

## Disclaimer

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

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

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

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

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## Overview for Request cder\_mpl1r\_wp258

**Request ID:** cder\_mpl1r\_wp258

**Request Description:** In this report we estimated background rates of interstitial lung disease (ILD) among patients with inflammatory bowel disease (IBD) and among patients with IBD who were treated with vedolizumab or natalizumab in the Sentinel Distributed Database (SDD).

**Sentinel Routine Querying Module:** Cohort Identification and Descriptive Analysis (CIDA) module, version 12.2.0

**Data Source:** We distributed this query to six Sentinel Data Partners (DP) on October 12, 2023. The study period included data from January 1, 2006 through April 30, 2023. Please see Appendix A for a list of dates of available data for each Data Partner.

**Study Design:** We identified background rates of ILD separately among adults aged 18 years and older with prevalent and incident diagnosis of IBD, as well as the two subtypes of IBD: ulcerative colitis (UC) and Crohn's disease (CD). We also identified individuals with incident use of vedolizumab and natalizumab and evaluated the occurrence of ILD during episodes of exposure to the two agents, among separate cohorts of adults who had a prior diagnosis of IBD, UC, or CD. This is a Type 2 analysis in the Query Request Package (QRP) documentation.

**Exposures of Interest:** In the ILD background rate cohorts, we defined the event of interest as the first diagnosis of IBD, UC, and CD in the data as the index event for the IBD, UC, and CD cohorts, respectively. Only the first qualifying (index) IBD diagnosis in any care setting for each member was included; cohort re-entry was not allowed. We defined the event of interest using International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes. Please see Appendix B for a list of ICD-10-CM and ICD-9-CM codes used to define IBD, UC, and CD in this request.

In the exposure-outcome cohorts, we defined the exposures of interest, vedolizumab and natalizumab, using Healthcare Common Procedure Coding System (HCPCS) codes and National Drug Codes (NDCs). Each qualifying dispensing or administration of vedolizumab or natalizumab (index) was identified for individuals with a prior diagnosis of IBD, UC, or CD; cohort re-entry was allowed. Please see Appendix C for a list of generic and brand name medical products and Appendix D for a list of HCPCS codes used to define vedolizumab and natalizumab in this request.

**Outcome of Interest:** We defined the outcome of interest as ILD using ICD-9-CM and ICD-10-CM diagnosis codes. Please see Appendix E for a list of the ICD-10-CM and ICD-9-CM codes used to define ILD in this report.

**Cohort Eligibility Criteria:** Patients with a history of ILD at any time prior to the index date were excluded. We restricted all cohorts to males and females within the following age groups: 18-24, 25-34, 35-44, 45-54, 55-64 and 65+ years.

For the background rates cohorts, we required members to be enrolled in health plans with medical coverage for at least 183 days prior to their index date, during which gaps in coverage of up to 45 days were allowed. We created six cohorts to examine background rates of ILD: prevalent IBD, prevalent CD, prevalent UC, incident IBD, incident CD, and incident UC. For the incident cohorts, index event washout was applied to all available data prior to the index date.

For the exposure-outcome cohorts, we required members to be enrolled in health plans with medical and drug coverage for at least 183 days prior to their index date, during which gaps in coverage of up to 45 days were allowed. We created five separate exposure cohorts for each of the two exposures of interest-vedolizumab and natalizumab. Exposure episodes were required to satisfy the following criteria:

1. Vedolizumab/natalizumab users with IBD: Patients needed to have 1) at least one IBD diagnosis ever in their enrollment history, 2) no prior vedolizumab use or natalizumab use in the 183 days prior to index (inclusive of index date if non-index defining exposure) or evidence of vedolizumab antibody assessment<sup>1</sup> in the 183 days prior to index, 3) no prior use of other IBD treatments within a time frame equal to five times the half-life of the specific IBD drug prior to index date, and 4) no current use of amiodarone with a days supply equal to five times the half-life (710 days) applied to amiodarone dispensings and administrations.

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2. Vedolizumab/natalizumab users with IBD: sensitivity analysis #1 with a days supply equal to the vedolizumab/natalizumab maximum dosing interval, rather than a days supply equal to five times the half-life of vedolizumab/natalizumab as was done in all other cohorts except for this sensitivity analysis #1 (please see the Follow-up Time section below for details on exposure episodes): Patients needed to have 1) at least one IBD diagnosis ever in their enrollment history, 2) no prior vedolizumab use or natalizumab use in the 183 days prior to index (inclusive of index date if non-index defining exposure) or evidence of vedolizumab antibody assessment in the 183 days prior to index, 3) no prior use of other IBD treatments within a time frame equal to five times the half-life of the specific IBD drug prior to index date, and 4) no current use of amiodarone with a days supply equal to five times the half-life (710 days) applied to amiodarone dispensings and administrations.

3. Vedolizumab/natalizumab users with IBD: sensitivity analysis #2 with no history of radiographic chest exam: Patients needed to have 1) at least one IBD diagnosis ever in their enrollment history, 2) no prior vedolizumab use or natalizumab use in the 183 days prior to index (inclusive of index date if non-index defining exposure) or evidence of vedolizumab antibody assessment in the 183 days prior to index, 3) no prior use of other IBD treatments within a time frame equal to five times the half-life of the specific IBD drug prior to index date, 4) no current use of amiodarone with a days supply equal to five times the half-life (710 days) applied to amiodarone dispensings and administrations, and 5) no prior history of radiographic chest exam in the 183 days prior to index.

4. Vedolizumab/natalizumab users with UC: Patients needed to have 1) at least one UC diagnosis ever in their enrollment history, 2) no prior vedolizumab use or natalizumab use in the 183 days prior to index (inclusive of index date if non-index defining exposure) or evidence of vedolizumab antibody assessment in the 183 days prior to index, 3) no prior use of other IBD treatments within a time frame equal to five times the half-life of the specific IBD drug prior to index date, and 4) no current use of amiodarone with a days supply equal to five times the half-life (710 days) applied to amiodarone dispensings and administrations.

5. Vedolizumab/natalizumab users with CD: Patients needed to have 1) at least one CD diagnosis ever in their enrollment history, 2) no prior vedolizumab use or natalizumab use in the 183 days prior to index (inclusive of index date if non-index defining exposure) or evidence of vedolizumab antibody assessment in the 183 days prior to index, 3) no prior use of other IBD treatments within a time frame equal to five times the half-life of the specific IBD drug prior to index date, 4) and no current use of amiodarone with a days supply equal to five times the half-life (710 days) applied to amiodarone dispensings and administrations.

Please see Appendix F for a list of non-proprietary and proprietary names of medical products used to define inclusion and exclusion criteria for this request and Appendix G for a list of ICD-9-CM, ICD-10-CM, International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS), Current Procedural Terminology, Fourth Edition (CPT-4), and HCPCS codes used to define inclusion and exclusion criteria for this request.

**Follow-up Time:** For estimating background rates, we followed patients from the day after the index event until the first occurrence of any of the following: 1) disenrollment; 2) death; 3) the end of the data provided by each Data Partner; 4) the end of the query period; 5) occurrence of the outcome.

For estimating outcome rates in the exposure-outcome cohorts, we created exposure episodes by applying a days supply value to vedolizumab and natalizumab dispensings and procedure codes.

For all vedolizumab cohorts, except vedolizumab sensitivity analysis #1, we applied a days supply of 128 days (equal to five times the half-life of vedolizumab) to vedolizumab procedures and administrations, with no gaps allowed. For vedolizumab sensitivity analysis #1, we applied a days supply of 56 days to vedolizumab dispensings and administrations (based on vedolizumab maximum dosing interval) and bridged any gaps of 14 days or less.

For all natalizumab cohorts, except natalizumab sensitivity analysis #1, we applied a days supply of 55 days (equal to five times the half-life of natalizumab) to natalizumab procedures and administrations, with no gaps allowed. For natalizumab sensitivity analysis #1, we applied a days supply of 28 days to natalizumab dispensings and administrations (based on natalizumab maximum dosing interval) and bridged any gaps of 14 days or less.

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Follow-up began on the day after the index dispensing or administration and continued until the first occurrence of any of the following: 1) disenrollment; 2) death; 3) the end of the data provided by each Data Partner; 4) the end of the query period; 5) the outcome; 6) receipt of natalizumab in the vedolizumab cohorts or receipt of vedolizumab in the natalizumab cohorts; 7) receipt of other IBD treatments (methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors, or tyrosine kinase inhibitors) or 8) end of exposure episode.

Please see Appendix H for a list of generic and brand names of medical products and Appendix I for a list of CPT-4, HCPCS, ICD-9-CM, ICD-10-CM, and ICD-10-PCS codes used to define censoring criteria in this request.

**Baseline Characteristics:** We assessed age, sex, race, and ethnicity on the index date and the following characteristics in the 183 days prior to and including the index date of natalizumab or vedolizumab dispensing or administration: tobacco use, systemic sclerosis, rheumatoid arthritis, dermatomyositis/polymyositis, anti-synthetase syndrome, use of other IBD medications (methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors, and tyrosine kinase inhibitors), and healthcare services/drug utilization metrics. We assessed the Combined Comorbidity Score<sup>2</sup> in all prior enrollment history including the index date. Chronic conditions were also assessed in all prior history, and were defined using Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Data Warehouse<sup>3</sup> algorithms and included: acute myocardial infarction, Alzheimer's disease, Alzheimer's disease and related disorders or senile dementia, atrial fibrillation, diabetes, heart failure, hyperlipidemia, hypertension, depression, ischemic heart disease, rheumatoid arthritis/osteoarthritis, stroke/transient ischemic attack, breast cancer, colorectal cancer, prostate cancer, lung cancer, endometrial cancer, acquired hypothyroidism, anemia, asthma, benign prostatic hyperplasia, chronic kidney disease, chronic obstructive pulmonary disease and bronchiectasis, glaucoma, and osteoporosis. We assessed the number of doses of vedolizumab or natalizumab received (one to three doses, four to six doses, seven to nine doses, or greater than or equal to ten doses) from the date of index to the most recent available data. History of IBD in the database was recorded in categories of less than one year of IBD history, one to two years of IBD history, and greater than or equal to two years of IBD history. Please see Appendix J for a list of generic and brand names of medical products and Appendix K for a list of CPT-4, HCPCS, ICD-9-CM, and ICD-10-CM codes used to define baseline characteristics in this request.

**Please see Appendices L, M, and N for the specifications used to define parameters for this request. Please see Appendix O for a list of baseline characteristics used in this request. Please also see Appendices P, Q, and R for the design diagrams used in this request and Appendix S for a list of other other IBD treatments used in the exclusion criteria.**

**Limitations:** Algorithms to define exposures, outcomes, inclusion and exclusion criteria, and baseline characteristics are imperfect and may be misclassified. Therefore, data should be interpreted with this limitation in mind.

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

<sup>1</sup>There were no antibody assessment codes identified for natalizumab.

<sup>2</sup>The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051)

<sup>3</sup>Chronic Conditions Data Warehouse. Condition Categories -Chronic Conditions Data Warehouse. <https://www.ccwdata.org/web/guest/condition-categories>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**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 Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Patient Characteristics	Number	Percent
Unique patients	3,457,764	N/A
Demographic Characteristics	Mean	Standard Deviation
Age (years)	57.8	15.1
Age	Number	Percent
18-24 years	196,309	5.7%
25-34 years	352,011	10.2%
35-44 years	389,510	11.3%
45-54 years	473,846	13.7%
55-64 years	499,506	14.4%
≥ 65 years	1,546,582	44.7%
Sex		
Female	2,009,115	58.1%
Male	1,448,649	41.9%
Race <sup>1</sup>		
American Indian or Alaska Native	9,406	0.3%
Asian	34,063	1.0%
Black or African American	174,407	5.0%
Multi-racial	12,351	0.4%
Native Hawaiian or Other Pacific Islander	2,169	0.1%
Unknown	1,580,030	45.7%
White	1,645,338	47.6%
Hispanic origin		
Yes	69,392	2.0%
No	1,727,467	50.0%
Unknown	1,660,905	48.0%
Year		
2006	45,208	1.3%
2007	53,625	1.6%
2008	141,702	4.1%
2009	132,656	3.8%
2010	302,403	8.7%
2011	281,763	8.1%
2012	240,469	7.0%
2013	220,859	6.4%
2014	221,284	6.4%
2015	234,733	6.8%
2016	248,145	7.2%
2017	244,791	7.1%
2018	231,965	6.7%
2019	237,761	6.9%

**Table 1a. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	224,823	6.5%
2021	191,785	5.5%
2022	186,820	5.4%
2023	16,972	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	2.7	3.5
Combined comorbidity score categories	Number	Percent
<=0	1,242,407	35.9%
1-2	977,706	28.3%
3-4	435,566	12.6%
>=5	802,085	23.2%
Vedolizumab doses received		
1-3	20,098	0.6%
4-6	19,179	0.6%
7-9	12,365	0.4%
≥10	41,278	1.2%
Natalizumab doses received		
1-3	481	0.0%
4-6	267	0.0%
7-9	166	0.0%
≥10	1,051	0.0%
Length of IBD history		
<1 year	3,247,371	93.9%
1-<2 years	123,951	3.6%
>= 2 years	86,442	2.5%
Systemic sclerosis	7,131	0.2%
Rheumatoid arthritis	113,515	3.3%
Dermatomyositis/polymyositis	3,252	0.1%
Anti-synthetase syndrome	270	0.0%
Acquired hypothyroidism	783,320	22.7%
Acute myocardial infarction	111,571	3.2%
Alzheimer's disease	75,827	2.2%
Alzheimer's disease and related conditions	230,576	6.7%
Anemia	1,305,987	37.8%
Asthma	512,367	14.8%
Atrial fibrillation	379,175	11.0%
Benign prostatic hyperplasia Inclusion	377,921	10.9%
Breast cancer	131,889	3.8%
Colorectal cancer	114,586	3.3%
Endometrial cancer	26,009	0.8%

**Table 1a. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	42,850	1.2%
Prostate cancer	114,967	3.3%
Cataract	980,063	28.3%
Chronic kidney disease	822,357	23.8%
COPD and bronchiectasis	739,932	21.4%
Depression	922,310	26.7%
Diabetes	619,148	17.9%
Glaucoma	372,227	10.8%
Heart failure	314,080	9.1%
Hip/pelvic fracture	76,777	2.2%
Hyperlipidemia	1,853,407	53.6%
Hypertension	1,912,952	55.3%
Ischemic heart disease	804,283	23.3%
Osteoporosis	510,083	14.8%
Rheumatoid arthritis/osteoarthritis	1,351,741	39.1%
Stroke/TIA Inclusion	324,999	9.4%
Tobacco Use	332,166	9.6%
<b>Baseline IBD Medication Use</b>		
Methotrexate	36,105	1.0%
Amiodarone	23,186	0.7%
Bleomycin	317	0.0%
Azathioprine	67,886	2.0%
Cyclophosphamide	3,984	0.1%
Sulfasalazine	79,196	2.3%
Checkpoint inhibitors	6,572	0.2%
Tyrosine kinase inhibitors	3,244	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	11.2	13.2
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	4.6	11.9
Mean number of filled prescriptions	12.7	17.8
Mean number of generics dispensed	5.0	5.7
Mean number of unique drug classes dispensed	4.7	5.2

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

**Table 1b. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Patient Characteristics	Number	Percent
Unique patients	1,641,564	N/A
Demographic Characteristics	Mean	Standard Deviation
Age (years)	54.9	15.3
Age	Number	Percent
18-24 years	122,248	7.4%
25-34 years	200,771	12.2%
35-44 years	212,458	12.9%
45-54 years	241,641	14.7%
55-64 years	236,898	14.4%
≥ 65 years	627,548	38.2%
Sex		
Female	948,102	57.8%
Male	693,462	42.2%
Race <sup>1</sup>		
American Indian or Alaska Native	4,389	0.3%
Asian	13,543	0.8%
Black or African American	84,009	5.1%
Multi-racial	6,028	0.4%
Native Hawaiian or Other Pacific Islander	970	0.1%
Unknown	788,876	48.1%
White	743,749	45.3%
Hispanic origin		
Yes	28,327	1.7%
No	781,094	47.6%
Unknown	832,143	50.7%
Year		
2006	23,593	1.4%
2007	25,960	1.6%
2008	71,838	4.4%
2009	64,657	3.9%
2010	150,585	9.2%
2011	132,193	8.1%
2012	114,740	7.0%
2013	106,778	6.5%
2014	110,245	6.7%
2015	114,955	7.0%
2016	121,956	7.4%
2017	116,320	7.1%
2018	106,848	6.5%
2019	108,111	6.6%

**Table 1b. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	103,067	6.3%
2021	81,923	5.0%
2022	79,869	4.9%
2023	7,926	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	2.4	3.2
Combined comorbidity score categories	Number	Percent
<=0	601,575	36.6%
1-2	501,829	30.6%
3-4	215,406	13.1%
>=5	322,754	19.7%
Vedolizumab doses received		
1-3	13,321	0.8%
4-6	12,075	0.7%
7-9	8,053	0.5%
≥10	27,598	1.7%
Natalizumab doses received		
1-3	376	0.0%
4-6	216	0.0%
7-9	128	0.0%
≥10	738	0.0%
Length of IBD history		
<1 year	1,440,455	87.7%
1-<2 years	91,270	5.6%
>= 2 years	109,839	6.7%
Systemic sclerosis	3,268	0.2%
Rheumatoid arthritis	53,269	3.2%
Dermatomyositis/polymyositis	1,651	0.1%
Anti-synthetase syndrome	136	0.0%
Acquired hypothyroidism	330,670	20.1%
Acute myocardial infarction	41,252	2.5%
Alzheimer's disease	24,874	1.5%
Alzheimer's disease and related conditions	78,482	4.8%
Anemia	607,933	37.0%
Asthma	239,482	14.6%
Atrial fibrillation	148,469	9.0%
Benign prostatic hyperplasia Inclusion	157,805	9.6%
Breast cancer	53,119	3.2%
Colorectal cancer	49,373	3.0%
Endometrial cancer	10,696	0.7%

**Table 1b. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	16,704	1.0%
Prostate cancer	41,944	2.6%
Cataract	395,767	24.1%
Chronic kidney disease	343,814	20.9%
COPD and bronchiectasis	319,703	19.5%
Depression	426,214	26.0%
Diabetes	253,590	15.4%
Glaucoma	150,523	9.2%
Heart failure	117,760	7.2%
Hip/pelvic fracture	27,149	1.7%
Hyperlipidemia	782,609	47.7%
Hypertension	829,741	50.5%
Ischemic heart disease	324,844	19.8%
Osteoporosis	212,082	12.9%
Rheumatoid arthritis/osteoarthritis	582,546	35.5%
Stroke/TIA Inclusion	123,981	7.6%
Tobacco Use	176,837	10.8%
<b>Baseline IBD Medication Use</b>		
Methotrexate	22,088	1.3%
Amiodarone	8,743	0.5%
Bleomycin	141	0.0%
Azathioprine	49,777	3.0%
Cyclophosphamide	1,430	0.1%
Sulfasalazine	34,561	2.1%
Checkpoint inhibitors	1,452	0.1%
Tyrosine kinase inhibitors	1,157	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	11.0	12.5
Mean number of emergency room encounters	0.5	1.6
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	3.9	10.7
Mean number of filled prescriptions	12.5	17.6
Mean number of generics dispensed	5.0	5.6
Mean number of unique drug classes dispensed	4.6	5.1

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.



**Table 1c. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Patient Characteristics	Number	Percent
Unique patients	2,164,271	N/A
Demographic Characteristics	Mean	Standard Deviation
Age (years)	59.7	14.8
Age	Number	Percent
18-24 years	97,459	4.5%
25-34 years	193,701	8.9%
35-44 years	224,334	10.4%
45-54 years	283,909	13.1%
55-64 years	312,368	14.4%
≥ 65 years	1,052,500	48.6%
Sex		
Female	1,252,132	57.9%
Male	912,139	42.1%
Race <sup>1</sup>		
American Indian or Alaska Native	5,702	0.3%
Asian	22,361	1.0%
Black or African American	105,033	4.9%
Multi-racial	7,530	0.3%
Native Hawaiian or Other Pacific Islander	1,326	0.1%
Unknown	969,333	44.8%
White	1,052,986	48.7%
Hispanic origin		
Yes	44,980	2.1%
No	1,102,937	51.0%
Unknown	1,016,354	47.0%
Year		
2006	24,463	1.1%
2007	33,630	1.6%
2008	82,124	3.8%
2009	85,355	3.9%
2010	178,377	8.2%
2011	184,743	8.5%
2012	158,775	7.3%
2013	145,163	6.7%
2014	140,792	6.5%
2015	149,806	6.9%
2016	151,460	7.0%
2017	146,149	6.8%
2018	141,937	6.6%
2019	146,690	6.8%

**Table 1c. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	138,063	6.4%
2021	124,870	5.8%
2022	121,430	5.6%
2023	10,444	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	3.0	3.7
Combined comorbidity score categories	Number	Percent
<=0	738,754	34.1%
1-2	585,921	27.1%
3-4	277,372	12.8%
>=5	562,224	26.0%
Vedolizumab doses received		
1-3	13,092	0.6%
4-6	12,690	0.6%
7-9	8,154	0.4%
≥10	27,204	1.3%
Natalizumab doses received		
1-3	191	0.0%
4-6	116	0.0%
7-9	81	0.0%
≥10	497	0.0%
Length of IBD history		
<1 year	1,939,503	89.6%
1-<2 years	105,959	4.9%
>= 2 years	118,809	5.5%
Systemic sclerosis	4,596	0.2%
Rheumatoid arthritis	74,110	3.4%
Dermatomyositis/polymyositis	1,924	0.1%
Anti-synthetase syndrome	162	0.0%
Acquired hypothyroidism	528,517	24.4%
Acute myocardial infarction	79,277	3.7%
Alzheimer's disease	55,765	2.6%
Alzheimer's disease and related conditions	168,031	7.8%
Anemia	872,993	40.3%
Asthma	331,122	15.3%
Atrial fibrillation	265,301	12.3%
Benign prostatic hyperplasia Inclusion	261,327	12.1%
Breast cancer	90,256	4.2%
Colorectal cancer	77,386	3.6%
Endometrial cancer	17,392	0.8%

**Table 1c. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Prevalent Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	29,372	1.4%
Prostate cancer	83,643	3.9%
Cataract	682,038	31.5%
Chronic kidney disease	560,144	25.9%
COPD and bronchiectasis	495,014	22.9%
Depression	597,044	27.6%
Diabetes	416,165	19.2%
Glaucoma	258,309	11.9%
Heart failure	220,474	10.2%
Hip/pelvic fracture	56,482	2.6%
Hyperlipidemia	1,251,754	57.8%
Hypertension	1,267,116	58.5%
Ischemic heart disease	553,697	25.6%
Osteoporosis	355,836	16.4%
Rheumatoid arthritis/osteoarthritis	910,320	42.1%
Stroke/TIA Inclusion	229,440	10.6%
Tobacco Use	186,854	8.6%
<b>Baseline IBD Medication Use</b>		
Methotrexate	19,862	0.9%
Amiodarone	16,277	0.8%
Bleomycin	216	0.0%
Azathioprine	35,732	1.7%
Cyclophosphamide	2,802	0.1%
Sulfasalazine	60,368	2.8%
Checkpoint inhibitors	5,159	0.2%
Tyrosine kinase inhibitors	2,246	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	11.6	13.5
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	5.1	12.5
Mean number of filled prescriptions	12.9	18.0
Mean number of generics dispensed	5.1	5.7
Mean number of unique drug classes dispensed	4.8	5.2

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

**Table 1d. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Patient Characteristics	Number	Percent
Unique patients	2,507,822	N/A
Demographic Characteristics	Mean	Standard Deviation
Age (years)	60.3	14.8
Age	Number	Percent
18-24 years	106,991	4.3%
25-34 years	212,215	8.5%
35-44 years	255,061	10.2%
45-54 years	333,725	13.3%
55-64 years	366,127	14.6%
≥ 65 years	1,233,703	49.2%
Sex		
Female	1,484,821	59.2%
Male	1,023,001	40.8%
Race <sup>1</sup>		
American Indian or Alaska Native	7,423	0.3%
Asian	28,004	1.1%
Black or African American	132,418	5.3%
Multi-racial	8,313	0.3%
Native Hawaiian or Other Pacific Islander	1,570	0.1%
Unknown	1,089,477	43.4%
White	1,240,617	49.5%
Hispanic origin		
Yes	53,711	2.1%
No	1,320,811	52.7%
Unknown	1,133,300	45.2%
Year		
2006	20,995	0.8%
2007	36,823	1.5%
2008	77,916	3.1%
2009	95,804	3.8%
2010	174,961	7.0%
2011	217,774	8.7%
2012	194,441	7.8%
2013	177,295	7.1%
2014	171,222	6.8%
2015	178,970	7.1%
2016	176,543	7.0%
2017	180,710	7.2%
2018	173,975	6.9%
2019	175,936	7.0%

**Table 1d. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	162,413	6.5%
2021	144,259	5.8%
2022	136,089	5.4%
2023	11,696	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	3.3	3.8
Combined comorbidity score categories	Number	Percent
<=0	779,608	31.1%
1-2	666,754	26.6%
3-4	338,530	13.5%
>=5	722,930	28.8%
Vedolizumab doses received		
1-3	6,704	0.3%
4-6	6,951	0.3%
7-9	4,370	0.2%
≥10	13,943	0.6%
Natalizumab doses received		
1-3	200	0.0%
4-6	104	0.0%
7-9	78	0.0%
≥10	610	0.0%
Length of IBD history		
<1 year	2,505,771	99.9%
1-<2 years	1,003	0.0%
>= 2 years	1,048	0.0%
Systemic sclerosis	5,761	0.2%
Rheumatoid arthritis	86,351	3.4%
Dermatomyositis/polymyositis	2,677	0.1%
Anti-synthetase syndrome	220	0.0%
Acquired hypothyroidism	661,476	26.4%
Acute myocardial infarction	103,497	4.1%
Alzheimer's disease	69,828	2.8%
Alzheimer's disease and related conditions	212,183	8.5%
Anemia	1,047,290	41.8%
Asthma	418,313	16.7%
Atrial fibrillation	333,147	13.3%
Benign prostatic hyperplasia Inclusion	319,862	12.8%
Breast cancer	111,905	4.5%
Colorectal cancer	100,425	4.0%
Endometrial cancer	23,508	0.9%

**Table 1d. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Inflammatory Bowel Disease (IBD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	37,801	1.5%
Prostate cancer	98,065	3.9%
Cataract	848,485	33.8%
Chronic kidney disease	708,684	28.3%
COPD and bronchiectasis	638,907	25.5%
Depression	742,479	29.6%
Diabetes	527,829	21.0%
Glaucoma	318,911	12.7%
Heart failure	286,046	11.4%
Hip/pelvic fracture	70,710	2.8%
Hyperlipidemia	1,519,421	60.6%
Hypertension	1,547,535	61.7%
Ischemic heart disease	700,272	27.9%
Osteoporosis	431,712	17.2%
Rheumatoid arthritis/osteoarthritis	1,135,098	45.3%
Stroke/TIA Inclusion	295,545	11.8%
Tobacco Use	260,183	10.4%
<b>Baseline IBD Medication Use</b>		
Methotrexate	19,708	0.8%
Amiodarone	20,347	0.8%
Bleomycin	217	0.0%
Azathioprine	12,105	0.5%
Cyclophosphamide	3,408	0.1%
Sulfasalazine	38,149	1.5%
Checkpoint inhibitors	6,221	0.2%
Tyrosine kinase inhibitors	2,847	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	11.7	14.0
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.4	0.8
Mean number of non-acute institutional encounters	0.1	0.4
Mean number of other ambulatory encounters	5.2	12.7
Mean number of filled prescriptions	13.0	18.4
Mean number of generics dispensed	5.2	5.8
Mean number of unique drug classes dispensed	4.9	5.3

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

**Table 1e. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Patient Characteristics	Number	Percent
Unique patients	1,124,298	N/A
Demographic Characteristics	Mean	Standard Deviation
Age (years)	57.4	15.1
Age	Number	Percent
18-24 years	63,777	5.7%
25-34 years	117,325	10.4%
35-44 years	134,453	12.0%
45-54 years	162,485	14.5%
55-64 years	164,512	14.6%
≥ 65 years	481,746	42.8%
Sex		
Female	654,551	58.2%
Male	469,747	41.8%
Race <sup>1</sup>		
American Indian or Alaska Native	3,287	0.3%
Asian	11,122	1.0%
Black or African American	57,870	5.1%
Multi-racial	3,916	0.3%
Native Hawaiian or Other Pacific Islander	683	0.1%
Unknown	524,134	46.6%
White	523,286	46.5%
Hispanic origin		
Yes	20,900	1.9%
No	556,150	49.5%
Unknown	547,248	48.7%
Year		
2006	9,861	0.9%
2007	17,197	1.5%
2008	36,629	3.3%
2009	45,814	4.1%
2010	80,187	7.1%
2011	99,473	8.8%
2012	90,405	8.0%
2013	83,484	7.4%
2014	82,418	7.3%
2015	83,382	7.4%
2016	81,135	7.2%
2017	80,808	7.2%
2018	75,126	6.7%
2019	74,248	6.6%



**Table 1e. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	68,746	6.1%
2021	56,926	5.1%
2022	53,288	4.7%
2023	5,171	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	2.9	3.5
Combined comorbidity score categories	Number	Percent
<=0	360,528	32.1%
1-2	325,324	28.9%
3-4	158,922	14.1%
>=5	279,524	24.9%
Vedolizumab doses received		
1-3	5,330	0.5%
4-6	5,097	0.5%
7-9	3,375	0.3%
≥10	11,436	1.0%
Natalizumab doses received		
1-3	129	0.0%
4-6	78	0.0%
7-9	49	0.0%
≥10	371	0.0%
Length of IBD history		
<1 year	1,027,947	91.4%
1-<2 years	32,856	2.9%
>= 2 years	63,495	5.6%
Systemic sclerosis	2,553	0.2%
Rheumatoid arthritis	37,251	3.3%
Dermatomyositis/polymyositis	1,354	0.1%
Anti-synthetase syndrome	108	0.0%
Acquired hypothyroidism	269,861	24.0%
Acute myocardial infarction	37,295	3.3%
Alzheimer's disease	22,257	2.0%
Alzheimer's disease and related conditions	70,131	6.2%
Anemia	456,435	40.6%
Asthma	186,985	16.6%
Atrial fibrillation	126,576	11.3%
Benign prostatic hyperplasia Inclusion	132,121	11.8%
Breast cancer	43,684	3.9%
Colorectal cancer	42,431	3.8%
Endometrial cancer	9,459	0.8%

