**	**946**	**36.8**	**63.4**
Female	1,517	1	13	20	32	946	35.4	61.5
Male	1,038	1	13	27	32	859	38.8	66.2
Givosiran	**184**	**1**	**26**	**27**	**31**	**356**	**36.8**	**47.7**
Female	145	1	26	27	32	356	39.4	52.6
Male	39	1	24	27	27	98	27.1	18.1
Cenobamate	**9,083**	**1**	**3**	**7**	**20**	**1,211**	**28.1**	**79.3**
Female	4,560	1	3	7	21	1,031	28.8	80.7
Male	4,523	1	3	7	20	1,211	27.4	77.9
Voxelotor	**2,999**	**1**	**5**	**12**	**35**	**1,334**	**45.4**	**112.8**
Female	1,730	1	4	12	36	1,274	46.6	112.4
Male	1,269	1	5	12	34	1,334	43.8	113.5
Golodirsen	**77**	**1**	**6**	**6**	**8**	**77**	**10.0**	**11.3**
Female	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
Male	77	1	6	6	8	77	10.0	11.3

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Table 8b. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Sex

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**8,613**	**1**	**6**	**6**	**6**	**390**	**8.5**	**10.7**
Female	2,347	1	6	6	6	336	8.4	10.9
Male	6,266	1	6	6	6	390	8.5	10.6
Brilliant Blue G Ophthalmic Solution	**93**	**7**	**48**	**111**	**237**	**1,177**	**207.1**	**240.3**
Female	49	7	55	125	223	1,177	196.9	221.2
Male	44	13	41	108	297	1,084	218.4	262.1
Lumateperone Tosylate	**18,276**	**1**	**3**	**7**	**20**	**1,283**	**30.1**	**86.2**
Female	10,888	1	3	7	20	1,283	30.8	87.1
Male	7,388	1	3	7	20	1,197	29.0	84.7
Lemborexant	**14,559**	**1**	**3**	**10**	**31**	**1,530**	**37.6**	**90.8**
Female	9,317	1	3	10	30	1,530	36.7	89.5
Male	5,242	1	4	11	32	1,312	39.2	93.0
Fam-Trastuzumab Deruxtecan-nxki	**14,550**	**1**	**20**	**20**	**21**	**806**	**23.8**	**22.5**
Female	12,995	1	20	20	21	806	23.9	23.5
Male	1,555	1	20	20	21	194	22.8	10.5
Ubrogepant	**129,049**	**1**	**11**	**31**	**77**	**1,710**	**70.8**	**120.1**
Female	113,033	1	11	31	77	1,710	70.7	119.8
Male	16,016	1	10	30	78	1,655	71.8	122.5

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	**Distribution of First Treatment Episode Gap Duration, days**						
		Minimum	**Q1**	**Median**	**Q3**	**Maximum**	**Mean**	**Standard Deviation**
Tenapanor	**4,211**	**1**	**4**	**11**	**31**	**684**	**30.5**	**56.0**
0-17 years	*****	4	9	11	97	276	79.4	116.5
18-24 years	*****	1	5	12	31	332	26.6	43.0
25-40 years	557	1	5	12	31	573	31.2	60.3
41-64 years	2,184	1	4	10	28	542	27.7	50.0
≥ 65 years	1,340	1	5	13	36	684	35.1	63.2
Trifarotene	**12,364**	**1**	**20**	**62**	**136**	**1,496**	**108.5**	**144.5**
0-17 years	5,270	1	21	61	131	1,496	107.6	148.1
18-24 years	3,164	1	20	62	134	1,419	104.9	134.6
25-40 years	2,762	1	20	63	139	1,276	109.4	142.2
41-64 years	1,108	1	21	64	155	1,175	120.6	158.5
≥ 65 years	60	1	28	64	136	909	113.9	155.3
Brolucizumab–dbll	**12,690**	**1**	**28**	**35**	**55**	**1,118**	**52.6**	**62.5**
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	*****	27	29	35	71	101	53.2	30.3
41-64 years	*****	2	27	40	59	559	55.8	61.5
≥ 65 years	12,450	1	28	35	55	1,118	52.5	62.5
Afamelanotide	**59**	**49**	**60**	**62**	**83**	**620**	**98.0**	**92.6**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	55	59	62	131	201	92.4	54.6
25-40 years	17	49	55	67	75	315	87.3	68.6
41-64 years	23	54	59	62	83	620	101.4	119.8
≥ 65 years	*****	60	62	72	108	340	109.8	87.4

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Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Fluorodopa F-18	*****	510	510	510	510	510	510.0	*****
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	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	*****	510	510	510	510	510	510.0	*****
Lasmiditan	**5,551**	**1**	**11**	**27**	**68**	**1,456**	**64.7**	**114.2**
0-17 years	19	4	9	33	82	401	81.6	113.1
18-24 years	185	1	14	40	97	1,000	74.9	109.1
25-40 years	1,273	1	11	27	65	1,456	62.2	114.0
41-64 years	3,308	1	10	26	63	1,328	60.7	108.1
≥ 65 years	766	1	12	32	86	1,010	83.5	137.3
Elexacaftor Ivacaftor Tezacaftor	**10,248**	**1**	**3**	**6**	**18**	**1,511**	**32.0**	**103.3**
0-17 years	3,660	1	3	6	15	1,351	23.9	72.5
18-24 years	2,239	1	3	8	23	1,511	38.1	109.7
25-40 years	3,202	1	3	6	17	1,471	35.8	124.2
41-64 years	910	1	2	6	19	1,178	34.2	110.5
≥ 65 years	237	1	3	7	21	691	41.5	101.5
Air Polymer-Type A	*****	7	7	7	7	7	7.0	*****
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	*****	7	7	7	7	7	7.0	*****
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Luspatercept–amt	**8,337**	**1**	**20**	**20**	**21**	**838**	**25.4**	**30.7**
0-17 years	*****	20	20	20	20	20	20.0	*****
18-24 years	*****	4	20	20	22	154	27.8	27.3
25-40 years	114	9	20	20	27	160	28.0	19.9
41-64 years	393	1	20	20	22	821	25.7	42.7
≥ 65 years	7,795	1	20	20	21	838	25.3	30.1
Zanubrutinib	**7,160**	**1**	**2**	**6**	**17**	**1,069**	**20.6**	**55.5**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	1	1	2	2	2	1.5	0.7
25-40 years	*****	1	2	6	15	25	9.0	9.3
41-64 years	*****	1	2	5	15	650	17.6	49.7
≥ 65 years	6,557	1	2	6	17	1,069	20.9	56.1
Cefiderocol	**514**	**1**	**6**	**19**	**61**	**941**	**55.3**	**96.8**
0-17 years	*****	19	19	39	58	58	38.5	27.6
18-24 years	*****	3	6	21	69	227	57.8	86.6
25-40 years	*****	1	6	17	67	587	60.3	110.8
41-64 years	172	1	5	14	52	394	48.5	78.6
≥ 65 years	276	1	8	22	64	941	58.6	104.4
Crizanlizumab-tmca	**2,555**	**1**	**13**	**25**	**32**	**946**	**36.8**	**63.4**
0-17 years	141	1	13	15	28	201	26.5	27.9
18-24 years	500	1	13	27	34	476	36.6	52.2
25-40 years	1,334	1	13	26	33	946	40.3	75.3
41-64 years	537	1	13	21	30	489	31.8	47.0
≥ 65 years	43	1	13	17	27	69	22.2	12.4

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Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Givosiran	**184**	**1**	**26**	**27**	**31**	**356**	**36.8**	**47.7**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	12	2	8	27	53	239	46.8	66.4
25-40 years	63	1	25	27	34	356	44.3	65.6
41-64 years	91	1	27	27	30	221	32.6	31.5
≥ 65 years	18	1	26	27	29	53	24.9	12.4
Cenobamate	**9,083**	**1**	**3**	**7**	**20**	**1,211**	**28.1**	**79.3**
0-17 years	368	1	3	8	21	414	25.5	53.3
18-24 years	1,133	1	3	7	21	948	27.8	70.0
25-40 years	3,321	1	3	7	20	1,143	26.6	72.7
41-64 years	3,398	1	3	7	20	1,211	29.7	89.7
≥ 65 years	863	1	3	7	19	966	29.3	80.9
Voxelotor	**2,999**	**1**	**5**	**12**	**35**	**1,334**	**45.4**	**112.8**
0-17 years	503	1	4	10	27	416	25.7	45.0
18-24 years	393	1	5	12	39	1,064	39.0	90.5
25-40 years	1,248	1	5	14	40	1,334	55.8	134.4
41-64 years	775	1	5	12	33	1,276	43.8	109.4
≥ 65 years	80	1	3	10	31	832	54.7	151.0
Golodirsen	**77**	**1**	**6**	**6**	**8**	**77**	**10.0**	**11.3**
0-17 years	62	1	6	6	7	77	9.5	11.5
18-24 years	*****	1	5	6	12	31	10.3	10.2
25-40 years	*****	7	7	21	27	27	18.3	10.3
41-64 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
≥ 65 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN

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Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
Enfortumab Vedotin-ejfv	**8,613**	**1**	**6**	**6**	**6**	**390**	**8.5**	**10.7**
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	23	4	6	6	7	21	7.9	4.0
41-64 years	941	4	6	6	7	125	9.1	9.3
≥ 65 years	7,649	1	6	6	6	390	8.4	10.9
Brilliant Blue G Ophthalmic Solution	**93**	**7**	**48**	**111**	**237**	**1,177**	**207.1**	**240.3**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	538	538	538	538	538	538.0	*****
25-40 years	*****	27	105	111	147	164	110.8	52.9
41-64 years	*****	13	62	139	234	657	183.9	166.2
≥ 65 years	55	7	48	111	251	1,177	223.3	280.8
Lumateperone Tosylate	**18,276**	**1**	**3**	**7**	**20**	**1,283**	**30.1**	**86.2**
0-17 years	76	1	2	7	21	250	26.5	51.2
18-24 years	1,351	1	4	9	21	941	26.3	70.8
25-40 years	5,836	1	3	7	19	1,283	28.4	81.9
41-64 years	9,214	1	3	7	21	1,277	30.8	90.2
≥ 65 years	1,799	1	3	8	24	1,022	34.9	89.7
Lemborexant	**14,559**	**1**	**3**	**10**	**31**	**1,530**	**37.6**	**90.8**
0-17 years	19	2	4	12	28	99	21.4	26.9
18-24 years	343	1	4	11	35	1,013	42.1	97.6
25-40 years	2,157	1	4	10	28	1,530	33.5	88.2
41-64 years	6,777	1	3	10	29	1,312	35.8	87.8

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Table 8c. Continuous Summary of First Treatment Episode Gaps for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024, by Age Group

	Total Number of Patients	Distribution of First Treatment Episode Gap Duration, days						
		Minimum	Q1	Median	Q3	Maximum	Mean	Standard Deviation
≥ 65 years	5,263	1	3	11	34	1,123	41.4	95.2
Fam-Trastuzumab Deruxtecan-nxki	**14,550**	**1**	**20**	**20**	**21**	**806**	**23.8**	**22.5**
0-17 years	0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
18-24 years	*****	20	20	20	27	27	22.3	3.6
25-40 years	*****	1	20	20	23	440	25.0	23.3
41-64 years	4,866	1	20	20	21	806	24.1	24.3
≥ 65 years	9,102	1	20	20	21	705	23.5	21.4
Ubrogepant	**129,049**	**1**	**11**	**31**	**77**	**1,710**	**70.8**	**120.1**
0-17 years	573	1	12	33	92	575	67.9	86.3
18-24 years	6,433	1	13	35	87	1,502	74.8	115.7
25-40 years	34,723	1	11	31	74	1,625	67.0	113.0
41-64 years	69,805	1	11	29	75	1,710	68.1	117.4
≥ 65 years	17,515	1	12	36	96	1,517	87.7	143.4

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

Data represented by NaN (Not a Number) is due to their inability to be calculated.

Table 9. Summary of Reasons Treatment Episodes Ended for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024[1,2]

		Censoring Reason						
		End of Exposure Episode[3]		Occurrence of User-Defined Censoring Criteria[4]		Disenrollment[5]		End of Data[6]	
	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
Tenapanor	20,145	20,078	99.7%	0	0.0%	4,893	24.3%	3,802	18.9%
Trifarotene	56,042	56,042	100.0%	0	0.0%	2,635	4.7%	1,243	2.2%
Brolucizumab–dbll	105,585	105,585	100.0%	0	0.0%	*****	*****	*****	*****
Afamelanotide	441	441	100.0%	0	0.0%	0	0.0%	0	0.0%
Fluorodopa F-18	129	129	100.0%	0	0.0%	0	0.0%	0	0.0%
Lasmiditan	34,868	34,849	99.9%	0	0.0%	1,535	4.4%	889	2.5%
Elexacaftor Ivacaftor Tezacaftor	73,899	73,810	99.9%	0	0.0%	10,376	14.0%	7,031	9.5%
Air Polymer-Type A	157	157	100.0%	0	0.0%	0	0.0%	0	0.0%
Luspatercept–amt	104,056	104,021	100.0%	0	0.0%	116	0.1%	92	0.1%
Zanubrutinib	36,117	35,707	98.9%	0	0.0%	6,983	19.3%	5,954	16.5%
Cefiderocol	3,025	3,023	99.9%	0	0.0%	16	0.5%	12	0.4%
Crizanlizumab-tmca	25,731	25,727	100.0%	0	0.0%	101	0.4%	67	0.3%
Givosiran	2,479	2,478	100.0%	0	0.0%	37	1.5%	28	1.1%
Cenobamate	42,902	42,714	99.6%	0	0.0%	10,454	24.4%	7,832	18.3%
Voxelotor	16,688	16,597	99.5%	0	0.0%	1,492	8.9%	1,058	6.3%
Golodirsen	1,849	1,849	100.0%	0	0.0%	36	1.9%	34	1.8%
Enfortumab Vedotin-ejfv	106,609	106,606	100.0%	0	0.0%	52	0.0%	71	0.1%
Brilliant Blue G Ophthalmic Solution	1,624	1,624	100.0%	0	0.0%	*****	*****	*****	*****
Lumateperone Tosylate	90,942	90,758	99.8%	0	0.0%	14,733	16.2%	10,114	11.1%
Lemborexant	82,244	82,084	99.8%	0	0.0%	7,290	8.9%	4,537	5.5%

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Table 9. Summary of Reasons Treatment Episodes Ended for Exposures of Interest in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024[1,2]

		End of Exposure Episode[3]		Occurrence of User-Defined Censoring Criteria[4]		Disenrollment[5]		End of Data[6]	
	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**
Fam-Trastuzumab Deruxtecan-nxki	149,248	149,234	100.0%	0	0.0%	115	0.1%	103	0.1%
Ubrogepant	779,021	778,788	100.0%	0	0.0%	50,508	6.5%	30,553	3.9%

[1]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.

[2]All reasons for censoring may not be displayed to prevent publication of small cells.

[3]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.

[4]Represents episodes censored due to occurrence of additional user-defined criteria using drug, procedure, diagnosis, and/or laboratory codes.

[5]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.

[6]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.