**Table 1e. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Crohn's Disease (CD): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	14,009	1.2%
Prostate cancer	35,079	3.1%
Cataract	334,191	29.7%
Chronic kidney disease	280,867	25.0%
COPD and bronchiectasis	263,127	23.4%
Depression	320,419	28.5%
Diabetes	208,824	18.6%
Glaucoma	125,866	11.2%
Heart failure	103,625	9.2%
Hip/pelvic fracture	24,023	2.1%
Hyperlipidemia	625,671	55.6%
Hypertension	642,495	57.1%
Ischemic heart disease	274,945	24.5%
Osteoporosis	170,014	15.1%
Rheumatoid arthritis/osteoarthritis	468,766	41.7%
Stroke/TIA Inclusion	109,371	9.7%
Tobacco Use	124,576	11.1%
<b>Baseline IBD Medication Use</b>		
Methotrexate	10,123	0.9%
Amiodarone	7,365	0.7%
Bleomycin	84	0.0%
Azathioprine	13,031	1.2%
Cyclophosphamide	1,126	0.1%
Sulfasalazine	18,776	1.7%
Checkpoint inhibitors	1,317	0.1%
Tyrosine kinase inhibitors	953	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	11.4	13.1
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	4.3	11.1
Mean number of filled prescriptions	12.5	17.7
Mean number of generics dispensed	5.0	5.7
Mean number of unique drug classes dispensed	4.7	5.2

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

**Table 1f. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics</b>	<b>Number</b>	<b>Percent</b>
Unique patients	1,708,404	N/A
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	61.3	14.7
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	63,185	3.7%
25-34 years	133,413	7.8%
35-44 years	164,002	9.6%
45-54 years	219,409	12.8%
55-64 years	248,388	14.5%
≥ 65 years	880,007	51.5%
<b>Sex</b>		
Female	1,009,659	59.1%
Male	698,745	40.9%
<b>Race<sup>1</sup></b>		
American Indian or Alaska Native	4,809	0.3%
Asian	18,580	1.1%
Black or African American	88,069	5.2%
Multi-racial	5,509	0.3%
Native Hawaiian or Other Pacific Islander	1,000	0.1%
Unknown	729,882	42.7%
White	860,555	50.4%
<b>Hispanic origin</b>		
Yes	36,374	2.1%
No	912,710	53.4%
Unknown	759,320	44.4%
<b>Year</b>		
2006	13,785	0.8%
2007	25,195	1.5%
2008	52,755	3.1%
2009	66,128	3.9%
2010	119,888	7.0%
2011	151,224	8.9%
2012	135,236	7.9%
2013	123,238	7.2%
2014	116,967	6.8%
2015	123,875	7.3%
2016	118,891	7.0%
2017	116,176	6.8%
2018	114,225	6.7%
2019	117,120	6.9%

**Table 1f. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2020	108,601	6.4%
2021	101,207	5.9%
2022	96,094	5.6%
2023	7,799	0.5%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>2</sup>	3.5	3.8
Combined comorbidity score categories	Number	Percent
<=0	511,404	29.9%
1-2	442,698	25.9%
3-4	232,222	13.6%
>=5	522,080	30.6%
Vedolizumab doses received		
1-3	6,732	0.4%
4-6	6,734	0.4%
7-9	4,328	0.3%
≥10	14,201	0.8%
Natalizumab doses received		
1-3	141	0.0%
4-6	76	0.0%
7-9	64	0.0%
≥10	389	0.0%
Length of IBD history		
<1 year	1,604,999	93.9%
1-<2 years	34,333	2.0%
>= 2 years	69,072	4.0%
Systemic sclerosis	3,948	0.2%
Rheumatoid arthritis	61,892	3.6%
Dermatomyositis/polymyositis	1,626	0.1%
Anti-synthetase syndrome	138	0.0%
Acquired hypothyroidism	464,292	27.2%
Acute myocardial infarction	74,901	4.4%
Alzheimer's disease	52,342	3.1%
Alzheimer's disease and related conditions	157,705	9.2%
Anemia	752,320	44.0%
Asthma	285,943	16.7%
Atrial fibrillation	239,835	14.0%
Benign prostatic hyperplasia Inclusion	226,929	13.3%
Breast cancer	79,296	4.6%
Colorectal cancer	69,555	4.1%
Endometrial cancer	16,094	0.9%

**Table 1f. Aggregated Characteristics of Interstitial Lung Disease (ILD) Background Rate in Ulcerative Colitis (UC): Incident Cohort in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Lung cancer	26,906	1.6%
Prostate cancer	73,118	4.3%
Cataract	607,711	35.6%
Chronic kidney disease	505,242	29.6%
COPD and bronchiectasis	447,293	26.2%
Depression	516,411	30.2%
Diabetes	367,182	21.5%
Glaucoma	227,952	13.3%
Heart failure	205,816	12.0%
Hip/pelvic fracture	53,341	3.1%
Hyperlipidemia	1,066,097	62.4%
Hypertension	1,079,777	63.2%
Ischemic heart disease	496,900	29.1%
Osteoporosis	316,400	18.5%
Rheumatoid arthritis/osteoarthritis	800,045	46.8%
Stroke/TIA Inclusion	213,785	12.5%
Tobacco Use	165,458	9.7%
<b>Baseline IBD Medication Use</b>		
Methotrexate	14,574	0.9%
Amiodarone	14,742	0.9%
Bleomycin	174	0.0%
Azathioprine	13,924	0.8%
Cyclophosphamide	2,522	0.1%
Sulfasalazine	34,046	2.0%
Checkpoint inhibitors	4,937	0.3%
Tyrosine kinase inhibitors	2,047	0.1%
<b>Health Service Utilization Intensity Metrics</b>		
	Mean	Standard Deviation
Mean number of ambulatory encounters	12.1	14.2
Mean number of emergency room encounters	0.5	1.5
Mean number of inpatient hospital encounters	0.4	0.9
Mean number of non-acute institutional encounters	0.1	0.5
Mean number of other ambulatory encounters	5.7	13.3
Mean number of filled prescriptions	13.4	18.7
Mean number of generics dispensed	5.3	5.9
Mean number of unique drug classes dispensed	5.0	5.3

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. J Clin Epidemiol. 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. Med Care. 2017;55(12):1046-1051.

**Table 1g. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	42,364	N/A
Episodes	43,524	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	51.7	14.2
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	3,673	8.4%
25-34 years	7,038	16.2%
35-44 years	6,921	15.9%
45-54 years	5,901	13.6%
55-64 years	5,172	11.9%
≥ 65 years	14,819	34.0%
<b>Sex</b>		
Female	23,208	54.8%
Male	19,156	45.2%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	102	0.2%
Asian	294	0.7%
Black or African American	1,804	4.3%
Multi-racial	168	0.4%
Native Hawaiian or Other Pacific Islander	36	0.1%
Unknown	19,591	46.2%
White	20,369	48.1%
<b>Hispanic origin</b>		
Yes	762	1.8%
No	20,977	49.5%
Unknown	20,625	48.7%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	701	1.6%
2015	2,062	4.7%
2016	4,555	10.5%
2017	4,489	10.3%
2018	5,771	13.3%

**Table 1g. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	6,957	16.0%
2020	7,432	17.1%
2021	5,668	13.0%
2022	5,470	12.6%
2023	419	1.0%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.5	3.1
Combined comorbidity score categories	Number	Percent
<=0	7,611	17.5%
1-2	13,421	30.8%
3-4	9,340	21.5%
>=5	13,152	30.2%
Vedolizumab doses received		
1-3	9,213	21.2%
4-6	9,568	22.0%
7-9	5,912	13.6%
≥10	18,831	43.3%
Natalizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	0	0.0%
≥10	*****	*****
Length of IBD history		
<1 year	10,899	25.0%
1-<2 years	7,507	17.2%
>=2 years	25,118	57.7%
Systemic sclerosis	51	0.1%
Rheumatoid arthritis	963	2.2%
Dermatomyositis/polymyositis	21	0.0%
Anti-synthetase syndrome	*****	*****
Acquired hypothyroidism	8,520	19.6%
Acute myocardial infarction	1,094	2.5%
Alzheimer's disease	208	0.5%
Alzheimer's disease and related conditions	1,142	2.6%
Anemia	24,702	56.8%
Asthma	7,931	18.2%
Atrial fibrillation	3,214	7.4%
Benign prostatic hyperplasia Inclusion	5,023	11.5%
Breast cancer	1,447	3.3%
Colorectal cancer	1,061	2.4%



**Table 1g. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	229	0.5%
Lung cancer	444	1.0%
Prostate cancer	1,219	2.8%
Cataract	12,761	29.3%
Chronic kidney disease	11,663	26.8%
COPD and bronchiectasis	9,132	21.0%
Depression	14,958	34.4%
Diabetes	7,650	17.6%
Glaucoma	4,757	10.9%
Heart failure	2,935	6.7%
Hip/pelvic fracture	560	1.3%
Hyperlipidemia	20,053	46.1%
Hypertension	20,394	46.9%
Ischemic heart disease	7,388	17.0%
Osteoporosis	6,839	15.7%
Rheumatoid arthritis/osteoarthritis	18,041	41.5%
Stroke/TIA Inclusion	2,729	6.3%
Tobacco Use	4,038	9.3%
<b>Baseline IBD Medication Use</b>		
Methotrexate	807	1.9%
Amiodarone	0	0.0%
Bleomycin	11	0.0%
Azathioprine	1,889	4.3%
Cyclophosphamide	18	0.0%
Sulfasalazine	885	2.0%
Checkpoint inhibitors	44	0.1%
Tyrosine kinase inhibitors	*****	*****

**Table 1g. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	14.0	10.8
Mean number of emergency room encounters	0.6	1.4
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	5.1	10.1
Mean number of filled prescriptions	18.6	16.0
Mean number of generics dispensed	8.0	5.3
Mean number of unique drug classes dispensed	7.5	4.8

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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

**Table 1h. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No Extended At-Risk Period After the Last Claim in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	42,364	N/A
Episodes	43,524	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	51.7	14.2
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	3,673	8.4%
25-34 years	7,038	16.2%
35-44 years	6,921	15.9%
45-54 years	5,901	13.6%
55-64 years	5,172	11.9%
≥ 65 years	14,819	34.0%
<b>Sex</b>		
Female	23,208	54.8%
Male	19,156	45.2%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	102	0.2%
Asian	294	0.7%
Black or African American	1,804	4.3%
Multi-racial	168	0.4%
Native Hawaiian or Other Pacific Islander	36	0.1%
Unknown	19,591	46.2%
White	20,369	48.1%
<b>Hispanic origin</b>		
Yes	762	1.8%
No	20,977	49.5%
Unknown	20,625	48.7%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	701	1.6%
2015	2,062	4.7%
2016	4,555	10.5%
2017	4,489	10.3%
2018	5,771	13.3%

**Table 1h. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No Extended At-Risk Period After the Last Claim in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	6,957	16.0%
2020	7,432	17.1%
2021	5,668	13.0%
2022	5,470	12.6%
2023	419	1.0%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.5	3.1
Combined comorbidity score categories	Number	Percent
<=0	7,611	17.5%
1-2	13,421	30.8%
3-4	9,340	21.5%
>=5	13,152	30.2%
Vedolizumab doses received		
1-3	9,213	21.2%
4-6	9,568	22.0%
7-9	5,912	13.6%
≥10	18,831	43.3%
Natalizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	0	0.0%
≥10	*****	*****
Length of IBD history		
<1 year	10,899	25.0%
1-<2 years	7,507	17.2%
>=2 years	25,118	57.7%
Systemic sclerosis	51	0.1%
Rheumatoid arthritis	963	2.2%
Dermatomyositis/polymyositis	21	0.0%
Anti-synthetase syndrome	*****	*****
Acquired hypothyroidism	8,520	19.6%
Acute myocardial infarction	1,094	2.5%
Alzheimer's disease	208	0.5%
Alzheimer's disease and related conditions	1,142	2.6%
Anemia	24,702	56.8%
Asthma	7,931	18.2%
Atrial fibrillation	3,214	7.4%
Benign prostatic hyperplasia Inclusion	5,023	11.5%
Breast cancer	1,447	3.3%
Colorectal cancer	1,061	2.4%

**Table 1h. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No Extended At-Risk Period After the Last Claim in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	229	0.5%
Lung cancer	444	1.0%
Prostate cancer	1,219	2.8%
Cataract	12,761	29.3%
Chronic kidney disease	11,663	26.8%
COPD and bronchiectasis	9,132	21.0%
Depression	14,958	34.4%
Diabetes	7,650	17.6%
Glaucoma	4,757	10.9%
Heart failure	2,935	6.7%
Hip/pelvic fracture	560	1.3%
Hyperlipidemia	20,053	46.1%
Hypertension	20,394	46.9%
Ischemic heart disease	7,388	17.0%
Osteoporosis	6,839	15.7%
Rheumatoid arthritis/osteoarthritis	18,041	41.5%
Stroke/TIA Inclusion	2,729	6.3%
Tobacco Use	4,038	9.3%
<b>Baseline IBD Medication Use</b>		
Methotrexate	807	1.9%
Amiodarone	0	0.0%
Bleomycin	11	0.0%
Azathioprine	1,889	4.3%
Cyclophosphamide	18	0.0%
Sulfasalazine	885	2.0%
Checkpoint inhibitors	44	0.1%
Tyrosine kinase inhibitors	*****	*****

**Table 1h. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No Extended At-Risk Period After the Last Claim in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	14.0	10.8
Mean number of emergency room encounters	0.6	1.4
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	5.1	10.1
Mean number of filled prescriptions	18.6	16.0
Mean number of generics dispensed	8.0	5.3
Mean number of unique drug classes dispensed	7.5	4.8

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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

**Table 1i. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	31,453	N/A
Episodes	32,178	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	50.4	14.1
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	2,963	9.2%
25-34 years	5,655	17.6%
35-44 years	5,360	16.7%
45-54 years	4,356	13.5%
55-64 years	3,697	11.5%
≥ 65 years	10,147	31.5%
<b>Sex</b>		
Female	17,074	54.3%
Male	14,379	45.7%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	75	0.2%
Asian	236	0.8%
Black or African American	1,240	3.9%
Multi-racial	137	0.4%
Native Hawaiian or Other Pacific Islander	29	0.1%
Unknown	15,496	49.3%
White	14,240	45.3%
<b>Hispanic origin</b>		
Yes	562	1.8%
No	14,528	46.2%
Unknown	16,363	52.0%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	496	1.5%
2015	1,473	4.6%
2016	3,211	10.0%
2017	3,185	9.9%
2018	4,211	13.1%

**Table 1i. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	5,131	15.9%
2020	5,630	17.5%
2021	4,383	13.6%
2022	4,107	12.8%
2023	351	1.1%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.0	2.9
Combined comorbidity score categories	Number	Percent
<=0	6,617	20.6%
1-2	10,904	33.9%
3-4	6,834	21.2%
>=5	7,823	24.3%
Vedolizumab doses received		
1-3	6,731	20.9%
4-6	7,077	22.0%
7-9	4,397	13.7%
≥10	13,973	43.4%
Natalizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	0	0.0%
≥10	*****	*****
Length of IBD history		
<1 year	7,912	24.6%
1-<2 years	5,640	17.5%
>=2 years	18,626	57.9%
Systemic sclerosis	32	0.1%
Rheumatoid arthritis	568	1.8%
Dermatomyositis/polymyositis	15	0.0%
Anti-synthetase syndrome	*****	*****
Acquired hypothyroidism	5,755	17.9%
Acute myocardial infarction	559	1.7%
Alzheimer's disease	122	0.4%
Alzheimer's disease and related conditions	619	1.9%
Anemia	16,980	52.8%
Asthma	5,265	16.4%
Atrial fibrillation	1,801	5.6%
Benign prostatic hyperplasia Inclusion	3,375	10.5%
Breast cancer	1,009	3.1%
Colorectal cancer	698	2.2%



**Table 1i. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	156	0.5%
Lung cancer	240	0.7%
Prostate cancer	808	2.5%
Cataract	8,656	26.9%
Chronic kidney disease	7,320	22.7%
COPD and bronchiectasis	5,575	17.3%
Depression	10,223	31.8%
Diabetes	4,956	15.4%
Glaucoma	3,293	10.2%
Heart failure	1,473	4.6%
Hip/pelvic fracture	326	1.0%
Hyperlipidemia	13,842	43.0%
Hypertension	13,668	42.5%
Ischemic heart disease	4,405	13.7%
Osteoporosis	4,609	14.3%
Rheumatoid arthritis/osteoarthritis	12,181	37.9%
Stroke/TIA Inclusion	1,559	4.8%
Tobacco Use	2,374	7.4%
<b>Baseline IBD Medication Use</b>		
Methotrexate	576	1.8%
Amiodarone	0	0.0%
Bleomycin	*****	*****
Azathioprine	1,355	4.2%
Cyclophosphamide	*****	*****
Sulfasalazine	605	1.9%
Checkpoint inhibitors	18	0.1%
Tyrosine kinase inhibitors	*****	*****

**Table 1i. Aggregated Characteristics of Vedolizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	12.4	9.7
Mean number of emergency room encounters	0.4	1.0
Mean number of inpatient hospital encounters	0.2	0.5
Mean number of non-acute institutional encounters	0.0	0.1
Mean number of other ambulatory encounters	3.7	8.0
Mean number of filled prescriptions	16.7	14.4
Mean number of generics dispensed	7.1	4.8
Mean number of unique drug classes dispensed	6.7	4.4

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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

**Table 1j. Aggregated Characteristics of Vedolizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	27,684	N/A
Episodes	28,573	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	51.8	14.5
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	2,297	8.0%
25-34 years	4,516	15.8%
35-44 years	4,606	16.1%
45-54 years	4,059	14.2%
55-64 years	3,517	12.3%
≥ 65 years	9,578	33.5%
<b>Sex</b>		
Female	15,807	57.1%
Male	11,877	42.9%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	60	0.2%
Asian	146	0.5%
Black or African American	1,372	5.0%
Multi-racial	87	0.3%
Native Hawaiian or Other Pacific Islander	18	0.1%
Unknown	11,870	42.9%
White	14,131	51.0%
<b>Hispanic origin</b>		
Yes	429	1.5%
No	14,794	53.4%
Unknown	12,461	45.0%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	586	2.1%
2015	1,661	5.8%
2016	3,478	12.2%
2017	3,089	10.8%
2018	3,783	13.2%

**Table 1j. Aggregated Characteristics of Vedolizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	4,493	15.7%
2020	4,668	16.3%
2021	3,391	11.9%
2022	3,203	11.2%
2023	221	0.8%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.9	3.2
Combined comorbidity score categories	Number	Percent
<=0	4,102	14.4%
1-2	8,357	29.2%
3-4	6,304	22.1%
>=5	9,810	34.3%
Vedolizumab doses received		
1-3	6,179	21.6%
4-6	6,090	21.3%
7-9	3,838	13.4%
≥10	12,466	43.6%
Natalizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	0	0.0%
≥10	*****	*****
Length of IBD history		
<1 year	5,896	20.6%
1-<2 years	4,513	15.8%
>=2 years	18,164	63.6%
Systemic sclerosis	36	0.1%
Rheumatoid arthritis	757	2.6%
Dermatomyositis/polymyositis	14	0.0%
Anti-synthetase syndrome	*****	*****
Acquired hypothyroidism	5,849	20.5%
Acute myocardial infarction	787	2.8%
Alzheimer's disease	138	0.5%
Alzheimer's disease and related conditions	810	2.8%
Anemia	17,401	60.9%
Asthma	5,661	19.8%
Atrial fibrillation	2,278	8.0%
Benign prostatic hyperplasia Inclusion	3,330	11.7%
Breast cancer	993	3.5%
Colorectal cancer	822	2.9%

**Table 1j. Aggregated Characteristics of Vedolizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	160	0.6%
Lung cancer	303	1.1%
Prostate cancer	749	2.6%
Cataract	8,626	30.2%
Chronic kidney disease	8,447	29.6%
COPD and bronchiectasis	6,654	23.3%
Depression	11,045	38.7%
Diabetes	5,084	17.8%
Glaucoma	3,228	11.3%
Heart failure	2,097	7.3%
Hip/pelvic fracture	408	1.4%
Hyperlipidemia	13,188	46.2%
Hypertension	14,012	49.0%
Ischemic heart disease	5,159	18.1%
Osteoporosis	5,145	18.0%
Rheumatoid arthritis/osteoarthritis	12,736	44.6%
Stroke/TIA Inclusion	1,931	6.8%
Tobacco Use	3,419	12.0%
<b>Baseline IBD Medication Use</b>		
Methotrexate	656	2.3%
Amiodarone	0	0.0%
Bleomycin	*****	*****
Azathioprine	1,256	4.4%
Cyclophosphamide	15	0.1%
Sulfasalazine	487	1.7%
Checkpoint inhibitors	*****	*****
Tyrosine kinase inhibitors	*****	*****

**Table 1j. Aggregated Characteristics of Vedolizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	14.8	11.4
Mean number of emergency room encounters	0.7	1.6
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	5.5	10.9
Mean number of filled prescriptions	19.6	17.1
Mean number of generics dispensed	8.3	5.6
Mean number of unique drug classes dispensed	7.8	5.0

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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**Table 1k. Aggregated Characteristics of Vedolizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	27,994	N/A
Episodes	28,662	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	52.2	14.1
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	2,435	8.5%
25-34 years	4,496	15.7%
35-44 years	4,508	15.7%
45-54 years	3,755	13.1%
55-64 years	3,345	11.7%
≥ 65 years	10,123	35.3%
<b>Sex</b>		
Female	14,706	52.5%
Male	13,288	47.5%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	70	0.3%
Asian	231	0.8%
Black or African American	1,055	3.8%
Multi-racial	127	0.5%
Native Hawaiian or Other Pacific Islander	23	0.1%
Unknown	13,633	48.7%
White	12,855	45.9%
<b>Hispanic origin</b>		
Yes	562	2.0%
No	13,097	46.8%
Unknown	14,335	51.2%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	0	0.0%
2009	0	0.0%
2010	0	0.0%
2011	0	0.0%
2012	0	0.0%
2013	0	0.0%
2014	410	1.4%
2015	1,258	4.4%
2016	2,736	9.5%
2017	2,919	10.2%
2018	3,838	13.4%

**Table 1k. Aggregated Characteristics of Vedolizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	4,629	16.2%
2020	4,848	16.9%
2021	3,905	13.6%
2022	3,824	13.3%
2023	295	1.0%
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.6	3.2
Combined comorbidity score categories	Number	Percent
<=0	5,044	17.6%
1-2	8,741	30.5%
3-4	6,070	21.2%
>=5	8,807	30.7%
Vedolizumab doses received		
1-3	5,881	20.5%
4-6	6,342	22.1%
7-9	3,915	13.7%
≥10	12,524	43.7%
Natalizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	0	0.0%
≥10	*****	*****
Length of IBD history		
<1 year	6,923	24.2%
1-<2 years	4,881	17.0%
>=2 years	16,858	58.8%
Systemic sclerosis	28	0.1%
Rheumatoid arthritis	603	2.1%
Dermatomyositis/polymyositis	14	0.0%
Anti-synthetase syndrome	*****	*****
Acquired hypothyroidism	5,902	20.6%
Acute myocardial infarction	736	2.6%
Alzheimer's disease	157	0.5%
Alzheimer's disease and related conditions	815	2.8%
Anemia	16,604	57.9%
Asthma	5,214	18.2%
Atrial fibrillation	2,206	7.7%
Benign prostatic hyperplasia Inclusion	3,545	12.4%
Breast cancer	955	3.3%
Colorectal cancer	733	2.6%



**Table 1k. Aggregated Characteristics of Vedolizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	148	0.5%
Lung cancer	296	1.0%
Prostate cancer	893	3.1%
Cataract	8,744	30.5%
Chronic kidney disease	7,720	26.9%
COPD and bronchiectasis	5,937	20.7%
Depression	9,382	32.7%
Diabetes	5,370	18.7%
Glaucoma	3,325	11.6%
Heart failure	2,030	7.1%
Hip/pelvic fracture	397	1.4%
Hyperlipidemia	13,933	48.6%
Hypertension	13,527	47.2%
Ischemic heart disease	5,095	17.8%
Osteoporosis	4,412	15.4%
Rheumatoid arthritis/osteoarthritis	12,034	42.0%
Stroke/TIA Inclusion	1,906	6.6%
Tobacco Use	1,919	6.7%
<b>Baseline IBD Medication Use</b>		
Methotrexate	478	1.7%
Amiodarone	0	0.0%
Bleomycin	*****	*****
Azathioprine	1,228	4.3%
Cyclophosphamide	13	0.0%
Sulfasalazine	685	2.4%
Checkpoint inhibitors	40	0.1%
Tyrosine kinase inhibitors	*****	*****

**Table 1k. Aggregated Characteristics of Vedolizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	14.0	10.6
Mean number of emergency room encounters	0.5	1.3
Mean number of inpatient hospital encounters	0.3	0.8
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	5.1	9.8
Mean number of filled prescriptions	18.5	15.4
Mean number of generics dispensed	8.0	5.2
Mean number of unique drug classes dispensed	7.5	4.7

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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**Table 1I. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	754	N/A
Episodes	822	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	45.4	12.8
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	47	5.7%
25-34 years	153	18.6%
35-44 years	207	25.2%
45-54 years	205	24.9%
55-64 years	150	18.2%
≥ 65 years	60	7.3%
<b>Sex</b>		
Female	539	71.5%
Male	215	28.5%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	363	48.1%
White	331	43.9%
<b>Hispanic origin</b>		
Yes	12	1.6%
No	369	48.9%
Unknown	373	49.5%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	43	5.2%
2009	43	5.2%
2010	42	5.1%
2011	77	9.4%
2012	97	11.8%
2013	99	12.0%
2014	65	7.9%
2015	49	6.0%
2016	47	5.7%
2017	43	5.2%
2018	62	7.5%

**Table 11. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	49	6.0%
2020	44	5.4%
2021	30	3.6%
2022	*****	*****
2023	*****	*****
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.3	3.1
Combined comorbidity score categories	Number	Percent
<=0	147	17.9%
1-2	255	31.0%
3-4	192	23.4%
>=5	228	27.7%
Vedolizumab doses received		
1-3	18	2.2%
4-6	17	2.1%
7-9	13	1.6%
≥10	72	8.8%
Natalizumab doses received		
1-3	221	26.9%
4-6	124	15.1%
7-9	80	9.7%
≥10	397	48.3%
Length of IBD history		
<1 year	224	27.3%
1-<2 years	191	23.2%
>=2 years	407	49.5%
Systemic sclerosis	*****	*****
Rheumatoid arthritis	33	4.0%
Dermatomyositis/polymyositis	*****	*****
Anti-synthetase syndrome	0	0.0%
Acquired hypothyroidism	204	24.8%
Acute myocardial infarction	12	1.5%
Alzheimer's disease	*****	*****
Alzheimer's disease and related conditions	36	4.4%
Anemia	447	54.4%
Asthma	169	20.6%
Atrial fibrillation	45	5.5%
Benign prostatic hyperplasia Inclusion	43	5.2%
Breast cancer	22	2.7%
Colorectal cancer	13	1.6%

**Table 1I. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	*****	*****
Lung cancer	*****	*****
Prostate cancer	*****	*****
Cataract	141	17.2%
Chronic kidney disease	182	22.1%
COPD and bronchiectasis	188	22.9%
Depression	465	56.6%
Diabetes	102	12.4%
Glaucoma	79	9.6%
Heart failure	35	4.3%
Hip/pelvic fracture	*****	*****
Hyperlipidemia	345	42.0%
Hypertension	350	42.6%
Ischemic heart disease	93	11.3%
Osteoporosis	121	14.7%
Rheumatoid arthritis/osteoarthritis	389	47.3%
Stroke/TIA Inclusion	87	10.6%
Tobacco Use	114	13.9%
<b>Baseline IBD Medication Use</b>		
Methotrexate	47	5.7%
Amiodarone	0	0.0%
Bleomycin	0	0.0%
Azathioprine	34	4.1%
Cyclophosphamide	*****	*****
Sulfasalazine	*****	*****
Checkpoint inhibitors	0	0.0%
Tyrosine kinase inhibitors	0	0.0%

**Table 1I. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	16.7	13.1
Mean number of emergency room encounters	0.7	1.5
Mean number of inpatient hospital encounters	0.5	1.1
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	6.7	13.6
Mean number of filled prescriptions	26.4	21.2
Mean number of generics dispensed	9.9	6.2
Mean number of unique drug classes dispensed	9.1	5.5

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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

**Table 1m. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No Episode Extension in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	754	N/A
Episodes	822	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	45.4	12.8
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	47	5.7%
25-34 years	153	18.6%
35-44 years	207	25.2%
45-54 years	205	24.9%
55-64 years	150	18.2%
≥ 65 years	60	7.3%
<b>Sex</b>		
Female	539	71.5%
Male	215	28.5%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	363	48.1%
White	331	43.9%
<b>Hispanic origin</b>		
Yes	12	1.6%
No	369	48.9%
Unknown	373	49.5%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	43	5.2%
2009	43	5.2%
2010	42	5.1%
2011	77	9.4%
2012	97	11.8%
2013	99	12.0%
2014	65	7.9%
2015	49	6.0%
2016	47	5.7%
2017	43	5.2%
2018	62	7.5%

**Table 1m. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No Episode Extension in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	49	6.0%
2020	44	5.4%
2021	30	3.6%
2022	*****	*****
2023	*****	*****
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.3	3.1
Combined comorbidity score categories	Number	Percent
<=0	147	17.9%
1-2	255	31.0%
3-4	192	23.4%
>=5	228	27.7%
Vedolizumab doses received		
1-3	18	2.2%
4-6	17	2.1%
7-9	13	1.6%
≥10	72	8.8%
Natalizumab doses received		
1-3	221	26.9%
4-6	124	15.1%
7-9	80	9.7%
≥10	397	48.3%
Length of IBD history		
<1 year	224	27.3%
1-<2 years	191	23.2%
>=2 years	407	49.5%
Systemic sclerosis	*****	*****
Rheumatoid arthritis	33	4.0%
Dermatomyositis/polymyositis	*****	*****
Anti-synthetase syndrome	0	0.0%
Acquired hypothyroidism	204	24.8%
Acute myocardial infarction	12	1.5%
Alzheimer's disease	*****	*****
Alzheimer's disease and related conditions	36	4.4%
Anemia	447	54.4%
Asthma	169	20.6%
Atrial fibrillation	45	5.5%
Benign prostatic hyperplasia Inclusion	43	5.2%
Breast cancer	22	2.7%
Colorectal cancer	13	1.6%