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

Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Tenapanor		Trifarotene		Brolucizumab–dbll		Afamelanotide	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233
Members with a valid index event								
Had any cohort-defining claim during the query period	13,825	237,653,248	*****	*****	18,545	237,648,528	*****	*****
Claim recorded during specified age range	13,825	0	37,479	*****	18,545	0	*****	*****
Episode defining index claim recorded during the query period	13,825	0	37,479	0	18,545	0	*****	*****
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	11,663	2,162	33,642	3,837	17,889	656	66	*****
Met inclusion and exclusion criteria	11,663	0	33,642	0	17,889	0	66	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	11,663	0	33,642	0	17,889	0	66	0
Final cohort								
Number of members	11,663	N/A	33,642	N/A	17,889	N/A	66	N/A

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Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Fluorodopa F-18		Lasmiditan		Elexacaftor Ivacaftor Tezacaftor		Air Polymer-Type A	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233
Members with a valid index event								
Had any cohort-defining claim during the query period	*****	*****	11,812	237,655,261	16,402	237,650,671	186	237,666,887
Claim recorded during specified age range	*****	*****	11,812	0	16,402	0	186	0
Episode defining index claim recorded during the query period	*****	*****	11,812	0	16,402	0	186	0
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	128	*****	10,488	1,324	14,185	2,217	156	30
Met inclusion and exclusion criteria	128	0	10,488	0	14,185	0	156	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	128	0	10,488	0	14,185	0	156	0
Final cohort								
Number of members	128	N/A	10,488	N/A	14,185	N/A	156	N/A

Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Luspatercept–amt		Zanubrutinib		Cefiderocol		Crizanlizumab-tmca	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233
Members with a valid index event								
Had any cohort-defining claim during the query period	10,024	237,657,049	12,932	237,654,141	2,397	237,664,676	3,209	237,663,864
Claim recorded during specified age range	10,024	0	12,932	0	2,397	0	3,209	0
Episode defining index claim recorded during the query period	10,024	0	12,932	0	2,397	0	3,209	0
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	9,368	656	11,764	1,168	2,077	320	2,936	273
Met inclusion and exclusion criteria	9,368	0	11,764	0	2,077	0	2,936	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	9,368	0	11,764	0	2,077	0	2,936	0
Final cohort								
Number of members	9,368	N/A	11,764	N/A	2,077	N/A	2,936	N/A

Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Givosiran		Cenobamate		Voxelotor		Golodirsen	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233
Members with a valid index event								
Had any cohort-defining claim during the query period	247	237,666,826	19,271	237,647,802	4,929	237,662,144	*****	*****
Claim recorded during specified age range	247	0	19,271	0	4,929	0	*****	*****
Episode defining index claim recorded during the query period	247	0	19,271	0	4,929	0	*****	*****
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	221	26	16,249	3,022	4,447	482	89	*****
Met inclusion and exclusion criteria	221	0	16,249	0	4,447	0	89	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	221	0	16,249	0	4,447	0	89	0
Final cohort								
Number of members	221	N/A	16,249	N/A	4,447	N/A	89	N/A

Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Enfortumab Vedotin-ejfv		Brilliant Blue G Ophthalmic Solution		Lumateperone Tosylate		Lemborexant	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements								
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233	237,667,073	87,233
Members with a valid index event								
Had any cohort-defining claim during the query period	10,133	237,656,940	1,714	237,665,359	48,035	237,619,038	35,847	237,631,226
Claim recorded during specified age range	10,133	0	1,714	0	48,035	0	35,847	0
Episode defining index claim recorded during the query period	10,133	0	1,714	0	48,035	0	35,847	0
Members with required pre-index history								
Had sufficient pre-index continuous enrollment	9,287	846	1,526	188	40,179	7,856	31,011	4,836
Met inclusion and exclusion criteria	9,287	0	1,526	0	40,179	0	31,011	0
Members with required post-index follow-up								
Had sufficient post-index continuous enrollment	9,287	0	1,526	0	40,179	0	31,011	0
Final cohort								
Number of members	9,287	N/A	1,526	N/A	40,179	N/A	31,011	N/A

Table 10. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

	Fam-Trastuzumab Deruxtecan-nxki		Ubrogepant	
	Remaining	Excluded	Remaining	Excluded
Members meeting enrollment and demographic requirements				
Enrolled at any point during the query period	318,817,616	N/A	318,817,616	N/A
Had required coverage type (medical and/or drug coverage)	237,760,359	81,057,257	237,760,359	81,057,257
Enrolled during specified age range	237,754,306	6,053	237,754,306	6,053
Had requestable medical charts	237,754,306	0	237,754,306	0
Met demographic requirements (sex, race, and Hispanic origin)	237,667,073	87,233	237,667,073	87,233
Members with a valid index event				
Had any cohort-defining claim during the query period	18,634	237,648,439	241,011	237,426,062
Claim recorded during specified age range	18,634	0	241,011	0
Episode defining index claim recorded during the query period	18,634	0	241,011	0
Members with required pre-index history				
Had sufficient pre-index continuous enrollment	16,627	2,007	209,902	31,109
Met inclusion and exclusion criteria	16,627	0	209,902	0
Members with required post-index follow-up				
Had sufficient post-index continuous enrollment	16,627	0	209,902	0
Final cohort				
Number of members	16,627	N/A	209,902	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 December 31, 2024

The FDA approval date for this drug was on September 12, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
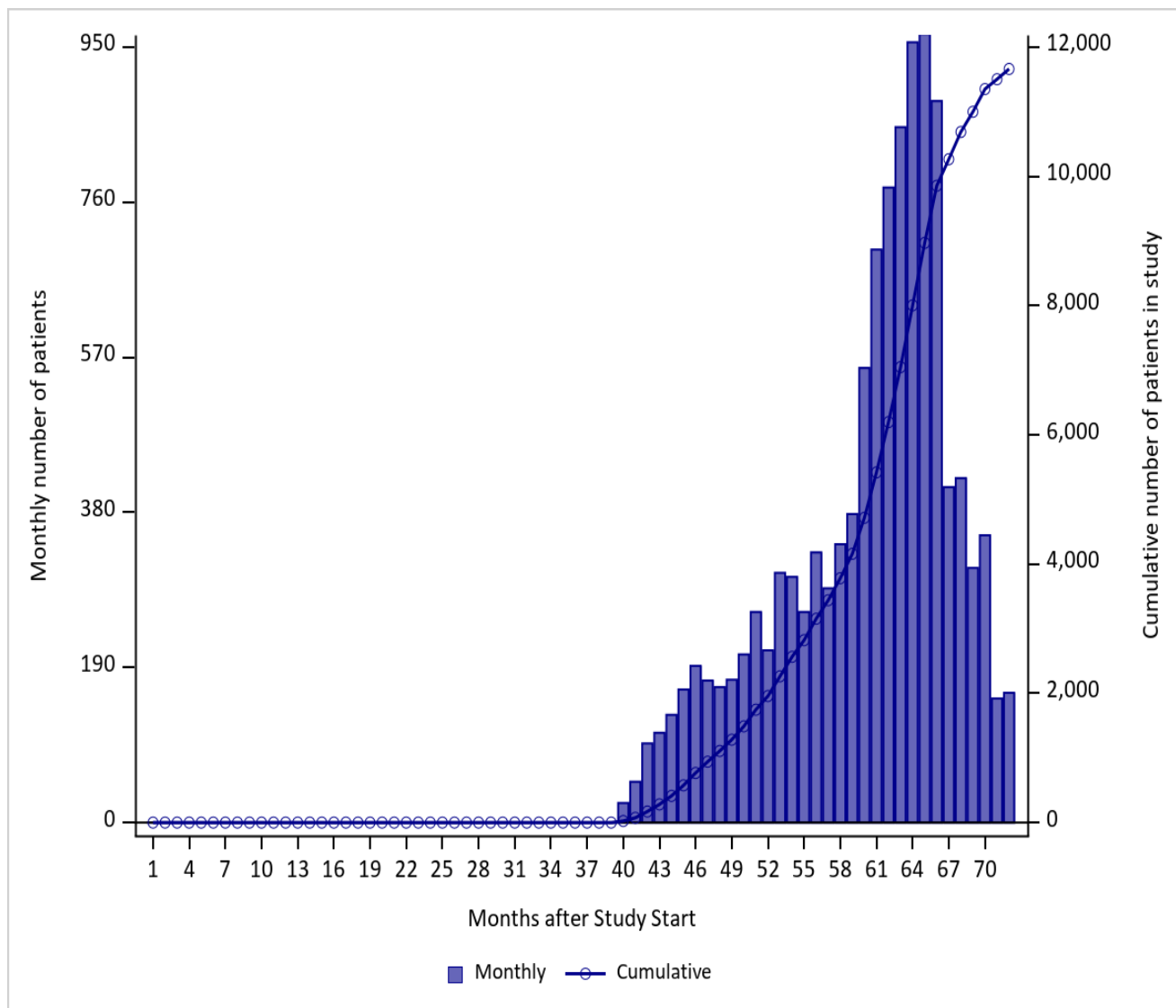
Figure 1b. Patient Entry into Study by Month for Trifarotene in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on October 4, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
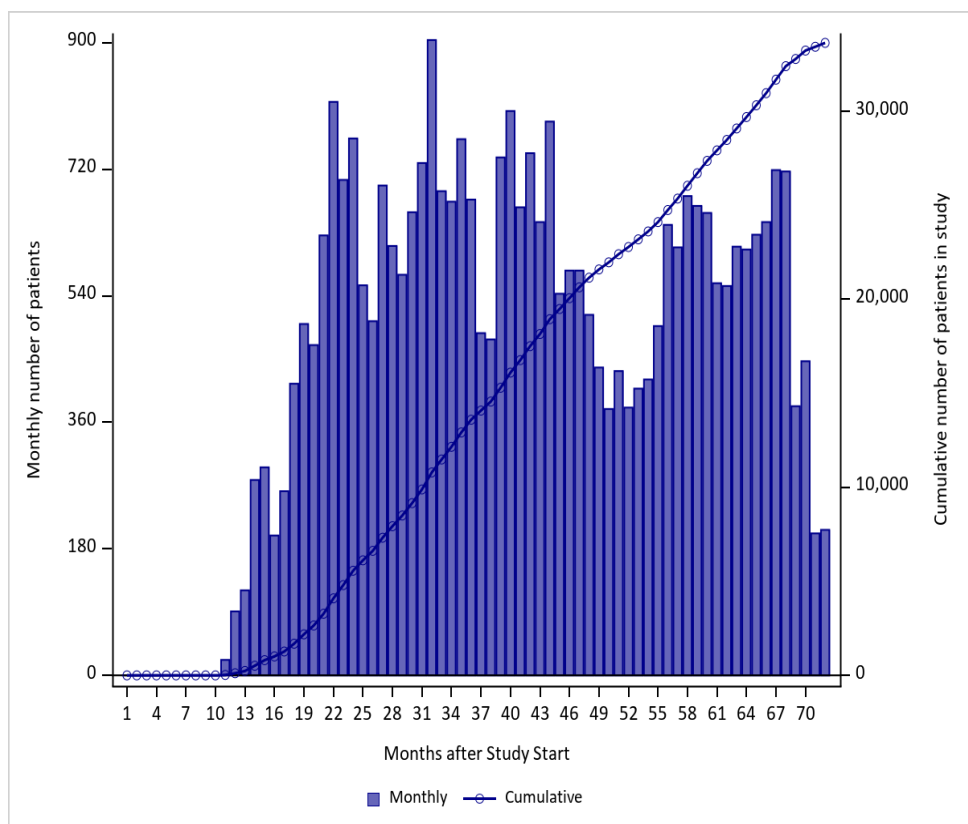
Figure 1c. Patient Entry into Study by Month for Brolucizumab–dbll in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on October 7, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
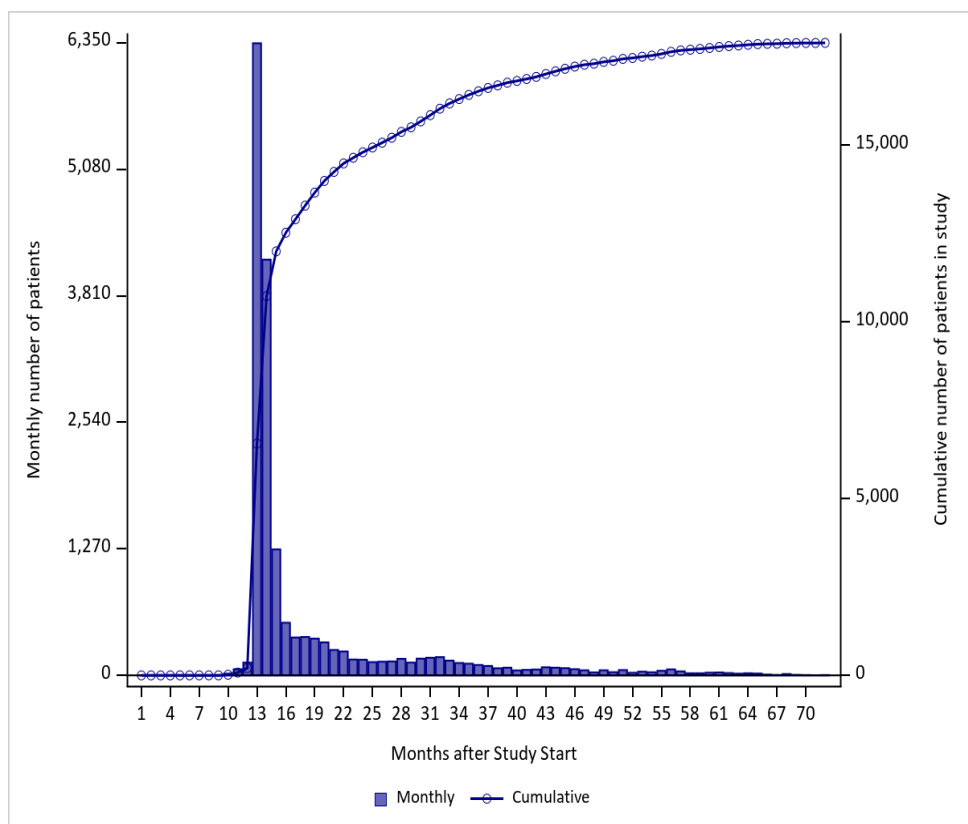
Figure 1d. Patient Entry into Study by Month for Afamelanotide in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on October 8, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

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 December 31, 2024

The FDA approval date for this drug was on October 10, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

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 December 31, 2024

The FDA approval date for this drug was on October 11, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
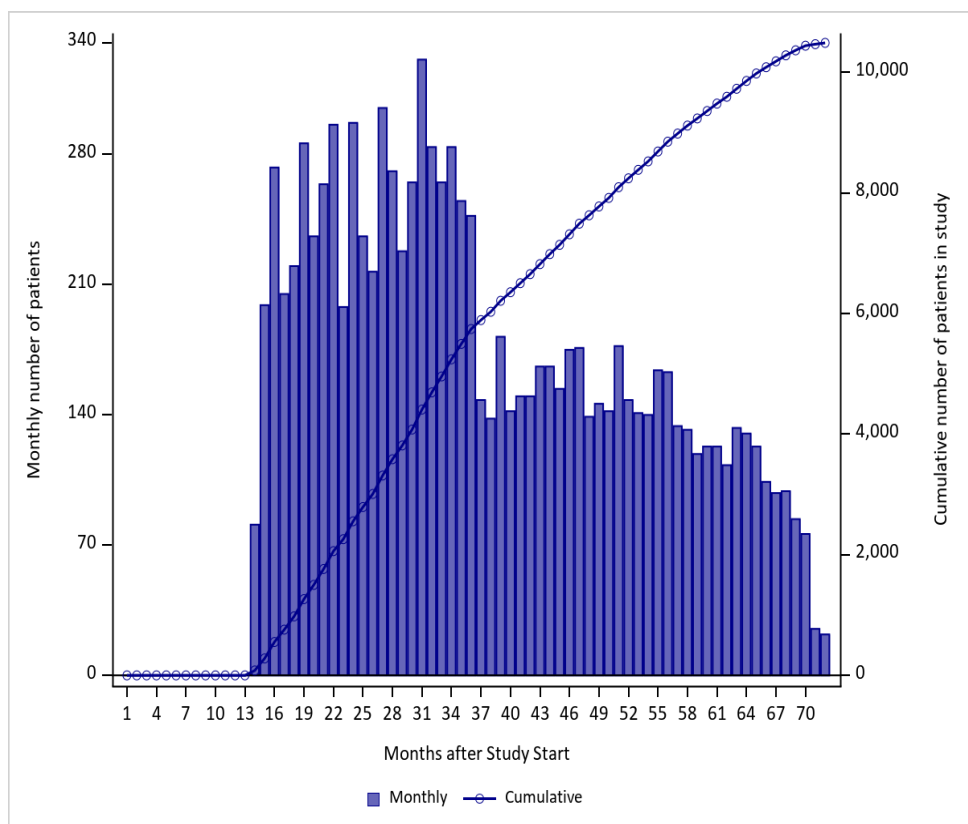
Figure 1g. Patient Entry into Study by Month for Elexacaftor Ivacaftor Tezacaftor in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on October 21, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
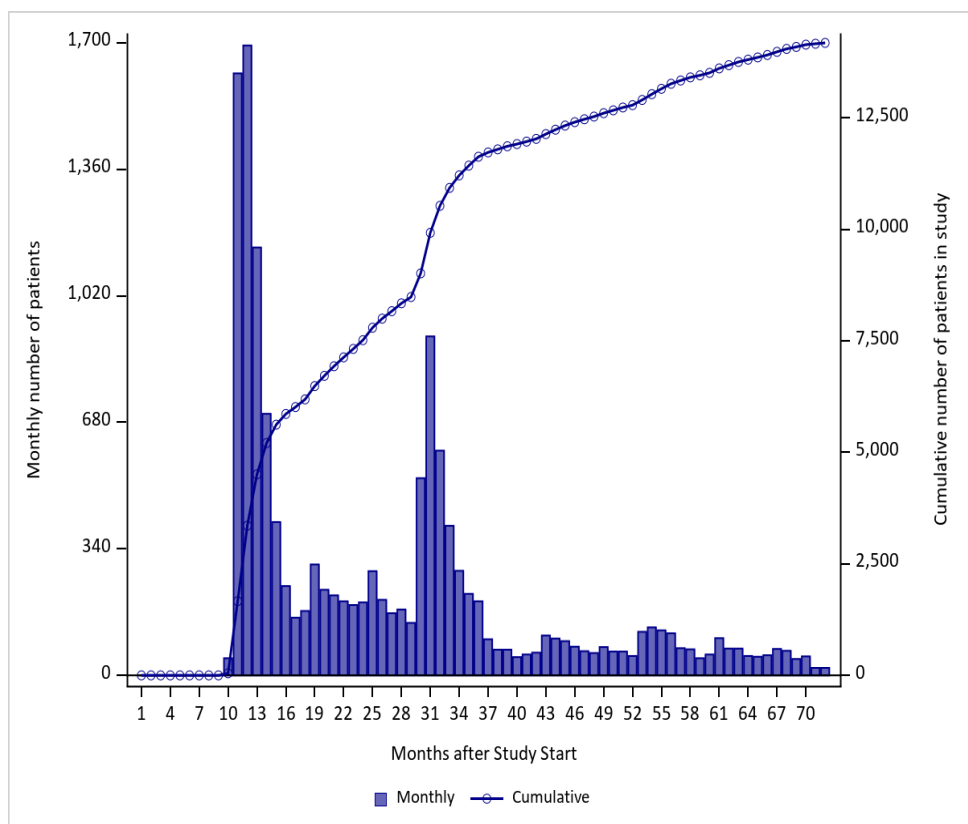
Figure 1h. Patient Entry into Study by Month for Air Polymer-Type A in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 7, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