**Table 1m. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No Episode Extension in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	*****	*****
Lung cancer	*****	*****
Prostate cancer	*****	*****
Cataract	141	17.2%
Chronic kidney disease	182	22.1%
COPD and bronchiectasis	188	22.9%
Depression	465	56.6%
Diabetes	102	12.4%
Glaucoma	79	9.6%
Heart failure	35	4.3%
Hip/pelvic fracture	*****	*****
Hyperlipidemia	345	42.0%
Hypertension	350	42.6%
Ischemic heart disease	93	11.3%
Osteoporosis	121	14.7%
Rheumatoid arthritis/osteoarthritis	389	47.3%
Stroke/TIA Inclusion	87	10.6%
Tobacco Use	114	13.9%
<b>Baseline IBD Medication Use</b>		
Methotrexate	47	5.7%
Amiodarone	0	0.0%
Bleomycin	0	0.0%
Azathioprine	34	4.1%
Cyclophosphamide	*****	*****
Sulfasalazine	*****	*****
Checkpoint inhibitors	0	0.0%
Tyrosine kinase inhibitors	0	0.0%

**Table 1m. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No Episode Extension in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	16.7	13.1
Mean number of emergency room encounters	0.7	1.5
Mean number of inpatient hospital encounters	0.5	1.1
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	6.7	13.6
Mean number of filled prescriptions	26.4	21.2
Mean number of generics dispensed	9.9	6.2
Mean number of unique drug classes dispensed	9.1	5.5

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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

**Table 1n. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	524	N/A
Episodes	564	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	45.0	12.6
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	32	5.7%
25-34 years	113	20.0%
35-44 years	143	25.4%
45-54 years	139	24.6%
55-64 years	98	17.4%
≥ 65 years	39	6.9%
<b>Sex</b>		
Female	369	70.4%
Male	155	29.6%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	260	49.6%
White	224	42.7%
<b>Hispanic origin</b>		
Yes	*****	*****
No	*****	*****
Unknown	270	51.5%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	31	5.5%
2009	29	5.1%
2010	30	5.3%
2011	44	7.8%
2012	64	11.3%
2013	58	10.3%
2014	43	7.6%
2015	37	6.6%
2016	33	5.9%
2017	30	5.3%
2018	54	9.6%

**Table 1n. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	32	5.7%
2020	32	5.7%
2021	24	4.3%
2022	*****	*****
2023	*****	*****
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	2.7	2.9
Combined comorbidity score categories	Number	Percent
<=0	126	22.3%
1-2	203	36.0%
3-4	115	20.4%
>=5	120	21.3%
Vedolizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	*****	*****
≥10	44	7.8%
Natalizumab doses received		
1-3	144	25.5%
4-6	81	14.4%
7-9	57	10.1%
≥10	282	50.0%
Length of IBD history		
<1 year	151	26.8%
1-<2 years	133	23.6%
>=2 years	280	49.6%
Systemic sclerosis	0	0.0%
Rheumatoid arthritis	16	2.8%
Dermatomyositis/polymyositis	0	0.0%
Anti-synthetase syndrome	0	0.0%
Acquired hypothyroidism	140	24.8%
Acute myocardial infarction	*****	*****
Alzheimer's disease	*****	*****
Alzheimer's disease and related conditions	16	2.8%
Anemia	282	50.0%
Asthma	100	17.7%
Atrial fibrillation	25	4.4%
Benign prostatic hyperplasia Inclusion	28	5.0%
Breast cancer	15	2.7%
Colorectal cancer	*****	*****

**Table 1n. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	*****	*****
Lung cancer	*****	*****
Prostate cancer	*****	*****
Cataract	96	17.0%
Chronic kidney disease	102	18.1%
COPD and bronchiectasis	102	18.1%
Depression	299	53.0%
Diabetes	57	10.1%
Glaucoma	52	9.2%
Heart failure	16	2.8%
Hip/pelvic fracture	*****	*****
Hyperlipidemia	220	39.0%
Hypertension	215	38.1%
Ischemic heart disease	46	8.2%
Osteoporosis	73	12.9%
Rheumatoid arthritis/osteoarthritis	244	43.3%
Stroke/TIA Inclusion	45	8.0%
Tobacco Use	68	12.1%
<b>Baseline IBD Medication Use</b>		
Methotrexate	32	5.7%
Amiodarone	0	0.0%
Bleomycin	0	0.0%
Azathioprine	21	3.7%
Cyclophosphamide	*****	*****
Sulfasalazine	*****	*****
Checkpoint inhibitors	0	0.0%
Tyrosine kinase inhibitors	0	0.0%

**Table 1n. Aggregated Characteristics of Natalizumab Users with Inflammatory Bowel Disease (IBD): No History of Radiographic Chest Exam in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	14.9	13.1
Mean number of emergency room encounters	0.4	1.0
Mean number of inpatient hospital encounters	0.2	0.6
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	4.4	11.2
Mean number of filled prescriptions	22.1	17.9
Mean number of generics dispensed	8.3	5.3
Mean number of unique drug classes dispensed	7.8	4.8

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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**Table 1o. Aggregated Characteristics of Natalizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	575	N/A
Episodes	621	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	44.0	13.3
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	45	7.2%
25-34 years	134	21.6%
35-44 years	164	26.4%
45-54 years	138	22.2%
55-64 years	94	15.1%
≥ 65 years	46	7.4%
<b>Sex</b>		
Female	402	69.9%
Male	173	30.1%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	0	0.0%
Asian	*****	*****
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	295	51.3%
White	234	40.7%
<b>Hispanic origin</b>		
Yes	*****	*****
No	*****	*****
Unknown	300	52.2%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	40	6.4%
2009	39	6.3%
2010	32	5.2%
2011	62	10.0%
2012	75	12.1%
2013	81	13.0%
2014	56	9.0%
2015	35	5.6%
2016	31	5.0%
2017	25	4.0%
2018	40	6.4%

**Table 1o. Aggregated Characteristics of Natalizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	33	5.3%
2020	32	5.2%
2021	*****	*****
2022	21	3.4%
2023	*****	*****
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.2	2.9
Combined comorbidity score categories	Number	Percent
<=0	102	16.4%
1-2	196	31.6%
3-4	155	25.0%
>=5	168	27.1%
Vedolizumab doses received		
1-3	18	2.9%
4-6	15	2.4%
7-9	13	2.1%
≥10	70	11.3%
Natalizumab doses received		
1-3	177	28.5%
4-6	94	15.1%
7-9	60	9.7%
≥10	290	46.7%
Length of IBD history		
<1 year	155	25.0%
1-<2 years	148	23.8%
>=2 years	318	51.2%
Systemic sclerosis	*****	*****
Rheumatoid arthritis	26	4.2%
Dermatomyositis/polymyositis	*****	*****
Anti-synthetase syndrome	0	0.0%
Acquired hypothyroidism	138	22.2%
Acute myocardial infarction	*****	*****
Alzheimer's disease	*****	*****
Alzheimer's disease and related conditions	25	4.0%
Anemia	356	57.3%
Asthma	131	21.1%
Atrial fibrillation	31	5.0%
Benign prostatic hyperplasia Inclusion	33	5.3%
Breast cancer	*****	*****
Colorectal cancer	*****	*****



**Table 1o. Aggregated Characteristics of Natalizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	*****	*****
Lung cancer	*****	*****
Prostate cancer	*****	*****
Cataract	87	14.0%
Chronic kidney disease	138	22.2%
COPD and bronchiectasis	134	21.6%
Depression	339	54.6%
Diabetes	64	10.3%
Glaucoma	48	7.7%
Heart failure	25	4.0%
Hip/pelvic fracture	*****	*****
Hyperlipidemia	230	37.0%
Hypertension	239	38.5%
Ischemic heart disease	60	9.7%
Osteoporosis	88	14.2%
Rheumatoid arthritis/osteoarthritis	273	44.0%
Stroke/TIA Inclusion	59	9.5%
Tobacco Use	84	13.5%
<b>Baseline IBD Medication Use</b>		
Methotrexate	47	7.6%
Amiodarone	0	0.0%
Bleomycin	0	0.0%
Azathioprine	31	5.0%
Cyclophosphamide	*****	*****
Sulfasalazine	*****	*****
Checkpoint inhibitors	0	0.0%
Tyrosine kinase inhibitors	0	0.0%

**Table 1o. Aggregated Characteristics of Natalizumab Users with Crohn's Disease (CD) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	16.3	13.0
Mean number of emergency room encounters	0.8	1.6
Mean number of inpatient hospital encounters	0.6	1.1
Mean number of non-acute institutional encounters	0.0	0.2
Mean number of other ambulatory encounters	6.7	12.6
Mean number of filled prescriptions	26.1	21.1
Mean number of generics dispensed	9.9	6.2
Mean number of unique drug classes dispensed	9.1	5.5

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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**Table 1p. Aggregated Characteristics of Natalizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

<b>Patient Characteristics<sup>1</sup></b>	<b>Number</b>	<b>Percent</b>
Unique patients	344	N/A
Episodes	377	100.0%
<b>Demographic Characteristics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Age (years)	46.4	12.4
<b>Age</b>	<b>Number</b>	<b>Percent</b>
18-24 years	20	5.3%
25-34 years	56	14.9%
35-44 years	94	24.9%
45-54 years	99	26.3%
55-64 years	81	21.5%
≥ 65 years	27	7.2%
<b>Sex</b>		
Female	238	69.2%
Male	106	30.8%
<b>Race<sup>2</sup></b>		
American Indian or Alaska Native	0	0.0%
Asian	0	0.0%
Black or African American	*****	*****
Multi-racial	*****	*****
Native Hawaiian or Other Pacific Islander	0	0.0%
Unknown	172	50.0%
White	147	42.7%
<b>Hispanic origin</b>		
Yes	*****	*****
No	*****	*****
Unknown	180	52.3%
<b>Year</b>		
2006	0	0.0%
2007	0	0.0%
2008	16	4.2%
2009	16	4.2%
2010	19	5.0%
2011	30	8.0%
2012	47	12.5%
2013	47	12.5%
2014	29	7.7%
2015	23	6.1%
2016	20	5.3%
2017	24	6.4%
2018	30	8.0%

**Table 1p. Aggregated Characteristics of Natalizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
2019	25	6.6%
2020	17	4.5%
2021	18	4.8%
2022	15	4.0%
2023	*****	*****
Health Characteristics	Mean	Standard Deviation
Combined comorbidity score <sup>3</sup>	3.6	3.2
Combined comorbidity score categories	Number	Percent
<=0	60	15.9%
1-2	107	28.4%
3-4	90	23.9%
>=5	120	31.8%
Vedolizumab doses received		
1-3	*****	*****
4-6	*****	*****
7-9	*****	*****
≥10	25	6.6%
Natalizumab doses received		
1-3	90	23.9%
4-6	59	15.6%
7-9	41	10.9%
≥10	187	49.6%
Length of IBD history		
<1 year	95	25.2%
1-<2 years	83	22.0%
>=2 years	199	52.8%
Systemic sclerosis	*****	*****
Rheumatoid arthritis	20	5.3%
Dermatomyositis/polymyositis	0	0.0%
Anti-synthetase syndrome	0	0.0%
Acquired hypothyroidism	112	29.7%
Acute myocardial infarction	*****	*****
Alzheimer's disease	*****	*****
Alzheimer's disease and related conditions	18	4.8%
Anemia	219	58.1%
Asthma	71	18.8%
Atrial fibrillation	23	6.1%
Benign prostatic hyperplasia Inclusion	22	5.8%
Breast cancer	16	4.2%
Colorectal cancer	*****	*****

**Table 1p. Aggregated Characteristics of Natalizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number	Percent
Endometrial cancer	*****	*****
Lung cancer	*****	*****
Prostate cancer	*****	*****
Cataract	80	21.2%
Chronic kidney disease	94	24.9%
COPD and bronchiectasis	81	21.5%
Depression	220	58.4%
Diabetes	58	15.4%
Glaucoma	42	11.1%
Heart failure	15	4.0%
Hip/pelvic fracture	*****	*****
Hyperlipidemia	185	49.1%
Hypertension	177	46.9%
Ischemic heart disease	49	13.0%
Osteoporosis	70	18.6%
Rheumatoid arthritis/osteoarthritis	190	50.4%
Stroke/TIA Inclusion	49	13.0%
Tobacco Use	55	14.6%
<b>Baseline IBD Medication Use</b>		
Methotrexate	19	5.0%
Amiodarone	0	0.0%
Bleomycin	0	0.0%
Azathioprine	14	3.7%
Cyclophosphamide	*****	*****
Sulfasalazine	*****	*****
Checkpoint inhibitors	0	0.0%
Tyrosine kinase inhibitors	0	0.0%

**Table 1p. Aggregated Characteristics of Natalizumab Users with Ulcerative Colitis (UC) in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

Health Service Utilization Intensity Metrics	Mean	Standard Deviation
Mean number of ambulatory encounters	17.9	12.6
Mean number of emergency room encounters	0.7	1.4
Mean number of inpatient hospital encounters	0.6	1.2
Mean number of non-acute institutional encounters	0.1	0.3
Mean number of other ambulatory encounters	7.8	16.2
Mean number of filled prescriptions	27.1	21.1
Mean number of generics dispensed	10.2	6.3
Mean number of unique drug classes dispensed	9.3	5.5

<sup>1</sup>All metrics are based on total number of episodes per group, except for sex, race, and Hispanic origin which are based on total number of unique patients.

<sup>2</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>3</sup>Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A combined comorbidity score predicted mortality in elderly patients better than existing scores. *J Clin Epidemiol.* 2011;64(7):749-759. Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and validation of the combined comorbidity score for ICD-10-CM. *Med Care.* 2017;55(12):1046-1051.

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**Table 2. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
ILD background rate in IBD: Prevalent cohort	3,457,764	3,457,764	46,075,791	46,075,791	N/A	N/A	184,604
ILD background rate in CD: Prevalent cohort	1,641,564	1,641,564	26,888,073	26,888,073	N/A	N/A	84,349
ILD background rate in UC: Prevalent cohort	2,164,271	2,164,271	19,058,636	19,058,636	N/A	N/A	120,086
ILD background rate in IBD: Incident cohort	2,507,822	2,507,822	19,586,910	19,586,910	N/A	N/A	142,467
ILD background rate in CD: Incident cohort	1,124,298	1,124,298	9,777,558	9,777,558	N/A	N/A	61,288
ILD background rate in UC: Incident cohort	1,708,404	1,708,404	10,716,564	10,716,564	N/A	N/A	99,895
Vedolizumab Users with IBD	42,364	43,524	570,127	570,129	65,386,013	629,907	630
Vedolizumab Users with IBD: No extended at-risk period after the last claim	42,364	43,524	472,389	472,390	25,315,343	646,039	444
Vedolizumab Users with IBD: No history of radiographic chest exam	31,453	32,178	431,427	431,429	49,465,952	454,930	376
Vedolizumab Users with CD	27,684	28,573	364,532	364,534	41,843,683	388,532	460
Vedolizumab Users with UC	27,994	28,662	388,038	388,039	44,524,804	407,606	411
Natalizumab Users with IBD	754	822	9,249	9,249	483,531	14,155	*****
Natalizumab Users with IBD: No episode extension	754	822	8,014	8,014	221,654	15,462	*****
Natalizumab Users with IBD: No history of radiographic chest exam	524	564	6,861	6,861	357,281	11,023	*****
Natalizumab Users with CD	575	621	6,822	6,822	356,003	10,286	*****
Natalizumab Users with UC	344	377	4,393	4,393	227,753	7,514	0

**Table 2. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
ILD background rate in IBD: Prevalent cohort	4,539,671,362	12,428,942.8	303,160,455	395,956,472,150	1,084,069,738.9	148.53 (147.85, 149.21)
ILD background rate in CD: Prevalent cohort	2,179,557,470	5,967,303.1	303,160,455	398,435,333,416	1,090,856,491.2	141.35 (140.40, 142.31)
ILD background rate in UC: Prevalent cohort	2,865,302,553	7,844,770.9	303,160,455	397,733,019,495	1,088,933,660.5	153.08 (152.21, 153.95)
ILD background rate in IBD: Incident cohort	3,252,923,046	8,906,017.9	301,937,133	395,462,425,516	1,082,717,113.0	159.97 (159.14, 160.80)
ILD background rate in CD: Incident cohort	1,492,434,154	4,086,062.0	302,504,787	398,189,459,879	1,090,183,326.2	149.99 (148.81, 151.19)
ILD background rate in UC: Incident cohort	2,233,321,846	6,114,502.0	302,522,395	397,401,110,212	1,088,024,942.4	163.37 (162.36, 164.39)
Vedolizumab Users with IBD	21,013,421	57,531.6	N/A	N/A	N/A	109.51 (101.28, 118.40)
Vedolizumab Users with IBD: No extended at-risk period after the last claim	15,682,157	42,935.4	N/A	N/A	N/A	103.41 (94.23, 113.49)
Vedolizumab Users with IBD: No history of radiographic chest exam	15,594,794	42,696.2	N/A	N/A	N/A	88.06 (79.60, 97.43)
Vedolizumab Users with CD	13,847,935	37,913.6	N/A	N/A	N/A	121.33 (110.73, 132.94)
Vedolizumab Users with UC	14,000,733	38,331.9	N/A	N/A	N/A	107.22 (97.34, 118.11)
Natalizumab Users with IBD	*****	*****	N/A	N/A	N/A	73.94 (30.78, 177.65)
Natalizumab Users with IBD: No episode extension	*****	*****	N/A	N/A	N/A	56.67 (18.28, 175.71)
Natalizumab Users with IBD: No history of radiographic chest exam	*****	*****	N/A	N/A	N/A	41.14 (10.29, 164.52)
Natalizumab Users with CD	*****	*****	N/A	N/A	N/A	100.56 (41.85, 241.59)
Natalizumab Users with UC	118,022	323.1	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

ILD = interstitial lung disease; IBD = inflammatory bowel disease; CD = Crohn's disease; UC = ulcerative colitis.

N/A = Not Applicable



**Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Sex**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
Female	2,009,115	2,009,115	26,246,416	26,246,416	N/A	N/A	110,065
Male	1,448,649	1,448,649	19,829,375	19,829,375	N/A	N/A	74,539
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
Female	948,102	948,102	15,767,827	15,767,827	N/A	N/A	50,512
Male	693,462	693,462	11,120,246	11,120,246	N/A	N/A	33,837
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
Female	1,252,132	1,252,132	10,394,744	10,394,744	N/A	N/A	70,980
Male	912,139	912,139	8,663,892	8,663,892	N/A	N/A	49,106
<b>ILD background rate in IBD: Incident cohort</b>							
Female	1,484,821	1,484,821	11,156,703	11,156,703	N/A	N/A	86,118
Male	1,023,001	1,023,001	8,430,207	8,430,207	N/A	N/A	56,349
<b>ILD background rate in CD: Incident cohort</b>							
Female	654,551	654,551	5,659,656	5,659,656	N/A	N/A	36,561
Male	469,747	469,747	4,117,902	4,117,902	N/A	N/A	24,727
<b>ILD background rate in UC: Incident cohort</b>							
Female	1,009,659	1,009,659	5,991,429	5,991,429	N/A	N/A	60,431
Male	698,745	698,745	4,725,135	4,725,135	N/A	N/A	39,464
<b>Vedolizumab Users with IBD</b>							
Female	23,208	23,906	303,384	303,386	34,763,008	378,668	322
Male	19,156	19,618	266,743	266,743	30,623,005	251,239	308
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>							
Female	23,208	23,906	249,812	249,813	13,385,615	415,053	223
Male	19,156	19,618	222,577	222,577	11,929,728	230,986	221

**Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Sex**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>							
Female	17,074	17,528	226,178	226,180	25,906,354	259,432	174
Male	14,379	14,650	205,249	205,249	23,559,598	195,498	202
<b>Vedolizumab Users with CD</b>							
Female	15,807	16,362	201,378	201,380	23,082,654	230,313	249
Male	11,877	12,211	163,154	163,154	18,761,029	158,219	211
<b>Vedolizumab Users with UC</b>							
Female	14,706	15,102	200,125	200,126	22,945,668	238,040	199
Male	13,288	13,560	187,913	187,913	21,579,136	169,566	212
<b>Natalizumab Users with IBD</b>							
Female	539	594	6,434	6,434	336,477	9,726	*****
Male	215	228	2,815	2,815	147,054	4,429	*****
<b>Natalizumab Users with IBD: No episode extension</b>							
Female	539	594	5,583	5,583	154,328	10,770	*****
Male	215	228	2,431	2,431	67,326	4,692	0
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>							
Female	369	401	4,646	4,646	242,311	7,328	*****
Male	155	163	2,215	2,215	114,970	3,696	*****
<b>Natalizumab Users with CD</b>							
Female	402	437	4,697	4,697	244,703	7,132	*****
Male	173	184	2,125	2,125	111,300	3,154	*****
<b>Natalizumab Users with UC</b>							
Female	238	263	2,836	2,836	147,790	4,559	0
Male	106	114	1,557	1,557	79,963	2,955	0

**Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Sex**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
Female	2,682,616,829	7,344,604.6	159,931,437	211,620,122,463	579,384,318.9	149.86 (148.98, 150.75)
Male	1,857,054,533	5,084,338.2	143,229,018	184,336,349,687	504,685,420.1	146.61 (145.56, 147.66)
<b>ILD background rate in CD: Prevalent cohort</b>						
Female	1,283,311,809	3,513,516.2	159,931,437	213,085,978,993	583,397,615.3	143.76 (142.52, 145.02)
Male	896,245,661	2,453,786.9	143,229,018	185,349,354,423	507,458,875.9	137.90 (136.44, 139.37)
<b>ILD background rate in UC: Prevalent cohort</b>						
Female	1,683,911,187	4,610,297.6	159,931,437	212,678,020,930	582,280,687.0	153.96 (152.83, 155.10)
Male	1,181,391,366	3,234,473.3	143,229,018	185,054,998,565	506,652,973.5	151.82 (150.48, 153.17)
<b>ILD background rate in IBD: Incident cohort</b>						
Female	1,959,951,744	5,366,055.4	159,250,268	211,329,439,076	578,588,471.1	160.49 (159.42, 161.56)
Male	1,292,971,302	3,539,962.5	142,686,865	184,132,986,440	504,128,641.9	159.18 (157.87, 160.50)
<b>ILD background rate in CD: Incident cohort</b>						
Female	884,950,095	2,422,861.3	159,559,894	212,943,006,838	583,006,178.9	150.90 (149.36, 152.45)
Male	607,484,059	1,663,200.7	142,944,893	185,246,453,041	507,177,147.3	148.67 (146.83, 150.54)
<b>ILD background rate in UC: Incident cohort</b>						
Female	1,343,164,837	3,677,384.9	159,584,542	212,483,545,120	581,748,241.3	164.33 (163.03, 165.65)
Male	890,157,009	2,437,117.1	142,937,853	184,917,565,092	506,276,701.1	161.93 (160.34, 163.53)
<b>Vedolizumab Users with IBD</b>						
Female	11,390,563	31,185.7	N/A	N/A	N/A	103.25 (92.57, 115.17)
Male	9,622,858	26,345.9	N/A	N/A	N/A	116.91 (104.55, 130.72)
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>						
Female	8,402,597	23,005.1	N/A	N/A	N/A	96.94 (85.01, 110.53)
Male	7,279,560	19,930.3	N/A	N/A	N/A	110.89 (97.19, 126.51)

**Table 3. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Sex**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>						
Female	8,350,664	22,862.9	N/A	N/A	N/A	76.11 (65.60, 88.30)
Male	7,244,130	19,833.3	N/A	N/A	N/A	101.85 (88.73, 116.91)
<b>Vedolizumab Users with CD</b>						
Female	7,799,078	21,352.7	N/A	N/A	N/A	116.61 (102.99, 132.04)
Male	6,048,857	16,560.9	N/A	N/A	N/A	127.41 (111.33, 145.81)
<b>Vedolizumab Users with UC</b>						
Female	7,339,721	20,095.1	N/A	N/A	N/A	99.03 (86.18, 113.79)
Male	6,661,012	18,236.9	N/A	N/A	N/A	116.25 (101.61, 133.00)
<b>Natalizumab Users with IBD</b>						
Female	*****	*****	N/A	N/A	N/A	84.85 (31.85, 226.08)
Male	*****	*****	N/A	N/A	N/A	48.83 (6.88, 346.64)
<b>Natalizumab Users with IBD: No episode extension</b>						
Female	*****	*****	N/A	N/A	N/A	81.41 (26.25, 252.41)
Male	58,758	160.9	N/A	N/A	N/A	0.00 (0.00, 0.00)
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>						
Female	*****	*****	N/A	N/A	N/A	30.29 (4.27, 215.01)
Male	*****	*****	N/A	N/A	N/A	64.15 (9.04, 455.40)
<b>Natalizumab Users with CD</b>						
Female	*****	*****	N/A	N/A	N/A	118.40 (44.44, 315.46)
Male	*****	*****	N/A	N/A	N/A	62.74 (8.84, 445.42)
<b>Natalizumab Users with UC</b>						
Female	77,630	212.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Male	40,392	110.6	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

N/A = Not Applicable

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
18-24 years	196,309	196,309	3,447,565	3,447,565	N/A	N/A	761
25-34 years	352,011	352,011	5,680,019	5,680,019	N/A	N/A	2,620
35-44 years	389,510	389,510	6,090,645	6,090,645	N/A	N/A	5,976
45-54 years	473,846	473,846	6,654,260	6,654,260	N/A	N/A	14,017
55-64 years	499,506	499,506	5,891,242	5,891,242	N/A	N/A	23,373
≥ 65 years	1,546,582	1,546,582	18,312,060	18,312,060	N/A	N/A	137,857
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
18-24 years	122,248	122,248	2,287,946	2,287,946	N/A	N/A	513
25-34 years	200,771	200,771	3,733,188	3,733,188	N/A	N/A	1,681
35-44 years	212,458	212,458	3,964,073	3,964,073	N/A	N/A	3,622
45-54 years	241,641	241,641	4,210,801	4,210,801	N/A	N/A	7,924
55-64 years	236,898	236,898	3,538,371	3,538,371	N/A	N/A	11,868
≥ 65 years	627,548	627,548	9,153,694	9,153,694	N/A	N/A	58,741
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
18-24 years	97,459	97,459	1,130,174	1,130,174	N/A	N/A	384
25-34 years	193,701	193,701	1,927,558	1,927,558	N/A	N/A	1,402
35-44 years	224,334	224,334	2,116,689	2,116,689	N/A	N/A	3,210
45-54 years	283,909	283,909	2,432,757	2,432,757	N/A	N/A	7,849
55-64 years	312,368	312,368	2,353,290	2,353,290	N/A	N/A	14,189
≥ 65 years	1,052,500	1,052,500	9,098,168	9,098,168	N/A	N/A	93,052
<b>ILD background rate in IBD: Incident cohort</b>							
18-24 years	106,991	106,991	1,184,256	1,184,256	N/A	N/A	417
25-34 years	212,215	212,215	2,018,348	2,018,348	N/A	N/A	1,606
35-44 years	255,061	255,061	2,273,694	2,273,694	N/A	N/A	3,993
45-54 years	333,725	333,725	2,637,336	2,637,336	N/A	N/A	9,877

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
55-64 years	366,127	366,127	2,503,587	2,503,587	N/A	N/A	17,391
≥ 65 years	1,233,703	1,233,703	8,969,689	8,969,689	N/A	N/A	109,183
<b>ILD background rate in CD: Incident cohort</b>							
18-24 years	63,777	63,777	708,605	708,605	N/A	N/A	272
25-34 years	117,325	117,325	1,176,009	1,176,009	N/A	N/A	951
35-44 years	134,453	134,453	1,292,668	1,292,668	N/A	N/A	2,197
45-54 years	162,485	162,485	1,442,007	1,442,007	N/A	N/A	5,116
55-64 years	164,512	164,512	1,269,248	1,269,248	N/A	N/A	8,112
≥ 65 years	481,746	481,746	3,889,021	3,889,021	N/A	N/A	44,640
<b>ILD background rate in UC: Incident cohort</b>							
18-24 years	63,185	63,185	522,539	522,539	N/A	N/A	252
25-34 years	133,413	133,413	953,760	953,760	N/A	N/A	1,072
35-44 years	164,002	164,002	1,112,540	1,112,540	N/A	N/A	2,563
45-54 years	219,409	219,409	1,344,162	1,344,162	N/A	N/A	6,372
55-64 years	248,388	248,388	1,357,198	1,357,198	N/A	N/A	11,795
≥ 65 years	880,007	880,007	5,426,365	5,426,365	N/A	N/A	77,841
<b>Vedolizumab Users with IBD</b>							
18-24 years	3,594	3,673	42,448	42,448	4,793,031	37,576	*****
25-34 years	6,894	7,038	85,770	85,771	9,601,468	165,657	*****
35-44 years	6,751	6,921	97,189	97,189	11,075,717	88,473	36
45-54 years	5,759	5,901	83,629	83,630	9,497,143	94,353	48
55-64 years	5,063	5,172	69,796	69,796	7,948,135	66,165	70
≥ 65 years	14,498	14,819	191,295	191,295	22,470,519	177,682	447

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>							
18-24 years	3,594	3,673	35,447	35,447	1,885,861	33,867	*****
25-34 years	6,894	7,038	71,198	71,199	3,777,704	227,086	*****
35-44 years	6,751	6,921	79,557	79,557	4,250,748	78,778	25
45-54 years	5,759	5,901	67,598	67,598	3,611,591	84,600	31
55-64 years	5,063	5,172	57,045	57,045	3,045,758	62,384	50
≥ 65 years	14,498	14,819	161,544	161,544	8,743,681	159,324	320
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>							
18-24 years	2,909	2,963	34,307	34,307	3,861,271	30,278	*****
25-34 years	5,545	5,655	71,141	71,142	7,983,374	124,508	*****
35-44 years	5,251	5,360	76,885	76,885	8,767,055	69,820	23
45-54 years	4,270	4,356	64,154	64,155	7,293,856	58,299	23
55-64 years	3,637	3,697	51,635	51,635	5,900,633	48,851	38
≥ 65 years	9,964	10,147	133,305	133,305	15,659,763	123,174	277
<b>Vedolizumab Users with CD</b>							
18-24 years	2,241	2,297	25,582	25,582	2,891,861	22,667	0
25-34 years	4,410	4,516	52,475	52,476	5,854,900	99,288	23
35-44 years	4,471	4,606	60,842	60,842	6,902,502	55,740	28
45-54 years	3,938	4,059	54,284	54,285	6,165,235	49,506	39
55-64 years	3,434	3,517	46,146	46,146	5,268,991	45,136	55
≥ 65 years	9,340	9,578	125,203	125,203	14,760,194	116,193	315
<b>Vedolizumab Users with UC</b>							
18-24 years	2,385	2,435	29,343	29,343	3,326,364	26,075	*****
25-34 years	4,419	4,496	58,470	58,470	6,567,851	88,540	*****
35-44 years	4,415	4,508	68,568	68,568	7,848,209	61,772	23
45-54 years	3,679	3,755	55,874	55,875	6,335,174	69,469	38

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
55-64 years	3,289	3,345	46,904	46,904	5,342,068	41,901	44
≥ 65 years	9,908	10,123	128,879	128,879	15,105,138	119,848	291
<b>Natalizumab Users with IBD</b>							
18-24 years	45	47	453	453	23,285	743	0
25-34 years	145	153	1,502	1,502	77,316	2,429	*****
35-44 years	191	207	2,594	2,594	136,756	3,644	*****
45-54 years	191	205	2,611	2,611	134,997	4,575	*****
55-64 years	141	150	1,696	1,696	90,408	2,257	*****
≥ 65 years	58	60	393	393	20,769	508	*****
<b>Natalizumab Users with IBD: No episode extension</b>							
18-24 years	45	47	392	392	10,713	725	0
25-34 years	145	153	1,283	1,283	35,369	2,821	*****
35-44 years	191	207	2,196	2,196	60,885	3,889	0
45-54 years	191	205	2,381	2,381	65,812	5,359	*****
55-64 years	141	150	1,401	1,401	38,867	2,109	0
≥ 65 years	58	60	361	361	10,008	560	*****
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>							
18-24 years	31	32	341	341	18,061	484	0
25-34 years	109	113	1,167	1,167	59,265	2,100	0
35-44 years	133	143	1,916	1,916	100,853	2,768	*****
45-54 years	130	139	1,983	1,983	101,926	3,682	*****
55-64 years	94	98	1,160	1,160	61,792	1,580	0
≥ 65 years	38	39	294	294	15,384	410	0



**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with CD</b>							
18-24 years	43	45	438	438	22,521	730	0
25-34 years	127	134	1,280	1,280	66,288	2,008	*****
35-44 years	150	164	2,077	2,077	109,553	2,854	*****
45-54 years	132	138	1,722	1,722	88,325	3,020	*****
55-64 years	91	94	1,038	1,038	55,352	1,290	*****
≥ 65 years	44	46	267	267	13,964	384	*****
<b>Natalizumab Users with UC</b>							
18-24 years	20	20	157	157	8,221	149	0
25-34 years	52	56	558	558	28,265	1,047	0
35-44 years	89	94	1,268	1,268	65,103	2,258	0
45-54 years	90	99	1,340	1,340	69,335	2,538	0
55-64 years	75	81	889	889	47,359	1,219	0
≥ 65 years	26	27	181	181	9,470	302	0

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
18-24 years	172,483,859	472,235.1	55,087,907	36,146,436,453	98,963,549.5	16.11 (15.01, 17.30)
25-34 years	339,823,762	930,386.8	71,938,465	48,931,769,254	133,967,883.0	28.16 (27.10, 29.26)
35-44 years	467,961,489	1,281,208.7	61,319,440	51,659,199,920	141,435,181.2	46.64 (45.48, 47.84)
45-54 years	629,316,308	1,722,974.1	59,493,367	56,345,709,373	154,266,144.8	81.35 (80.02, 82.71)
55-64 years	603,902,136	1,653,393.9	53,452,227	54,269,709,017	148,582,365.5	141.36 (139.56, 143.19)
≥ 65 years	2,326,183,808	6,368,744.2	83,414,655	148,603,648,133	406,854,615.0	216.46 (215.32, 217.60)
<b>ILD background rate in CD: Prevalent cohort</b>						
18-24 years	109,509,377	299,820.3	55,087,907	36,194,241,488	99,094,432.5	17.11 (15.69, 18.66)
25-34 years	198,306,308	542,933.1	71,969,893	49,056,870,825	134,310,392.4	30.96 (29.52, 32.48)
35-44 years	259,823,509	711,358.0	61,373,350	51,859,085,814	141,982,438.9	50.92 (49.29, 52.60)
45-54 years	328,075,108	898,220.7	59,566,041	56,633,446,300	155,053,925.5	88.22 (86.30, 90.18)
55-64 years	297,095,776	813,403.9	53,556,472	54,630,179,361	149,569,279.6	145.91 (143.30, 148.55)
≥ 65 years	986,747,392	2,701,567.1	83,500,141	150,061,509,628	410,846,022.3	217.43 (215.68, 219.20)
<b>ILD background rate in UC: Prevalent cohort</b>						
18-24 years	85,655,829	234,512.9	55,087,907	36,214,684,942	99,150,403.7	16.37 (14.82, 18.10)
25-34 years	188,071,827	514,912.6	71,978,292	49,071,952,596	134,351,684.0	27.23 (25.84, 28.69)
35-44 years	271,823,799	744,213.0	61,375,776	51,855,743,284	141,973,287.6	43.13 (41.67, 44.65)
45-54 years	378,619,331	1,036,603.2	59,560,805	56,595,104,943	154,948,952.6	75.72 (74.06, 77.41)
55-64 years	374,654,223	1,025,747.4	53,537,111	54,547,166,118	149,342,001.7	138.33 (136.07, 140.62)
≥ 65 years	1,566,477,544	4,288,781.8	83,477,449	149,448,367,612	409,167,330.9	216.97 (215.58, 218.36)
<b>ILD background rate in IBD: Incident cohort</b>						
18-24 years	92,301,860	252,708.7	54,959,374	36,113,858,267	98,874,355.3	16.50 (14.99, 18.16)
25-34 years	205,724,457	563,242.9	71,744,313	48,887,569,964	133,846,871.9	28.51 (27.15, 29.94)
35-44 years	306,755,303	839,850.2	61,128,267	51,605,101,277	141,287,067.2	47.54 (46.09, 49.04)
45-54 years	441,815,658	1,209,625.3	59,288,619	56,279,085,496	154,083,738.5	81.65 (80.06, 83.28)

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
55-64 years	437,678,189	1,198,297.6	53,253,486	54,196,743,538	148,382,597.0	145.13 (142.99, 147.30)
≥ 65 years	1,768,647,579	4,842,293.2	82,990,877	148,380,066,974	406,242,483.2	225.48 (224.14, 226.82)
<b>ILD background rate in CD: Incident cohort</b>						
18-24 years	56,228,241	153,944.5	55,002,485	36,170,823,808	99,030,318.4	17.67 (15.69, 19.90)
25-34 years	116,455,128	318,836.8	71,854,443	49,030,761,218	134,238,908.2	29.83 (27.99, 31.78)
35-44 years	164,613,276	450,686.6	61,264,478	51,829,205,279	141,900,630.5	48.75 (46.75, 50.83)
45-54 years	220,631,221	604,055.4	59,454,202	56,599,093,201	154,959,871.9	84.69 (82.40, 87.05)
55-64 years	204,640,556	560,275.3	53,453,075	54,595,093,367	149,473,219.3	144.79 (141.67, 147.97)
≥ 65 years	729,865,732	1,998,263.5	83,307,003	149,964,483,006	410,580,377.8	223.39 (221.33, 225.48)
<b>ILD background rate in UC: Incident cohort</b>						
18-24 years	55,102,320	150,861.9	55,031,006	36,195,673,641	99,098,353.6	16.70 (14.76, 18.90)
25-34 years	131,351,364	359,620.4	71,884,799	49,044,827,579	134,277,419.8	29.81 (28.08, 31.65)
35-44 years	200,678,357	549,427.4	61,279,616	51,821,358,574	141,879,147.4	46.65 (44.88, 48.49)
45-54 years	293,511,930	803,591.9	59,454,170	56,551,629,242	154,829,922.6	79.29 (77.37, 81.27)
55-64 years	296,823,343	812,658.0	53,429,227	54,498,048,569	149,207,525.2	145.14 (142.55, 147.78)
≥ 65 years	1,255,854,532	3,438,342.3	83,226,031	149,289,572,607	408,732,573.9	226.39 (224.81, 227.99)
<b>Vedolizumab Users with IBD</b>						
18-24 years	*****	*****	N/A	N/A	N/A	5.38 (1.35, 21.51)
25-34 years	*****	*****	N/A	N/A	N/A	35.55 (24.38, 51.83)
35-44 years	3,108,793	8,511.4	N/A	N/A	N/A	42.30 (30.51, 58.64)
45-54 years	2,742,776	7,509.3	N/A	N/A	N/A	63.92 (48.17, 84.82)
55-64 years	2,350,555	6,435.5	N/A	N/A	N/A	108.77 (86.06, 137.49)
≥ 65 years	8,679,046	23,761.9	N/A	N/A	N/A	188.12 (171.46, 206.39)

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>						
18-24 years	*****	*****	N/A	N/A	N/A	3.72 (0.52, 26.44)
25-34 years	*****	*****	N/A	N/A	N/A	30.76 (19.12, 49.48)
35-44 years	2,243,616	6,142.7	N/A	N/A	N/A	40.70 (27.50, 60.23)
45-54 years	1,968,276	5,388.8	N/A	N/A	N/A	57.53 (40.46, 81.80)
55-64 years	1,710,858	4,684.1	N/A	N/A	N/A	106.74 (80.90, 140.84)
≥ 65 years	6,760,083	18,508.1	N/A	N/A	N/A	172.90 (154.95, 192.92)
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>						
18-24 years	*****	*****	N/A	N/A	N/A	3.34 (0.47, 23.72)
25-34 years	*****	*****	N/A	N/A	N/A	22.56 (13.36, 38.09)
35-44 years	2,426,852	6,644.4	N/A	N/A	N/A	34.62 (23.00, 52.09)
45-54 years	2,085,539	5,709.9	N/A	N/A	N/A	40.28 (26.77, 60.62)
55-64 years	1,692,156	4,632.9	N/A	N/A	N/A	82.02 (59.68, 112.72)
≥ 65 years	6,029,992	16,509.2	N/A	N/A	N/A	167.79 (149.14, 188.75)
<b>Vedolizumab Users with CD</b>						
18-24 years	845,756	2,315.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	1,767,419	4,838.9	N/A	N/A	N/A	47.53 (31.59, 71.53)
35-44 years	2,032,128	5,563.7	N/A	N/A	N/A	50.33 (34.75, 72.89)
45-54 years	1,848,955	5,062.2	N/A	N/A	N/A	77.04 (56.29, 105.45)
55-64 years	1,623,213	4,444.1	N/A	N/A	N/A	123.76 (95.02, 161.20)
≥ 65 years	5,730,464	15,689.2	N/A	N/A	N/A	200.78 (179.78, 224.22)
<b>Vedolizumab Users with UC</b>						
18-24 years	*****	*****	N/A	N/A	N/A	7.95 (1.99, 31.79)
25-34 years	*****	*****	N/A	N/A	N/A	25.90 (15.04, 44.61)
35-44 years	2,118,578	5,800.4	N/A	N/A	N/A	39.65 (26.35, 59.67)
45-54 years	1,781,465	4,877.4	N/A	N/A	N/A	77.91 (56.69, 107.07)

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
55-64 years	1,525,031	4,175.3	N/A	N/A	N/A	105.38 (78.42, 141.61)
≥ 65 years	5,823,618	15,944.2	N/A	N/A	N/A	182.51 (162.70, 204.73)
<b>Natalizumab Users with IBD</b>						
18-24 years	11,847	32.4	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	*****	*****	N/A	N/A	N/A	88.92 (12.52, 631.25)
35-44 years	*****	*****	N/A	N/A	N/A	54.41 (7.66, 386.24)
45-54 years	*****	*****	N/A	N/A	N/A	55.16 (7.77, 391.61)
55-64 years	*****	*****	N/A	N/A	N/A	76.13 (10.72, 540.46)
≥ 65 years	*****	*****	N/A	N/A	N/A	286.74 (40.39, 2,035.66)
<b>Natalizumab Users with IBD: No episode extension</b>						
18-24 years	9,180	25.1	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	*****	*****	N/A	N/A	N/A	114.24 (16.09, 811.03)
35-44 years	51,469	140.9	N/A	N/A	N/A	0.00 (0.00, 0.00)
45-54 years	*****	*****	N/A	N/A	N/A	66.52 (9.37, 472.26)
55-64 years	35,506	97.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
≥ 65 years	*****	*****	N/A	N/A	N/A	353.68 (49.82, 2,510.92)
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>						
18-24 years	8,998	24.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	30,949	84.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
35-44 years	*****	*****	N/A	N/A	N/A	76.38 (10.76, 542.25)
45-54 years	*****	*****	N/A	N/A	N/A	76.32 (10.75, 541.83)
55-64 years	32,508	89.0	N/A	N/A	N/A	0.00 (0.00, 0.00)
≥ 65 years	9,411	25.8	N/A	N/A	N/A	0.00 (0.00, 0.00)

**Table 4. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Age Group**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with CD</b>						
18-24 years	11,526	31.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	*****	*****	N/A	N/A	N/A	102.62 (14.46, 728.54)
35-44 years	*****	*****	N/A	N/A	N/A	67.93 (9.57, 482.24)
45-54 years	*****	*****	N/A	N/A	N/A	86.50 (12.18, 614.07)
55-64 years	*****	*****	N/A	N/A	N/A	123.14 (17.34, 874.19)
≥ 65 years	*****	*****	N/A	N/A	N/A	413.37 (58.23, 2,934.62)
<b>Natalizumab Users with UC</b>						
18-24 years	3,857	10.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
25-34 years	15,529	42.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
35-44 years	32,817	89.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
45-54 years	35,539	97.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
55-64 years	24,444	66.9	N/A	N/A	N/A	0.00 (0.00, 0.00)
≥ 65 years	5,836	16.0	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

N/A = Not Applicable

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
American Indian or Alaska Native	9,406	9,406	109,866	109,866	N/A	N/A	662
Asian	34,063	34,063	285,890	285,890	N/A	N/A	1,877
Black or African American	174,407	174,407	2,447,765	2,447,765	N/A	N/A	10,462
Multi-racial	12,351	12,351	162,320	162,320	N/A	N/A	136
Native Hawaiian or Other Pacific Islander	2,169	2,169	25,806	25,806	N/A	N/A	84
Unknown	1,580,030	1,580,030	19,318,368	19,318,368	N/A	N/A	36,733
White	1,645,338	1,645,338	23,725,776	23,725,776	N/A	N/A	134,650
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
American Indian or Alaska Native	4,389	4,389	65,686	65,686	N/A	N/A	315
Asian	13,543	13,543	128,680	128,680	N/A	N/A	802
Black or African American	84,009	84,009	1,622,760	1,622,760	N/A	N/A	4,682
Multi-racial	6,028	6,028	91,912	91,912	N/A	N/A	70
Native Hawaiian or Other Pacific Islander	970	970	13,722	13,722	N/A	N/A	37
Unknown	788,876	788,876	11,036,798	11,036,798	N/A	N/A	17,436
White	743,749	743,749	13,928,515	13,928,515	N/A	N/A	61,007
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
American Indian or Alaska Native	5,702	5,702	43,514	43,514	N/A	N/A	401
Asian	22,361	22,361	154,976	154,976	N/A	N/A	1,165
Black or African American	105,033	105,033	817,352	817,352	N/A	N/A	6,688
Multi-racial	7,530	7,530	69,618	69,618	N/A	N/A	85
Native Hawaiian or Other Pacific Islander	1,326	1,326	12,049	12,049	N/A	N/A	55
Unknown	969,333	969,333	8,274,867	8,274,867	N/A	N/A	23,692
White	1,052,986	1,052,986	9,686,260	9,686,260	N/A	N/A	88,000

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>ILD background rate in IBD: Incident cohort</b>							
American Indian or Alaska Native	7,423	7,423	50,847	50,847	N/A	N/A	535
Asian	28,004	28,004	140,134	140,134	N/A	N/A	1,652
Black or African American	132,418	132,418	915,077	915,077	N/A	N/A	8,597
Multi-racial	8,313	8,313	69,304	69,304	N/A	N/A	95
Native Hawaiian or Other Pacific Islander	1,570	1,570	8,436	8,436	N/A	N/A	68
Unknown	1,089,477	1,089,477	8,412,063	8,412,063	N/A	N/A	27,942
White	1,240,617	1,240,617	9,991,049	9,991,049	N/A	N/A	103,578
<b>ILD background rate in CD: Incident cohort</b>							
American Indian or Alaska Native	3,287	3,287	25,701	25,701	N/A	N/A	234
Asian	11,122	11,122	55,973	55,973	N/A	N/A	710
Black or African American	57,870	57,870	488,365	488,365	N/A	N/A	3,583
Multi-racial	3,916	3,916	35,059	35,059	N/A	N/A	50
Native Hawaiian or Other Pacific Islander	683	683	3,847	3,847	N/A	N/A	28
Unknown	524,134	524,134	4,305,510	4,305,510	N/A	N/A	12,627
White	523,286	523,286	4,863,103	4,863,103	N/A	N/A	44,056
<b>ILD background rate in UC: Incident cohort</b>							
American Indian or Alaska Native	4,809	4,809	27,008	27,008	N/A	N/A	359
Asian	18,580	18,580	88,658	88,658	N/A	N/A	1,030
Black or African American	88,069	88,069	470,934	470,934	N/A	N/A	5,858
Multi-racial	5,509	5,509	37,512	37,512	N/A	N/A	65
Native Hawaiian or Other Pacific Islander	1,000	1,000	5,186	5,186	N/A	N/A	46
Unknown	729,882	729,882	4,523,410	4,523,410	N/A	N/A	19,412
White	860,555	860,555	5,563,856	5,563,856	N/A	N/A	73,125



**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with IBD</b>							
American Indian or Alaska Native	102	108	1,018	1,018	115,961	909	*****
Asian	294	311	3,249	3,249	362,399	3,181	*****
Black or African American	1,804	1,894	15,123	15,123	1,678,391	13,863	*****
Multi-racial	168	173	2,938	2,938	328,079	2,568	*****
Native Hawaiian or Other Pacific Islander	36	37	298	298	31,881	249	0
Unknown	19,591	20,003	310,806	310,808	35,550,173	284,531	116
White	20,369	20,998	236,695	236,695	27,319,129	324,606	485
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>							
American Indian or Alaska Native	102	108	864	864	46,301	831	*****
Asian	294	311	2,748	2,748	146,050	3,079	*****
Black or African American	1,804	1,894	12,099	12,099	639,799	12,306	*****
Multi-racial	168	173	2,524	2,524	134,460	2,411	*****
Native Hawaiian or Other Pacific Islander	36	37	214	214	11,266	201	0
Unknown	19,591	20,003	257,144	257,145	13,752,813	260,470	83
White	20,369	20,998	196,796	196,796	10,584,654	366,740	338
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>							
American Indian or Alaska Native	75	79	813	813	94,204	739	*****
Asian	236	249	2,606	2,606	289,633	2,361	*****
Black or African American	1,240	1,295	10,485	10,485	1,167,789	9,169	*****
Multi-racial	137	139	2,208	2,208	245,495	1,922	*****
Native Hawaiian or Other Pacific Islander	29	29	211	211	21,363	167	0
Unknown	15,496	15,772	248,186	248,188	28,411,558	228,624	73
White	14,240	14,615	166,918	166,918	19,235,910	211,947	289

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with CD</b>							
American Indian or Alaska Native	60	64	677	677	78,594	616	*****
Asian	146	158	1,556	1,556	171,462	1,683	*****
Black or African American	1,372	1,443	11,365	11,365	1,267,945	10,554	*****
Multi-racial	87	90	1,527	1,527	169,952	1,331	0
Native Hawaiian or Other Pacific Islander	18	18	120	120	12,795	100	0
Unknown	11,870	12,149	186,499	186,501	21,323,912	173,211	79
White	14,131	14,651	162,788	162,788	18,819,023	201,036	362
<b>Vedolizumab Users with UC</b>							
American Indian or Alaska Native	70	75	669	669	76,598	600	*****
Asian	231	241	2,695	2,695	301,214	2,452	*****
Black or African American	1,055	1,110	9,111	9,111	1,005,034	7,983	*****
Multi-racial	127	131	2,264	2,264	252,053	1,973	*****
Native Hawaiian or Other Pacific Islander	23	24	199	199	21,131	165	0
Unknown	13,633	13,896	220,799	220,800	25,307,121	198,120	81
White	12,855	13,185	152,301	152,301	17,561,653	196,314	309
<b>Natalizumab Users with IBD</b>							
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	*****	*****	*****	*****	110	2	0
Black or African American	*****	*****	457	457	24,678	573	0
Multi-racial	*****	*****	*****	*****	3,754	123	0
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0	0
Unknown	363	384	5,026	5,026	263,776	6,925	*****
White	331	370	3,690	3,690	191,213	6,532	*****

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with IBD: No episode extension</b>							
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	*****	*****	*****	*****	56	2	0
Black or African American	*****	*****	386	386	10,738	493	0
Multi-racial	*****	*****	*****	*****	2,025	166	0
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0	0
Unknown	363	384	4,406	4,406	121,578	6,902	*****
White	331	370	3,146	3,146	87,257	7,900	*****
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>							
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	*****	*****	*****	*****	55	1	0
Black or African American	*****	*****	286	286	15,522	371	0
Multi-racial	*****	*****	*****	*****	3,754	123	0
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0	0
Unknown	260	269	3,856	3,856	203,490	5,156	*****
White	224	251	2,644	2,644	134,460	5,372	*****
<b>Natalizumab Users with CD</b>							
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	*****	*****	*****	*****	110	2	0
Black or African American	*****	*****	*****	*****	16,523	425	0
Multi-racial	*****	*****	*****	*****	258	5	0
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0	0
Unknown	295	310	3,885	3,885	204,300	5,141	*****
White	234	259	2,621	2,621	134,812	4,713	*****

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with UC</b>							
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Black or African American	*****	*****	213	213	11,675	212	0
Multi-racial	*****	*****	74	74	3,754	123	0
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	0	0
Unknown	172	182	2,370	2,370	123,641	3,598	0
White	147	168	1,736	1,736	88,683	3,581	0

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
American Indian or Alaska Native	11,563,870	31,660.2	1,194,240	1,558,566,928	4,267,123.7	209.10 (193.76, 225.65)
Asian	40,153,918	109,935.4	5,423,383	6,315,287,829	17,290,315.8	170.74 (163.18, 178.64)
Black or African American	203,697,939	557,694.6	19,004,680	23,035,248,836	63,067,074.2	187.59 (184.03, 191.22)
Multi-racial	15,559,962	42,600.9	1,406,946	1,836,136,658	5,027,068.2	31.92 (26.99, 37.77)
Native Hawaiian or Other Pacific Islander	2,202,245	6,029.4	445,781	459,991,654	1,259,388.5	139.32 (112.49, 172.54)
Unknown	1,820,957,466	4,985,509.8	186,570,725	214,881,581,108	588,313,706.0	73.68 (72.93, 74.44)
White	2,445,535,962	6,695,512.6	89,114,700	147,869,659,137	404,845,062.7	201.10 (200.03, 202.18)
<b>ILD background rate in CD: Prevalent cohort</b>						
American Indian or Alaska Native	5,696,921	15,597.3	1,194,240	1,564,661,124	4,283,808.7	201.96 (180.84, 225.54)
Asian	16,929,850	46,351.4	5,423,383	6,339,716,461	17,357,197.7	173.03 (161.46, 185.43)
Black or African American	101,987,269	279,225.9	19,004,680	23,142,086,079	63,359,578.6	167.68 (162.94, 172.55)
Multi-racial	7,716,625	21,127.0	1,406,946	1,844,284,501	5,049,375.8	33.13 (26.21, 41.88)
Native Hawaiian or Other Pacific Islander	963,135	2,636.9	445,781	461,316,186	1,263,014.9	140.32 (101.66, 193.66)
Unknown	906,870,521	2,482,876.2	186,570,725	215,880,009,229	591,047,253.2	70.23 (69.19, 71.28)
White	1,139,393,149	3,119,488.4	89,114,700	149,203,259,836	408,496,262.4	195.57 (194.02, 197.13)
<b>ILD background rate in UC: Prevalent cohort</b>						
American Indian or Alaska Native	6,929,509	18,972.0	1,194,240	1,563,404,387	4,280,367.9	211.36 (191.66, 233.10)
Asian	25,824,941	70,704.8	5,423,383	6,330,267,857	17,331,328.8	164.77 (155.57, 174.51)
Black or African American	121,884,271	333,700.9	19,004,680	23,122,273,314	63,305,334.2	200.42 (195.67, 205.28)
Multi-racial	9,678,063	26,497.1	1,406,946	1,842,315,178	5,043,984.1	32.08 (25.94, 39.68)
Native Hawaiian or Other Pacific Islander	1,406,434	3,850.6	445,781	460,858,353	1,261,761.4	142.83 (109.66, 186.04)
Unknown	1,139,138,317	3,118,790.7	186,570,725	215,634,107,277	590,374,010.3	75.97 (75.00, 76.94)
White	1,560,441,018	4,272,254.7	89,114,700	148,779,793,129	407,336,873.7	205.98 (204.62, 207.35)

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Incident cohort</b>						
American Indian or Alaska Native	8,712,836	23,854.4	1,191,438	1,557,162,793	4,263,279.4	224.28 (206.05, 244.11)
Asian	32,808,116	89,823.7	5,413,956	6,309,699,763	17,275,016.5	183.92 (175.26, 193.00)
Black or African American	150,278,623	411,440.4	18,946,764	23,009,987,927	62,997,913.6	208.95 (204.58, 213.41)
Multi-racial	10,831,523	29,655.1	1,401,912	1,834,486,621	5,022,550.6	32.03 (26.20, 39.17)
Native Hawaiian or Other Pacific Islander	1,591,346	4,356.9	444,949	459,664,382	1,258,492.5	156.08 (123.06, 197.95)
Unknown	1,279,262,721	3,502,430.4	185,943,041	214,655,647,746	587,695,134.1	79.78 (78.85, 80.72)
White	1,769,437,881	4,844,456.9	88,595,073	147,635,776,284	404,204,726.3	213.81 (212.51, 215.11)
<b>ILD background rate in CD: Incident cohort</b>						
American Indian or Alaska Native	4,091,116	11,200.9	1,192,724	1,563,958,090	4,281,883.9	208.91 (183.79, 237.47)
Asian	14,008,257	38,352.5	5,419,304	6,336,941,985	17,349,601.6	185.12 (172.00, 199.26)
Black or African American	69,424,266	190,073.3	18,971,003	23,129,856,966	63,326,097.1	188.51 (182.43, 194.78)
Multi-racial	5,208,838	14,261.0	1,404,298	1,843,395,226	5,046,941.1	35.06 (26.57, 46.26)
Native Hawaiian or Other Pacific Islander	699,362	1,914.7	445,381	461,156,277	1,262,577.1	146.23 (100.97, 211.79)
Unknown	620,590,754	1,699,084.9	186,232,181	215,761,425,459	590,722,588.5	74.32 (73.03, 75.62)
White	778,411,561	2,131,174.7	88,839,896	149,092,725,876	408,193,636.9	206.72 (204.80, 208.66)
<b>ILD background rate in UC: Incident cohort</b>						
American Indian or Alaska Native	5,643,101	15,450.0	1,192,813	1,562,513,434	4,277,928.6	232.36 (209.53, 257.69)
Asian	21,229,850	58,124.2	5,417,559	6,326,946,532	17,322,235.5	177.21 (166.71, 188.37)
Black or African American	99,438,530	272,247.9	18,977,241	23,105,698,238	63,259,954.1	215.17 (209.73, 220.75)
Multi-racial	7,334,716	20,081.4	1,404,278	1,841,249,300	5,041,065.8	32.37 (25.38, 41.28)
Native Hawaiian or Other Pacific Islander	1,043,655	2,857.4	445,315	460,651,755	1,261,195.8	160.99 (120.58, 214.93)
Unknown	867,968,037	2,376,367.0	186,241,244	215,484,462,300	589,964,304.7	81.69 (80.55, 82.84)
White	1,230,663,957	3,369,374.3	88,843,945	148,619,588,653	406,898,257.8	217.03 (215.46, 218.61)

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with IBD</b>						
American Indian or Alaska Native	*****	*****	N/A	N/A	N/A	78.07 (11.00, 554.26)
Asian	*****	*****	N/A	N/A	N/A	80.61 (26.00, 249.95)
Black or African American	*****	*****	N/A	N/A	N/A	117.51 (78.09, 176.84)
Multi-racial	*****	*****	N/A	N/A	N/A	93.32 (23.34, 373.15)
Native Hawaiian or Other Pacific Islander	15,260	41.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	9,132,289	25,002.8	N/A	N/A	N/A	46.39 (38.68, 55.65)
White	10,889,991	29,815.2	N/A	N/A	N/A	162.67 (148.82, 177.81)
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>						
American Indian or Alaska Native	*****	*****	N/A	N/A	N/A	106.05 (14.94, 752.87)
Asian	*****	*****	N/A	N/A	N/A	109.98 (35.47, 341.01)
Black or African American	*****	*****	N/A	N/A	N/A	127.85 (79.48, 205.66)
Multi-racial	*****	*****	N/A	N/A	N/A	123.02 (30.77, 491.90)
Native Hawaiian or Other Pacific Islander	8,853	24.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	6,806,162	18,634.3	N/A	N/A	N/A	44.54 (35.92, 55.23)
White	8,188,014	22,417.6	N/A	N/A	N/A	150.77 (135.53, 167.74)
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>						
American Indian or Alaska Native	*****	*****	N/A	N/A	N/A	100.75 (14.19, 715.26)
Asian	*****	*****	N/A	N/A	N/A	100.14 (32.30, 310.51)
Black or African American	*****	*****	N/A	N/A	N/A	59.02 (29.52, 118.02)
Multi-racial	*****	*****	N/A	N/A	N/A	125.41 (31.36, 501.45)
Native Hawaiian or Other Pacific Islander	10,834	29.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	7,287,959	19,953.3	N/A	N/A	N/A	36.59 (29.09, 46.02)
White	7,597,007	20,799.5	N/A	N/A	N/A	138.95 (123.82, 155.93)

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with CD</b>						
American Indian or Alaska Native	*****	*****	N/A	N/A	N/A	122.08 (17.20, 866.65)
Asian	*****	*****	N/A	N/A	N/A	57.05 (8.04, 405.03)
Black or African American	*****	*****	N/A	N/A	N/A	113.23 (70.39, 182.14)
Multi-racial	40,255	110.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	6,357	17.4	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	5,545,827	15,183.6	N/A	N/A	N/A	52.03 (41.73, 64.87)
White	7,613,185	20,843.8	N/A	N/A	N/A	173.67 (156.67, 192.52)
<b>Vedolizumab Users with UC</b>						
American Indian or Alaska Native	*****	*****	N/A	N/A	N/A	113.16 (15.94, 803.37)
Asian	*****	*****	N/A	N/A	N/A	96.53 (31.13, 299.31)
Black or African American	*****	*****	N/A	N/A	N/A	129.54 (78.10, 214.88)
Multi-racial	*****	*****	N/A	N/A	N/A	122.15 (30.55, 488.43)
Native Hawaiian or Other Pacific Islander	9,965	27.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	6,448,163	17,654.1	N/A	N/A	N/A	45.88 (36.90, 57.05)
White	6,914,081	18,929.7	N/A	N/A	N/A	163.24 (146.01, 182.49)
<b>Natalizumab Users with IBD</b>						
American Indian or Alaska Native	0	0.0	N/A	N/A	N/A	NaN
Asian	108	0.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
Black or African American	15,167	41.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Multi-racial	922	2.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	0	0.0	N/A	N/A	N/A	NaN
Unknown	*****	*****	N/A	N/A	N/A	30.78 (4.34, 218.51)
White	*****	*****	N/A	N/A	N/A	130.30 (48.90, 347.18)



**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with IBD: No episode extension</b>						
American Indian or Alaska Native	0	0.0	N/A	N/A	N/A	NaN
Asian	54	0.1	N/A	N/A	N/A	0.00 (0.00, 0.00)
Black or African American	11,187	30.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
Multi-racial	895	2.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	0	0.0	N/A	N/A	N/A	NaN
Unknown	*****	*****	N/A	N/A	N/A	38.35 (5.40, 272.26)
White	*****	*****	N/A	N/A	N/A	84.96 (21.25, 339.70)
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>						
American Indian or Alaska Native	0	0.0	N/A	N/A	N/A	NaN
Asian	54	0.1	N/A	N/A	N/A	0.00 (0.00, 0.00)
Black or African American	9,594	26.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
Multi-racial	922	2.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	0	0.0	N/A	N/A	N/A	NaN
Unknown	*****	*****	N/A	N/A	N/A	41.45 (5.84, 294.25)
White	*****	*****	N/A	N/A	N/A	46.32 (6.52, 328.86)
<b>Natalizumab Users with CD</b>						
American Indian or Alaska Native	0	0.0	N/A	N/A	N/A	NaN
Asian	108	0.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
Black or African American	10,374	28.4	N/A	N/A	N/A	0.00 (0.00, 0.00)
Multi-racial	82	0.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	0	0.0	N/A	N/A	N/A	NaN
Unknown	*****	*****	N/A	N/A	N/A	39.52 (5.57, 280.58)
White	*****	*****	N/A	N/A	N/A	185.80 (69.73, 495.06)

**Table 5. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Race<sup>1</sup>**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>2</sup>	Total Eligible Member-Days <sup>2</sup>	Total Eligible Member-Years <sup>2</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with UC</b>						
American Indian or Alaska Native	0	0.0	N/A	N/A	N/A	NaN
Asian	0	0.0	N/A	N/A	N/A	NaN
Black or African American	7,027	19.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Multi-racial	922	2.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Native Hawaiian or Other Pacific Islander	0	0.0	N/A	N/A	N/A	NaN
Unknown	56,932	155.9	N/A	N/A	N/A	0.00 (0.00, 0.00)
White	53,141	145.5	N/A	N/A	N/A	0.00 (0.00, 0.00)

<sup>1</sup>Race data may not be completely populated at all Data Partners; therefore, data about race may be incomplete.