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–amt in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 8, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
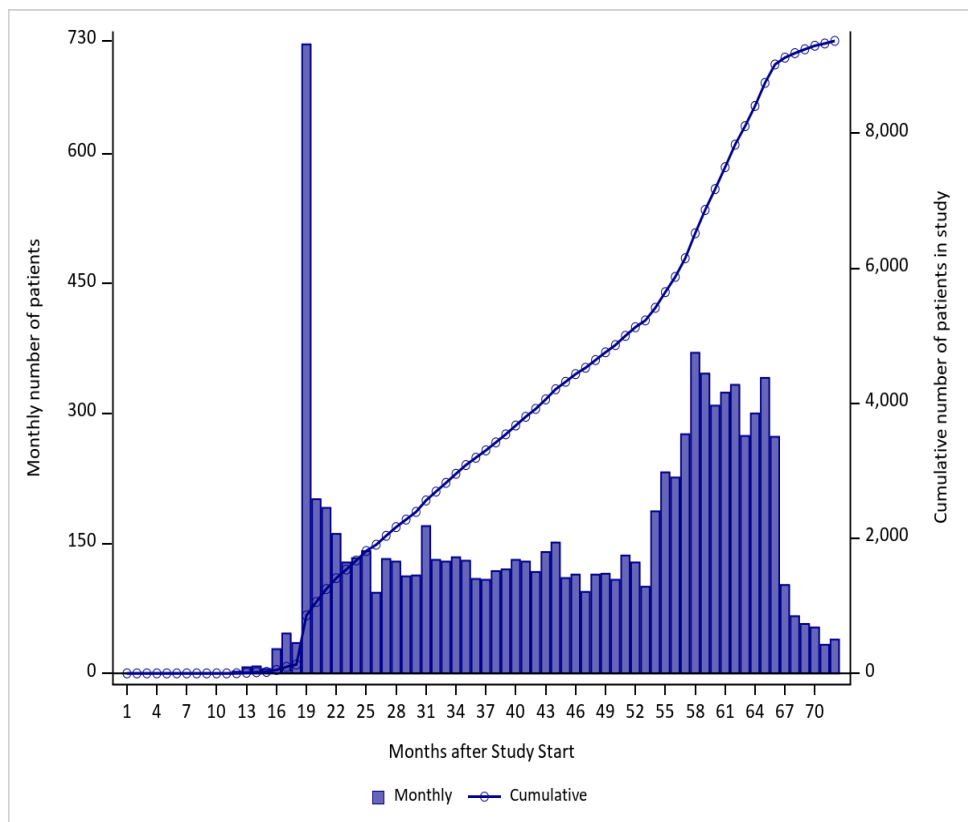
Figure 1j. Patient Entry into Study by Month for Zanubrutinib in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 14, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
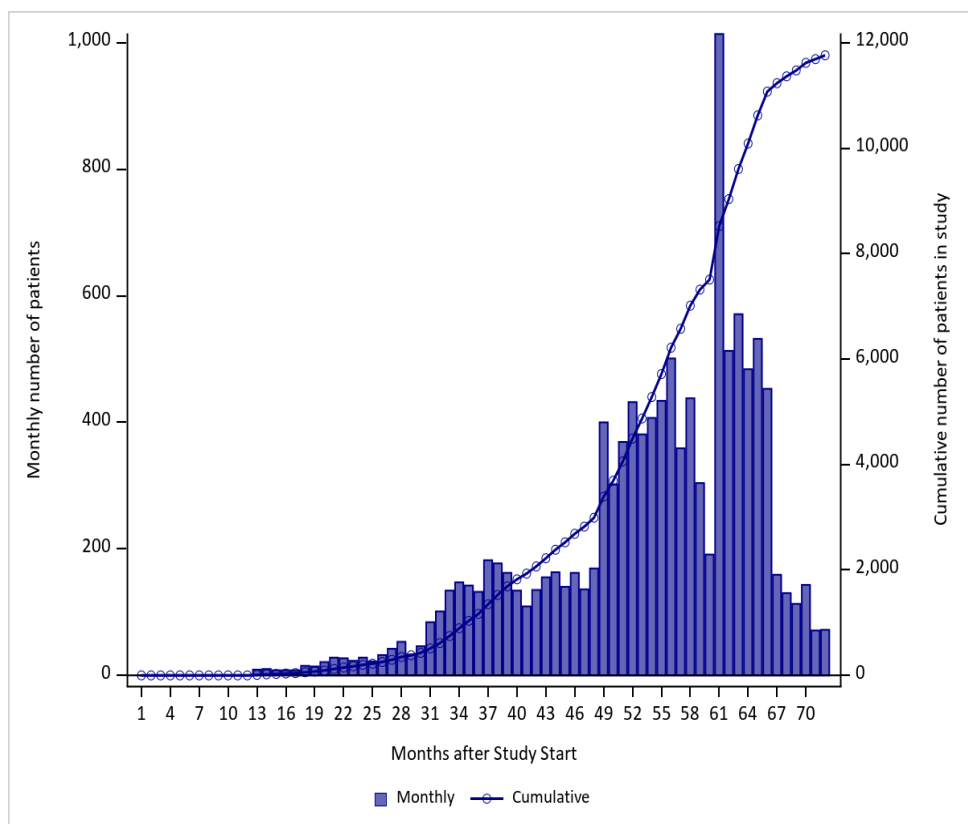
Figure 1k. Patient Entry into Study by Month for Cefiderocol in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 14, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
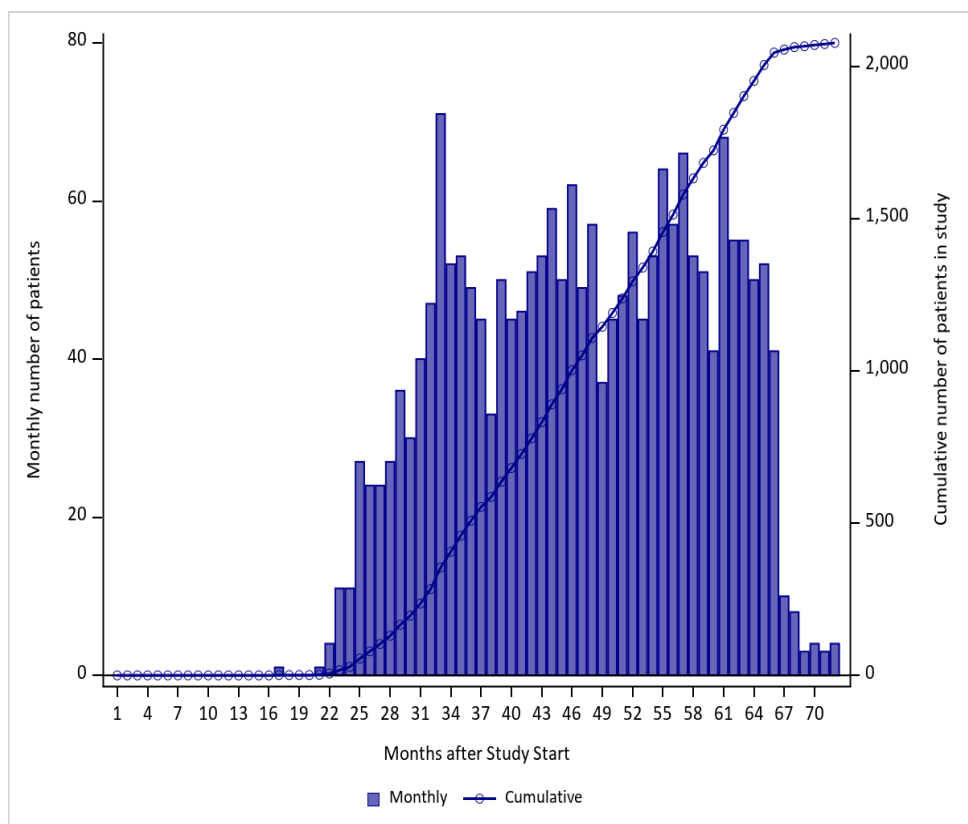
Figure 1l. Patient Entry into Study by Month for Crizanlizumab-tmca in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 15, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
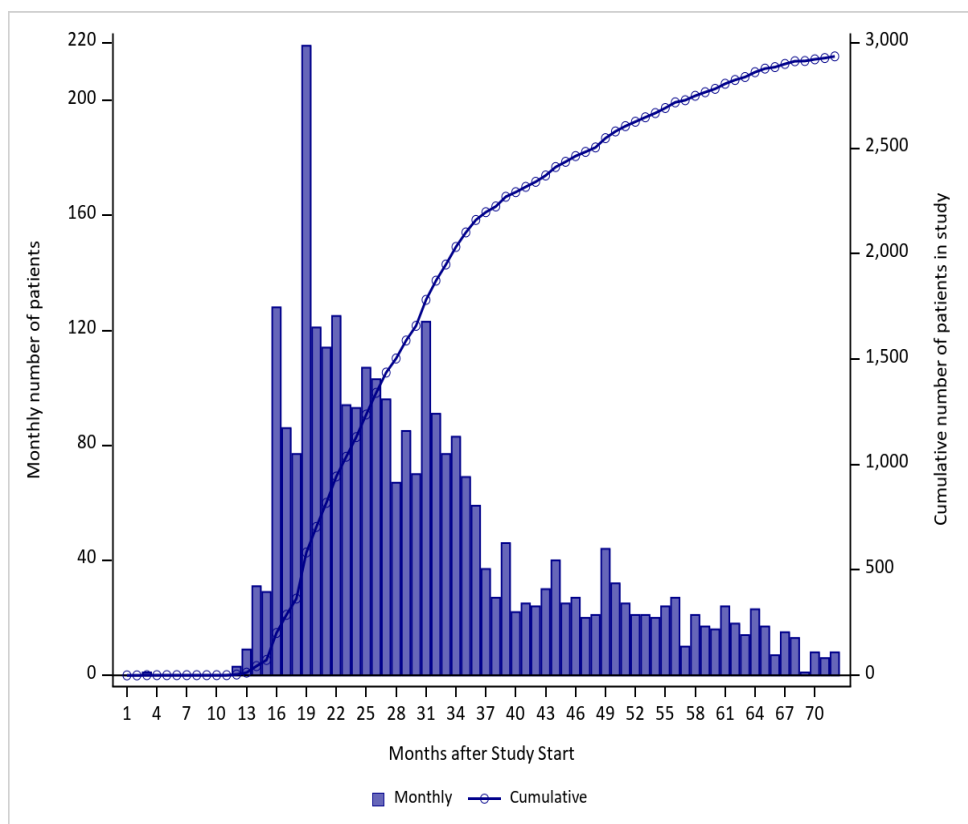
Figure 1m. Patient Entry into Study by Month for Givosiran in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 20, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

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 December 31, 2024

The FDA approval date for this drug was on November 21, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
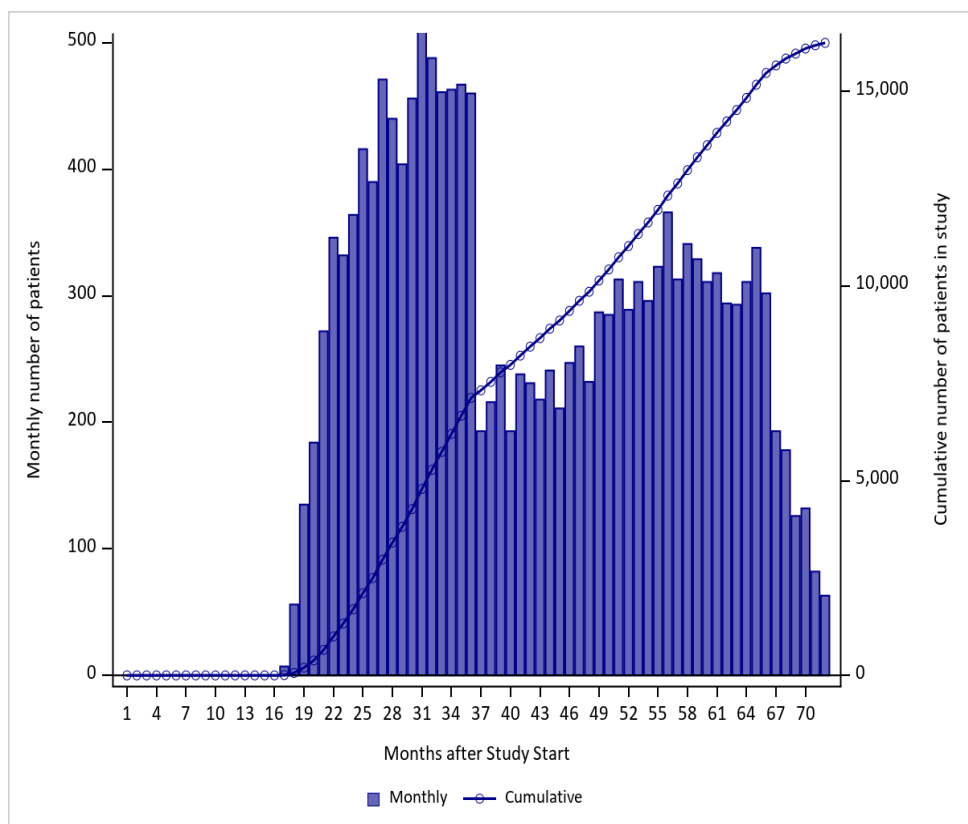
Figure 1o. Patient Entry into Study by Month for Voxelotor in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on November 25, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
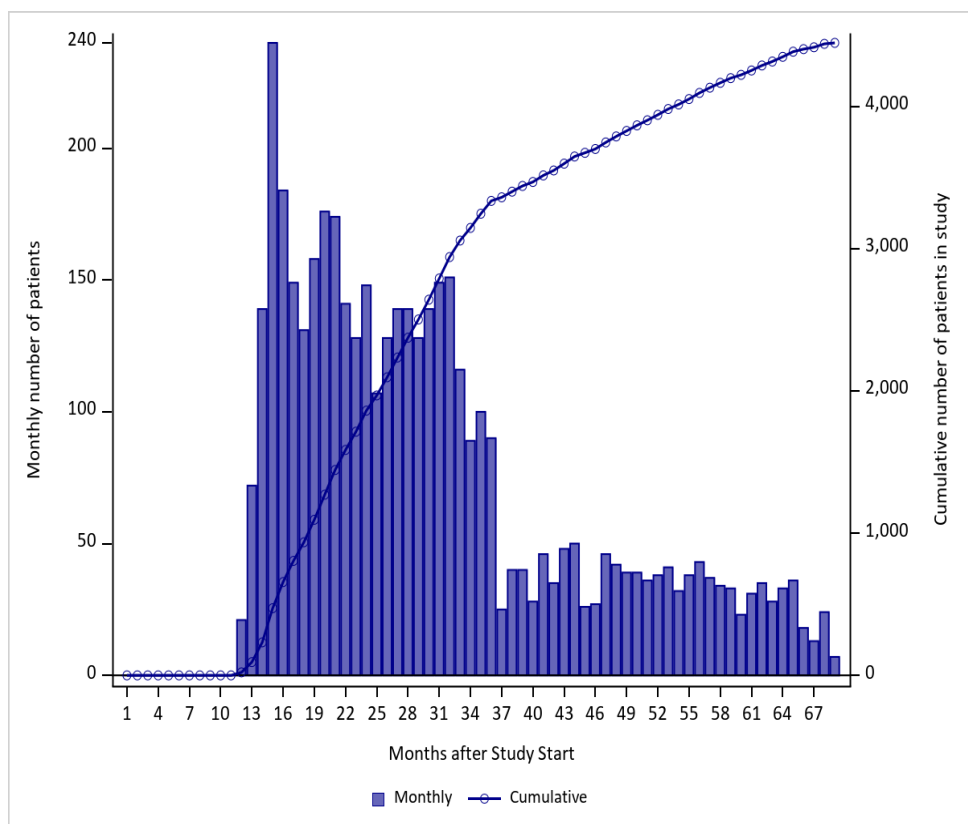
Figure 1p. Patient Entry into Study by Month for Golodirsen in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on December 12, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