<sup>2</sup>Eligible Members, Member-Days, and Member-Years are reflective of the number of patients that met all cohort entry criteria on at least one day during the query period.

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

N/A = Not Applicable

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

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
Yes	69,392	69,392	683,708	683,708	N/A	N/A	2,816
No	1,727,467	1,727,467	24,863,921	24,863,921	N/A	N/A	144,085
Unknown	1,660,905	1,660,905	20,528,162	20,528,162	N/A	N/A	37,703
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
Yes	28,327	28,327	344,187	344,187	N/A	N/A	1,093
No	781,094	781,094	14,774,227	14,774,227	N/A	N/A	65,204
Unknown	832,143	832,143	11,769,659	11,769,659	N/A	N/A	18,052
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
Yes	44,980	44,980	334,908	334,908	N/A	N/A	1,888
No	1,102,937	1,102,937	9,976,571	9,976,571	N/A	N/A	93,982
Unknown	1,016,354	1,016,354	8,747,157	8,747,157	N/A	N/A	24,216
<b>ILD background rate in IBD: Incident cohort</b>							
Yes	53,711	53,711	299,189	299,189	N/A	N/A	2,443
No	1,320,811	1,320,811	10,430,548	10,430,548	N/A	N/A	111,929
Unknown	1,133,300	1,133,300	8,857,173	8,857,173	N/A	N/A	28,095
<b>ILD background rate in CD: Incident cohort</b>							
Yes	20,900	20,900	128,315	128,315	N/A	N/A	921
No	556,150	556,150	5,102,667	5,102,667	N/A	N/A	47,569
Unknown	547,248	547,248	4,546,576	4,546,576	N/A	N/A	12,798
<b>ILD background rate in UC: Incident cohort</b>							
Yes	36,374	36,374	182,265	182,265	N/A	N/A	1,673
No	912,710	912,710	5,783,943	5,783,943	N/A	N/A	78,665
Unknown	759,320	759,320	4,750,356	4,750,356	N/A	N/A	19,557

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with IBD</b>							
Yes	762	791	6,572	6,573	689,829	6,114	*****
No	20,977	21,693	227,237	227,237	26,213,952	316,954	*****
Unknown	20,625	21,040	336,318	336,319	38,482,232	306,840	134
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>							
Yes	762	791	5,304	5,304	276,358	6,527	*****
No	20,977	21,693	187,661	187,661	10,090,047	359,018	341
Unknown	20,625	21,040	279,424	279,425	14,948,938	280,494	*****
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>							
Yes	562	578	4,740	4,741	489,363	4,531	*****
No	14,528	14,955	157,524	157,524	18,160,598	203,634	290
Unknown	16,363	16,645	269,163	269,164	30,815,991	246,765	*****
<b>Vedolizumab Users with CD</b>							
Yes	429	446	3,745	3,746	387,848	3,732	*****
No	14,794	15,383	159,799	159,799	18,469,195	199,199	368
Unknown	12,461	12,744	200,988	200,989	22,986,640	185,601	*****
<b>Vedolizumab Users with UC</b>							
Yes	562	579	4,831	4,832	512,253	4,044	*****
No	13,097	13,482	143,697	143,697	16,551,563	188,550	311
Unknown	14,335	14,601	239,510	239,510	27,460,988	215,012	*****
<b>Natalizumab Users with IBD</b>							
Yes	12	12	104	104	4,865	350	0
No	369	416	3,616	3,616	190,590	5,618	*****
Unknown	373	394	5,529	5,529	288,076	8,187	*****

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with IBD: No episode extension</b>							
Yes	12	12	89	89	2,429	303	0
No	369	416	3,074	3,074	85,408	6,320	*****
Unknown	373	394	4,851	4,851	133,817	8,839	*****
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>							
Yes	*****	*****	68	68	3,470	153	0
No	*****	*****	2,465	2,465	128,311	4,322	*****
Unknown	270	279	4,328	4,328	225,500	6,548	*****
<b>Natalizumab Users with CD</b>							
Yes	*****	*****	20	20	1,024	54	0
No	*****	*****	2,504	2,504	131,714	3,782	*****
Unknown	300	315	4,298	4,298	223,265	6,450	*****
<b>Natalizumab Users with UC</b>							
Yes	*****	*****	84	84	3,841	296	0
No	*****	*****	1,658	1,658	86,338	3,005	0
Unknown	180	190	2,651	2,651	137,574	4,213	0

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
Yes	66,449,127	181,927.8	13,780,561	12,557,972,339	34,381,854.5	154.79 (149.17, 160.61)
No	2,543,107,179	6,962,648.0	102,304,557	163,375,045,967.00	447,296,498.2	206.94 (205.87, 208.01)
Unknown	1,930,115,056	5,284,367.0	187,075,337	220,023,453,844.00	602,391,386.3	71.35 (70.63, 72.07)
<b>ILD background rate in CD: Prevalent cohort</b>						
Yes	27,970,852	76,580.0	13,780,561	12,599,033,603	34,494,274.1	142.73 (134.51, 151.44)
No	1,187,150,415	3,250,240.7	102,304,557	164,762,052,388	451,093,914.8	200.61 (199.08, 202.16)
Unknown	964,436,203	2,640,482.4	187,075,337	221,074,247,425	605,268,302.3	68.37 (67.38, 69.37)
<b>ILD background rate in UC: Prevalent cohort</b>						
Yes	43,231,346	118,361.0	13,780,561	12,582,978,900	34,450,318.7	159.51 (152.48, 166.87)
No	1,617,563,989	4,428,648.8	102,304,557	164,329,212,647	449,908,864.2	212.21 (210.86, 213.57)
Unknown	1,204,507,218	3,297,761.0	187,075,337	220,820,827,948	604,574,477.6	73.43 (72.51, 74.36)
<b>ILD background rate in IBD: Incident cohort</b>						
Yes	51,617,513	141,321.0	13,755,530	12,546,405,367	34,350,185.8	172.87 (166.15, 179.86)
No	1,856,459,089	5,082,708.0	101,774,268	163,125,560,449	446,613,444.1	220.22 (218.93, 221.51)
Unknown	1,344,846,444	3,681,988.9	186,407,335	219,790,459,700	601,753,483.1	76.30 (75.42, 77.20)
<b>ILD background rate in CD: Incident cohort</b>						
Yes	21,069,715	57,685.7	13,768,926	12,593,942,249	34,480,334.7	159.66 (149.67, 170.31)
No	816,648,675	2,235,862.2	102,021,133	164,643,925,767	450,770,501.8	212.75 (210.85, 214.68)
Unknown	654,715,764	1,792,514.1	186,714,728	220,951,591,863	604,932,489.7	71.40 (70.17, 72.64)
<b>ILD background rate in UC: Incident cohort</b>						
Yes	34,946,227	95,677.6	13,765,839	12,575,249,948	34,429,158.0	174.86 (166.68, 183.44)
No	1,286,115,119	3,521,191.3	102,030,592	164,159,430,181	449,444,025.1	223.40 (221.85, 224.97)
Unknown	912,260,500	2,497,633.1	186,725,964	220,666,430,083	604,151,759.3	78.30 (77.21, 79.41)

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with IBD</b>						
Yes	*****	*****	N/A	N/A	N/A	92.41 (44.06, 193.85)
No	*****	*****	N/A	N/A	N/A	161.48 (147.78, 176.44)
Unknown	9,675,773	26,490.8	N/A	N/A	N/A	50.58 (42.70, 59.92)
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>						
Yes	*****	*****	N/A	N/A	N/A	115.50 (51.89, 257.10)
No	8,235,317	22,547.1	N/A	N/A	N/A	151.24 (136.01, 168.17)
Unknown	*****	*****	N/A	N/A	N/A	48.82 (40.01, 59.57)
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>						
Yes	*****	*****	N/A	N/A	N/A	55.15 (17.79, 171.00)
No	7,653,915	20,955.3	N/A	N/A	N/A	138.39 (123.34, 155.27)
Unknown	*****	*****	N/A	N/A	N/A	39.16 (31.58, 48.56)
<b>Vedolizumab Users with CD</b>						
Yes	*****	*****	N/A	N/A	N/A	90.64 (34.02, 241.51)
No	7,832,637	21,444.6	N/A	N/A	N/A	171.61 (154.94, 190.07)
Unknown	*****	*****	N/A	N/A	N/A	54.90 (44.55, 67.66)
<b>Vedolizumab Users with UC</b>						
Yes	*****	*****	N/A	N/A	N/A	90.66 (37.74, 217.83)
No	6,957,111	19,047.5	N/A	N/A	N/A	163.28 (146.10, 182.47)
Unknown	*****	*****	N/A	N/A	N/A	50.71 (41.47, 62.01)
<b>Natalizumab Users with IBD</b>						
Yes	2,089	5.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
No	*****	*****	N/A	N/A	N/A	127.30 (47.78, 339.17)
Unknown	*****	*****	N/A	N/A	N/A	28.07 (3.95, 199.26)

**Table 6. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Hispanic Origin**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with IBD: No episode extension</b>						
Yes	1,390	3.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
No	*****	*****	N/A	N/A	N/A	84.08 (21.03, 336.21)
Unknown	*****	*****	N/A	N/A	N/A	34.76 (4.90, 246.74)
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>						
Yes	979	2.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
No	*****	*****	N/A	N/A	N/A	47.01 (6.62, 333.73)
Unknown	*****	*****	N/A	N/A	N/A	36.94 (5.20, 262.28)
<b>Natalizumab Users with CD</b>						
Yes	757	2.1	N/A	N/A	N/A	0.00 (0.00, 0.00)
No	*****	*****	N/A	N/A	N/A	184.99 (69.43, 492.91)
Unknown	*****	*****	N/A	N/A	N/A	35.85 (5.05, 254.52)
<b>Natalizumab Users with UC</b>						
Yes	1,332	3.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
No	52,752	144.4	N/A	N/A	N/A	0.00 (0.00, 0.00)
Unknown	63,938	175.1	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

N/A = Not Applicable



**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
Evidence of 1-3 vedolizumab doses received	20,098	20,098	938,323	938,323	N/A	N/A	797
Evidence of 4-6 vedolizumab doses received	19,179	19,179	1,066,821	1,066,821	N/A	N/A	769
Evidence of 7-9 vedolizumab doses received	12,365	12,365	749,337	749,337	N/A	N/A	502
Evidence of 10+ vedolizumab doses	41,278	41,278	3,519,622	3,519,622	N/A	N/A	2,212
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
Evidence of 1-3 vedolizumab doses received	13,321	13,321	610,949	610,949	N/A	N/A	567
Evidence of 4-6 vedolizumab doses received	12,075	12,075	654,559	654,559	N/A	N/A	522
Evidence of 7-9 vedolizumab doses received	8,053	8,053	465,804	465,804	N/A	N/A	357
Evidence of 10+ vedolizumab doses	27,598	27,598	2,169,319	2,169,319	N/A	N/A	1,598
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
Evidence of 1-3 vedolizumab doses received	13,092	13,092	328,290	328,290	N/A	N/A	509
Evidence of 4-6 vedolizumab doses received	12,690	12,690	407,292	407,292	N/A	N/A	503
Evidence of 7-9 vedolizumab doses received	8,154	8,154	281,426	281,426	N/A	N/A	322
Evidence of 10+ vedolizumab doses	27,204	27,204	1,341,668	1,341,668	N/A	N/A	1,411

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>ILD background rate in IBD: Incident cohort</b>							
Evidence of 1-3 vedolizumab doses received	6,704	6,704	296,457	296,457	N/A	N/A	325
Evidence of 4-6 vedolizumab doses received	6,951	6,951	367,343	367,343	N/A	N/A	302
Evidence of 7-9 vedolizumab doses received	4,370	4,370	248,771	248,771	N/A	N/A	185
Evidence of 10+ vedolizumab doses	13,943	13,943	1,082,955	1,082,955	N/A	N/A	814
<b>ILD background rate in CD: Incident cohort</b>							
Evidence of 1-3 vedolizumab doses received	5,330	5,330	162,457	162,457	N/A	N/A	233
Evidence of 4-6 vedolizumab doses received	5,097	5,097	192,208	192,208	N/A	N/A	220
Evidence of 7-9 vedolizumab doses received	3,375	3,375	132,397	132,397	N/A	N/A	150
Evidence of 10+ vedolizumab doses	11,436	11,436	589,155	589,155	N/A	N/A	688
<b>ILD background rate in UC: Incident cohort</b>							
Evidence of 1-3 vedolizumab doses received	6,732	6,732	159,530	159,530	N/A	N/A	338
Evidence of 4-6 vedolizumab doses received	6,734	6,734	203,136	203,136	N/A	N/A	300
Evidence of 7-9 vedolizumab doses received	4,328	4,328	134,386	134,386	N/A	N/A	190
Evidence of 10+ vedolizumab doses	14,201	14,201	582,608	582,608	N/A	N/A	811

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with IBD</b>							
Evidence of 1-3 vedolizumab doses received	9,114	9,213	25,080	25,080	2,064,346	36,302	84
Evidence of 4-6 vedolizumab doses received	9,523	9,568	57,391	57,392	6,068,183	104,947	79
Evidence of 7-9 vedolizumab doses received	5,889	5,912	55,157	55,157	6,151,903	64,360	72
Evidence of 10+ vedolizumab doses	18,469	18,831	432,499	432,500	51,101,581	424,299	395
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>							
Evidence of 1-3 vedolizumab doses received	9,114	9,213	24,637	24,637	1,134,002	49,719	60
Evidence of 4-6 vedolizumab doses received	9,523	9,568	54,572	54,572	2,840,022	155,761	52
Evidence of 7-9 vedolizumab doses received	5,889	5,912	49,896	49,896	2,653,514	76,210	51
Evidence of 10+ vedolizumab doses	18,469	18,831	343,284	343,285	18,687,805	364,349	281
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>							
Evidence of 1-3 vedolizumab doses received	6,663	6,731	18,672	18,672	1,518,679	24,425	41
Evidence of 4-6 vedolizumab doses received	7,048	7,077	43,059	43,060	4,541,858	73,434	43
Evidence of 7-9 vedolizumab doses received	4,382	4,397	42,017	42,017	4,684,851	48,770	39
Evidence of 10+ vedolizumab doses	13,742	13,973	327,679	327,680	38,720,564	308,300	253

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab Users with CD</b>							
Evidence of 1-3 vedolizumab doses received	6,105	6,179	16,314	16,314	1,371,463	30,764	56
Evidence of 4-6 vedolizumab doses received	6,059	6,090	35,227	35,228	3,735,074	30,040	55
Evidence of 7-9 vedolizumab doses received	3,825	3,838	34,315	34,315	3,815,613	46,050	52
Evidence of 10+ vedolizumab doses	12,181	12,466	278,676	278,677	32,921,533	281,678	297
<b>Vedolizumab Users with UC</b>							
Evidence of 1-3 vedolizumab doses received	5,821	5,881	16,529	16,529	1,348,931	10,826	62
Evidence of 4-6 vedolizumab doses received	6,313	6,342	38,940	38,941	4,114,529	88,950	53
Evidence of 7-9 vedolizumab doses received	3,899	3,915	37,375	37,375	4,173,319	32,951	47
Evidence of 10+ vedolizumab doses	12,307	12,524	295,194	295,194	34,888,025	274,879	249

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
Evidence of 1-3 vedolizumab doses received	22,303,233	61,062.9	N/A	N/A	N/A	130.52 (121.77, 139.90)
Evidence of 4-6 vedolizumab doses received	25,346,308	69,394.4	N/A	N/A	N/A	110.82 (103.25, 118.93)
Evidence of 7-9 vedolizumab doses received	17,606,977	48,205.3	N/A	N/A	N/A	104.14 (95.42, 113.66)
Evidence of 10+ vedolizumab doses	81,887,764	224,196.5	N/A	N/A	N/A	98.66 (94.64, 102.86)
<b>ILD background rate in CD: Prevalent cohort</b>						
Evidence of 1-3 vedolizumab doses received	15,402,020	42,168.4	N/A	N/A	N/A	134.46 (123.84, 146.00)
Evidence of 4-6 vedolizumab doses received	16,542,330	45,290.4	N/A	N/A	N/A	115.26 (105.78, 125.58)
Evidence of 7-9 vedolizumab doses received	11,667,459	31,943.8	N/A	N/A	N/A	111.76 (100.75, 123.97)
Evidence of 10+ vedolizumab doses	54,912,698	150,342.8	N/A	N/A	N/A	106.29 (101.20, 111.63)
<b>ILD background rate in UC: Prevalent cohort</b>						
Evidence of 1-3 vedolizumab doses received	13,680,515	37,455.2	N/A	N/A	N/A	135.90 (124.59, 148.23)
Evidence of 4-6 vedolizumab doses received	16,136,499	44,179.3	N/A	N/A	N/A	113.85 (104.33, 124.25)
Evidence of 7-9 vedolizumab doses received	11,169,070	30,579.2	N/A	N/A	N/A	105.30 (94.40, 117.45)
Evidence of 10+ vedolizumab doses	52,654,641	144,160.6	N/A	N/A	N/A	97.88 (92.90, 103.12)

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Incident cohort</b>						
Evidence of 1-3 vedolizumab doses received	8,337,696	22,827.4	N/A	N/A	N/A	142.37 (127.71, 158.72)
Evidence of 4-6 vedolizumab doses received	9,897,854	27,098.8	N/A	N/A	N/A	111.44 (99.56, 124.75)
Evidence of 7-9 vedolizumab doses received	6,730,365	18,426.7	N/A	N/A	N/A	100.40 (86.92, 115.96)
Evidence of 10+ vedolizumab doses	28,911,267	79,154.7	N/A	N/A	N/A	102.84 (96.01, 110.15)
<b>ILD background rate in CD: Incident cohort</b>						
Evidence of 1-3 vedolizumab doses received	6,203,986	16,985.6	N/A	N/A	N/A	137.18 (120.65, 155.97)
Evidence of 4-6 vedolizumab doses received	6,962,807	19,063.1	N/A	N/A	N/A	115.41 (101.12, 131.71)
Evidence of 7-9 vedolizumab doses received	4,849,425	13,277.0	N/A	N/A	N/A	112.98 (96.27, 132.58)
Evidence of 10+ vedolizumab doses	22,635,822	61,973.5	N/A	N/A	N/A	111.02 (103.02, 119.63)
<b>ILD background rate in UC: Incident cohort</b>						
Evidence of 1-3 vedolizumab doses received	7,943,509	21,748.1	N/A	N/A	N/A	155.42 (139.70, 172.90)
Evidence of 4-6 vedolizumab doses received	9,372,400	25,660.2	N/A	N/A	N/A	116.91 (104.40, 130.92)
Evidence of 7-9 vedolizumab doses received	6,388,885	17,491.8	N/A	N/A	N/A	108.62 (94.22, 125.22)
Evidence of 10+ vedolizumab doses	28,518,448	78,079.3	N/A	N/A	N/A	103.87 (96.96, 111.27)

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with IBD</b>						
Evidence of 1-3 vedolizumab doses received	972,583	2,662.8	N/A	N/A	N/A	315.46 (254.72, 390.68)
Evidence of 4-6 vedolizumab doses received	2,060,650	5,641.8	N/A	N/A	N/A	140.03 (112.32, 174.58)
Evidence of 7-9 vedolizumab doses received	2,030,833	5,560.1	N/A	N/A	N/A	129.49 (102.79, 163.14)
Evidence of 10+ vedolizumab doses	15,949,355	43,667.0	N/A	N/A	N/A	90.46 (81.96, 99.83)
<b>Vedolizumab Users with IBD: No extended at-risk period after the last claim</b>						
Evidence of 1-3 vedolizumab doses received	617,037	1,689.4	N/A	N/A	N/A	355.17 (275.76, 457.43)
Evidence of 4-6 vedolizumab doses received	1,595,634	4,368.6	N/A	N/A	N/A	119.03 (90.70, 156.21)
Evidence of 7-9 vedolizumab doses received	1,601,514	4,384.7	N/A	N/A	N/A	116.31 (88.40, 153.05)
Evidence of 10+ vedolizumab doses	11,867,972	32,492.7	N/A	N/A	N/A	86.48 (76.94, 97.21)
<b>Vedolizumab Users with IBD: No history of radiographic chest exam</b>						
Evidence of 1-3 vedolizumab doses received	703,474	1,926.0	N/A	N/A	N/A	212.88 (156.74, 289.11)
Evidence of 4-6 vedolizumab doses received	1,519,120	4,159.1	N/A	N/A	N/A	103.39 (76.68, 139.40)
Evidence of 7-9 vedolizumab doses received	1,518,231	4,156.7	N/A	N/A	N/A	93.82 (68.55, 128.42)
Evidence of 10+ vedolizumab doses	11,853,969	32,454.4	N/A	N/A	N/A	77.96 (68.92, 88.18)

**Table 7. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Vedolizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab Users with CD</b>						
Evidence of 1-3 vedolizumab doses received	668,092	1,829.1	N/A	N/A	N/A	306.16 (235.61, 397.82)
Evidence of 4-6 vedolizumab doses received	1,326,331	3,631.3	N/A	N/A	N/A	151.46 (116.28, 197.28)
Evidence of 7-9 vedolizumab doses received	1,316,300	3,603.8	N/A	N/A	N/A	144.29 (109.95, 189.36)
Evidence of 10+ vedolizumab doses	10,537,212	28,849.3	N/A	N/A	N/A	102.95 (91.88, 115.35)
<b>Vedolizumab Users with UC</b>						
Evidence of 1-3 vedolizumab doses received	615,418	1,684.9	N/A	N/A	N/A	367.97 (286.88, 471.97)
Evidence of 4-6 vedolizumab doses received	1,358,032	3,718.1	N/A	N/A	N/A	142.55 (108.90, 186.59)
Evidence of 7-9 vedolizumab doses received	1,342,966	3,676.8	N/A	N/A	N/A	127.83 (96.04, 170.13)
Evidence of 10+ vedolizumab doses	10,684,317	29,252.1	N/A	N/A	N/A	85.12 (75.18, 96.38)

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

N/A = Not Applicable



**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
Evidence of 1-3 natalizumab doses received	481	481	41,476	41,476	N/A	N/A	26
Evidence of 4-6 natalizumab doses received	267	267	20,769	20,769	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	166	166	12,288	12,288	N/A	N/A	*****
Evidence of 10+ natalizumab doses	1,051	1,051	58,406	58,406	N/A	N/A	62
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
Evidence of 1-3 natalizumab doses received	376	376	38,130	38,130	N/A	N/A	21
Evidence of 4-6 natalizumab doses received	216	216	19,494	19,494	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	128	128	11,605	11,605	N/A	N/A	*****
Evidence of 10+ natalizumab doses	738	738	51,952	51,952	N/A	N/A	34
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
Evidence of 1-3 natalizumab doses received	191	191	3,160	3,160	N/A	N/A	13
Evidence of 4-6 natalizumab doses received	116	116	1,201	1,201	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	81	81	741	741	N/A	N/A	*****
Evidence of 10+ natalizumab doses	497	497	6,158	6,158	N/A	N/A	33

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>ILD background rate in IBD: Incident cohort</b>							
Evidence of 1-3 natalizumab doses received	200	200	4,758	4,758	N/A	N/A	*****
Evidence of 4-6 natalizumab doses received	104	104	1,549	1,549	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	78	78	998	998	N/A	N/A	*****
Evidence of 10+ natalizumab doses	610	610	9,552	9,552	N/A	N/A	37
<b>ILD background rate in CD: Incident cohort</b>							
Evidence of 1-3 natalizumab doses received	129	129	4,057	4,057	N/A	N/A	*****
Evidence of 4-6 natalizumab doses received	78	78	1,479	1,479	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	49	49	805	805	N/A	N/A	*****
Evidence of 10+ natalizumab doses	371	371	6,689	6,689	N/A	N/A	15
<b>ILD background rate in UC: Incident cohort</b>							
Evidence of 1-3 natalizumab doses received	141	141	1,101	1,101	N/A	N/A	11
Evidence of 4-6 natalizumab doses received	76	76	485	485	N/A	N/A	*****
Evidence of 7-9 natalizumab doses received	64	64	411	411	N/A	N/A	*****
Evidence of 10+ natalizumab doses	389	389	3,935	3,935	N/A	N/A	25

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with IBD</b>							
Evidence of 1-3 natalizumab doses received	218	221	462	462	22,674	667	*****
Evidence of 4-6 natalizumab doses received	122	124	518	518	26,160	930	0
Evidence of 7-9 natalizumab doses received	80	80	534	534	28,342	658	0
Evidence of 10+ natalizumab doses	367	397	7,735	7,735	406,355	11,901	*****
<b>Natalizumab Users with IBD: No episode extension</b>							
Evidence of 1-3 natalizumab doses received	218	221	450	450	12,001	772	*****
Evidence of 4-6 natalizumab doses received	122	124	504	504	13,772	1,128	0
Evidence of 7-9 natalizumab doses received	80	80	486	486	13,454	709	0
Evidence of 10+ natalizumab doses	367	397	6,574	6,574	182,427	12,854	*****
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>							
Evidence of 1-3 natalizumab doses received	142	144	300	300	14,633	478	0
Evidence of 4-6 natalizumab doses received	79	81	322	322	16,256	636	0
Evidence of 7-9 natalizumab doses received	57	57	389	389	20,572	465	0
Evidence of 10+ natalizumab doses	265	282	5,850	5,850	305,820	9,445	*****

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab Users with CD</b>							
Evidence of 1-3 natalizumab doses received	176	177	378	378	18,614	504	*****
Evidence of 4-6 natalizumab doses received	93	94	393	393	19,725	733	0
Evidence of 7-9 natalizumab doses received	60	60	384	384	20,467	472	0
Evidence of 10+ natalizumab doses	269	290	5,667	5,667	297,197	8,576	*****
<b>Natalizumab Users with UC</b>							
Evidence of 1-3 natalizumab doses received	88	90	193	193	9,301	294	0
Evidence of 4-6 natalizumab doses received	58	59	263	263	13,433	353	0
Evidence of 7-9 natalizumab doses received	41	41	292	292	15,341	422	0
Evidence of 10+ natalizumab doses	172	187	3,645	3,645	189,678	6,446	0

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>						
Evidence of 1-3 natalizumab doses received	822,128	2,250.9	N/A	N/A	N/A	115.51 (78.65, 169.65)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	71.90 (37.41, 138.18)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	45.18 (16.96, 120.39)
Evidence of 10+ natalizumab doses	2,203,772	6,033.6	N/A	N/A	N/A	102.76 (80.11, 131.80)
<b>ILD background rate in CD: Prevalent cohort</b>						
Evidence of 1-3 natalizumab doses received	668,139	1,829.3	N/A	N/A	N/A	114.80 (74.85, 176.07)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	75.54 (37.78, 151.06)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	41.84 (13.49, 129.72)
Evidence of 10+ natalizumab doses	1,525,387	4,176.3	N/A	N/A	N/A	81.41 (58.17, 113.94)
<b>ILD background rate in UC: Prevalent cohort</b>						
Evidence of 1-3 natalizumab doses received	313,791	859.1	N/A	N/A	N/A	151.32 (87.86, 260.60)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	77.81 (29.20, 207.32)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	79.63 (25.68, 246.90)
Evidence of 10+ natalizumab doses	1,077,524	2,950.1	N/A	N/A	N/A	111.86 (79.52, 157.35)

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Incident cohort</b>						
Evidence of 1-3 natalizumab doses received	*****	*****	N/A	N/A	N/A	87.39 (41.66, 183.32)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	47.49 (11.88, 189.89)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	52.45 (13.12, 209.74)
Evidence of 10+ natalizumab doses	1,246,689	3,413.2	N/A	N/A	N/A	108.40 (78.54, 149.61)
<b>ILD background rate in CD: Incident cohort</b>						
Evidence of 1-3 natalizumab doses received	*****	*****	N/A	N/A	N/A	55.42 (17.87, 171.82)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	29.41 (4.14, 208.79)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	38.22 (5.38, 271.32)
Evidence of 10+ natalizumab doses	730,846	2,000.9	N/A	N/A	N/A	74.96 (45.19, 124.35)
<b>ILD background rate in UC: Incident cohort</b>						
Evidence of 1-3 natalizumab doses received	218,720	598.8	N/A	N/A	N/A	183.69 (101.73, 331.70)
Evidence of 4-6 natalizumab doses received	*****	*****	N/A	N/A	N/A	66.67 (16.67, 266.58)
Evidence of 7-9 natalizumab doses received	*****	*****	N/A	N/A	N/A	105.30 (33.96, 326.50)
Evidence of 10+ natalizumab doses	853,414	2,336.5	N/A	N/A	N/A	107.00 (72.30, 158.35)

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with IBD</b>						
Evidence of 1-3 natalizumab doses received	*****	*****	N/A	N/A	N/A	226.89 (31.96, 1,610.78)
Evidence of 4-6 natalizumab doses received	16,036	43.9	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 7-9 natalizumab doses received	14,890	40.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 10+ natalizumab doses	*****	*****	N/A	N/A	N/A	73.06 (27.42, 194.67)
<b>Natalizumab Users with IBD: No episode extension</b>						
Evidence of 1-3 natalizumab doses received	*****	*****	N/A	N/A	N/A	338.35 (47.66, 2,402.07)
Evidence of 4-6 natalizumab doses received	12,985	35.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 7-9 natalizumab doses received	11,785	32.3	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 10+ natalizumab doses	*****	*****	N/A	N/A	N/A	46.29 (11.58, 185.11)
<b>Natalizumab Users with IBD: No history of radiographic chest exam</b>						
Evidence of 1-3 natalizumab doses received	10,317	28.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 4-6 natalizumab doses received	10,458	28.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 7-9 natalizumab doses received	10,843	29.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 10+ natalizumab doses	*****	*****	N/A	N/A	N/A	50.06 (12.52, 200.17)

**Table 8. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Natalizumab Doses Received**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab Users with CD</b>						
Evidence of 1-3 natalizumab doses received	*****	*****	N/A	N/A	N/A	277.44 (39.08, 1,969.64)
Evidence of 4-6 natalizumab doses received	12,279	33.6	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 7-9 natalizumab doses received	11,156	30.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 10+ natalizumab doses	*****	*****	N/A	N/A	N/A	100.75 (37.81, 268.44)
<b>Natalizumab Users with UC</b>						
Evidence of 1-3 natalizumab doses received	6,597	18.1	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 4-6 natalizumab doses received	7,731	21.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 7-9 natalizumab doses received	7,487	20.5	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 10+ natalizumab doses	96,207	263.4	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

N/A = Not Applicable



**Table 9. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Interstitial lung disease (ILD) background rate in inflammatory bowel disease (IBD): Prevalent cohort</b>							
Evidence of <1 year of IBD history	3,247,371	3,247,371	42,524,619	42,524,619	N/A	N/A	176,097
Evidence of 1-<2 years of IBD history	123,951	123,951	2,196,411	2,196,411	N/A	N/A	5,612
Evidence of >= 2 years of IBD history	86,442	86,442	1,354,761	1,354,761	N/A	N/A	2,895
<b>ILD background rate in Crohn's disease (CD): Prevalent cohort</b>							
Evidence of <1 year of IBD history	1,440,455	1,440,455	24,070,319	24,070,319	N/A	N/A	75,233
Evidence of 1-<2 years of IBD history	91,270	91,270	1,502,091	1,502,091	N/A	N/A	4,515
Evidence of >= 2 years of IBD history	109,839	109,839	1,315,663	1,315,663	N/A	N/A	4,601
<b>ILD background rate in ulcerative colitis (UC): Prevalent cohort</b>							
Evidence of <1 year of IBD history	1,939,503	1,939,503	17,108,068	17,108,068	N/A	N/A	109,189
Evidence of 1-<2 years of IBD history	105,959	105,959	1,145,345	1,145,345	N/A	N/A	5,263
Evidence of >= 2 years of IBD history	118,809	118,809	805,223	805,223	N/A	N/A	5,634
<b>ILD background rate in IBD: Incident cohort</b>							
Evidence of <1 year of IBD history	2,505,771	2,505,771	19,561,211	19,561,211	N/A	N/A	142,362
Evidence of 1-<2 years of IBD history	1,003	1,003	15,362	15,362	N/A	N/A	67
Evidence of >= 2 years of IBD history	1,048	1,048	10,337	10,337	N/A	N/A	38
<b>ILD background rate in CD: Incident cohort</b>							
Evidence of <1 year of IBD history	1,027,947	1,027,947	9,021,584	9,021,584	N/A	N/A	56,102
Evidence of 1-<2 years of IBD history	32,856	32,856	302,707	302,707	N/A	N/A	1,852
Evidence of >= 2 years of IBD history	63,495	63,495	453,267	453,267	N/A	N/A	3,334
<b>ILD background rate in UC: Incident cohort</b>							
Evidence of <1 year of IBD history	1,604,999	1,604,999	10,246,504	10,246,504	N/A	N/A	94,247
Evidence of 1-<2 years of IBD history	34,333	34,333	186,435	186,435	N/A	N/A	2,003
Evidence of >= 2 years of IBD history	69,072	69,072	283,625	283,625	N/A	N/A	3,645

**Table 9. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Total Number of Events	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member- Days <sup>1</sup>	Total Eligible Member- Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>ILD background rate in IBD: Prevalent cohort</b>							
Evidence of <1 year of IBD history	712,419	4,261,568,901	11,667,539.8	N/A	N/A	N/A	150.93 (150.23, 151.64)
Evidence of 1-<2 years of IBD history	23,349	176,657,549	483,662.0	N/A	N/A	N/A	116.03 (113.04, 119.11)
Evidence of >= 2 years of IBD history	101,444,912	277,741.0	N/A	N/A	N/A	N/A	104.23 (100.51, 108.10)
<b>ILD background rate in CD: Prevalent cohort</b>							
Evidence of <1 year of IBD history	304,005	1,918,942,387	5,253,777.9	N/A	N/A	N/A	143.20 (142.18, 144.22)
Evidence of 1-<2 years of IBD history	19,387	128,282,084	351,217.2	N/A	N/A	N/A	128.55 (124.86, 132.36)
Evidence of >= 2 years of IBD history	132,332,999	362,308.0	N/A	N/A	N/A	N/A	126.99 (123.37, 130.71)
<b>ILD background rate in UC: Prevalent cohort</b>							
Evidence of <1 year of IBD history	444,943	2,560,894,675	7,011,347.5	N/A	N/A	N/A	155.73 (154.81, 156.66)
Evidence of 1-<2 years of IBD history	22,857	155,433,118	425,552.7	N/A	N/A	N/A	123.67 (120.38, 127.06)
Evidence of >= 2 years of IBD history	148,974,760	407,870.7	N/A	N/A	N/A	N/A	138.13 (134.57, 141.79)
<b>ILD background rate in IBD: Incident cohort</b>							
Evidence of <1 year of IBD history	562,424	3,250,899,254	8,900,477.1	N/A	N/A	N/A	159.95 (159.12, 160.78)
Evidence of 1-<2 years of IBD history	220	1,073,664	2,939.5	N/A	N/A	N/A	227.93 (179.39, 289.59)
Evidence of >= 2 years of IBD history	950,128	2,601.3	N/A	N/A	N/A	N/A	146.08 (106.29, 200.76)
<b>ILD background rate in CD: Incident cohort</b>							
Evidence of <1 year of IBD history	221,188	1,363,487,610	3,733,025.6	N/A	N/A	N/A	150.29 (149.05, 151.53)
Evidence of 1-<2 years of IBD history	8,126	47,641,652	130,435.7	N/A	N/A	N/A	141.99 (135.66, 148.60)
Evidence of >= 2 years of IBD history	81,304,892	222,600.7	N/A	N/A	N/A	N/A	149.77 (144.78, 154.95)
<b>ILD background rate in UC: Incident cohort</b>							
Evidence of <1 year of IBD history	376,185	2,097,490,662	5,742,616.5	N/A	N/A	N/A	164.12 (163.07, 165.17)
Evidence of 1-<2 years of IBD history	8,872	49,421,341	135,308.3	N/A	N/A	N/A	148.03 (141.69, 154.66)
Evidence of >= 2 years of IBD history	86,409,843	236,577.3	N/A	N/A	N/A	N/A	154.07 (149.15, 159.16)

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

N/A = Not Applicable

**Table 10. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Vedolizumab users with IBD</b>							
Evidence of <1 year of IBD history	10,897	10,899	131,346	131,346	14,906,287	161,538	132
Evidence of 1-<2 years of IBD history	7,504	7,507	97,016	97,016	11,071,885	133,471	84
Evidence of ≥2 years of IBD history	24,425	25,118	341,765	341,767	39,407,841	334,899	414
<b>Vedolizumab users with IBD: No extended at-risk period after the last claim</b>							
Evidence of <1 year of IBD history	10,897	10,899	111,877	111,877	5,964,461	200,139	103
Evidence of 1-<2 years of IBD history	7,504	7,507	81,295	81,295	4,350,787	146,301	63
Evidence of ≥2 years of IBD history	24,425	25,118	279,217	279,218	15,000,095	299,598	278
<b>Vedolizumab users with IBD: No history of radiographic chest exam</b>							
Evidence of <1 year of IBD history	7,911	7,912	96,712	96,712	10,960,997	123,318	74
Evidence of 1-<2 years of IBD history	5,639	5,640	74,118	74,118	8,456,539	91,801	54
Evidence of ≥2 years of IBD history	18,209	18,626	260,597	260,599	30,048,416	239,811	248
<b>Vedolizumab users with Crohn's disease (CD)</b>							
Evidence of <1 year of IBD history	5,896	5,896	68,639	68,639	7,791,111	68,728	80
Evidence of 1-<2 years of IBD history	4,512	4,513	56,295	56,295	6,418,988	97,034	57
Evidence of ≥2 years of IBD history	17,602	18,164	239,598	239,600	27,633,584	222,770	323
<b>Vedolizumab users with ulcerative colitis (UC)</b>							
Evidence of <1 year of IBD history	6,921	6,923	85,812	85,812	9,735,099	113,343	79
Evidence of 1-<2 years of IBD history	4,879	4,881	65,126	65,126	7,427,491	58,379	49
Evidence of ≥2 years of IBD history	16,436	16,858	237,100	237,101	27,362,214	235,884	283

**Table 10. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Number of Patients	Number of Exposure Episodes	Number of Exposure Episode Defining-Dispensings (Adjusted for Same-Day Dispensings)	Number of Exposure Episode Defining-Dispensings (Not Adjusted for Same-Day Dispensings)	Total Days Supply During Exposure Episodes	Number of Units of Drug Dispensed During Exposure Episodes	Number of Exposure Episodes with an Event
<b>Natalizumab users with IBD</b>							
Evidence of <1 year of IBD history	223	224	2,318	2,318	121,856	3,264	*****
Evidence of 1-<2 years of IBD history	191	191	2,354	2,354	121,354	4,263	*****
Evidence of ≥2 years of IBD history	368	407	4,577	4,577	240,321	6,628	*****
<b>Natalizumab users with IBD: No episode extension</b>							
Evidence of <1 year of IBD history	223	224	2,059	2,059	56,955	3,466	*****
Evidence of 1-<2 years of IBD history	191	191	2,116	2,116	58,686	5,027	*****
Evidence of ≥2 years of IBD history	368	407	3,839	3,839	106,013	6,969	0
<b>Natalizumab users with IBD: No history of radiographic chest exam</b>							
Evidence of <1 year of IBD history	150	151	1,682	1,682	87,868	2,577	*****
Evidence of 1-<2 years of IBD history	133	133	1,861	1,861	95,237	3,574	*****
Evidence of ≥2 years of IBD history	257	280	3,318	3,318	174,176	4,872	0
<b>Natalizumab users with CD</b>							
Evidence of <1 year of IBD history	155	155	1,580	1,580	83,136	2,214	*****
Evidence of 1-<2 years of IBD history	148	148	1,804	1,804	92,939	3,183	*****
Evidence of ≥2 years of IBD history	290	318	3,438	3,438	179,928	4,888	*****
<b>Natalizumab users with UC</b>							
Evidence of <1 year of IBD history	94	95	979	979	51,275	1,373	0
Evidence of 1-<2 years of IBD history	83	83	1,057	1,057	53,270	2,344	0
Evidence of ≥2 years of IBD history	178	199	2,357	2,357	123,208	3,797	0

**Table 10. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Vedolizumab users with IBD</b>						
Evidence of <1 year of IBD history	4,567,109	12,504.1	N/A	N/A	N/A	105.57 (89.01, 125.20)
Evidence of 1-<2 years of IBD history	3,543,867	9,702.6	N/A	N/A	N/A	86.57 (69.91, 107.22)
Evidence of ≥2 years of IBD history	12,902,445	35,325.0	N/A	N/A	N/A	117.20 (106.43, 129.05)
<b>Vedolizumab users with IBD: No extended at-risk period after the last claim</b>						
Evidence of <1 year of IBD history	3,489,368	9,553.4	N/A	N/A	N/A	107.82 (88.88, 130.78)
Evidence of 1-<2 years of IBD history	2,669,554	7,308.8	N/A	N/A	N/A	86.20 (67.34, 110.34)
Evidence of ≥2 years of IBD history	9,523,235	26,073.2	N/A	N/A	N/A	106.62 (94.80, 119.92)
<b>Vedolizumab users with IBD: No history of radiographic chest exam</b>						
Evidence of <1 year of IBD history	3,308,483	9,058.1	N/A	N/A	N/A	81.69 (65.05, 102.60)
Evidence of 1-<2 years of IBD history	2,663,256	7,291.6	N/A	N/A	N/A	74.06 (56.72, 96.70)
Evidence of ≥2 years of IBD history	9,623,055	26,346.5	N/A	N/A	N/A	94.13 (83.11, 106.61)
<b>Vedolizumab users with CD</b>						
Evidence of <1 year of IBD history	2,467,654	6,756.1	N/A	N/A	N/A	118.41 (95.11, 147.42)
Evidence of 1-<2 years of IBD history	2,114,434	5,789.0	N/A	N/A	N/A	98.46 (75.95, 127.65)
Evidence of ≥2 years of IBD history	9,265,847	25,368.5	N/A	N/A	N/A	127.32 (114.17, 141.99)
<b>Vedolizumab users with UC</b>						
Evidence of <1 year of IBD history	2,918,037	7,989.1	N/A	N/A	N/A	98.88 (79.32, 123.28)
Evidence of 1-<2 years of IBD history	2,321,120	6,354.9	N/A	N/A	N/A	77.11 (58.28, 102.02)
Evidence of ≥2 years of IBD history	8,761,576	23,987.9	N/A	N/A	N/A	117.98 (105.00, 132.55)

**Table 10. Summary of Exposures of Interest in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023, by Length of Inflammatory Bowel Disease (IBD) History**

	Total Days at Risk	Total Years at Risk	Number of Eligible Members <sup>1</sup>	Total Eligible Member-Days <sup>1</sup>	Total Eligible Member-Years <sup>1</sup>	Event Rate per 10,000 Patient-Years at Risk (95% Confidence Interval)
<b>Natalizumab users with IBD</b>						
Evidence of <1 year of IBD history	*****	*****	N/A	N/A	N/A	117.74 (29.45, 470.81)
Evidence of 1-<2 years of IBD history	*****	*****	N/A	N/A	N/A	110.84 (27.72, 443.18)
Evidence of ≥2 years of IBD history	*****	*****	N/A	N/A	N/A	30.68 (4.32, 217.82)
<b>Natalizumab users with IBD: No episode extension</b>						
Evidence of <1 year of IBD history	*****	*****	N/A	N/A	N/A	74.16 (10.45, 526.50)
Evidence of 1-<2 years of IBD history	*****	*****	N/A	N/A	N/A	133.94 (33.50, 535.57)
Evidence of ≥2 years of IBD history	89,572	245.2	N/A	N/A	N/A	0.00 (0.00, 0.00)
<b>Natalizumab users with IBD: No history of radiographic chest exam</b>						
Evidence of <1 year of IBD history	*****	*****	N/A	N/A	N/A	84.48 (11.90, 599.74)
Evidence of 1-<2 years of IBD history	*****	*****	N/A	N/A	N/A	72.50 (10.21, 514.74)
Evidence of ≥2 years of IBD history	83,931	229.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
<b>Natalizumab users with CD</b>						
Evidence of <1 year of IBD history	*****	*****	N/A	N/A	N/A	176.53 (44.15, 705.86)
Evidence of 1-<2 years of IBD history	*****	*****	N/A	N/A	N/A	146.07 (36.53, 584.06)
Evidence of ≥2 years of IBD history	*****	*****	N/A	N/A	N/A	40.48 (5.70, 287.41)
<b>Natalizumab users with UC</b>						
Evidence of <1 year of IBD history	26,566	72.7	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of 1-<2 years of IBD history	30,599	83.8	N/A	N/A	N/A	0.00 (0.00, 0.00)
Evidence of ≥2 years of IBD history	60,857	166.6	N/A	N/A	N/A	0.00 (0.00, 0.00)

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

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

N/A = Not Applicable

**Table 11a. Summary of Episode-Level<sup>1</sup> Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Vedolizumab Users with Inflammatory Bowel Disease (IBD)		Vedolizumab Users with Inflammatory Bowel Disease: No Extended At-Risk Period After the Last Claim		Vedolizumab Users with Inflammatory Bowel Disease: No History of Radiographic Chest Exam		Vedolizumab Users with Crohn's Disease (CD)		Vedolizumab Users with Ulcerative Colitis (UC)	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>										
Enrolled at any point during the query period	384,214,993	N/A	384,214,993	N/A	384,214,993	N/A	384,214,993	N/A	384,214,993	N/A
Had required coverage type (medical and/or drug coverage)	284,118,754	100,096,239	284,118,754	100,096,239	284,118,754	100,096,239	284,118,754	100,096,239	284,118,754	100,096,239
Enrolled during specified age range	222,464,518	61,654,236	222,464,518	61,654,236	222,464,518	61,654,236	222,464,518	61,654,236	222,464,518	61,654,236
Had requestable medical charts	222,464,518	0	222,464,518	0	222,464,518	0	222,464,518	0	222,464,518	0
Met demographic requirements (sex, race, and Hispanic origin)	222,342,362	122,156	222,342,362	122,156	222,342,362	122,156	222,342,362	122,156	222,342,362	122,156
<b>Members with a valid index event</b>										
Had any cohort-defining claim during the query period	77,776	222,264,586	77,776	222,264,586	77,776	222,264,586	77,776	222,264,586	77,776	222,264,586
<b>Cohort episodes with a valid index date</b>										
Total number of claims with cohort-identifying codes during the query period	927,938	N/A	927,938	N/A	927,938	N/A	927,938	N/A	927,938	N/A
Claim recorded during specified age range	920,653	7,285	920,653	7,285	920,653	7,285	920,653	7,285	920,653	7,285
Episode defining index claim recorded during the query period	87,202	833,451	116,374	804,279	87,202	833,451	87,202	833,451	87,202	833,451
<b>Cohort episodes with required pre-index history</b>										
Had sufficient pre-index continuous enrollment	59,567	27,635	87,302	29,072	59,567	27,635	59,567	27,635	59,567	27,635
Met inclusion and exclusion criteria <sup>2</sup>	45,466	14,101	45,466	41,836	33,096	26,471	29,986	29,581	29,986	29,581
Evidence of amiodarone	N/A	679	N/A	1,038	N/A	679	N/A	679	N/A	679
Evidence of atezolizumab	N/A	*****	N/A	12	N/A	*****	N/A	*****	N/A	*****
Evidence of avelumab	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of azathioprine	N/A	3,855	N/A	5,087	N/A	3,855	N/A	3,855	N/A	3,855
Evidence of bleomycin	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of cemiplimab	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of chest exam	N/A	N/A	N/A	N/A	N/A	16,413	N/A	N/A	N/A	N/A
Evidence of cyclophosphamide	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of dostarlimab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of durvalumab	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of ipilimumab	N/A	114	N/A	116	N/A	114	N/A	114	N/A	114
Evidence of methotrexate	N/A	1,696	N/A	2,361	N/A	1,696	N/A	1,696	N/A	1,696

**Table 11a. Summary of Episode-Level<sup>1</sup> Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Vedolizumab Users with Inflammatory Bowel Disease (IBD)		Vedolizumab Users with Inflammatory Bowel Disease: No Extended At-Risk Period After the Last Claim		Vedolizumab Users with Inflammatory Bowel Disease: No History of Radiographic Chest Exam		Vedolizumab Users with Crohn's Disease (CD)		Vedolizumab Users with Ulcerative Colitis (UC)	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Evidence of natalizumab	N/A	100	N/A	116	N/A	100	N/A	100	N/A	100
Evidence of nivolumab	N/A	231	N/A	258	N/A	231	N/A	231	N/A	231
Evidence of pembrolizumab	N/A	114	N/A	132	N/A	114	N/A	114	N/A	114
Evidence of retifanlimab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of sulfasalazine	N/A	1,232	N/A	1,634	N/A	1,232	N/A	1,232	N/A	1,232
Evidence of TK inhibitors	N/A	65	N/A	97	N/A	65	N/A	65	N/A	65
Evidence of tremelimumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of vedolizumab antibody assessment CPT code	N/A	239	N/A	1,039	N/A	239	N/A	239	N/A	239
Evidence of vedolizumab	N/A	6,275	N/A	34,010	N/A	6,275	N/A	6,275	N/A	6,275
No evidence of CD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19,990	N/A	N/A
No evidence of IBD	N/A	949	N/A	1,094	N/A	949	N/A	N/A	N/A	N/A
No evidence of UC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21,199
Met event incidence criteria	43,524	1,942	43,524	1,942	32,178	918	28,573	1,413	28,662	1,324
Had sufficient post-index continuous enrollment	43,524	0	43,524	0	32,178	0	28,573	0	28,662	0
Met minimum days' supply criteria	43,524	0	43,524	0	32,178	0	28,573	0	28,662	0
Met minimum episode duration criteria	43,524	0	43,524	0	32,178	0	28,573	0	28,662	0
Episode duration was longer than blackout period	43,524	0	43,524	0	32,178	0	28,573	0	28,662	0
Did not have an event during blackout period	43,524	0	43,524	0	32,178	0	28,573	0	28,662	0
<b>Final cohort</b>										
Number of members	42,364	N/A	42,364	N/A	31,453	N/A	27,684	N/A	27,994	N/A
Number of episodes	43,524	N/A	43,524	N/A	32,178	N/A	28,573	N/A	28,662	N/A



**Table 11a. Summary of Episode-Level<sup>1</sup> Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Natalizumab Users with Inflammatory Bowel Disease		Natalizumab Users with Inflammatory Bowel Disease: No Episode Extension		Natalizumab Users with Inflammatory Bowel Disease: No History of Radiographic Chest Exam		Natalizumab Users with Crohn's Disease		Natalizumab Users with Ulcerative Colitis	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>										
Enrolled at any point during the query period	469,573,642	N/A	469,573,642	N/A	469,573,642	N/A	469,573,642	N/A	469,573,642	N/A
Had required coverage type (medical and/or drug coverage)	344,090,363	125,483,279	344,090,363	125,483,279	344,090,363	125,483,279	344,090,363	125,483,279	344,090,363	125,483,279
Enrolled during specified age range	278,530,120	65,560,243	278,530,120	65,560,243	278,530,120	65,560,243	278,530,120	65,560,243	278,530,120	65,560,243
Had requestable medical charts	278,530,120	0	278,530,120	0	278,530,120	0	278,530,120	0	278,530,120	0
Met demographic requirements (sex, race, and Hispanic origin)	278,322,735	207,385	278,322,735	207,385	278,322,735	207,385	278,322,735	207,385	278,322,735	207,385
<b>Members with a valid index event</b>										
Had any cohort-defining claim during the query period	53,044	278,269,691	53,044	278,269,691	53,044	278,269,691	53,044	278,269,691	53,044	278,269,691
<b>Cohort episodes with a valid index date</b>										
Total number of claims with cohort-identifying codes during the query period	1,231,859	N/A	1,231,859	N/A	1,231,859	N/A	1,231,859	N/A	1,231,859	N/A
Claim recorded during specified age range	1,229,759	2,100	1,229,759	2,100	1,229,759	2,100	1,229,759	2,100	1,229,759	2,100
Episode defining index claim recorded during the query period	120,127	1,109,632	159,803	1,069,956	120,127	1,109,632	120,127	1,109,632	120,127	1,109,632
<b>Cohort episodes with required pre-index history</b>										
Had sufficient pre-index continuous enrollment	83,535	36,592	120,071	39,732	83,535	36,592	83,535	36,592	83,535	36,592
Met inclusion and exclusion criteria <sup>2</sup>	850	82,685	850	119,221	575	82,960	639	82,896	394	83,141
Evidence of amiodarone	N/A	162	N/A	253	N/A	162	N/A	162	N/A	162
Evidence of atezolizumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of avelumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of azathioprine	N/A	42	N/A	48	N/A	42	N/A	42	N/A	42
Evidence of bleomycin	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of cemiplimab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of chest exam	N/A	N/A	N/A	N/A	N/A	15,346	N/A	N/A	N/A	N/A
Evidence of cyclophosphamide	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of dostarlimab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of durvalumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of ipilimumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of methotrexate	N/A	91	N/A	108	N/A	91	N/A	91	N/A	91

**Table 11a. Summary of Episode-Level<sup>1</sup> Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Natalizumab Users with Inflammatory Bowel Disease		Natalizumab Users with Inflammatory Bowel Disease: No Episode Extension		Natalizumab Users with Inflammatory Bowel Disease: No History of Radiographic Chest Exam		Natalizumab Users with Crohn's Disease		Natalizumab Users with Ulcerative Colitis	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
Evidence of natalizumab	N/A	54,725	N/A	91,261	N/A	54,725	N/A	54,725	N/A	54,725
Evidence of nivolumab	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of pembrolizumab	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of retifanlimab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of sulfasalazine	N/A	63	N/A	93	N/A	63	N/A	63	N/A	63
Evidence of TK inhibitors	N/A	16	N/A	24	N/A	16	N/A	16	N/A	16
Evidence of tremelimumab	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Evidence of vedolizumab antibody assessment CPT code	N/A	*****	N/A	*****	N/A	*****	N/A	*****	N/A	*****
Evidence of vedolizumab	N/A	39	N/A	42	N/A	39	N/A	39	N/A	39
No evidence of CD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	81,780	N/A	N/A
No evidence of IBD	N/A	81,054	N/A	116,568	N/A	81,054	N/A	N/A	N/A	N/A
No evidence of UC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	82,351
Met event incidence criteria	822	28	822	28	564	11	621	18	377	17
Had sufficient post-index continuous enrollment	822	0	822	0	564	0	621	0	377	0
Met minimum days' supply criteria	822	0	822	0	564	0	621	0	377	0
Met minimum episode duration criteria	822	0	822	0	564	0	621	0	377	0
Episode duration was longer than blackout period	822	0	822	0	564	0	621	0	377	0
Did not have an event during blackout period	822	0	822	0	564	0	621	0	377	0
<b>Final cohort</b>										
Number of members	754	N/A	754	N/A	524	N/A	575	N/A	344	N/A
Number of episodes	822	N/A	822	N/A	564	N/A	621	N/A	377	N/A

<sup>1</sup>Cohorts are formed by first evaluating enrollment and demographic requirements as well as index events among members, then evaluating index dates, pre-index history, and post-index follow-up among episodes. Because of this, the number remaining often increases from the member- to episode-level steps.

<sup>2</sup>Episodes can meet multiple inclusion and/or exclusion criteria; therefore, the total number of episodes excluded overall may not equal the sum of all episodes in each criterion.

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

N/A = Not Applicable

**Table 11b. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Interstitial Lung Disease Background Rate in Inflammatory Bowel Disease: Prevalent Cohort		Interstitial Lung Disease Background Rate in Crohn's Disease: Prevalent Cohort		Interstitial Lung Disease Background Rate in Ulcerative Colitis: Prevalent Cohort	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>						
Enrolled at any point during the query period	476,013,417	N/A	476,013,417	N/A	476,013,417	N/A
Had required coverage type (medical and/or drug coverage)	451,655,117	24,358,300	451,655,117	24,358,300	451,655,117	24,358,300
Enrolled during specified age range	374,682,143	76,972,974	374,682,143	76,972,974	374,682,143	76,972,974
Had requestable medical charts	374,682,143	0	374,682,143	0	374,682,143	0
Met demographic requirements (sex, race, and Hispanic origin)	374,365,313	316,830	374,365,313	316,830	374,365,313	316,830
<b>Members with a valid index event</b>						
Had any cohort-defining claim during the query period	4,084,950	370,280,363	1,950,845	372,414,468	2,559,550	371,805,763
Claim recorded during specified age range	4,040,977	43,973	1,918,348	32,497	2,537,563	21,987
Episode defining index claim recorded during the query period	4,040,977	0	1,918,348	0	2,537,563	0
<b>Members with required pre-index history</b>						
Had sufficient pre-index continuous enrollment	3,591,498	449,479	1,694,066	224,282	2,258,609	278,954
Met inclusion and exclusion criteria	3,591,498	0	1,694,066	0	2,258,609	0
Met event incidence criteria	3,457,764	133,734	1,641,564	52,502	2,164,271	94,338
Had sufficient post-index continuous enrollment	3,457,764	0	1,641,564	0	2,164,271	0
Had index episode of at least required length	3,457,764	0	1,641,564	0	2,164,271	0
Had index episode longer than blackout period	3,457,764	0	1,641,564	0	2,164,271	0
Did not have an event during blackout period	3,457,764	0	1,641,564	0	2,164,271	0
<b>Final cohort</b>						
Number of members	3,457,764	N/A	1,641,564	N/A	2,164,271	N/A
Number of episodes	3,457,764	N/A	1,641,564	N/A	2,164,271	N/A

**Table 11b. Summary of Patient-Level Cohort Attrition in the Sentinel Distributed Database (SDD) from January 1, 2006 to April 30, 2023**

	Interstitial Lung Disease Background Rate in Inflammatory Bowel Disease: Incident Cohort		Interstitial Lung Disease Background Rate in Crohn's Disease: Incident Cohort		Interstitial Lung Disease Background Rate in Ulcerative Colitis: Incident Cohort	
	Remaining	Excluded	Remaining	Excluded	Remaining	Excluded
<b>Members meeting enrollment and demographic requirements</b>						
Enrolled at any point during the query period	476,013,417	N/A	476,013,417	N/A	476,013,417	N/A
Had required coverage type (medical and/or drug coverage)	451,655,117	24,358,300	451,655,117	24,358,300	451,655,117	24,358,300
Enrolled during specified age range	374,682,143	76,972,974	374,682,143	76,972,974	374,682,143	76,972,974
Had requestable medical charts	374,682,143	0	374,682,143	0	374,682,143	0
Met demographic requirements (sex, race, and Hispanic origin)	374,365,313	316,830	374,365,313	316,830	374,365,313	316,830
<b>Members with a valid index event</b>						
Had any cohort-defining claim during the query period	4,084,950	370,280,363	1,950,845	372,414,468	2,559,550	371,805,763
Claim recorded during specified age range	4,040,977	43,973	1,918,348	32,497	2,537,563	21,987
Episode defining index claim recorded during the query period	4,003,345	37,632	1,892,825	25,523	2,523,345	14,218
<b>Members with required pre-index history</b>						
Had sufficient pre-index continuous enrollment	2,630,071	1,373,274	1,170,864	721,961	1,796,726	726,619
Met inclusion and exclusion criteria	2,630,071	0	1,170,864	0	1,796,726	0
Met event incidence criteria	2,507,822	122,249	1,124,298	46,566	1,708,404	88,322
Had sufficient post-index continuous enrollment	2,507,822	0	1,124,298	0	1,708,404	0
Had index episode of at least required length	2,507,822	0	1,124,298	0	1,708,404	0
Had index episode longer than blackout period	2,507,822	0	1,124,298	0	1,708,404	0
Did not have an event during blackout period	2,507,822	0	1,124,298	0	1,708,404	0
<b>Final cohort</b>						
Number of members	2,507,822	N/A	1,124,298	N/A	1,708,404	N/A
Number of episodes	2,507,822	N/A	1,124,298	N/A	1,708,404	N/A

N/A = Not Applicable

**Appendix A. Dates of Available Data for Each Data Partner (DP) as of Request Distribution Date (September 26, 2023)**

Masked DP ID <sup>1</sup>	DP Start Date	DP End Date <sup>1</sup>
DP01	01/01/2008	04/30/2023
DP02	01/01/2006	02/28/2023
DP03	01/01/2010	12/31/2022
DP04	01/01/2007	01/31/2023
DP05	01/01/2008	12/31/2022
DP06	01/01/2014	12/31/2020

<sup>1</sup>End Date represents the earliest of: (1) query end date, or (2) last day of the most recent month for which all of a Data Partner's data tables (enrollment, dispensing, etc.) have at least 80% of the record count relative to the prior month.