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 December 31, 2024

The FDA approval date for this drug was on December 18, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
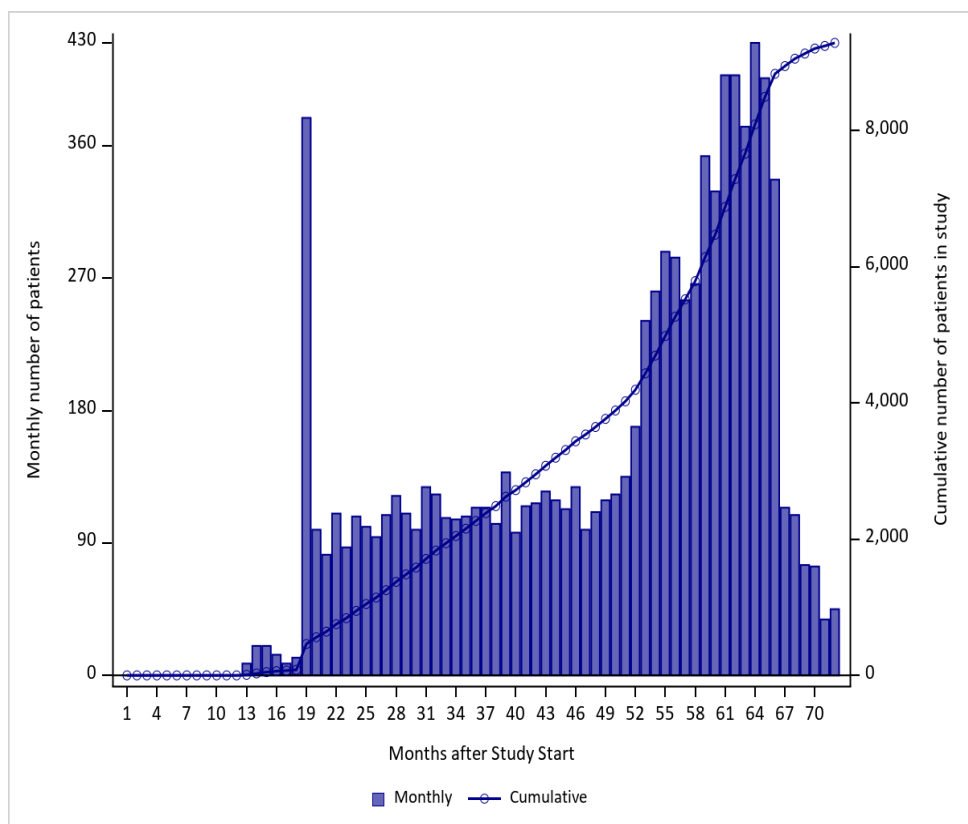
Figure 1r. Patient Entry into Study by Month for Brilliant Blue G Ophthalmic Solution in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
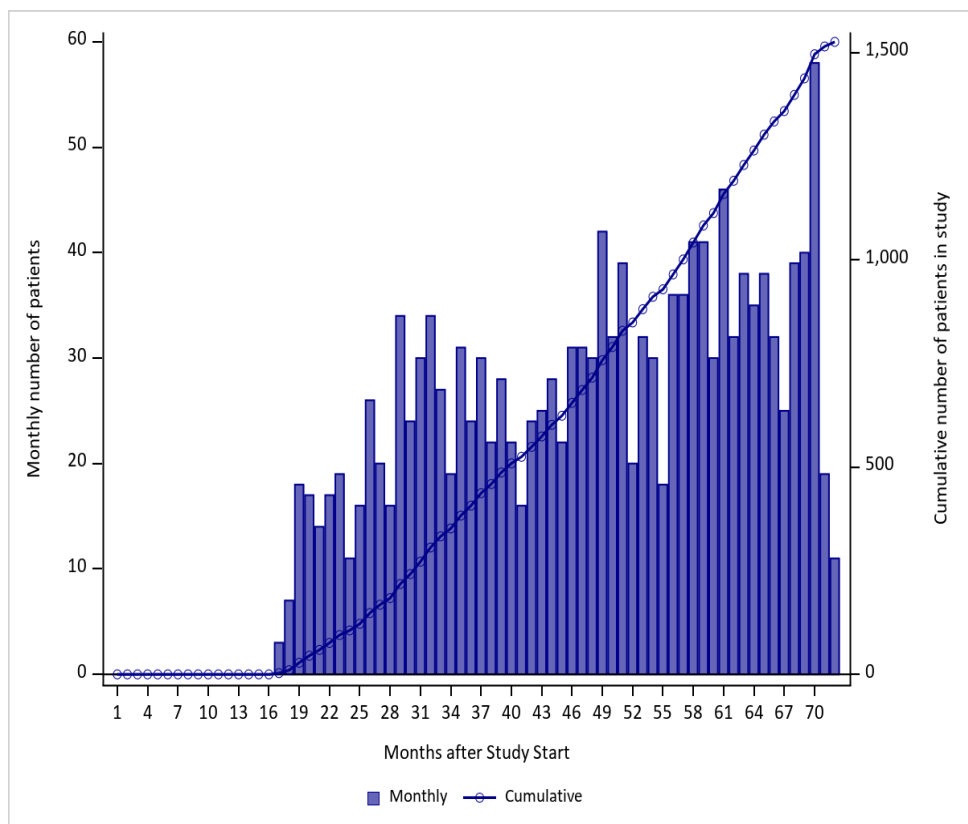
Figure 1s. Patient Entry into Study by Month for Lumateperone Tosylate in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
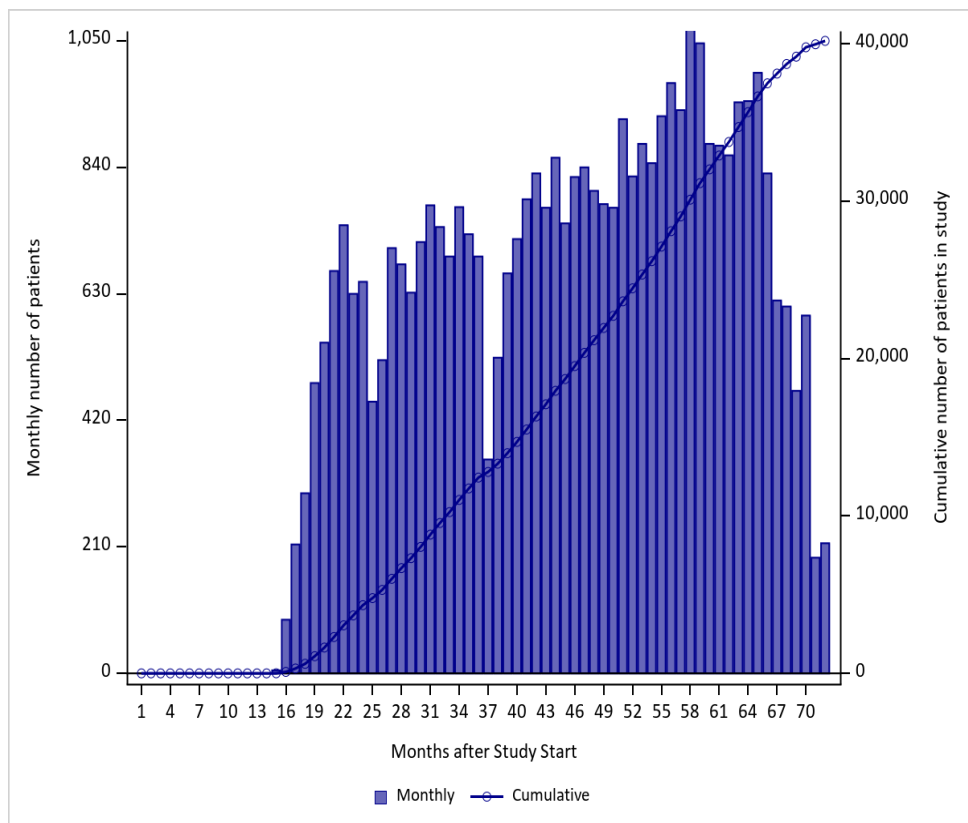
Figure 1t. Patient Entry into Study by Month for Lemborexant in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024
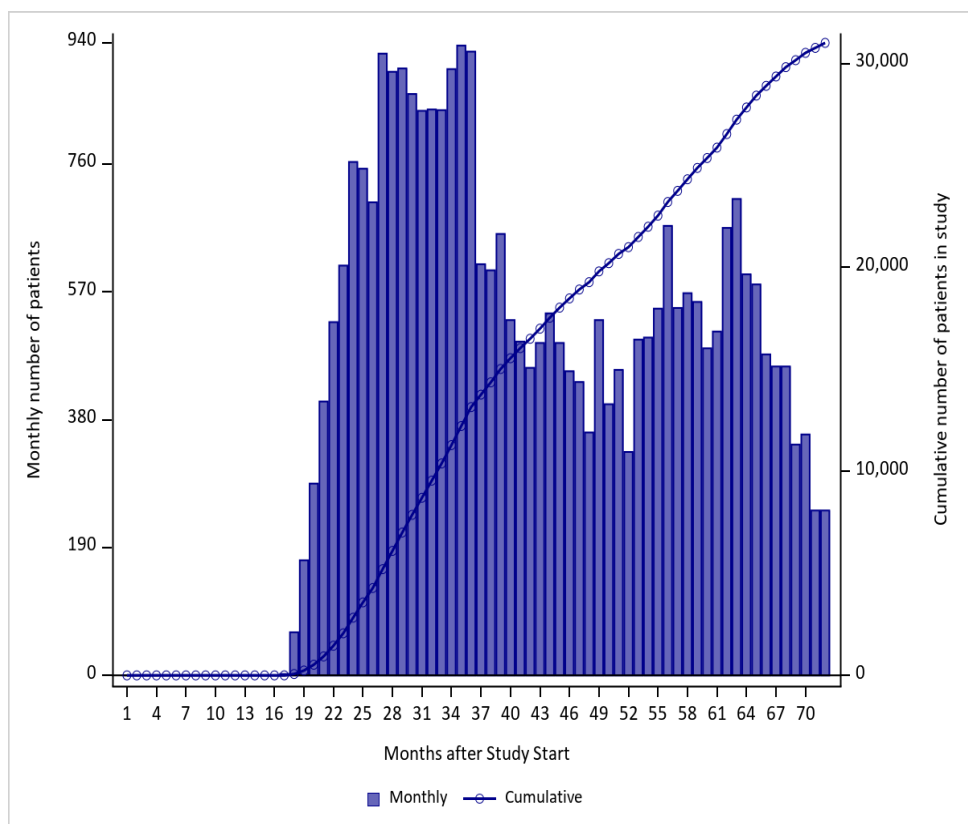
The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download

The FDA approval date for this drug was on December 20, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
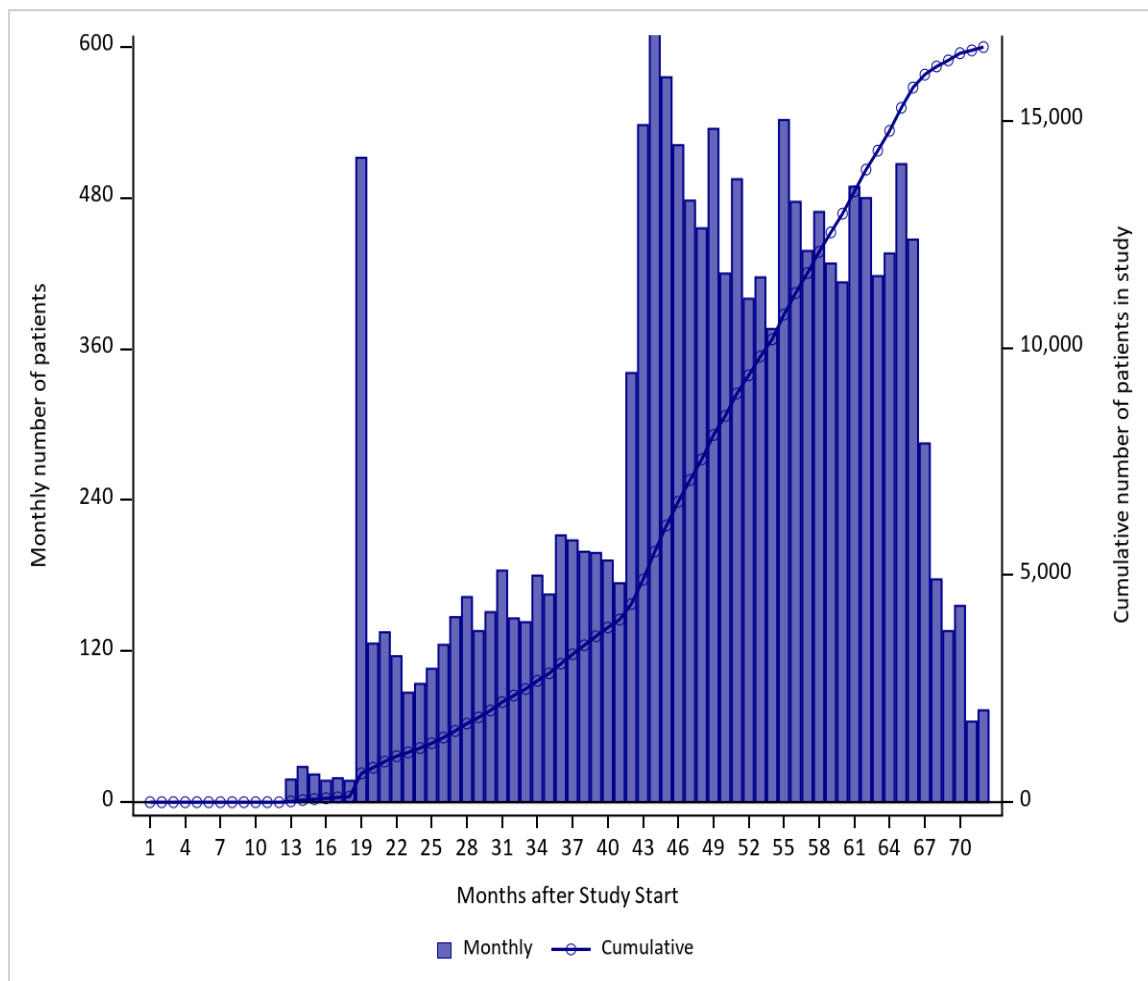
Figure 1v. Patient Entry into Study by Month for Ubrogepant in the Sentinel Distributed Database from January 1, 2019 to December 31, 2024

The FDA approval date for this drug was on December 23, 2019, as listed on the FDA website https://www.fda.gov/media/147414/download
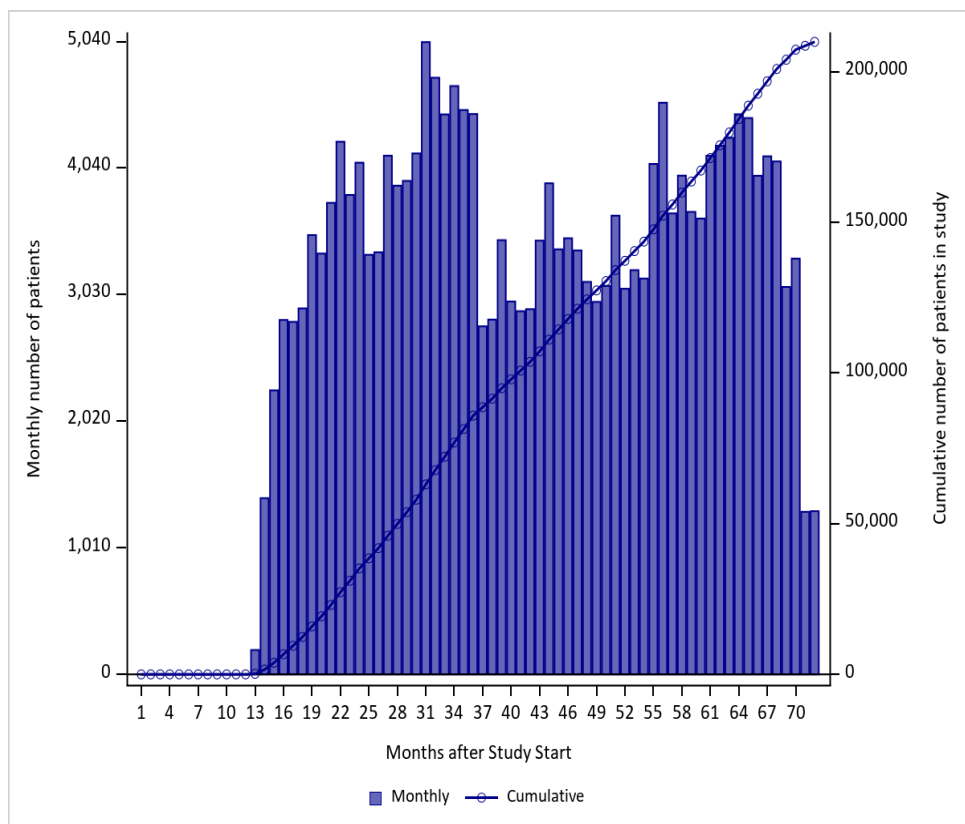
Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (May 22, 2025)

Masked DP ID	DP Start Date	DP End Date[1]
DP01	01/01/2004	03/31/2024
DP02	01/01/2005	07/31/2022
DP03	01/01/2008	08/31/2024
DP04	01/01/2006	10/31/2024
DP05	01/01/2000	01/31/2024
DP06	01/01/2000	04/30/2024
DP07	01/01/2000	04/30/2024
DP08	01/01/2000	01/31/2024
DP09	01/01/2000	04/30/2024
DP10	01/01/2007	06/30/2024
DP11	01/01/2014	12/31/2021
DP12	01/01/2008	12/31/2024
DP13	01/01/2010	06/30/2024

[1]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 Generic and Brand Names of Medical Products Used to Define Exposures in this Request

Generic Name	Brand Name
Air Polymer-Type A	
hydroxyethylcellulose/glycerin in sterile water	ExEm
Brilliant Blue G Ophthalmic Solution	
C.I. acid blue 90	TissueBlue
Brolucizumab–dbll	
brolucizumab-dbll	Beovu
Cefiderocol	
cefiderocol sulfate tosylate	Fetroja
Cenobamate	
cenobamate	Xcopri
cenobamate	Xcopri Maintenance Pack
cenobamate	Xcopri Titration Pack
Crizanlizumab-tmca	
crizanlizumab-tmca	Adakveo
Elexacaftor Ivacaftor Tezacaftor	
elexacaftor/tezacaftor/ivacaftor	Trikafta
Enfortumab Vedotin-ejfv	
enfortumab vedotin-ejfv	Padcev
Fam-Trastuzumab Deruxtecan-nxki	
fam-trastuzumab deruxtecan-nxki	Enhertu
Fluorodopa F-18	
fluorodopa F-18	fluorodopa F-18
Givosiran	
givosiran sodium	Givlaari
Golodirsen	
golodirsen	Vyondys-53
Lasmiditan	
lasmiditan succinate	Reyvow
Lemborexant	
lemborexant	Dayvigo
Lumateperone Tosylate	
lumateperone	Caplyta
lumateperone tosylate	Caplyta
Luspatercept–amt	
luspatercept-aamt	Reblozyl
Tenapanor	
Tenapanor	XPHOZAH

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

Generic Name	Brand Name
tenapanor HCl	Ibsrela
tenapanor HCl	Xphozah
Trifarotene	
trifarotene	Aklief
Ubrogepant	
ubrogepant	Ubrelvy
Voxelotor	
voxelotor	Oxbryta
Zanubrutinib	
zanubrutinib	Brukinsa