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

Code	Description	Code Category	Code Type
<b>Inflammatory Bowel Disease</b>			
555	Regional enteritis	Diagnosis	ICD-9-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-9-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-9-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-9-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-9-CM
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM
K52.3	Indeterminate colitis	Diagnosis	ICD-10-CM
<b>Crohn's Disease</b>			
555	Regional enteritis	Diagnosis	ICD-10-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-10-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-10-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-10-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-10-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
<b>Ulcerative Colitis</b>			
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM

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

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM

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

Generic Name	Brand Name
<b>Vedolizumab</b>	
vedolizumab	Entyvio
<b>Natalizumab</b>	
natalizumab	Tysabri

**Appendix D. List of Healthcare Common Procedure Coding System, Level II (HCPCS) Codes Used to Define Exposures in this Request**

Code	Description	Code Category	Code Type
<b>Vedolizumab</b>			
C9026	Injection, vedolizumab, 1 mg	Procedure	HCPCS
J3380	Injection, vedolizumab, 1 mg	Procedure	HCPCS
<b>Natalizumab</b>			
C9126	Injection natalizumab per 5 mg	Procedure	HCPCS
J2323	Injection, natalizumab, 1 mg	Procedure	HCPCS
Q4079	Injection, natalizumab, 1 mg	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
<b>Interstitial Lung Disease</b>			
515	Postinflammatory pulmonary fibrosis	Diagnosis	ICD-9-CM
516.30	Idiopathic interstitial pneumonia, not otherwise specified	Diagnosis	ICD-9-CM
516.31	Idiopathic pulmonary fibrosis	Diagnosis	ICD-9-CM
516.32	Idiopathic non-specific interstitial pneumonitis	Diagnosis	ICD-9-CM
516.33	Acute interstitial pneumonitis	Diagnosis	ICD-9-CM
516.34	Respiratory bronchiolitis interstitial lung disease	Diagnosis	ICD-9-CM
516.35	Idiopathic lymphoid interstitial pneumonia	Diagnosis	ICD-9-CM
516.36	Cryptogenic organizing pneumonia	Diagnosis	ICD-9-CM
516.37	Desquamative interstitial pneumonia	Diagnosis	ICD-9-CM
516.8	Other specified alveolar and parietoalveolar pneumonopathies	Diagnosis	ICD-9-CM
516.9	Unspecified alveolar and parietoalveolar pneumonopathy	Diagnosis	ICD-9-CM
J80	Acute respiratory distress syndrome	Diagnosis	ICD-10-CM
J84	Other interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.1	Other interstitial pulmonary diseases with fibrosis	Diagnosis	ICD-10-CM
J84.10	Pulmonary fibrosis, unspecified	Diagnosis	ICD-10-CM
J84.11	Idiopathic interstitial pneumonia	Diagnosis	ICD-10-CM
J84.111	Idiopathic interstitial pneumonia, not otherwise specified	Diagnosis	ICD-10-CM
J84.112	Idiopathic pulmonary fibrosis	Diagnosis	ICD-10-CM
J84.113	Idiopathic non-specific interstitial pneumonitis	Diagnosis	ICD-10-CM
J84.114	Acute interstitial pneumonitis	Diagnosis	ICD-10-CM
J84.115	Respiratory bronchiolitis interstitial lung disease	Diagnosis	ICD-10-CM
J84.116	Cryptogenic organizing pneumonia	Diagnosis	ICD-10-CM
J84.117	Desquamative interstitial pneumonia	Diagnosis	ICD-10-CM
J84.17	Other interstitial pulmonary diseases with fibrosis in diseases classified elsewhere	Diagnosis	ICD-10-CM
J84.2	Lymphoid interstitial pneumonia	Diagnosis	ICD-10-CM
J84.8	Other specified interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.89	Other specified interstitial pulmonary diseases	Diagnosis	ICD-10-CM
J84.9	Interstitial pulmonary disease, unspecified	Diagnosis	ICD-10-CM

**Appendix F. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request**

Non-Proprietary Name	Proprietary Name
<b>Retifanlimab</b>	
retifanlimab-dlwr	Zynyz
<b>Atezolizumab</b>	
atezolizumab	Tecentriq
<b>Durvalumab</b>	
durvalumab	Imfinzi
<b>Avelumab</b>	
avelumab	Bavencio
<b>Cemiplimab</b>	
cemiplimab-rwlc	Libtayo
<b>Dostarlimab</b>	
dostarlimab-gxly	Jemperli
<b>Ipilimumab</b>	
ipilimumab	Yervoy
<b>Nivolumab</b>	
nivolumab	Opdivo
nivolumab-relatlimab-rmbw	Opdualag
<b>Pembrolizumab</b>	
pembrolizumab	Keytruda
<b>Tremelimumab</b>	
tremelimumab-actl	Imjudo
<b>Checkpoint Inhibitors</b>	
atezolizumab	Tecentriq
avelumab	Bavencio
cemiplimab-rwlc	Libtayo
dostarlimab-gxly	Jemperli
durvalumab	Imfinzi
ipilimumab	Yervoy
nivolumab	Opdivo
nivolumab-relatlimab-rmbw	Opdualag
pembrolizumab	Keytruda
retifanlimab-dlwr	Zynyz
tremelimumab-actl	Imjudo
<b>Tyrosine Kinase Inhibitors</b>	
acalabrutinib	Calquence
acalabrutinib maleate	Calquence (acalabrutinib mal)
afatinib dimaleate	Gilotrif
alectinib HCl	Alecensa
asciminib hydrochloride	Scemblix
avapritinib	Ayvakit

**Appendix F. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request**

Non-Proprietary Name	Proprietary Name
axitinib	Inlyta
bosutinib	Bosulif
brigatinib	Alunbrig
capmatinib hydrochloride	Tabrecta
ceritinib	Zykadia
crizotinib	Xalkori
dacomitinib	Vizimpro
dasatinib	Sprycel
deucravacitinib	Sotyktu
entrectinib	Rozlytrek
erdafitinib	Balversa
erlotinib HCl	Tarceva
erlotinib HCl	erlotinib
fedratinib dihydrochloride	Inrebic
fostamatinib disodium	Tavalisse
futibatinib	Lytgobi
gefitinib	Iressa
gefitinib	gefitinib
gilteritinib fumarate	Xospata
ibrutinib	Imbruvica
imatinib mesylate	Gleevec
imatinib mesylate	imatinib
infigratinib phosphate	Truseltiq
lapatinib ditosylate	Tykerb
lapatinib ditosylate	lapatinib
larotrectinib sulfate	Vitrakvi
lenvatinib mesylate	Lenvima
lorlatinib	Lorbrena
midostaurin	Rydapt
mobocertinib succinate	Exkivity
neratinib maleate	Nerlynx
nilotinib HCl	Tasigna
nintedanib esylate	Ofev
osimertinib mesylate	Tagrisso
pacritinib citrate	Vonjo
pazopanib HCl	Votrient
pemigatinib	Pemazyre
pexidartinib hydrochloride	Turalio
pirtobrutinib	Jaypirca
pralsetinib	Gavreto



**Appendix F. List of Non-Proprietary and Proprietary Names of Medical Products Used to Define Inclusion and Exclusion Criteria in this Request**

<b>Non-Proprietary Name</b>	<b>Proprietary Name</b>
ripretinib	Qinlock
selpercatinib	Retevmo
sunitinib malate	Sutent
sunitinib malate	sunitinib malate
tepotinib HCl	Tepmetko
tivozanib HCl	Fotivda
tucatinib	Tukysa
vandetanib	Caprelsa
vandetanib	vandetanib
zanubrutinib	Brukinsa
<b>Amiodarone</b>	
amiodarone	Cordarone
amiodarone	Cordarone IV
amiodarone	Nexterone
amiodarone	Pacerone
amiodarone	amiodarone
amiodarone	amiodarone in dextrose 5 %
<b>Methotrexate</b>	
methotrexate	Xatmep
methotrexate sodium	methotrexate sodium
methotrexate sodium	Trexall
methotrexate sodium	Methotrexate (Anti-Rheumatic)
methotrexate sodium	Rheumatrex
methotrexate sodium/PF	methotrexate sodium (PF)
methotrexate sodium/PF	Methotrexate LPF
methotrexate/PF	Otrexup (PF)
methotrexate/PF	Rasuvo (PF)
methotrexate/PF	RediTrex (PF)

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

Code	Description	Code Category	Code Type
<b>Inflammatory Bowel Disease</b>			
555	Regional enteritis	Diagnosis	ICD-9-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-9-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-9-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-9-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-9-CM
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM
K52.3	Indeterminate colitis	Diagnosis	ICD-10-CM
<b>Crohn's Disease</b>			
555	Regional enteritis	Diagnosis	ICD-10-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-10-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-10-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-10-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-10-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
<b>Ulcerative Colitis</b>			
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM

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

<b>Code</b>	<b>Description</b>	<b>Code Category</b>	<b>Code Type</b>
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM
<b>Chest Radiograph Exam</b>			
70360	Radiologic examination; neck, soft tissue	Procedure	CPT-4
70370	Radiologic examination; pharynx or larynx, including fluoroscopy and/or magnification	Procedure	CPT-4
71010	Radiologic examination, chest; single view, frontal	Procedure	CPT-4
71015	Radiologic examination, chest; stereo, frontal	Procedure	CPT-4
71020	Radiologic examination, chest, 2 views, frontal and lateral;	Procedure	CPT-4
71021	Radiologic examination, chest, 2 views, frontal and lateral; with apical lordotic procedure	Procedure	CPT-4
71022	Radiologic examination, chest, 2 views, frontal and lateral; with oblique projections	Procedure	CPT-4
71023	Radiologic examination, chest, 2 views, frontal and lateral; with fluoroscopy	Procedure	CPT-4
71030	Radiologic examination, chest, complete, minimum of 4 views;	Procedure	CPT-4
71034	Radiologic examination, chest, complete, minimum of 4 views; with fluoroscopy	Procedure	CPT-4
71035	Radiologic examination, chest, complete, minimum of 4 views; with fluoroscopy	Procedure	CPT-4
71045	Radiologic examination, chest; single view	Procedure	CPT-4
71046	Radiologic examination, chest; 2 views	Procedure	CPT-4
71047	Radiologic examination, chest; 3 views	Procedure	CPT-4
71048	Radiologic examination, chest; 4 or more views	Procedure	CPT-4
74210	Radiologic examination; pharynx and/or cervical esophagus	Procedure	CPT-4
<b>Vedolizumab (Drug Assay CPT Code)</b>			
80280	DRUG ASSAY VEDOLIZUMAB	Procedure	CPT-4
<b>Atezolizumab</b>			
C9483	Injection, atezolizumab, 10 mg	Procedure	HCPCS
J9022	Injection, atezolizumab, 10 mg	Procedure	HCPCS
XW033D6	Introduction of Atezolizumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS



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

Code	Description	Code Category	Code Type
XW043D6	Introduction of Atezolizumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
<b>Durvalumab</b>			
C9492	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9173	Injection, durvalumab, 10 mg	Procedure	HCPCS
XW03336	Introduction of Durvalumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW04336	Introduction of Durvalumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
<b>Avelumab</b>			
C9491	Injection, avelumab, 10 mg	Procedure	HCPCS
J9023	Injection, avelumab, 10 mg	Procedure	HCPCS
<b>Cemiplimab</b>			
C9044	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
J9119	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
<b>Dostarlimab</b>			
C9082	Injection, dostarlimab-gxly, 100 mg	Procedure	HCPCS
J9272	Injection, dostarlimab-gxly, 10 mg	Procedure	HCPCS
<b>Ipilimumab</b>			
C9284	Injection, ipilimumab, 1 mg	Procedure	HCPCS
J9228	Injection, ipilimumab, 1 mg	Procedure	HCPCS
<b>Nivolumab</b>			
C9453	Injection, nivolumab, 1 mg	Procedure	HCPCS
J9298	Injection, nivolumab and relatlimab-rmbw, 3 mg/1 mg	Procedure	HCPCS
J9299	Injection, nivolumab, 1 mg	Procedure	HCPCS
<b>Pembrolizumab</b>			
C9027	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
J9271	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
<b>Tremelimumab</b>			
C9147	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
J9347	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
<b>Checkpoint Inhibitors</b>			
C9027	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
C9044	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
C9082	Injection, dostarlimab-gxly, 100 mg	Procedure	HCPCS
C9147	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
C9284	Injection, ipilimumab, 1 mg	Procedure	HCPCS



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

Code	Description	Code Category	Code Type
C9453	Injection, nivolumab, 1 mg	Procedure	HCPCS
C9483	Injection, atezolizumab, 10 mg	Procedure	HCPCS
C9491	Injection, avelumab, 10 mg	Procedure	HCPCS
C9492	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9022	Injection, atezolizumab, 10 mg	Procedure	HCPCS
J9023	Injection, avelumab, 10 mg	Procedure	HCPCS
J9119	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
J9173	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9228	Injection, ipilimumab, 1 mg	Procedure	HCPCS
J9271	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
J9272	Injection, dostarlimab-gxly, 10 mg	Procedure	HCPCS
J9298	Injection, nivolumab and relatlimab-rmbw, 3 mg/1 mg	Procedure	HCPCS
J9299	Injection, nivolumab, 1 mg	Procedure	HCPCS
J9347	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
XW03336	Introduction of Durvalumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW033D6	Introduction of Atezolizumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW04336	Introduction of Durvalumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW043D6	Introduction of Atezolizumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
<b>Tyrosine Kinase Inhibitors</b>			
J8565	Gefitinib, oral, 250 mg	Procedure	HCPCS
<b>Amiodarone</b>			
J0282	amiodarone	Procedure	HCPCS
J0283	amiodarone	Procedure	HCPCS
<b>Methotrexate</b>			
J8610	Methotrexate, oral, 2.5 mg	Procedure	HCPCS
J9250	Methotrexate sodium, 5 mg	Procedure	HCPCS
J9260	Methotrexate sodium, 50 mg	Procedure	HCPCS

**Appendix H. List of Generic and Brand Names of Medical Products Used to Define Exposure Censoring Criteria in this Request**

Generic Name	Brand Name
<b>Vedolizumab</b>	
vedolizumab	Entyvio
<b>Natalizumab</b>	
natalizumab	Tysabri
<b>Methotrexate</b>	
methotrexate	Xatmep
methotrexate sodium	Methotrexate (Anti-Rheumatic)
methotrexate sodium	Rheumatrex
methotrexate sodium	Trexall
methotrexate sodium	methotrexate sodium
methotrexate sodium/PF	Methotrexate LPF
methotrexate sodium/PF	methotrexate sodium (PF)
methotrexate/PF	Otrexup (PF)
methotrexate/PF	Rasuvo (PF)
methotrexate/PF	RediTrex (PF)
<b>Amiodarone</b>	
amiodarone HCl/dextrose 5 % in water_excl	amiodarone in dextrose 5 %
amiodarone HCl_excl	Cordarone
amiodarone HCl_excl	Cordarone IV
amiodarone HCl_excl	Pacerone
amiodarone HCl_excl	amiodarone
amiodarone in dextrose, iso-osmotic_excl	Nexterone
<b>Bleomycin</b>	
bleomycin sulfate	Blenoxane
bleomycin sulfate	Bleo 15K
bleomycin sulfate	bleomycin
<b>Azathioprine</b>	
azathioprine	Azasan
azathioprine	Imuran
azathioprine	azathioprine
azathioprine sodium	azathioprine sodium
<b>Cyclophosphamide</b>	
cyclophosphamide	Cytosan
cyclophosphamide	Neosar
cyclophosphamide	cyclophosphamide
<b>Sulfasalazine</b>	
sulfasalazine	Azulfidine
sulfasalazine	Azulfidine EN-tabs
sulfasalazine	Sulfazine
sulfasalazine	sulfasalazine

**Appendix H. List of Generic and Brand Names of Medical Products Used to Define Exposure Censoring Criteria in this Request**

Generic Name	Brand Name
<b>Checkpoint Inhibitors</b>	
atezolizumab	Tecentriq
avelumab	Bavencio
cemiplimab-rwlc	Libtayo
dostarlimab-gxly	Jemperli
durvalumab	Imfinzi
ipilimumab	Yervoy
nivolumab	Opdivo
nivolumab-relatlimab-rmbw	Opdualag
pembrolizumab	Keytruda
retifanlimab-dlwr	Zynyz
tremelimumab-actl	Imjudo
<b>Tyrosine Kinase Inhibitors</b>	
acalabrutinib	Calquence
acalabrutinib maleate	Calquence (acalabrutinib mal)
afatinib dimaleate	Gilotrif
alectinib HCl	Alecensa
asciminib hydrochloride	Scemblix
avapritinib	Ayvakit
axitinib	Inlyta
bosutinib	Bosulif
brigatinib	Alunbrig
capmatinib hydrochloride	Tabrecta
ceritinib	Zykadia
crizotinib	Xalkori
dacomitinib	Vizimpro
dasatinib	Sprycel
deucravacitinib	Sotyktu
entrectinib	Rozlytrek
erdafitinib	Balversa
erlotinib HCl	Tarceva
erlotinib HCl	erlotinib
fedratinib dihydrochloride	Inrebic
fostamatinib disodium	Tavalisse
futibatinib	Lytgobi
gefitinib	Iressa
gefitinib	gefitinib
gilteritinib fumarate	Xospata
ibrutinib	Imbruvica
imatinib mesylate	Gleevec

**Appendix H. List of Generic and Brand Names of Medical Products Used to Define Exposure Censoring Criteria in this Request**

Generic Name	Brand Name
imatinib mesylate	imatinib
infigratinib phosphate	Truseltiq
lapatinib ditosylate	Tykerb
lapatinib ditosylate	lapatinib
larotrectinib sulfate	Vitrakvi
lenvatinib mesylate	Lenvima
lorlatinib	Lorbrena
midostaurin	Rydapt
mobocertinib succinate	Exkivity
neratinib maleate	Nerlynx
nilotinib HCl	Tasigna
nintedanib esylate	Ofev
osimertinib mesylate	Tagrisso
pacritinib citrate	Vonjo
pazopanib HCl	Votrient
pemigatinib	Pemazyre
pexidartinib hydrochloride	Turalio
pirtobrutinib	Jaypirca
pralsetinib	Gavreto
ripretinib	Qinlock
selpercatinib	Retevmo
sunitinib malate	Sutent
sunitinib malate	sunitinib malate
tepotinib HCl	Tepmetko
tivozanib HCl	Fotivda
tucatinib	Tukysa
vandetanib	Caprelsa
vandetanib	vandetanib
zanubrutinib	Brukinsa

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

Code	Description	Code Category	Code Type
<b>Vedolizumab</b>			
C9026	Injection, vedolizumab, 1 mg	Procedure	HCPCS
J3380	Injection, vedolizumab, 1 mg	Procedure	HCPCS
<b>Natalizumab</b>			
C9126	Injection natalizumab per 5 mg	Procedure	HCPCS
J2323	Injection, natalizumab, 1 mg	Procedure	HCPCS
Q4079	Injection, natalizumab, 1 mg	Procedure	HCPCS
<b>Methotrexate</b>			
J8610	Methotrexate	Procedure	HCPCS
J9250	Methotrexate	Procedure	HCPCS
J9260	Methotrexate	Procedure	HCPCS
<b>Amiodarone</b>			
J0282	amiodarone	Procedure	HCPCS
J0283	amiodarone	Procedure	HCPCS
<b>Bleomycin</b>			
C9417	Bleomycin sulfate, 15 units, brand name	Procedure	HCPCS
J9040	Injection, bleomycin sulfate, 15 units	Procedure	HCPCS
<b>Azathioprine</b>			
C9436	Azathioprine, parenteral, brand name, per 100 mg	Procedure	HCPCS
J7500	Azathioprine, oral, 50 mg	Procedure	HCPCS
J7501	Azathioprine, parenteral, 100 mg	Procedure	HCPCS
<b>Cyclophosphamide</b>			
C9087	Injection, cyclophosphamide, (AuroMedics), 10 mg	Procedure	HCPCS
C9420	Cyclophosphamide, 100 mg, brand name	Procedure	HCPCS
C9421	Cyclophosphamide, lyophilized, 100 mg, brand name	Procedure	HCPCS
J8530	Cyclophosphamide, oral, 25 mg	Procedure	HCPCS
J9070	Cyclophosphamide, 100 mg	Procedure	HCPCS
J9071	Injection, cyclophosphamide, (AuroMedics), 5 mg	Procedure	HCPCS
J9080	Cyclophosphamide, 200 mg	Procedure	HCPCS
J9090	Cyclophosphamide, 500 mg	Procedure	HCPCS
J9091	Cyclophosphamide, 1 g	Procedure	HCPCS
J9092	Cyclophosphamide, 2 g	Procedure	HCPCS
J9093	Cyclophosphamide, lyophilized, 100 mg	Procedure	HCPCS
J9094	Cyclophosphamide, lyophilized, 200 mg	Procedure	HCPCS
J9095	Cyclophosphamide, lyophilized, 500 mg	Procedure	HCPCS
J9096	Cyclophosphamide, lyophilized, 1 g	Procedure	HCPCS
J9097	Cyclophosphamide, lyophilized, 2 g	Procedure	HCPCS

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

Code	Description	Code Category	Code Type
<b>Checkpoint Inhibitors</b>			
C9027	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
C9044	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
C9082	Injection, dostarlimab-gxly, 100 mg	Procedure	HCPCS
C9147	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
C9284	Injection, ipilimumab, 1 mg	Procedure	HCPCS
C9453	Injection, nivolumab, 1 mg	Procedure	HCPCS
C9483	Injection, atezolizumab, 10 mg	Procedure	HCPCS
C9491	Injection, avelumab, 10 mg	Procedure	HCPCS
C9492	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9022	Injection, atezolizumab, 10 mg	Procedure	HCPCS
J9023	Injection, avelumab, 10 mg	Procedure	HCPCS
J9119	Injection, cemiplimab-rwlc, 1 mg	Procedure	HCPCS
J9173	Injection, durvalumab, 10 mg	Procedure	HCPCS
J9228	Injection, ipilimumab, 1 mg	Procedure	HCPCS
J9271	Injection, pembrolizumab, 1 mg	Procedure	HCPCS
J9272	Injection, dostarlimab-gxly, 10 mg	Procedure	HCPCS
J9298	Injection, nivolumab and relatlimab-rmbw, 3 mg/1 mg	Procedure	HCPCS
J9299	Injection, nivolumab, 1 mg	Procedure	HCPCS
J9347	Injection, tremelimumab-actl, 1 mg	Procedure	HCPCS
XW03336	Introduction of Durvalumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW033D6	Introduction of Atezolizumab Antineoplastic into Peripheral Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW04336	Introduction of Durvalumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
XW043D6	Introduction of Atezolizumab Antineoplastic into Central Vein, Percutaneous Approach, New Technology Group 6	Procedure	ICD-10-PCS
<b>Tyrosine Kinase Inhibitors</b>			
J8565	Gefitinib, oral, 250 mg	Procedure	HCPCS

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

Generic Name	Brand Name
<b>Methotrexate</b>	
methotrexate	Methotrexate (Anti-Rheumatic)
methotrexate	Methotrexate LPF
methotrexate	Otrexup (PF)
methotrexate	Rasuvo (PF)
methotrexate	RediTrex (PF)
methotrexate	Rheumatrex
methotrexate	Trexall
methotrexate	Xatmep
methotrexate	methotrexate sodium
methotrexate	methotrexate sodium (PF)
<b>Amiodarone</b>	
amiodarone	Cordarone
amiodarone	Cordarone IV
amiodarone	Nexterone
amiodarone	Pacerone
amiodarone	amiodarone
amiodarone	amiodarone in dextrose 5 %
<b>Bleomycin</b>	
bleomycin sulfate	Blenoxane
bleomycin sulfate	Bleo 15K
bleomycin sulfate	bleomycin
<b>Azathioprine</b>	
azathioprine	Azasan
azathioprine	Imuran
azathioprine	azathioprine
azathioprine sodium	azathioprine sodium
<b>Cyclophosphamide</b>	
cyclophosphamide	Cytosan
cyclophosphamide	Neosar
cyclophosphamide	cyclophosphamide
<b>Sulfasalazine</b>	
sulfasalazine	Azulfidine
sulfasalazine	Azulfidine EN-tabs
sulfasalazine	Sulfazine
sulfasalazine	sulfasalazine
<b>Tobacco Use</b>	
bupropion HCl	Buproban
bupropion HCl	Zyban
bupropion HCl	bupropion HCl (smoking deter)
nicotine	Habitrol

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

Generic Name	Brand Name
nicotine	NTS Step 1
nicotine	NTS Step 2
nicotine	NTS Step 3
nicotine	Nicoderm CQ
nicotine	Nicotrol
nicotine	Nicotrol NS
nicotine	nicotine
nicotine polacrilex	Commit
nicotine polacrilex	Nicorelief
nicotine polacrilex	Nicorette
nicotine polacrilex	Nicorette Refill
nicotine polacrilex	Nicorette Starter Kit
nicotine polacrilex	Quit 2
nicotine polacrilex	Quit 4
nicotine polacrilex	Stop Smoking Aid
nicotine polacrilex	Thrive Nicotine
nicotine polacrilex	nicotine (polacrilex)
varenicline tartrate	Chantix
varenicline tartrate	Chantix Continuing Month Box
varenicline tartrate	Chantix Continuing Month Pak
varenicline tartrate	Chantix Starting Month Box
varenicline tartrate	Chantix Starting Month Pak
varenicline tartrate	varenicline