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

Code	Description	Code Category	Code Type
Afamelanotide			
J7352	Afamelanotide implant, 1 mg	Procedure	HCPCS
Air Polymer-Type A			
A9574	Air polymer-type A intrauterine foam, 0.1 ml	Procedure	HCPCS
Brolucizumab–dbll			
J0179	Injection, brolucizumab-dbll, 1 mg	Procedure	HCPCS
Cefiderocol			
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
Crizanlizumab-tmca			
C9053	Injection, crizanlizumab-tmca, 1 mg	Procedure	HCPCS
J0791	Injection, crizanlizumab-tmca, 5 mg	Procedure	HCPCS
Enfortumab Vedotin-ejfv			
J9177	Injection, enfortumab vedotin-ejfv, 0.25 mg	Procedure	HCPCS
Fam-Trastuzumab Deruxtecan-nxki			
J9358	Injection, fam-trastuzumab deruxtecan-nxki, 1 mg	Procedure	HCPCS
Fluorodopa F-18			
A9602	Fluorodopa F-18, diagnostic, per mCi	Procedure	HCPCS
Givosiran			
C9056	Injection, givosiran, 0.5 mg	Procedure	HCPCS
J0223	Injection, givosiran, 0.5 mg	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
Golodirsen			
J1429	Injection, golodirsen, 10 mg	Procedure	HCPCS
Luspatercept–amt			
J0896	Injection, luspatercept-aamt, 0.25 mg	Procedure	HCPCS

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
Acquired Hypothyroidism			
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
Alcohol Abuse			
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F10.132	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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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
HZ93ZZZ	Pharmacotherapy for Substance Abuse Treatment, Antabuse	Procedure	ICD-10-PCS
HZ96ZZZ	Pharmacotherapy for Substance Abuse Treatment, Clonidine	Procedure	ICD-10-PCS
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

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Code	Description	Code Category	Code Type
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
R78.0	Finding of alcohol in blood	Diagnosis	ICD-10-CM
T51.0X1A	Toxic effect of ethanol, accidental (unintentional), initial encounter	Procedure	ICD-10-PCS
T51.0X2A	Toxic effect of ethanol, intentional self-harm, initial encounter	Procedure	ICD-10-PCS
T51.0X3A	Toxic effect of ethanol, assault, initial encounter	Procedure	ICD-10-PCS
T51.0X4A	Toxic effect of ethanol, undetermined, initial encounter	Procedure	ICD-10-PCS
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
Alzheimers			
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM
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
Acute Myocardial Infraction			
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

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Code	Description	Code Category	Code Type
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
I21.B	Myocardial infarction with coronary microvascular dysfunction	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

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Code	Description	Code Category	Code Type
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
Anemia			
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
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
D57.04	Hb-SS disease with dactylitis	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
D57.214	Sickle-cell/Hb-C disease with dactylitis	Diagnosis	ICD-10-CM
D57.218	Sickle-cell/Hb-C disease with crisis with other specified complication	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
D57.411	Sickle-cell thalassemia, unspecified, with acute chest syndrome	Diagnosis	ICD-10-CM
D57.412	Sickle-cell thalassemia, unspecified, with splenic sequestration	Diagnosis	ICD-10-CM
D57.413	Sickle-cell thalassemia, unspecified, with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.414	Sickle-cell thalassemia, unspecified, with dactylitis	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, unspecified, with crisis	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
D57.434	Sickle-cell thalassemia beta zero with dactylitis	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
D57.454	Sickle-cell thalassemia beta plus with dactylitis	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

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Code	Description	Code Category	Code Type
D57.813	Other sickle-cell disorders with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.814	Other sickle-cell disorders with dactylitis	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
D59.30	Hemolytic-uremic syndrome, unspecified	Diagnosis	ICD-10-CM
D59.31	Infection-associated hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.32	Hereditary hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.39	Other hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
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
D61.02	Shwachman-Diamond syndrome	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
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

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Code	Description	Code Category	Code Type
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			
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

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Code	Description	Code Category	Code Type
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
Atrial Fibrillation			
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
Benign Prostatic Hyperplasia			
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
Breast Cancer			
C50.011	Malignant neoplasm of nipple and areola, right female breast	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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
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

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Code	Description	Code Category	Code Type
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
Cardiac Arrest			
I46.2	Cardiac arrest due to underlying cardiac condition	Diagnosis	ICD-10-CM
I46.8	Cardiac arrest due to other underlying condition	Diagnosis	ICD-10-CM
I46.9	Cardiac arrest, cause unspecified	Diagnosis	ICD-10-CM
I97.120	Postprocedural cardiac arrest following cardiac surgery	Diagnosis	ICD-10-CM
I97.121	Postprocedural cardiac arrest following other surgery	Diagnosis	ICD-10-CM
I97.710	Intraoperative cardiac arrest during cardiac surgery	Diagnosis	ICD-10-CM
I97.711	Intraoperative cardiac arrest during other surgery	Diagnosis	ICD-10-CM
Z86.74	Personal history of sudden cardiac arrest	Diagnosis	ICD-10-CM
Chronic Kidney Disease			
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
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
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	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

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Code	Description	Code Category	Code Type
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
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
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

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Code	Description	Code Category	Code Type
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	Sjogren syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
M35.0A	Sjogren syndrome with glomerular disease	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

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Code	Description	Code Category	Code Type
N02.B1	Recurrent and persistent immunoglobulin A nephropathy with glomerular lesion	Diagnosis	ICD-10-CM
N02.B2	Recurrent and persistent immunoglobulin A nephropathy with focal and segmental glomerular lesion	Diagnosis	ICD-10-CM
N02.B3	Recurrent and persistent immunoglobulin A nephropathy with diffuse membranoproliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.B4	Recurrent and persistent immunoglobulin A nephropathy with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N02.B5	Recurrent and persistent immunoglobulin A nephropathy with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.B6	Recurrent and persistent immunoglobulin A nephropathy with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.B9	Other recurrent and persistent immunoglobulin A nephropathy	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
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

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Code	Description	Code Category	Code Type
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
N04.20	Nephrotic syndrome with diffuse membranous glomerulonephritis, unspecified	Diagnosis	ICD-10-CM
N04.21	Primary membranous nephropathy with nephrotic syndrome	Diagnosis	ICD-10-CM
N04.22	Secondary membranous nephropathy with nephrotic syndrome	Diagnosis	ICD-10-CM
N04.29	Other 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

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Code	Description	Code Category	Code Type
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
N06.20	Isolated proteinuria with diffuse membranous glomerulonephritis, unspecified	Diagnosis	ICD-10-CM
N06.21	Primary membranous nephropathy with isolated proteinuria	Diagnosis	ICD-10-CM
N06.22	Secondary membranous nephropathy with isolated proteinuria	Diagnosis	ICD-10-CM
N06.29	Other 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
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
N07.4	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
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.11	Contrast-induced nephropathy	Diagnosis	ICD-10-CM
N14.19	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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
N25.1	Nephrogenic diabetes insipidus	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
Colorectal Cancer			
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
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
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
Chronic Obstructive Pulmonary Disease			
J40	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-10-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.81	Bronchiolitis obliterans and bronchiolitis obliterans syndrome	Diagnosis	ICD-10-CM
J44.89	Other specified chronic obstructive pulmonary disease	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
Coronary Angioplasty Bypass			
00566	Anesthesia for direct coronary artery bypass grafting; without pump oxygenator	Procedure	CPT-4
00567	Anesthesia for direct coronary artery bypass grafting; with pump oxygenator	Procedure	CPT-4
02104Z3	Bypass Coronary Artery, One Artery from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02114Z3	Bypass Coronary Artery, Two Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02124Z3	Bypass Coronary Artery, Three Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02134Z3	Bypass Coronary Artery, Four or More Arteries from Coronary Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0270346	Dilation of Coronary Artery, One Artery, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
027034Z	Dilation of Coronary Artery, One Artery with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0270356	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027035Z	Dilation of Coronary Artery, One Artery with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0270366	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027036Z	Dilation of Coronary Artery, One Artery with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0270376	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027037Z	Dilation of Coronary Artery, One Artery with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703D6	Dilation of Coronary Artery, One Artery, Bifurcation, with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02703DZ	Dilation of Coronary Artery, One Artery with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02703E6	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703EZ	Dilation of Coronary Artery, One Artery with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02703F6	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703FZ	Dilation of Coronary Artery, One Artery with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703G6	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703GZ	Dilation of Coronary Artery, One Artery with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02703T6	Dilation of Coronary Artery, One Artery, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02703TZ	Dilation of Coronary Artery, One Artery with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02703Z6	Dilation of Coronary Artery, One Artery, Bifurcation, Percutaneous Approach	Procedure	ICD-10-PCS
02703ZZ	Dilation of Coronary Artery, One Artery, Percutaneous Approach	Procedure	ICD-10-PCS
0270446	Dilation of Coronary Artery, One Artery, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027044Z	Dilation of Coronary Artery, One Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0270456	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027045Z	Dilation of Coronary Artery, One Artery with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0270466	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
027046Z	Dilation of Coronary Artery, One Artery with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0270476	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027047Z	Dilation of Coronary Artery, One Artery with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704D6	Dilation of Coronary Artery, One Artery, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704DZ	Dilation of Coronary Artery, One Artery with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704E6	Dilation of Coronary Artery, One Artery, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704EZ	Dilation of Coronary Artery, One Artery with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704F6	Dilation of Coronary Artery, One Artery, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704FZ	Dilation of Coronary Artery, One Artery with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704G6	Dilation of Coronary Artery, One Artery, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704GZ	Dilation of Coronary Artery, One Artery with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704T6	Dilation of Coronary Artery, One Artery, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02704TZ	Dilation of Coronary Artery, One Artery with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704Z6	Dilation of Coronary Artery, One Artery, Bifurcation, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02704ZZ	Dilation of Coronary Artery, One Artery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0271346	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
027134Z	Dilation of Coronary Artery, Two Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0271356	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027135Z	Dilation of Coronary Artery, Two Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0271366	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027136Z	Dilation of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0271376	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027137Z	Dilation of Coronary Artery, Two Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713D6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02713DZ	Dilation of Coronary Artery, Two Arteries with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02713E6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713EZ	Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713F6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713FZ	Dilation of Coronary Artery, Two Arteries with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713G6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713GZ	Dilation of Coronary Artery, Two Arteries with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02713T6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02713TZ	Dilation of Coronary Artery, Two Arteries with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02713Z6	Dilation of Coronary Artery, Two Arteries, Bifurcation, Percutaneous Approach	Procedure	ICD-10-PCS
02713ZZ	Dilation of Coronary Artery, Two Arteries, Percutaneous Approach	Procedure	ICD-10-PCS
0271446	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027144Z	Dilation of Coronary Artery, Two Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0271456	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027145Z	Dilation of Coronary Artery, Two Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
0271466	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027146Z	Dilation of Coronary Artery, Two Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0271476	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027147Z	Dilation of Coronary Artery, Two Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714D6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714DZ	Dilation of Coronary Artery, Two Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714E6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714EZ	Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714F6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714FZ	Dilation of Coronary Artery, Two Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714G6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714GZ	Dilation of Coronary Artery, Two Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
02714T6	Dilation of Coronary Artery, Two Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714TZ	Dilation of Coronary Artery, Two Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714Z6	Dilation of Coronary Artery, Two Arteries, Bifurcation, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02714ZZ	Dilation of Coronary Artery, Two Arteries, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0272346	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
027234Z	Dilation of Coronary Artery, Three Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0272356	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027235Z	Dilation of Coronary Artery, Three Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0272366	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027236Z	Dilation of Coronary Artery, Three Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0272376	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027237Z	Dilation of Coronary Artery, Three Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723D6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS

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Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
02723DZ	Dilation of Coronary Artery, Three Arteries with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02723E6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723EZ	Dilation of Coronary Artery, Three Arteries with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723F6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723FZ	Dilation of Coronary Artery, Three Arteries with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723G6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723GZ	Dilation of Coronary Artery, Three Arteries with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02723T6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02723TZ	Dilation of Coronary Artery, Three Arteries with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02723Z6	Dilation of Coronary Artery, Three Arteries, Bifurcation, Percutaneous Approach	Procedure	ICD-10-PCS
02723ZZ	Dilation of Coronary Artery, Three Arteries, Percutaneous Approach	Procedure	ICD-10-PCS
0272446	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027244Z	Dilation of Coronary Artery, Three Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0272456	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
027245Z	Dilation of Coronary Artery, Three Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0272466	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027246Z	Dilation of Coronary Artery, Three Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0272476	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027247Z	Dilation of Coronary Artery, Three Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724D6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724DZ	Dilation of Coronary Artery, Three Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724E6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724EZ	Dilation of Coronary Artery, Three Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724F6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724FZ	Dilation of Coronary Artery, Three Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724G6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
02724GZ	Dilation of Coronary Artery, Three Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724T6	Dilation of Coronary Artery, Three Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724TZ	Dilation of Coronary Artery, Three Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724Z6	Dilation of Coronary Artery, Three Arteries, Bifurcation, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02724ZZ	Dilation of Coronary Artery, Three Arteries, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0273346	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
027334Z	Dilation of Coronary Artery, Four or More Arteries with Drug-eluting Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
0273356	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027335Z	Dilation of Coronary Artery, Four or More Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0273366	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027336Z	Dilation of Coronary Artery, Four or More Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
0273376	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
027337Z	Dilation of Coronary Artery, Four or More Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
02733D6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02733DZ	Dilation of Coronary Artery, Four or More Arteries with Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02733E6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733EZ	Dilation of Coronary Artery, Four or More Arteries with Two Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733F6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733FZ	Dilation of Coronary Artery, Four or More Arteries with Three Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733G6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733GZ	Dilation of Coronary Artery, Four or More Arteries with Four or More Intraluminal Devices, Percutaneous Approach	Procedure	ICD-10-PCS
02733T6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02733TZ	Dilation of Coronary Artery, Four or More Arteries with Radioactive Intraluminal Device, Percutaneous Approach	Procedure	ICD-10-PCS
02733Z6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Approach	Procedure	ICD-10-PCS
02733ZZ	Dilation of Coronary Artery, Four or More Arteries, Percutaneous Approach	Procedure	ICD-10-PCS
0273446	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Drug-eluting Intraluminal Device, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
027344Z	Dilation of Coronary Artery, Four or More Arteries with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0273456	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027345Z	Dilation of Coronary Artery, Four or More Arteries with Two Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0273466	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027346Z	Dilation of Coronary Artery, Four or More Arteries with Three Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0273476	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
027347Z	Dilation of Coronary Artery, Four or More Arteries with Four or More Drug-eluting Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734D6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734DZ	Dilation of Coronary Artery, Four or More Arteries with Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734E6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734EZ	Dilation of Coronary Artery, Four or More Arteries with Two Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734F6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Three Intraluminal Devices, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
02734FZ	Dilation of Coronary Artery, Four or More Arteries with Three Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734G6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734GZ	Dilation of Coronary Artery, Four or More Arteries with Four or More Intraluminal Devices, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734T6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734TZ	Dilation of Coronary Artery, Four or More Arteries with Radioactive Intraluminal Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734Z6	Dilation of Coronary Artery, Four or More Arteries, Bifurcation, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
02734ZZ	Dilation of Coronary Artery, Four or More Arteries, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0644T	Transcatheter removal or debulking of intracardiac mass (eg, vegetations, thrombus) via suction (eg, vacuum, aspiration) device, percutaneous approach, with intraoperative reinfusion of aspirated blood, including imaging guidance, when performed	Procedure	CPT-3
33508	Endoscopy, surgical, including video-assisted harvest of vein(s) for coronary artery bypass procedure (List separately in addition to code for primary procedure)	Procedure	CPT-4
33509	Harvest of upper extremity artery, 1 segment, for coronary artery bypass procedure, endoscopic	Procedure	CPT-4
33510	Coronary artery bypass, vein only; single coronary venous graft	Procedure	CPT-4
33511	Coronary artery bypass, vein only; 2 coronary venous grafts	Procedure	CPT-4
33512	Coronary artery bypass, vein only; 3 coronary venous grafts	Procedure	CPT-4
33513	Coronary artery bypass, vein only; 4 coronary venous grafts	Procedure	CPT-4
33514	Coronary artery bypass, vein only; 5 coronary venous grafts	Procedure	CPT-4

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Code	Description	Code Category	Code Type
33516	Coronary artery bypass, vein only; 6 or more coronary venous grafts	Procedure	CPT-4
33517	Coronary artery bypass, using venous graft(s) and arterial graft(s); single vein graft (List separately in addition to code for primary procedure)	Procedure	CPT-4
33518	Coronary artery bypass, using venous graft(s) and arterial graft(s); 2 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33519	Coronary artery bypass, using venous graft(s) and arterial graft(s); 3 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33520	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Single Graft	Procedure	CPT-4
33521	Coronary artery bypass, using venous graft(s) and arterial graft(s); 4 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33522	Coronary artery bypass, using venous graft(s) and arterial graft(s); 5 venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33523	Coronary artery bypass, using venous graft(s) and arterial graft(s); 6 or more venous grafts (List separately in addition to code for primary procedure)	Procedure	CPT-4
33525	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Two Coronary Grafts	Procedure	CPT-4
33528	Coronary Artery Bypass, Nonautogenous Graft (eg, Synthetic Or Cadaver); Three Or More Coronary Grafts	Procedure	CPT-4
33530	Reoperation, coronary artery bypass procedure or valve procedure, more than 1 month after original operation (List separately in addition to code for primary procedure)	Procedure	CPT-4
33533	Coronary artery bypass, using arterial graft(s); single arterial graft	Procedure	CPT-4
33534	Coronary artery bypass, using arterial graft(s); 2 coronary arterial grafts	Procedure	CPT-4
33535	Coronary artery bypass, using arterial graft(s); 3 coronary arterial grafts	Procedure	CPT-4
33536	Coronary artery bypass, using arterial graft(s); 4 or more coronary arterial grafts	Procedure	CPT-4

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Code	Description	Code Category	Code Type
33572	Coronary endarterectomy, open, any method, of left anterior descending, circumflex, or right coronary artery performed in conjunction with coronary artery bypass graft procedure, each vessel (List separately in addition to primary procedure)	Procedure	CPT-4
35500	Harvest of upper extremity vein, 1 segment, for lower extremity or coronary artery bypass procedure (List separately in addition to code for primary procedure)	Procedure	CPT-4
35600	Harvest of upper extremity artery, 1 segment, for coronary artery bypass procedure, open	Procedure	CPT-4
4110F	Internal mammary artery graft performed for primary, isolated coronary artery bypass graft procedure (CABG)	Procedure	CPT-2
92920	Percutaneous transluminal coronary angioplasty; single major coronary artery or branch	Procedure	CPT-4
92921	Percutaneous transluminal coronary angioplasty; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	Procedure	CPT-4
92924	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch	Procedure	CPT-4
92925	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	Procedure	CPT-4
92928	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch	Procedure	CPT-4
92929	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	Procedure	CPT-4
92933	Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch	Procedure	CPT-4

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
92934	Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (List separately in addition to code for primary procedure)	Procedure	CPT-4
92937	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single	Procedure	CPT-4
92938	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each ad	Procedure	CPT-4
92941	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspirati	Procedure	CPT-4
92943	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel	Procedure	CPT-4
92944	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; each additional coronary artery, co	Procedure	CPT-4
C9600	Percutaneous transcatheter placement of drug eluting intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch	Procedure	HCPCS
C9601	Percutaneous transcatheter placement of drug-eluting intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	Procedure	HCPCS

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Code	Description	Code Category	Code Type
C9602	Percutaneous transluminal coronary atherectomy, with drug eluting intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch	Procedure	HCPCS
C9603	Percutaneous transluminal coronary atherectomy, with drug-eluting intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	Procedure	HCPCS
C9604	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, including distal protection when perfo	Procedure	HCPCS
C9605	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, including distal protection when perfo	Procedure	HCPCS
C9606	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty, inclu	Procedure	HCPCS
C9607	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty; single vessel	Procedure	HCPCS
C9608	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of drug-eluting intracoronary stent, atherectomy and angioplasty; each additional corona	Procedure	HCPCS
S2205	Minimally invasive direct coronary artery bypass surgery involving mini-thoracotomy or mini-sternotomy surgery, performed under direct vision; using arterial graft(s), single coronary arterial graft	Procedure	HCPCS

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Code	Description	Code Category	Code Type
S2206	Minimally invasive direct coronary artery bypass surgery involving mini-thoracotomy or mini-sternotomy surgery, performed under direct vision; using arterial graft(s), two coronary arterial grafts	Procedure	HCPCS
S2207	Minimally invasive direct coronary artery bypass surgery involving mini-thoracotomy or mini-sternotomy surgery, performed under direct vision; using venous graft only, single coronary venous graft	Procedure	HCPCS
S2208	Minimally invasive direct coronary artery bypass surgery involving mini-thoracotomy or mini-sternotomy surgery, performed under direct vision; using single arterial and venous graft(s), single venous graft	Procedure	HCPCS
S2209	Minimally invasive direct coronary artery bypass surgery involving mini-thoracotomy or mini-sternotomy surgery, performed under direct vision; using two arterial grafts and single venous graft	Procedure	HCPCS
T82.2	Mechanical complication of coronary artery bypass graft and biological heart valve graft	Diagnosis	ICD-10-CM
T82.21	Mechanical complication of coronary artery bypass graft	Diagnosis	ICD-10-CM
T82.211	Breakdown (mechanical) of coronary artery bypass graft	Diagnosis	ICD-10-CM
T82.211A	Breakdown (mechanical) of coronary artery bypass graft, initial encounter	Diagnosis	ICD-10-CM
T82.211D	Breakdown (mechanical) of coronary artery bypass graft, subsequent encounter	Diagnosis	ICD-10-CM
T82.211S	Breakdown (mechanical) of coronary artery bypass graft, sequela	Diagnosis	ICD-10-CM
T82.212	Displacement of coronary artery bypass graft	Diagnosis	ICD-10-CM
T82.212A	Displacement of coronary artery bypass graft, initial encounter	Diagnosis	ICD-10-CM
T82.212D	Displacement of coronary artery bypass graft, subsequent encounter	Diagnosis	ICD-10-CM
T82.212S	Displacement of coronary artery bypass graft, sequela	Diagnosis	ICD-10-CM
T82.213	Leakage of coronary artery bypass graft	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
T82.213A	Leakage of coronary artery bypass graft, initial encounter	Diagnosis	ICD-10-CM
T82.213D	Leakage of coronary artery bypass graft, subsequent encounter	Diagnosis	ICD-10-CM
T82.213S	Leakage of coronary artery bypass graft, sequela	Diagnosis	ICD-10-CM
T82.218	Other mechanical complication of coronary artery bypass graft	Diagnosis	ICD-10-CM
T82.218A	Other mechanical complication of coronary artery bypass graft, initial encounter	Diagnosis	ICD-10-CM
T82.218D	Other mechanical complication of coronary artery bypass graft, subsequent encounter	Diagnosis	ICD-10-CM
T82.218S	Other mechanical complication of coronary artery bypass graft, sequela	Diagnosis	ICD-10-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
Dementia			
F01.50	Vascular dementia, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F01.51	Vascular dementia, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F01.511	Vascular dementia, unspecified severity, with agitation	Diagnosis	ICD-10-CM
F01.518	Vascular dementia, unspecified severity, with other behavioral disturbance	Diagnosis	ICD-10-CM
F01.52	Vascular dementia, unspecified severity, with psychotic disturbance	Diagnosis	ICD-10-CM
F01.53	Vascular dementia, unspecified severity, with mood disturbance	Diagnosis	ICD-10-CM
F01.54	Vascular dementia, unspecified severity, with anxiety	Diagnosis	ICD-10-CM
F01.A0	Vascular dementia, mild, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F01.A11	Vascular dementia, mild, with agitation	Diagnosis	ICD-10-CM
F01.A18	Vascular dementia, mild, with other behavioral disturbance	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F01.A2	Vascular dementia, mild, with psychotic disturbance	Diagnosis	ICD-10-CM
F01.A3	Vascular dementia, mild, with mood disturbance	Diagnosis	ICD-10-CM
F01.A4	Vascular dementia, mild, with anxiety	Diagnosis	ICD-10-CM
F01.B0	Vascular dementia, moderate, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F01.B11	Vascular dementia, moderate, with agitation	Diagnosis	ICD-10-CM
F01.B18	Vascular dementia, moderate, with other behavioral disturbance	Diagnosis	ICD-10-CM
F01.B2	Vascular dementia, moderate, with psychotic disturbance	Diagnosis	ICD-10-CM
F01.B3	Vascular dementia, moderate, with mood disturbance	Diagnosis	ICD-10-CM
F01.B4	Vascular dementia, moderate, with anxiety	Diagnosis	ICD-10-CM
F01.C0	Vascular dementia, severe, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F01.C11	Vascular dementia, severe, with agitation	Diagnosis	ICD-10-CM
F01.C18	Vascular dementia, severe, with other behavioral disturbance	Diagnosis	ICD-10-CM
F01.C2	Vascular dementia, severe, with psychotic disturbance	Diagnosis	ICD-10-CM
F01.C3	Vascular dementia, severe, with mood disturbance	Diagnosis	ICD-10-CM
F01.C4	Vascular dementia, severe, with anxiety	Diagnosis	ICD-10-CM
F02.80	Dementia in other diseases classified elsewhere, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F02.81	Dementia in other diseases classified elsewhere, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F02.811	Dementia in other diseases classified elsewhere, unspecified severity, with agitation	Diagnosis	ICD-10-CM
F02.818	Dementia in other diseases classified elsewhere, unspecified severity, with other behavioral disturbance	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
F02.82	Dementia in other diseases classified elsewhere, unspecified severity, with psychotic disturbance	Diagnosis	ICD-10-CM
F02.83	Dementia in other diseases classified elsewhere, unspecified severity, with mood disturbance	Diagnosis	ICD-10-CM
F02.84	Dementia in other diseases classified elsewhere, unspecified severity, with anxiety	Diagnosis	ICD-10-CM
F02.A0	Dementia in other diseases classified elsewhere, mild, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F02.A11	Dementia in other diseases classified elsewhere, mild, with agitation	Diagnosis	ICD-10-CM
F02.A18	Dementia in other diseases classified elsewhere, mild, with other behavioral disturbance	Diagnosis	ICD-10-CM
F02.A2	Dementia in other diseases classified elsewhere, mild, with psychotic disturbance	Diagnosis	ICD-10-CM
F02.A3	Dementia in other diseases classified elsewhere, mild, with mood disturbance	Diagnosis	ICD-10-CM
F02.A4	Dementia in other diseases classified elsewhere, mild, with anxiety	Diagnosis	ICD-10-CM
F02.B0	Dementia in other diseases classified elsewhere, moderate, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F02.B11	Dementia in other diseases classified elsewhere, moderate, with agitation	Diagnosis	ICD-10-CM
F02.B18	Dementia in other diseases classified elsewhere, moderate, with other behavioral disturbance	Diagnosis	ICD-10-CM
F02.B2	Dementia in other diseases classified elsewhere, moderate, with psychotic disturbance	Diagnosis	ICD-10-CM
F02.B3	Dementia in other diseases classified elsewhere, moderate, with mood disturbance	Diagnosis	ICD-10-CM
F02.B4	Dementia in other diseases classified elsewhere, moderate, with anxiety	Diagnosis	ICD-10-CM
F02.C0	Dementia in other diseases classified elsewhere, severe, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F02.C11	Dementia in other diseases classified elsewhere, severe, with agitation	Diagnosis	ICD-10-CM
F02.C18	Dementia in other diseases classified elsewhere, severe, with other behavioral disturbance	Diagnosis	ICD-10-CM
F02.C2	Dementia in other diseases classified elsewhere, severe, with psychotic disturbance	Diagnosis	ICD-10-CM
F02.C3	Dementia in other diseases classified elsewhere, severe, with mood disturbance	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
F02.C4	Dementia in other diseases classified elsewhere, severe, with anxiety	Diagnosis	ICD-10-CM
F03.90	Unspecified dementia, unspecified severity, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F03.91	Unspecified dementia, unspecified severity, with behavioral disturbance	Diagnosis	ICD-10-CM
F03.911	Unspecified dementia, unspecified severity, with agitation	Diagnosis	ICD-10-CM
F03.918	Unspecified dementia, unspecified severity, with other behavioral disturbance	Diagnosis	ICD-10-CM
F03.92	Unspecified dementia, unspecified severity, with psychotic disturbance	Diagnosis	ICD-10-CM
F03.93	Unspecified dementia, unspecified severity, with mood disturbance	Diagnosis	ICD-10-CM
F03.94	Unspecified dementia, unspecified severity, with anxiety	Diagnosis	ICD-10-CM
F03.A0	Unspecified dementia, mild, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F03.A11	Unspecified dementia, mild, with agitation	Diagnosis	ICD-10-CM
F03.A18	Unspecified dementia, mild, with other behavioral disturbance	Diagnosis	ICD-10-CM
F03.A2	Unspecified dementia, mild, with psychotic disturbance	Diagnosis	ICD-10-CM
F03.A3	Unspecified dementia, mild, with mood disturbance	Diagnosis	ICD-10-CM
F03.A4	Unspecified dementia, mild, with anxiety	Diagnosis	ICD-10-CM
F03.B0	Unspecified dementia, moderate, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F03.B11	Unspecified dementia, moderate, with agitation	Diagnosis	ICD-10-CM
F03.B18	Unspecified dementia, moderate, with other behavioral disturbance	Diagnosis	ICD-10-CM
F03.B2	Unspecified dementia, moderate, with psychotic disturbance	Diagnosis	ICD-10-CM
F03.B3	Unspecified dementia, moderate, with mood disturbance	Diagnosis	ICD-10-CM
F03.B4	Unspecified dementia, moderate, with anxiety	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
F03.C0	Unspecified dementia, severe, without behavioral disturbance, psychotic disturbance, mood disturbance, and anxiety	Diagnosis	ICD-10-CM
F03.C11	Unspecified dementia, severe, with agitation	Diagnosis	ICD-10-CM
F03.C18	Unspecified dementia, severe, with other behavioral disturbance	Diagnosis	ICD-10-CM
F03.C2	Unspecified dementia, severe, with psychotic disturbance	Diagnosis	ICD-10-CM
F03.C3	Unspecified dementia, severe, with mood disturbance	Diagnosis	ICD-10-CM
F03.C4	Unspecified dementia, severe, with anxiety	Diagnosis	ICD-10-CM
F05	Delirium 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
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal neurocognitive disorder	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
G31.83	Neurocognitive disorder with Lewy bodies	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
Depression			
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

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Code	Description	Code Category	Code Type
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

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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

Diabetes

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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
E08.59	Diabetes mellitus due to underlying condition with other circulatory complications	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E08.610	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E09.311	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E09.331	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

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Code	Description	Code Category	Code Type
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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E09.3519	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E09.3549	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
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

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Code	Description	Code Category	Code Type
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
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.00	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.3292	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.3399	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.3519	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
E11.3543	Type 2 diabetes mellitus 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.3549	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E11.44	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E13.11	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

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Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E13.3299	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
E13.3411	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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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			
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

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Code	Description	Code Category	Code Type
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F11.282	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F12.13	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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F13.181	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F13.26	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F13.94	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
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

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Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F14.120	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F14.259	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F15.120	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F15.259	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
F16.120	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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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 amnestic disorder	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
F19.26	Other psychoactive substance dependence with psychoactive substance-induced persisting amnestic 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

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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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
T40.711A	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
Z71.51	Drug abuse counseling and surveillance of drug abuser	Diagnosis	ICD-10-CM
Endometrial Cancer			
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
Z85.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-10-CM
Glaucoma			
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

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Code	Description	Code Category	Code Type
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
H40.041	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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
H40.1323	Pigmentary glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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
Heart Failure			
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

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Code	Description	Code Category	Code Type
I42.0	Dilated cardiomyopathy	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
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
Hyperlipidemia			
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
E78.49	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
Hypertension			
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

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Code	Description	Code Category	Code Type
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
I1A.0	Resistant hypertension	Diagnosis	ICD-10-CM
I67.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
Ischemic Heart Disease			

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Code	Description	Code Category	Code Type
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.2	Refractory angina pectoris	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.81	Angina pectoris with coronary microvascular dysfunction	Diagnosis	ICD-10-CM
I20.89	Other forms of angina pectoris	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
I24.81	Acute coronary microvascular dysfunction	Diagnosis	ICD-10-CM
I24.89	Other forms of acute ischemic heart disease	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
I25.112	Atherosclerotic heart disease of native coronary artery with refractory angina pectoris	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
I25.3	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

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Code	Description	Code Category	Code Type
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
I25.702	Atherosclerosis of coronary artery bypass graft(s), unspecified, with refractory angina pectoris	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.710	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
I25.712	Atherosclerosis of autologous vein coronary artery bypass graft(s) with refractory angina pectoris	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
I25.722	Atherosclerosis of autologous artery coronary artery bypass graft(s) with refractory angina pectoris	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

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Code	Description	Code Category	Code Type
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.732	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with refractory angina pectoris	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
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
I25.752	Atherosclerosis of native coronary artery of transplanted heart with refractory angina pectoris	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
I25.762	Atherosclerosis of bypass graft of coronary artery of transplanted heart with refractory angina pectoris	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

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Code	Description	Code Category	Code Type
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.792	Atherosclerosis of other coronary artery bypass graft(s) with refractory angina pectoris	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
I25.85	Chronic coronary microvascular dysfunction	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
Liver Disease CCW			
K70	Alcoholic liver disease	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.1	Alcoholic hepatitis	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
K70.3	Alcoholic cirrhosis of liver	Diagnosis	ICD-10-CM
K70.30	Alcoholic cirrhosis of liver without ascites	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
K70.31	Alcoholic cirrhosis of liver with ascites	Diagnosis	ICD-10-CM
K70.4	Alcoholic hepatic failure	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
K71.0	Toxic liver disease with cholestasis	Diagnosis	ICD-10-CM
K71.11	Toxic liver disease with hepatic necrosis, with coma	Diagnosis	ICD-10-CM
K71.7	Toxic liver disease with fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM
K71.8	Toxic liver disease with other disorders of liver	Diagnosis	ICD-10-CM
K71.9	Toxic liver disease, unspecified	Diagnosis	ICD-10-CM
K72	Hepatic failure, not elsewhere classified	Diagnosis	ICD-10-CM
K72.0	Acute and subacute hepatic failure	Diagnosis	ICD-10-CM
K72.00	Acute and subacute hepatic failure without coma	Diagnosis	ICD-10-CM
K72.01	Acute and subacute hepatic failure with coma	Diagnosis	ICD-10-CM
K72.1	Chronic hepatic failure	Diagnosis	ICD-10-CM
K72.10	Chronic hepatic failure without coma	Diagnosis	ICD-10-CM
K72.11	Chronic hepatic failure with coma	Diagnosis	ICD-10-CM
K72.9	Hepatic failure, unspecified	Diagnosis	ICD-10-CM
K72.90	Hepatic failure, unspecified without coma	Diagnosis	ICD-10-CM
K72.91	Hepatic failure, unspecified with coma	Diagnosis	ICD-10-CM
K74	Fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM
K74.0	Hepatic fibrosis	Diagnosis	ICD-10-CM
K74.00	Hepatic fibrosis, unspecified	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
K74.01	Hepatic fibrosis, early fibrosis	Diagnosis	ICD-10-CM
K74.02	Hepatic fibrosis, advanced fibrosis	Diagnosis	ICD-10-CM
K74.1	Hepatic sclerosis	Diagnosis	ICD-10-CM
K74.2	Hepatic fibrosis with hepatic sclerosis	Diagnosis	ICD-10-CM
K74.3	Primary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.4	Secondary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.5	Biliary cirrhosis, unspecified	Diagnosis	ICD-10-CM
K74.6	Other and unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K74.60	Unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K74.69	Other cirrhosis of liver	Diagnosis	ICD-10-CM
K75.0	Abscess of liver	Diagnosis	ICD-10-CM
K75.1	Phlebitis of portal vein	Diagnosis	ICD-10-CM
K75.8	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.81	Nonalcoholic steatohepatitis (NASH)	Diagnosis	ICD-10-CM
K75.89	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.9	Inflammatory liver disease, unspecified	Diagnosis	ICD-10-CM
K76.0	Fatty (change of) liver, not elsewhere classified	Diagnosis	ICD-10-CM
K76.1	Chronic passive congestion of liver	Diagnosis	ICD-10-CM
K76.2	Central hemorrhagic necrosis of liver	Diagnosis	ICD-10-CM
K76.3	Infarction of liver	Diagnosis	ICD-10-CM
K76.5	Hepatic veno-occlusive disease	Diagnosis	ICD-10-CM
K76.6	Portal hypertension	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
K76.8	Other specified diseases of liver	Diagnosis	ICD-10-CM
K76.81	Hepatopulmonary syndrome	Diagnosis	ICD-10-CM
K76.82	Hepatic encephalopathy	Diagnosis	ICD-10-CM
K76.89	Other specified diseases of liver	Diagnosis	ICD-10-CM
K76.9	Liver disease, unspecified	Diagnosis	ICD-10-CM
K77	Liver disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.32	Calculus of bile duct with acute cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.33	Calculus of bile duct with acute cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.34	Calculus of bile duct with chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.35	Calculus of bile duct with chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K83.0	Cholangitis	Diagnosis	ICD-10-CM
R16.0	Hepatomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
R16.2	Hepatomegaly with splenomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
Z48.23	Encounter for aftercare following liver transplant	Diagnosis	ICD-10-CM
Z94.4	Liver transplant status	Diagnosis	ICD-10-CM
Liver Disease Extended DX List			
K70	Alcoholic liver disease	Diagnosis	ICD-10-CM
K70.0	Alcoholic fatty liver	Diagnosis	ICD-10-CM
K70.1	Alcoholic hepatitis	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
K70.3	Alcoholic cirrhosis 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
K70.4	Alcoholic hepatic failure	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
K71	Toxic liver disease	Diagnosis	ICD-10-CM
K71.0	Toxic liver disease with cholestasis	Diagnosis	ICD-10-CM
K71.1	Toxic liver disease with hepatic necrosis	Diagnosis	ICD-10-CM
K71.10	Toxic liver disease with hepatic necrosis, without coma	Diagnosis	ICD-10-CM
K71.11	Toxic liver disease with hepatic necrosis, with coma	Diagnosis	ICD-10-CM
K71.2	Toxic liver disease with acute hepatitis	Diagnosis	ICD-10-CM
K71.3	Toxic liver disease with chronic persistent hepatitis	Diagnosis	ICD-10-CM
K71.4	Toxic liver disease with chronic lobular hepatitis	Diagnosis	ICD-10-CM
K71.5	Toxic liver disease with chronic active hepatitis	Diagnosis	ICD-10-CM
K71.50	Toxic liver disease with chronic active hepatitis without ascites	Diagnosis	ICD-10-CM
K71.51	Toxic liver disease with chronic active hepatitis with ascites	Diagnosis	ICD-10-CM
K71.6	Toxic liver disease with hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K71.7	Toxic liver disease with fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
K71.8	Toxic liver disease with other disorders of liver	Diagnosis	ICD-10-CM
K71.9	Toxic liver disease, unspecified	Diagnosis	ICD-10-CM
K72	Hepatic failure, not elsewhere classified	Diagnosis	ICD-10-CM
K72.0	Acute and subacute hepatic failure	Diagnosis	ICD-10-CM
K72.00	Acute and subacute hepatic failure without coma	Diagnosis	ICD-10-CM
K72.01	Acute and subacute hepatic failure with coma	Diagnosis	ICD-10-CM
K72.1	Chronic hepatic failure	Diagnosis	ICD-10-CM
K72.10	Chronic hepatic failure without coma	Diagnosis	ICD-10-CM
K72.11	Chronic hepatic failure with coma	Diagnosis	ICD-10-CM
K72.9	Hepatic failure, unspecified	Diagnosis	ICD-10-CM
K72.90	Hepatic failure, unspecified without coma	Diagnosis	ICD-10-CM
K72.91	Hepatic failure, unspecified with coma	Diagnosis	ICD-10-CM
K73	Chronic hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K73.0	Chronic persistent hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K73.1	Chronic lobular hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K73.2	Chronic active hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K73.8	Other chronic hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K73.9	Chronic hepatitis, unspecified	Diagnosis	ICD-10-CM
K74	Fibrosis and cirrhosis of liver	Diagnosis	ICD-10-CM
K74.0	Hepatic fibrosis	Diagnosis	ICD-10-CM
K74.00	Hepatic fibrosis, unspecified	Diagnosis	ICD-10-CM
K74.01	Hepatic fibrosis, early fibrosis	Diagnosis	ICD-10-CM
K74.02	Hepatic fibrosis, advanced fibrosis	Diagnosis	ICD-10-CM

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
K74.1	Hepatic sclerosis	Diagnosis	ICD-10-CM
K74.2	Hepatic fibrosis with hepatic sclerosis	Diagnosis	ICD-10-CM
K74.3	Primary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.4	Secondary biliary cirrhosis	Diagnosis	ICD-10-CM
K74.5	Biliary cirrhosis, unspecified	Diagnosis	ICD-10-CM
K74.6	Other and unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K74.60	Unspecified cirrhosis of liver	Diagnosis	ICD-10-CM
K74.69	Other cirrhosis of liver	Diagnosis	ICD-10-CM
K75	Other inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.0	Abscess of liver	Diagnosis	ICD-10-CM
K75.1	Phlebitis of portal vein	Diagnosis	ICD-10-CM
K75.2	Nonspecific reactive hepatitis	Diagnosis	ICD-10-CM
K75.3	Granulomatous hepatitis, not elsewhere classified	Diagnosis	ICD-10-CM
K75.4	Autoimmune hepatitis	Diagnosis	ICD-10-CM
K75.8	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.81	Nonalcoholic steatohepatitis (NASH)	Diagnosis	ICD-10-CM
K75.89	Other specified inflammatory liver diseases	Diagnosis	ICD-10-CM
K75.9	Inflammatory liver disease, unspecified	Diagnosis	ICD-10-CM
K76	Other diseases of liver	Diagnosis	ICD-10-CM
K76.0	Fatty (change of) liver, not elsewhere classified	Diagnosis	ICD-10-CM
K76.1	Chronic passive congestion of liver	Diagnosis	ICD-10-CM
K76.2	Central hemorrhagic necrosis of liver	Diagnosis	ICD-10-CM
K76.3	Infarction of liver	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
K76.4	Peliosis hepatis	Diagnosis	ICD-10-CM
K76.5	Hepatic veno-occlusive disease	Diagnosis	ICD-10-CM
K76.6	Portal hypertension	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
K76.8	Other specified diseases of liver	Diagnosis	ICD-10-CM
K76.81	Hepatopulmonary syndrome	Diagnosis	ICD-10-CM
K76.82	Hepatic encephalopathy	Diagnosis	ICD-10-CM
K76.89	Other specified diseases of liver	Diagnosis	ICD-10-CM
K76.9	Liver disease, unspecified	Diagnosis	ICD-10-CM
K77	Liver disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction	Diagnosis	ICD-10-CM
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction	Diagnosis	ICD-10-CM
K80.32	Calculus of bile duct with acute cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.33	Calculus of bile duct with acute cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.34	Calculus of bile duct with chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.35	Calculus of bile duct with chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction	Diagnosis	ICD-10-CM
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction	Diagnosis	ICD-10-CM
K83.0	Cholangitis	Diagnosis	ICD-10-CM
R16.0	Hepatomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
R16.2	Hepatomegaly with splenomegaly, not elsewhere classified	Diagnosis	ICD-10-CM
Z48.23	Encounter for aftercare following liver transplant	Diagnosis	ICD-10-CM
Z94.4	Liver transplant status	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Liver Disease Procedures			
06L20ZZ	Occlusion of Gastric Vein, Open Approach	Procedure	ICD-10-PCS
06L23ZZ	Occlusion of Gastric Vein, Percutaneous Approach	Procedure	ICD-10-PCS
06L24ZZ	Occlusion of Gastric Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
06L30ZZ	Occlusion of Esophageal Vein, Open Approach	Procedure	ICD-10-PCS
06L33ZZ	Occlusion of Esophageal Vein, Percutaneous Approach	Procedure	ICD-10-PCS
06L34ZZ	Occlusion of Esophageal Vein, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S30Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9S3ZZ	Drainage of Greater Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9S40Z	Drainage of Greater Omentum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9S4ZZ	Drainage of Greater Omentum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T30Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9T3ZZ	Drainage of Lesser Omentum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9T40Z	Drainage of Lesser Omentum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9T4ZZ	Drainage of Lesser Omentum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9V30Z	Drainage of Mesentery with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9V3ZZ	Drainage of Mesentery, Percutaneous Approach	Procedure	ICD-10-PCS
0D9V40Z	Drainage of Mesentery with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9V4ZZ	Drainage of Mesentery, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9W30Z	Drainage of Peritoneum with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0D9W3ZZ	Drainage of Peritoneum, Percutaneous Approach	Procedure	ICD-10-PCS
0D9W40Z	Drainage of Peritoneum with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0D9W4ZZ	Drainage of Peritoneum, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS

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Code	Description	Code Category	Code Type
0DL57DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening	Procedure	ICD-10-PCS
0DL58DZ	Occlusion of Esophagus with Intraluminal Device, Via Natural or Artificial Opening Endoscopic	Procedure	ICD-10-PCS
0W9F30Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9F3ZZ	Drainage of Abdominal Wall, Percutaneous Approach	Procedure	ICD-10-PCS
0W9F40Z	Drainage of Abdominal Wall with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9F4ZZ	Drainage of Abdominal Wall, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9G30Z	Drainage of Peritoneal Cavity with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9G3ZZ	Drainage of Peritoneal Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
0W9G40Z	Drainage of Peritoneal Cavity with Drainage Device, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9G4ZZ	Drainage of Peritoneal Cavity, Percutaneous Endoscopic Approach	Procedure	ICD-10-PCS
0W9J30Z	Drainage of Pelvic Cavity with Drainage Device, Percutaneous Approach	Procedure	ICD-10-PCS
0W9J3ZZ	Drainage of Pelvic Cavity, Percutaneous Approach	Procedure	ICD-10-PCS
Lung Cancer			
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
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

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Code	Description	Code Category	Code Type
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
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
Obesity			
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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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

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Code	Description	Code Category	Code Type
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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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
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

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Code	Description	Code Category	Code Type
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
Osteoporosis			
M80.00XA	Age-related osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.011A	Age-related osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.012A	Age-related osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.019A	Age-related osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.021A	Age-related osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.022A	Age-related osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.029A	Age-related osteoporosis with current pathological fracture, unspecified humerus, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M80.031A	Age-related osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.032A	Age-related osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.039A	Age-related osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.041A	Age-related osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.042A	Age-related osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.049A	Age-related osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.051A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.052A	Age-related osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.059A	Age-related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.061A	Age-related osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.062A	Age-related osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.069A	Age-related osteoporosis with current pathological fracture, unspecified lower leg, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M80.071A	Age-related osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.072A	Age-related osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.079A	Age-related osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.08XA	Age-related osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0AXA	Age-related osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0B1A	Age-related osteoporosis with current pathological fracture, right pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0B2A	Age-related osteoporosis with current pathological fracture, left pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.0B9A	Age-related osteoporosis with current pathological fracture, unspecified pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.80XA	Other osteoporosis with current pathological fracture, unspecified site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.811A	Other osteoporosis with current pathological fracture, right shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.812A	Other osteoporosis with current pathological fracture, left shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.819A	Other osteoporosis with current pathological fracture, unspecified shoulder, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.821A	Other osteoporosis with current pathological fracture, right humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.822A	Other osteoporosis with current pathological fracture, left humerus, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.829A	Other osteoporosis with current pathological fracture, unspecified humerus, 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M80.831A	Other osteoporosis with current pathological fracture, right forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.832A	Other osteoporosis with current pathological fracture, left forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.839A	Other osteoporosis with current pathological fracture, unspecified forearm, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.841A	Other osteoporosis with current pathological fracture, right hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.842A	Other osteoporosis with current pathological fracture, left hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.849A	Other osteoporosis with current pathological fracture, unspecified hand, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.851A	Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.852A	Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.859A	Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.861A	Other osteoporosis with current pathological fracture, right lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.862A	Other osteoporosis with current pathological fracture, left lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.869A	Other osteoporosis with current pathological fracture, unspecified lower leg, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.871A	Other osteoporosis with current pathological fracture, right ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.872A	Other osteoporosis with current pathological fracture, left ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.879A	Other osteoporosis with current pathological fracture, unspecified ankle and foot, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.88XA	Other osteoporosis with current pathological fracture, vertebra(e), initial encounter for fracture	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
M80.8AXA	Other osteoporosis with current pathological fracture, other site, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.8B1A	Other osteoporosis with current pathological fracture, right pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.8B2A	Other osteoporosis with current pathological fracture, left pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M80.8B9A	Other osteoporosis with current pathological fracture, unspecified pelvis, 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
Overweight			
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
Prostate			
C61	Malignant neoplasm of prostate	Diagnosis	ICD-10-CM
D07.5	Carcinoma in situ of prostate	Diagnosis	ICD-10-CM
Z85.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-10-CM
Rheumatoid Arthritis			
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

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Code	Description	Code Category	Code Type
L40.59	Other psoriatic arthropathy	Diagnosis	ICD-10-CM
M05.00	Felty's syndrome, unspecified site	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
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
M05.179	Rheumatoid lung disease with rheumatoid arthritis of unspecified 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), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M05.19	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M05.29	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M05.39	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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M05.69	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
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M06.029	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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M06.811	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M06.8A	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M08.079	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M08.269	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M08.459	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M08.852	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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M08.951	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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	Diagnosis	ICD-10-CM
M16.30	Unilateral osteoarthritis resulting from hip dysplasia, unspecified hip	Diagnosis	ICD-10-CM
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
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
M19.042	Primary osteoarthritis, left hand	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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
Smoking			
1034F	Current tobacco smoker (CAD, CAP, COPD, PV) (DM)	Procedure	CPT-2

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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	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

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Code	Description	Code Category	Code Type
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
Transient Ischemic Attack			
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

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Code	Description	Code Category	Code Type
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

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Code	Description	Code Category	Code Type
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
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

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Code	Description	Code Category	Code Type
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 artery	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
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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 due 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 due 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

Code	Description	Code Category	Code Type
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
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

Appendix D. List of Current Procedural Terminology, Fourth Edition (CPT-4), Current Procedural Terminology, Second Edition (CPT-2), Current Procedural Terminology, Third Edition (CPT-3), Healthcare Common Procedure Coding System, Level II (HCPCS), 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
I63.532	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
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 Generic and Brand Names of Medical Products Used to Define Covariates in this Request

Generic Name	Brand Name
Obesity	
benzphetamine HCl	Regimex
benzphetamine HCl	benzphetamine
diethylpropion HCl	diethylpropion
liraglutide	Saxenda
liraglutide	Victoza 2-Pak
liraglutide	Victoza 3-Pak
liraglutide	liraglutide
lorcaserin HCl	Belviq
lorcaserin HCl	Belviq XR
naltrexone HCl/bupropion HCl	Contrave
orlistat	Alli
orlistat	Xenical
phendimetrazine tartrate	phendimetrazine tartrate
phentermine HCl	Adipex-P
phentermine HCl	Lomaira
phentermine HCl	phentermine
phentermine HCl/topiramate	Qsymia
semaglutide	Ozempic
semaglutide	Wegovy
tirzepatide	Mounjaro
tirzepatide	Zepbound
Smoking	
nicotine	Nicoderm CQ
nicotine	Nicotrol
nicotine	Nicotrol NS
nicotine	nicotine
nicotine bitartrate	Nicotine Tartrate
nicotine polacrilex	Nicorelief
nicotine polacrilex	Nicorette
nicotine polacrilex	Quit 2
nicotine polacrilex	Quit 4
nicotine polacrilex	Stop Smoking Aid
nicotine polacrilex	nicotine (polacrilex)
nicotine polacrilex	nicotine polacrilex (bulk)
varenicline tartrate	Chantix
varenicline tartrate	Chantix Continuing Month Box
varenicline tartrate	Chantix Starting Month Box
varenicline tartrate	Tyrvaya
varenicline tartrate	varenicline tartrate

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 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
Minimum Pre-Index Enrollment Days:	183 days
Minimum Post-Index Required Days:	0 days
Enrollment Gap:	45 days
Age Groups:	0-17, 18-24, 25-40, 41-64, 65+ years
Sex:	M, F
Other Demographic Restrictions:	Restrict cohort to specific demographic values
Stratifications:	Age group, Sex, Calendar Month
Data Restrictions:	No
Chart Availability Restriction Indicator:	No
Envelope macro:	Reclassify encounters during inpatient stay as inpatient
Freeze data:	No
Drop Censor Output Indicator:	Yes

Exposure

Scenario	Group	Index Exposure	Cohort definition	Type 5 Exposure Washout Period	Exclude Evidence of Days Supply if Event Washout Includes Dispensings
1	tena	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
2	trif	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
3	brol	Brolucizumab–dbll	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A

cder_mpl1r_wp296

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296
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			Exposure		
Scenario	**Group**	**Index Exposure**	**Cohort definition**	**Type 5 Exposure Washout Period**	**Exclude Evidence of Days Supply if Event Washout Includes Dispensings**
4	afam	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
5	fluo	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
6	lasm	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
7	ele_iva_tez	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
8	air_poly	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
9	lus	Luspatercept–amt	Include all valid exposure episodes during query period; only the first valid exposure episode's incidence is assessed using washout criteria	0	N/A
10	zanu	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
11	cefi	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
12	criz	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

cder_mpl1r_wp296

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296
The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).

		Exposure			
Scenario	Group	Index Exposure	Cohort definition	Type 5 Exposure Washout Period	Exclude Evidence of Days Supply if Event Washout Includes Dispensings
13	givo	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
14	ceno	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
15	vox	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
16	golo	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
17	enf_ved	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
18	brill	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
19	luma	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
20	lemb	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

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).

			Exposure		
Scenario	Group	Index Exposure	Cohort definition	Type 5 Exposure Washout Period	Exclude Evidence of Days Supply if Event Washout Includes Dispensings
21	fam	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
22	ubro	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

N/A: Not applicable

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296
The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).

		Exposure				
Scenario	Care Setting and Diagnosis Position Requirements	Treatment Episode Gap Type	Exposure Episode Gap	Exposure Episode Extension Period	Create Baseline Table?	End At-Risk Period at Evidence of
1	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
2	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
3	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
4	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
5	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
6	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
7	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
8	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
9	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

cder_mpl1r_wp296

Appendix F. Technical Specifications Used in this Request

Specifications for Type 5 Request: cder_mpl1r_wp296

The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).

		Exposure				
Scenario	Care Setting and Diagnosis Position Requirements	Treatment Episode Gap Type	Exposure Episode Gap	Exposure Episode Extension Period	Create Baseline Table?	End At-Risk Period at Evidence of
10	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
11	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
12	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
13	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
14	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
15	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
16	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
17	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
18	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

Appendix F. Technical Specifications Used in this Request

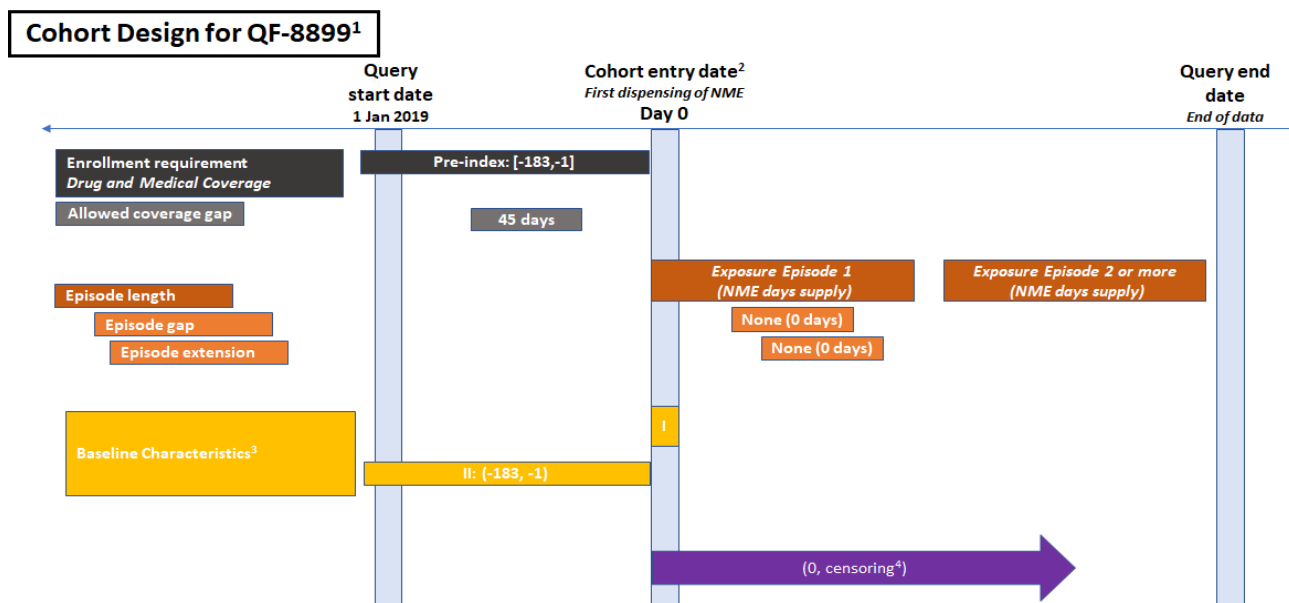| Specifications for Type 5 Request: cder_mpl1r_wp296						
The Center for Drug Evaluation and Research (CDER) has requested execution of the Cohort Identification and Descriptive Analysis (CIDA) tool 14.2.0 to assess utilization and uptake of the 2019 (part 2) New Molecular Entities (NMEs) to inform FDA in the Sentinel Distributed Database (SDD).						

		Exposure				
Scenario	**Care Setting and Diagnosis Position Requirements**	**Treatment Episode Gap Type**	**Exposure Episode Gap**	**Exposure Episode Extension Period**	**Create Baseline Table?**	**End At-Risk Period at Evidence of**
19	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
20	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
21	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date
22	Any care setting, any diagnosis position	Fixed	0 days	0 days	Yes	Disenrollment; Death; Data Partner End Date; Query End Date

International Classification of Diseases, Ninth Revision (ICD-9), International Classification of Diseases, Tenth Revision (ICD-10), Healthcare Common Procedure Coding System (HCPCS), and CPT (Current Procedural Terminology) codes are provided by Optum360.
National Drug Codes (NDCs) are checked against FirstDataBank's FDBMedKnowledge®

Cohort Design for QF-8899[1]

| Query start date 1 Jan 2019 | Cohort entry date[2] First dispensing of NME Day 0 | Query end date End of data |

Enrollment requirement
Drug and Medical Coverage

Pre-index: [-183,-1]

Allowed coverage gap

45 days

Episode length

Episode gap

Episode extension

Exposure Episode 1 (NME days supply)

Exposure Episode 2 or more (NME days supply)

None (0 days)

None (0 days)

Baseline Characteristics[3]

I

II: (-183, -1)

(0, censoring[4])

[1] Includes all valid exposure during the query period; only the first valid episode's incidence is assessed using the washout period.
[2] 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.
[3] Baseline characteristics:
  Window I: Age, Sex, Year
  Window II: Chronic Conditions Data Warehouse (CCW): Acute Myocardial Infarction, Alzheimer's Disease, Non-Alzheimer's Dementia, Atrial Fibrillation, Diabetes, Heart Failure, Hyperlipidemia, Hypertension, Depression, Ischemic Heart Disease, Rheumatoid Arthritis/Osteoarthritis, Stroke/Transient Ischemic Attach (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, Osteoporosis; and Other: Obesity (Diagnosis or Procedure Codes), Obesity (Dispensing Codes), Overweight, Smoking (Diagnosis or Procedure Codes), Smoking (Dispensing Codes), Alcohol Abuse or Dependence, Drug Abuse or Dependence, History of Cardiac Arrest, History of Coronary Angioplasty or Bypass, Liver Disease CCW, and Liver Disease Extended
[4] Censoring: earliest of death, disenrollment, data partner data end date, query end date

Appendix H. Health Characteristics used to Define Covariates in this Request

	Utilization			
Group	Medical Utilization Evaluation Period Start	Medical Utilization Evaluation Period End	Drug Utilization Evaluation Period Start	Drug Utilization Evaluation Period End
All groups	**-183**	**-1**	-183	-1

Baseline Characteristics

Covariate Name	Covariate Number	Code Category	Care Setting and Diagnosis Position Requirements	Complex Covariates
Chronic Conditions Data Warehouse				
Acute Myocardial Infarction	1	DX	IPP, IPS	
Alzheimer's Disease	2	DX	Any	
Non-Alzheimer's Dementia	3	DX	Any	
Atrial Fibrillation	4	DX	IPP, IPS	
	5	DX	AV*, ED*, OA*	
	6	CC		4 or 5
Diabetes	7	DX	IP*, IS*	
	8	DX	AV*, ED*, OA*	
	9	CC		7 or 8
Heart Failure	10	DX	IP*, AV*, ED*, OA*	
Hyperlipidemia	11	DX	IP*, IS*	
	12	DX	AV*, ED*, OA*	
	13	CC		11 or 12
Hypertension	14	DX	IP*, IS*	
	15	DX	AV*, ED*, OA*	
	16	CC		14 or 15
Depression	17	DX	Any	
Ischemic Heart Disease	18	DX	Any	
Rheumatoid Arthritis/Osteoarthritis	19	DX	Any	
Stroke/Transient Ishemic Attack (TIA)	20	DX	IP*	
	21	DX	AV*, ED*, OA*	
	22	CC		20 or 21
Breast Cancer	23	DX	IP*, IS*	
	24	DX	AV*, ED* OA*	
	25	CC		23 or 24

cder_mpl1r_wp296

Appendix H. Health Characteristics used to Define Covariates in this Request

Baseline Characteristics

Covariate Name	Covariate Number	Code Category	Care Setting and Diagnosis Position Requirements	Complex Covariates
Colorectal Cancer	26	DX	IP*, IS*	
	27	DX	AV*, ED* OA*	
	28	CC		26 or 27
Prostate Cancer	29	DX	IP*, IS*	
	30	DX	AV*, ED* OA*	
	31	CC		28 or 29
Lung Cancer	32	DX	IP*, IS*	
	33	DX	AV*, ED* OA*	
	34	CC		32 or 33
Endometrial Cancer	35	DX	IP*, IS*	
	36	DX	AV*, ED* OA*	
	37	CC		35 or 36
Acquired Hypothyroidism	38	DX	IP*, IS*	
	39	DX	AV*, ED* OA*	
	40	CC		38 or 39
Anemia	**41**	DX	Any	
Asthma	42	DX	IP*, IS*,	
	43	DX	AV*, ED* OA*	
	44	CC		42 or 43
Benign Prostatic Hyperplasia	45	DX	IP*, IS*	
	46	DX	AV*, ED* OA*	
	47	CC		45 or 46
Chronic Kidney Disease	48	DX	IP*, IS*	
	49	DX	AV*, ED* OA*	
	50	CC		48 or 49
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	51	DX	IP*, IS*	
	52	DX	AV*, ED* OA*	
	53	CC		51 or 52
Glaucoma	**54**	DX	AV*, ED*, OA*	
Osteoporosis	55	DX	IP*, IS*,	
	56	DX	AV*, ED* OA*	
	57	CC		55 or 56

Appendix H. Health Characteristics used to Define Covariates in this Request

<div align="center">

Baseline Characteristics

</div>

Covariate Name	Covariate Number	Code Category	Care Setting and Diagnosis Position Requirements	Complex Covariates
Other				
Obesity (Diagnosis or Procedure Codes)	**58**	DX, PX	Any	
Obesity (Dispensing Codes)	**59**	RX	Any	
Overweight	**60**	DX	Any	
Smoking (Diagnosis or Procedure Codes)	**61**	DX, PX	Any	
Smoking (Dispensing Codes)	**62**	RX	Any	
Alcohol Abuse or Dependence	**63**	DX, PX	Any	
Drug Abuse or Dependence	**64**	DX, PX	Any	
History of Cardiac Arrest	**65**	DX	Any	
History of Coronary Angioplasty or Bypass	**66**	DX, PX	Any	
Liver Disease CCW	67	DX	IP*, IS*	
	68	DX	AV*, ED* OA*	
	69	CC		67 or 68
	70	PX	AV*	
	71	DX	AV*	
	72	CC		70 and 71
	73	PX	ED*	
	74	DX	ED*	
	75	CC		73 and 74
	76	PX	OA*	
	77	DX	OA*	
	78	CC		76 and 77
	79	PX	IS*	
	80	DX	IS*	
	81	CC		79 and 80
	82	CC		69 or 72 or 75 or 78 or 81

Appendix H. Health Characteristics used to Define Covariates in this Request

Covariate Name	Covariate Number	Code Category	Care Setting and Diagnosis Position Requirements	Complex Covariates
	83	DX	IP*, IS*	
	84	DX	AV*, ED* OA*	
	85	CC		83 or 84
	86	PX	AV*	
	87	DX	AV*	
	88	CC		86 and 87
	89	PX	ED*	
	90	DX	ED*	
Liver Disease Extended	91	CC		89 and 90
	92	PX	OA*	
	93	DX	OA*	
	94	CC		92 and 93
	95	PX	IS*	
	96	DX	IS*	
	97	CC		95 and 96
	98	CC		85 or 88 or 91 or 94 or 97

Appendix H. Health Characteristics used to Define Covariates in this Request

Baseline Characteristics

Covariate Name	Number of Instances the Covariate Should be Found in Evaluation	Covariate Evaluation Period Start	Covariate Evaluation Period End	Forced Supply to Attach to a Code *(only applies to RX codes)*	Lookback Period Date Only
Chronic Conditions Data Warehouse					
Acute Myocardial Infarction	1	-183	-1	N/A	Y
Alzheimer's Disease	1	-183	-1	N/A	Y
Non-Alzheimer's Dementia	1	-183	-1	N/A	Y
Atrial Fibrillation	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Diabetes	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Heart Failure	1	-183	-1	N/A	Y
Hyperlipidemia	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Hypertension	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Depression	1	-183	-1	N/A	Y
Ischemic Heart Disease	1	-183	-1	N/A	Y
Rheumatoid Arthritis/Osteoarthritis	2	-183	-1	N/A	Y
Stroke/Transient Ishemic Attack (TIA)	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Breast Cancer	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Colorectal Cancer	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Prostate Cancer	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y

Appendix H. Health Characteristics used to Define Covariates in this Request

Baseline Characteristics

Covariate Name	Number of Instances the Covariate Should be Found in Evaluation	Covariate Evaluation Period Start	Covariate Evaluation Period End	Forced Supply to Attach to a Code *(only applies to RX codes)*	Lookback Period Date Only
Lung Cancer	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Endometrial Cancer	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Acquired Hypothyroidism	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Anemia	1	-183	-1	N/A	Y
Asthma	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Benign Prostatic Hyperplasia	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Chronic Kidney Disease	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Chronic Obstructive Pulmonary Disease (COPD) and Bronchiectasis	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Glaucoma	1	-183	-1	N/A	Y
Osteoporosis	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Other					
Obesity (Diagnosis or Procedure Codes)	1	-183	-1	N/A	Y
Obesity (Dispensing Codes)	1	-183	-1	N/A	Y
Overweight	1	-183	-1	N/A	Y
Smoking (Diagnosis or Procedure Codes)	1	-183	-1	N/A	Y
Smoking (Dispensing Codes)	1	-183	-1	N/A	Y

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Appendix H. Health Characteristics used to Define Covariates in this Request

Baseline Characteristics

Covariate Name	Number of Instances the Covariate Should be Found in Evaluation	Covariate Evaluation Period Start	Covariate Evaluation Period End	Forced Supply to Attach to a Code *(only applies to RX codes)*	Lookback Period Date Only
Alcohol Abuse or Dependence	1	-183	-1	N/A	Y
Drug Abuse or Dependence	1	-183	-1	N/A	Y
History of Cardiac Arrest	1	-183	-1	N/A	Y
History of Coronary Angioplasty or Bypass	1	-183	-1	N/A	Y
Liver Disease CCW	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y

Appendix H. Health Characteristics used to Define Covariates in this Request

Baseline Characteristics

Covariate Name	Number of Instances the Covariate Should be Found in Evaluation	Covariate Evaluation Period Start	Covariate Evaluation Period End	Forced Supply to Attach to a Code *(only applies to RX codes)*	Lookback Period Date Only
	1	-183	-1	N/A	Y
	2	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
Liver Disease Extended	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y
	1	-183	-1	N/A	Y

N/A: Not applicable

Appendix H. Health Characteristics used to Define Covariates in this Request

RX: Drug code **DX:** Diagnosis code **PX:** Procedure code **CC:** Complex covariates (multiple COVARNUM values are used to define a covariate)	**IP*:** inpatient hospital stays, any diagnoses **IS*:** non-acute institutional stays, any diagnoses **ED*:** emergency department encounters **AV*:** ambulatory visits **OA*:** other ambulatory visits	**N:** Lookback period should search for evidence of a date or an interval **Y:** Lookback period should search for evidence of a date only	**L:** Lab Date **O:** Order Date **R:** Result Date **Blank:** if CODECAT is not LB	**<=X:** less than or equal to X **<X:** less than X **>=X:** greater than or equal to X **>X:** greater than X **~=X:** not equal to X **X:Y:** between X and Y **BORDERLINE** **POSITIVE** **NEGATIVE** **UNDETERMINED** **Start\end unit: range** **Blank:** if CODECat is not LB

*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 Scondary) uses the second diagnosis position.

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