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

Code	Description	Code Category	Code Type
<b>Methotrexate</b>			
80204	Methotrexate	Procedure	CPT-4
J8610	Methotrexate	Procedure	HCPCS
J9250	Methotrexate	Procedure	HCPCS
J9260	Methotrexate	Procedure	HCPCS
<b>Amiodarone</b>			
80151	amiodarone	Procedure	CPT-4
J0282	amiodarone	Procedure	HCPCS
J0283	amiodarone	Procedure	HCPCS
<b>Bleomycin</b>			
C9417	Bleomycin sulfate, 15 units, brand name	Procedure	HCPCS
J9040	Injection, bleomycin sulfate, 15 units	Procedure	HCPCS
<b>Azathioprine</b>			
C9436	Azathioprine, parenteral, brand name, per 100 mg	Procedure	HCPCS
J7500	Azathioprine, oral, 50 mg	Procedure	HCPCS
J7501	Azathioprine, parenteral, 100 mg	Procedure	HCPCS
<b>Cyclophosphamide</b>			
C9087	Injection, cyclophosphamide, (AuroMedics), 10 mg	Procedure	HCPCS
C9420	Cyclophosphamide, 100 mg, brand name	Procedure	HCPCS
C9421	Cyclophosphamide, lyophilized, 100 mg, brand name	Procedure	HCPCS
J8530	Cyclophosphamide, oral, 25 mg	Procedure	HCPCS
J9070	Cyclophosphamide, 100 mg	Procedure	HCPCS
J9071	Injection, cyclophosphamide, (AuroMedics), 5 mg	Procedure	HCPCS
J9080	Cyclophosphamide, 200 mg	Procedure	HCPCS
J9090	Cyclophosphamide, 500 mg	Procedure	HCPCS
J9091	Cyclophosphamide, 1 g	Procedure	HCPCS
J9092	Cyclophosphamide, 2 g	Procedure	HCPCS
J9093	Cyclophosphamide, lyophilized, 100 mg	Procedure	HCPCS
J9094	Cyclophosphamide, lyophilized, 200 mg	Procedure	HCPCS
J9095	Cyclophosphamide, lyophilized, 500 mg	Procedure	HCPCS
J9096	Cyclophosphamide, lyophilized, 1 g	Procedure	HCPCS
J9097	Cyclophosphamide, lyophilized, 2 g	Procedure	HCPCS
<b>Acquired Hypothyroidism</b>			
244.0	Postsurgical hypothyroidism	Diagnosis	ICD-9-CM
244.1	Other postablative hypothyroidism	Diagnosis	ICD-9-CM
244.2	Iodine hypothyroidism	Diagnosis	ICD-9-CM
244.3	Other iatrogenic hypothyroidism	Diagnosis	ICD-9-CM
244.8	Other specified acquired hypothyroidism	Diagnosis	ICD-9-CM
244.9	Unspecified hypothyroidism	Diagnosis	ICD-9-CM
E01.8	Other iodine-deficiency related thyroid disorders and allied conditions	Diagnosis	ICD-10-CM
E02	Subclinical iodine-deficiency hypothyroidism	Diagnosis	ICD-10-CM
E03.2	Hypothyroidism due to medicaments and other exogenous substances	Diagnosis	ICD-10-CM
E03.3	Postinfectious hypothyroidism	Diagnosis	ICD-10-CM
E03.8	Other specified hypothyroidism	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
E03.9	Hypothyroidism, unspecified	Diagnosis	ICD-10-CM
E89.0	Postprocedural hypothyroidism	Diagnosis	ICD-10-CM
<b>Acute Myocardial Infarction</b>			
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.9	Acute myocardial infarction, unspecified	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
<b>Alzheimer's Disease</b>			
331.0	Alzheimer's disease	Diagnosis	ICD-9-CM
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
<b>Alzheimer's Disease and Related Conditions</b>			
290.0	Senile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.10	Presenile dementia, uncomplicated	Diagnosis	ICD-9-CM
290.11	Presenile dementia with delirium	Diagnosis	ICD-9-CM
290.12	Presenile dementia with delusional features	Diagnosis	ICD-9-CM
290.13	Presenile dementia with depressive features	Diagnosis	ICD-9-CM
290.20	Senile dementia with delusional features	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
290.21	Senile dementia with depressive features	Diagnosis	ICD-9-CM
290.3	Senile dementia with delirium	Diagnosis	ICD-9-CM
290.40	Vascular dementia, uncomplicated	Diagnosis	ICD-9-CM
290.41	Vascular dementia, with delirium	Diagnosis	ICD-9-CM
290.42	Vascular dementia, with delusions	Diagnosis	ICD-9-CM
290.43	Vascular dementia, with depressed mood	Diagnosis	ICD-9-CM
294.0	Amnesic disorder in conditions classified elsewhere	Diagnosis	ICD-9-CM
294.10	Dementia in conditions classified elsewhere without behavioral disturbance	Diagnosis	ICD-9-CM
294.11	Dementia in conditions classified elsewhere with behavioral disturbance	Diagnosis	ICD-9-CM
294.20	Dementia, unspecified, without behavioral disturbance	Diagnosis	ICD-9-CM
294.21	Dementia, unspecified, with behavioral disturbance	Diagnosis	ICD-9-CM
294.8	Other persistent mental disorders due to conditions classified elsewhere	Diagnosis	ICD-9-CM
331.0	Alzheimer's disease	Diagnosis	ICD-9-CM
331.11	Pick's disease	Diagnosis	ICD-9-CM
331.19	Other frontotemporal dementia	Diagnosis	ICD-9-CM
331.2	Senile degeneration of brain	Diagnosis	ICD-9-CM
331.7	Cerebral degeneration in diseases classified elsewhere	Diagnosis	ICD-9-CM
797	Senility without mention of psychosis	Diagnosis	ICD-9-CM
F01.50	Vascular dementia, 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
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
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
F04	Amnesic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F05	Delirium due to known physiological condition	Diagnosis	ICD-10-CM
F06.1	Catatonic disorder due to known physiological condition	Diagnosis	ICD-10-CM
F06.8	Other specified mental disorders due to known physiological condition	Diagnosis	ICD-10-CM
G13.8	Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere	Diagnosis	ICD-10-CM
G30.0	Alzheimer's disease with early onset	Diagnosis	ICD-10-CM
G30.1	Alzheimer's disease with late onset	Diagnosis	ICD-10-CM
G30.8	Other Alzheimer's disease	Diagnosis	ICD-10-CM
G30.9	Alzheimer's disease, unspecified	Diagnosis	ICD-10-CM
G31.01	Pick's disease	Diagnosis	ICD-10-CM
G31.09	Other frontotemporal 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
G94	Other disorders of brain in diseases classified elsewhere	Diagnosis	ICD-10-CM
R41.81	Age-related cognitive decline	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
R54	Age-related physical debility	Diagnosis	ICD-10-CM
<b>Anemia</b>			
280.0	Iron deficiency anemia secondary to blood loss (chronic)	Diagnosis	ICD-9-CM
280.1	Iron deficiency anemia secondary to inadequate dietary iron intake	Diagnosis	ICD-9-CM
280.8	Other specified iron deficiency anemias	Diagnosis	ICD-9-CM
280.9	Unspecified iron deficiency anemia	Diagnosis	ICD-9-CM
281.0	Pernicious anemia	Diagnosis	ICD-9-CM
281.1	Other vitamin B12 deficiency anemia	Diagnosis	ICD-9-CM
281.2	Folate-deficiency anemia	Diagnosis	ICD-9-CM
281.3	Other specified megaloblastic anemias not elsewhere classified	Diagnosis	ICD-9-CM
281.4	Protein-deficiency anemia	Diagnosis	ICD-9-CM
281.8	Anemia associated with other specified nutritional deficiency	Diagnosis	ICD-9-CM
281.9	Unspecified deficiency anemia	Diagnosis	ICD-9-CM
282.0	Hereditary spherocytosis	Diagnosis	ICD-9-CM
282.1	Hereditary elliptocytosis	Diagnosis	ICD-9-CM
282.2	Anemias due to disorders of glutathione metabolism	Diagnosis	ICD-9-CM
282.3	Other hemolytic anemias due to enzyme deficiency	Diagnosis	ICD-9-CM
282.40	Thalassemia, unspecified	Diagnosis	ICD-9-CM
282.41	Sickle-cell thalassemia without crisis	Diagnosis	ICD-9-CM
282.42	Sickle-cell thalassemia with crisis	Diagnosis	ICD-9-CM
282.43	Alpha thalassemia	Diagnosis	ICD-9-CM
282.44	Beta thalassemia	Diagnosis	ICD-9-CM
282.45	Delta-beta thalassemia	Diagnosis	ICD-9-CM
282.46	Thalassemia minor	Diagnosis	ICD-9-CM
282.47	Hemoglobin E-beta thalassemia	Diagnosis	ICD-9-CM
282.49	Other thalassemia	Diagnosis	ICD-9-CM
282.5	Sickle-cell trait	Diagnosis	ICD-9-CM
282.60	Sickle-cell disease, unspecified	Diagnosis	ICD-9-CM
282.61	Hb-SS disease without crisis	Diagnosis	ICD-9-CM
282.62	Hb-SS disease with crisis	Diagnosis	ICD-9-CM
282.63	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-9-CM
282.64	Sickle-cell/Hb-C disease with crisis	Diagnosis	ICD-9-CM
282.68	Other sickle-cell disease without crisis	Diagnosis	ICD-9-CM
282.69	Other sickle-cell disease with crisis	Diagnosis	ICD-9-CM
282.7	Other hemoglobinopathies	Diagnosis	ICD-9-CM
282.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-9-CM
282.9	Unspecified hereditary hemolytic anemia	Diagnosis	ICD-9-CM
283.0	Autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.10	Unspecified non-autoimmune hemolytic anemia	Diagnosis	ICD-9-CM
283.11	Hemolytic-uremic syndrome	Diagnosis	ICD-9-CM
283.19	Other non-autoimmune hemolytic anemias	Diagnosis	ICD-9-CM
283.2	Hemoglobinuria due to hemolysis from external causes	Diagnosis	ICD-9-CM
283.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-9-CM
284.01	Constitutional red blood cell aplasia	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
284.09	Other constitutional aplastic anemia	Diagnosis	ICD-9-CM
284.11	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-9-CM
284.12	Other drug induced pancytopenia	Diagnosis	ICD-9-CM
284.19	Other pancytopenia	Diagnosis	ICD-9-CM
284.2	Myelophthisis	Diagnosis	ICD-9-CM
284.81	Red cell aplasia (acquired) (adult) (with thymoma)	Diagnosis	ICD-9-CM
284.89	Other specified aplastic anemias	Diagnosis	ICD-9-CM
284.9	Unspecified aplastic anemia	Diagnosis	ICD-9-CM
285.0	Sideroblastic anemia	Diagnosis	ICD-9-CM
285.1	Acute posthemorrhagic anemia	Diagnosis	ICD-9-CM
285.21	Anemia in chronic kidney disease	Diagnosis	ICD-9-CM
285.22	Anemia in neoplastic disease	Diagnosis	ICD-9-CM
285.29	Anemia of other chronic disease	Diagnosis	ICD-9-CM
285.3	Antineoplastic chemotherapy induced anemia	Diagnosis	ICD-9-CM
285.8	Other specified anemias	Diagnosis	ICD-9-CM
285.9	Unspecified anemia	Diagnosis	ICD-9-CM
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
D51.1	Vitamin B12 deficiency anemia due to selective vitamin B12 malabsorption with	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

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

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
D57.09	Hb-SS disease with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.1	Sickle-cell disease without crisis	Diagnosis	ICD-10-CM
D57.20	Sickle-cell/Hb-C disease without crisis	Diagnosis	ICD-10-CM
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome	Diagnosis	ICD-10-CM
D57.212	Sickle-cell/Hb-C disease with splenic sequestration	Diagnosis	ICD-10-CM
D57.213	Sickle-cell/Hb-C disease with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.218	Sickle-cell/Hb-C disease with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified	Diagnosis	ICD-10-CM
D57.3	Sickle-cell trait	Diagnosis	ICD-10-CM
D57.40	Sickle-cell thalassemia without crisis	Diagnosis	ICD-10-CM
D57.411	Sickle-cell thalassemia, 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
D57.418	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
D57.438	Sickle-cell thalassemia beta zero with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.439	Sickle-cell thalassemia beta zero with crisis, unspecified	Diagnosis	ICD-10-CM
D57.44	Sickle-cell thalassemia beta plus without crisis	Diagnosis	ICD-10-CM
D57.451	Sickle-cell thalassemia beta plus with acute chest syndrome	Diagnosis	ICD-10-CM
D57.452	Sickle-cell thalassemia beta plus with splenic sequestration	Diagnosis	ICD-10-CM
D57.453	Sickle-cell thalassemia beta plus with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.458	Sickle-cell thalassemia beta plus with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.459	Sickle-cell thalassemia beta plus with crisis, unspecified	Diagnosis	ICD-10-CM
D57.80	Other sickle-cell disorders without crisis	Diagnosis	ICD-10-CM
D57.811	Other sickle-cell disorders with acute chest syndrome	Diagnosis	ICD-10-CM
D57.812	Other sickle-cell disorders with splenic sequestration	Diagnosis	ICD-10-CM
D57.813	Other sickle-cell disorders with cerebral vascular involvement	Diagnosis	ICD-10-CM
D57.818	Other sickle-cell disorders with crisis with other specified complication	Diagnosis	ICD-10-CM
D57.819	Other sickle-cell disorders with crisis, unspecified	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
D58.0	Hereditary spherocytosis	Diagnosis	ICD-10-CM
D58.1	Hereditary elliptocytosis	Diagnosis	ICD-10-CM
D58.2	Other hemoglobinopathies	Diagnosis	ICD-10-CM
D58.8	Other specified hereditary hemolytic anemias	Diagnosis	ICD-10-CM
D58.9	Hereditary hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.0	Drug-induced autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.1	Other autoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.10	Autoimmune hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D59.11	Warm autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.12	Cold autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.13	Mixed type autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.19	Other autoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.2	Drug-induced nonautoimmune hemolytic anemia	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
D59.4	Other nonautoimmune hemolytic anemias	Diagnosis	ICD-10-CM
D59.5	Paroxysmal nocturnal hemoglobinuria [Marchiafava-Micheli]	Diagnosis	ICD-10-CM
D59.6	Hemoglobinuria due to hemolysis from other external causes	Diagnosis	ICD-10-CM
D59.8	Other acquired hemolytic anemias	Diagnosis	ICD-10-CM
D59.9	Acquired hemolytic anemia, unspecified	Diagnosis	ICD-10-CM
D60.0	Chronic acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.1	Transient acquired pure red cell aplasia	Diagnosis	ICD-10-CM
D60.8	Other acquired pure red cell aplasias	Diagnosis	ICD-10-CM
D60.9	Acquired pure red cell aplasia, unspecified	Diagnosis	ICD-10-CM
D61.01	Constitutional (pure) red blood cell aplasia	Diagnosis	ICD-10-CM
D61.09	Other constitutional aplastic anemia	Diagnosis	ICD-10-CM
D61.1	Drug-induced aplastic anemia	Diagnosis	ICD-10-CM
D61.2	Aplastic anemia due to other external agents	Diagnosis	ICD-10-CM
D61.3	Idiopathic aplastic anemia	Diagnosis	ICD-10-CM
D61.810	Antineoplastic chemotherapy induced pancytopenia	Diagnosis	ICD-10-CM
D61.811	Other drug-induced pancytopenia	Diagnosis	ICD-10-CM
D61.818	Other pancytopenia	Diagnosis	ICD-10-CM
D61.82	Myelophthisis	Diagnosis	ICD-10-CM
D61.89	Other specified aplastic anemias and other bone marrow failure syndromes	Diagnosis	ICD-10-CM
D61.9	Aplastic anemia, unspecified	Diagnosis	ICD-10-CM
D62	Acute posthemorrhagic anemia	Diagnosis	ICD-10-CM
D63.0	Anemia in neoplastic disease	Diagnosis	ICD-10-CM
D63.1	Anemia in chronic kidney disease	Diagnosis	ICD-10-CM
D63.8	Anemia in other chronic diseases classified elsewhere	Diagnosis	ICD-10-CM
D64.0	Hereditary sideroblastic anemia	Diagnosis	ICD-10-CM
D64.1	Secondary sideroblastic anemia due to disease	Diagnosis	ICD-10-CM
D64.2	Secondary sideroblastic anemia due to drugs and toxins	Diagnosis	ICD-10-CM
D64.3	Other sideroblastic anemias	Diagnosis	ICD-10-CM
D64.4	Congenital dyserythropoietic anemia	Diagnosis	ICD-10-CM
D64.81	Anemia due to antineoplastic chemotherapy	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
D64.89	Other specified anemias	Diagnosis	ICD-10-CM
D64.9	Anemia, unspecified	Diagnosis	ICD-10-CM
<b>Asthma</b>			
493.00	Extrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.01	Extrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.02	Extrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.10	Intrinsic asthma, unspecified	Diagnosis	ICD-9-CM
493.11	Intrinsic asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.12	Intrinsic asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.20	Chronic obstructive asthma, unspecified	Diagnosis	ICD-9-CM
493.21	Chronic obstructive asthma with status asthmaticus	Diagnosis	ICD-9-CM
493.22	Chronic obstructive asthma, with (acute) exacerbation	Diagnosis	ICD-9-CM
493.81	Exercise induced bronchospasm	Diagnosis	ICD-9-CM
493.82	Cough variant asthma	Diagnosis	ICD-9-CM
493.90	Asthma, unspecified, unspecified status	Diagnosis	ICD-9-CM
493.91	Asthma, unspecified with status asthmaticus	Diagnosis	ICD-9-CM
493.92	Asthma, unspecified, with (acute) exacerbation	Diagnosis	ICD-9-CM
J45.20	Mild intermittent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.21	Mild intermittent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.22	Mild intermittent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.30	Mild persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.31	Mild persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.32	Mild persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.40	Moderate persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.41	Moderate persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.42	Moderate persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.50	Severe persistent asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.51	Severe persistent asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.52	Severe persistent asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.901	Unspecified asthma with (acute) exacerbation	Diagnosis	ICD-10-CM
J45.902	Unspecified asthma with status asthmaticus	Diagnosis	ICD-10-CM
J45.909	Unspecified asthma, uncomplicated	Diagnosis	ICD-10-CM
J45.990	Exercise induced bronchospasm	Diagnosis	ICD-10-CM
J45.991	Cough variant asthma	Diagnosis	ICD-10-CM
J45.998	Other asthma	Diagnosis	ICD-10-CM
J82.83	Eosinophilic asthma	Diagnosis	ICD-10-CM
<b>Atrial Fibrillation</b>			
427.31	Atrial fibrillation	Diagnosis	ICD-9-CM
I48.0	Paroxysmal atrial fibrillation	Diagnosis	ICD-10-CM
I48.1	Persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.11	Longstanding persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.19	Other persistent atrial fibrillation	Diagnosis	ICD-10-CM
I48.2	Chronic atrial fibrillation	Diagnosis	ICD-10-CM
I48.20	Chronic atrial fibrillation, unspecified	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
I48.21	Permanent atrial fibrillation	Diagnosis	ICD-10-CM
I48.91	Unspecified atrial fibrillation	Diagnosis	ICD-10-CM
<b>Benign Hyperplasia</b>			
600.00	Hypertrophy (benign) of prostate without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.01	Hypertrophy (benign) of prostate with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.10	Nodular prostate without urinary obstruction	Diagnosis	ICD-9-CM
600.11	Nodular prostate with urinary obstruction	Diagnosis	ICD-9-CM
600.20	Benign localized hyperplasia of prostate without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.21	Benign localized hyperplasia of prostate with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.3	Cyst of prostate	Diagnosis	ICD-9-CM
600.90	Hyperplasia of prostate, unspecified, without urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
600.91	Hyperplasia of prostate, unspecified, with urinary obstruction and other lower urinary tract symptoms [LUTS]	Diagnosis	ICD-9-CM
N40.0	Benign prostatic hyperplasia without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.1	Benign prostatic hyperplasia with lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.2	Nodular prostate without lower urinary tract symptoms	Diagnosis	ICD-10-CM
N40.3	Nodular prostate with lower urinary tract symptoms	Diagnosis	ICD-10-CM
N42.83	Cyst of prostate	Diagnosis	ICD-10-CM
<b>Breast Cancer</b>			
174.0	Malignant neoplasm of nipple and areola of female breast	Diagnosis	ICD-9-CM
174.1	Malignant neoplasm of central portion of female breast	Diagnosis	ICD-9-CM
174.2	Malignant neoplasm of upper-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.3	Malignant neoplasm of lower-inner quadrant of female breast	Diagnosis	ICD-9-CM
174.4	Malignant neoplasm of upper-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.5	Malignant neoplasm of lower-outer quadrant of female breast	Diagnosis	ICD-9-CM
174.6	Malignant neoplasm of axillary tail of female breast	Diagnosis	ICD-9-CM
174.8	Malignant neoplasm of other specified sites of female breast	Diagnosis	ICD-9-CM
174.9	Malignant neoplasm of breast (female), unspecified site	Diagnosis	ICD-9-CM
175.0	Malignant neoplasm of nipple and areola of male breast	Diagnosis	ICD-9-CM
175.9	Malignant neoplasm of other and unspecified sites of male breast	Diagnosis	ICD-9-CM
233.0	Carcinoma in situ of breast	Diagnosis	ICD-9-CM
C50.011	Malignant neoplasm of nipple and areola, right female breast	Diagnosis	ICD-10-CM
C50.012	Malignant neoplasm of nipple and areola, left female breast	Diagnosis	ICD-10-CM
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast	Diagnosis	ICD-10-CM
C50.021	Malignant neoplasm of nipple and areola, right male breast	Diagnosis	ICD-10-CM
C50.022	Malignant neoplasm of nipple and areola, left male breast	Diagnosis	ICD-10-CM
C50.029	Malignant neoplasm of nipple and areola, unspecified male breast	Diagnosis	ICD-10-CM
C50.111	Malignant neoplasm of central portion of right female breast	Diagnosis	ICD-10-CM
C50.112	Malignant neoplasm of central portion of left female breast	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast	Diagnosis	ICD-10-CM
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast	Diagnosis	ICD-10-CM
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast	Diagnosis	ICD-10-CM
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast	Diagnosis	ICD-10-CM
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast	Diagnosis	ICD-10-CM
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast	Diagnosis	ICD-10-CM
C50.611	Malignant neoplasm of axillary tail of right female breast	Diagnosis	ICD-10-CM
C50.612	Malignant neoplasm of axillary tail of left female breast	Diagnosis	ICD-10-CM
C50.619	Malignant neoplasm of axillary tail of unspecified female breast	Diagnosis	ICD-10-CM
C50.621	Malignant neoplasm of axillary tail of right male breast	Diagnosis	ICD-10-CM
C50.622	Malignant neoplasm of axillary tail of left male breast	Diagnosis	ICD-10-CM
C50.629	Malignant neoplasm of axillary tail of unspecified male breast	Diagnosis	ICD-10-CM
C50.811	Malignant neoplasm of overlapping sites of right female breast	Diagnosis	ICD-10-CM
C50.812	Malignant neoplasm of overlapping sites of left female breast	Diagnosis	ICD-10-CM
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast	Diagnosis	ICD-10-CM
C50.821	Malignant neoplasm of overlapping sites of right male breast	Diagnosis	ICD-10-CM
C50.822	Malignant neoplasm of overlapping sites of left male breast	Diagnosis	ICD-10-CM
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast	Diagnosis	ICD-10-CM
C50.911	Malignant neoplasm of unspecified site of right female breast	Diagnosis	ICD-10-CM
C50.912	Malignant neoplasm of unspecified site of left female breast	Diagnosis	ICD-10-CM
C50.919	Malignant neoplasm of unspecified site of unspecified female breast	Diagnosis	ICD-10-CM
C50.921	Malignant neoplasm of unspecified site of right male breast	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
V10.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-9-CM
Z85.3	Personal history of malignant neoplasm of breast	Diagnosis	ICD-10-CM
<b>Colorectal Cancer</b>			
153.0	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-9-CM
153.1	Malignant neoplasm of transverse colon	Diagnosis	ICD-9-CM
153.2	Malignant neoplasm of descending colon	Diagnosis	ICD-9-CM
153.3	Malignant neoplasm of sigmoid colon	Diagnosis	ICD-9-CM
153.4	Malignant neoplasm of cecum	Diagnosis	ICD-9-CM
153.5	Malignant neoplasm of appendix	Diagnosis	ICD-9-CM
153.6	Malignant neoplasm of ascending colon	Diagnosis	ICD-9-CM
153.7	Malignant neoplasm of splenic flexure	Diagnosis	ICD-9-CM
153.8	Malignant neoplasm of other specified sites of large intestine	Diagnosis	ICD-9-CM
153.9	Malignant neoplasm of colon, unspecified site	Diagnosis	ICD-9-CM
154.0	Malignant neoplasm of rectosigmoid junction	Diagnosis	ICD-9-CM
154.1	Malignant neoplasm of rectum	Diagnosis	ICD-9-CM
230.3	Carcinoma in situ of colon	Diagnosis	ICD-9-CM
230.4	Carcinoma in situ of rectum	Diagnosis	ICD-9-CM
C18.0	Malignant neoplasm of cecum	Diagnosis	ICD-10-CM
C18.1	Malignant neoplasm of appendix	Diagnosis	ICD-10-CM
C18.2	Malignant neoplasm of ascending colon	Diagnosis	ICD-10-CM
C18.3	Malignant neoplasm of hepatic flexure	Diagnosis	ICD-10-CM
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
D01.0	Carcinoma in situ of colon	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
D01.1	Carcinoma in situ of rectosigmoid junction	Diagnosis	ICD-10-CM
D01.2	Carcinoma in situ of rectum	Diagnosis	ICD-10-CM
V10.05	Personal history of malignant neoplasm of large intestine	Diagnosis	ICD-9-CM
V10.06	Personal history of malignant neoplasm of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-9-CM
Z85.038	Personal history of other malignant neoplasm of large intestine	Diagnosis	ICD-10-CM
Z85.040	Personal history of malignant carcinoid tumor of rectum	Diagnosis	ICD-10-CM
Z85.048	Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus	Diagnosis	ICD-10-CM
<b>Endometrial Cancer</b>			
182.0	Malignant neoplasm of corpus uteri, except isthmus	Diagnosis	ICD-9-CM
233.2	Carcinoma in situ of other and unspecified parts of uterus	Diagnosis	ICD-9-CM
C54.1	Malignant neoplasm of endometrium	Diagnosis	ICD-10-CM
C54.2	Malignant neoplasm of myometrium	Diagnosis	ICD-10-CM
C54.3	Malignant neoplasm of fundus uteri	Diagnosis	ICD-10-CM
C54.8	Malignant neoplasm of overlapping sites of corpus uteri	Diagnosis	ICD-10-CM
C54.9	Malignant neoplasm of corpus uteri, unspecified	Diagnosis	ICD-10-CM
D07.0	Carcinoma in situ of endometrium	Diagnosis	ICD-10-CM
V10.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-9-CM
Z85.42	Personal history of malignant neoplasm of other parts of uterus	Diagnosis	ICD-10-CM
<b>Lung Cancer</b>			
162.2	Malignant neoplasm of main bronchus	Diagnosis	ICD-9-CM
162.3	Malignant neoplasm of upper lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.4	Malignant neoplasm of middle lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.5	Malignant neoplasm of lower lobe, bronchus, or lung	Diagnosis	ICD-9-CM
162.8	Malignant neoplasm of other parts of bronchus or lung	Diagnosis	ICD-9-CM
162.9	Malignant neoplasm of bronchus and lung, unspecified site	Diagnosis	ICD-9-CM
231.2	Carcinoma in situ of bronchus and lung	Diagnosis	ICD-9-CM
C34.00	Malignant neoplasm of unspecified main bronchus	Diagnosis	ICD-10-CM
C34.01	Malignant neoplasm of right main bronchus	Diagnosis	ICD-10-CM
C34.02	Malignant neoplasm of left main bronchus	Diagnosis	ICD-10-CM
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.2	Malignant neoplasm of middle lobe, bronchus or lung	Diagnosis	ICD-10-CM
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung	Diagnosis	ICD-10-CM
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung	Diagnosis	ICD-10-CM
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung	Diagnosis	ICD-10-CM
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung	Diagnosis	ICD-10-CM
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung	Diagnosis	ICD-10-CM
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung	Diagnosis	ICD-10-CM
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung	Diagnosis	ICD-10-CM
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung	Diagnosis	ICD-10-CM
D02.20	Carcinoma in situ of unspecified bronchus and lung	Diagnosis	ICD-10-CM
D02.21	Carcinoma in situ of right bronchus and lung	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
D02.22	Carcinoma in situ of left bronchus and lung	Diagnosis	ICD-10-CM
V10.11	Personal history of malignant neoplasm of bronchus and lung	Diagnosis	ICD-9-CM
Z85.110	Personal history of malignant carcinoid tumor of bronchus and lung	Diagnosis	ICD-10-CM
Z85.118	Personal history of other malignant neoplasm of bronchus and lung	Diagnosis	ICD-10-CM
<b>Prostate Cancer</b>			
185	Malignant neoplasm of prostate	Diagnosis	ICD-9-CM
233.4	Carcinoma in situ of prostate	Diagnosis	ICD-9-CM
C61	Malignant neoplasm of prostate	Diagnosis	ICD-10-CM
D07.5	Carcinoma in situ of prostate	Diagnosis	ICD-10-CM
V10.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-9-CM
Z85.46	Personal history of malignant neoplasm of prostate	Diagnosis	ICD-10-CM
<b>Cataract</b>			
366.01	Anterior subcapsular polar cataract, nonsenile	Diagnosis	ICD-9-CM
366.02	Posterior subcapsular polar cataract, nonsenile	Diagnosis	ICD-9-CM
366.03	Cortical, lamellar, or zonular cataract, nonsenile	Diagnosis	ICD-9-CM
366.04	Nuclear cataract, nonsenile	Diagnosis	ICD-9-CM
366.09	Other and combined forms of nonsenile cataract	Diagnosis	ICD-9-CM
366.10	Unspecified senile cataract	Diagnosis	ICD-9-CM
366.12	Incipient cataract	Diagnosis	ICD-9-CM
366.13	Anterior subcapsular polar senile cataract	Diagnosis	ICD-9-CM
366.14	Posterior subcapsular polar senile cataract	Diagnosis	ICD-9-CM
366.15	Cortical senile cataract	Diagnosis	ICD-9-CM
366.16	Nuclear sclerosis	Diagnosis	ICD-9-CM
366.17	Total or mature senile cataract	Diagnosis	ICD-9-CM
366.18	Hyper mature senile cataract	Diagnosis	ICD-9-CM
366.19	Other and combined forms of senile cataract	Diagnosis	ICD-9-CM
366.20	Unspecified traumatic cataract	Diagnosis	ICD-9-CM
366.21	Localized traumatic opacities of cataract	Diagnosis	ICD-9-CM
366.22	Total traumatic cataract	Diagnosis	ICD-9-CM
366.23	Partially resolved traumatic cataract	Diagnosis	ICD-9-CM
366.30	Unspecified cataracta complicata	Diagnosis	ICD-9-CM
366.45	Toxic cataract	Diagnosis	ICD-9-CM
366.46	Cataract associated with radiation and other physical influences	Diagnosis	ICD-9-CM
366.50	Unspecified after-cataract	Diagnosis	ICD-9-CM
366.51	Soemmering's ring	Diagnosis	ICD-9-CM
366.52	Other after-cataract, not obscuring vision	Diagnosis	ICD-9-CM
366.53	After-cataract, obscuring vision	Diagnosis	ICD-9-CM
366.8	Other cataract	Diagnosis	ICD-9-CM
366.9	Unspecified cataract	Diagnosis	ICD-9-CM
379.26	Vitreous prolapse	Diagnosis	ICD-9-CM
379.31	Aphakia	Diagnosis	ICD-9-CM
379.39	Other disorders of lens	Diagnosis	ICD-9-CM
743.30	Unspecified congenital cataract	Diagnosis	ICD-9-CM
743.31	Congenital capsular and subcapsular cataract	Diagnosis	ICD-9-CM



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

Code	Description	Code Category	Code Type
743.32	Congenital cortical and zonular cataract	Diagnosis	ICD-9-CM
743.33	Congenital nuclear cataract	Diagnosis	ICD-9-CM
H25.011	Cortical age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.012	Cortical age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.013	Cortical age-related cataract, bilateral	Diagnosis	ICD-10-CM
H25.019	Cortical age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.031	Anterior subcapsular polar age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.032	Anterior subcapsular polar age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.033	Anterior subcapsular polar age-related cataract, bilateral	Diagnosis	ICD-10-CM
H25.039	Anterior subcapsular polar age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.041	Posterior subcapsular polar age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.042	Posterior subcapsular polar age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.043	Posterior subcapsular polar age-related cataract, bilateral	Diagnosis	ICD-10-CM
H25.049	Posterior subcapsular polar age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.091	Other age-related incipient cataract, right eye	Diagnosis	ICD-10-CM
H25.092	Other age-related incipient cataract, left eye	Diagnosis	ICD-10-CM
H25.093	Other age-related incipient cataract, bilateral	Diagnosis	ICD-10-CM
H25.099	Other age-related incipient cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.10	Age-related nuclear cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.11	Age-related nuclear cataract, right eye	Diagnosis	ICD-10-CM
H25.12	Age-related nuclear cataract, left eye	Diagnosis	ICD-10-CM
H25.13	Age-related nuclear cataract, bilateral	Diagnosis	ICD-10-CM
H25.20	Age-related cataract, morgagnian type, unspecified eye	Diagnosis	ICD-10-CM
H25.21	Age-related cataract, morgagnian type, right eye	Diagnosis	ICD-10-CM
H25.22	Age-related cataract, morgagnian type, left eye	Diagnosis	ICD-10-CM
H25.23	Age-related cataract, morgagnian type, bilateral	Diagnosis	ICD-10-CM
H25.811	Combined forms of age-related cataract, right eye	Diagnosis	ICD-10-CM
H25.812	Combined forms of age-related cataract, left eye	Diagnosis	ICD-10-CM
H25.813	Combined forms of age-related cataract, bilateral	Diagnosis	ICD-10-CM
H25.819	Combined forms of age-related cataract, unspecified eye	Diagnosis	ICD-10-CM
H25.89	Other age-related cataract	Diagnosis	ICD-10-CM
H25.9	Unspecified age-related cataract	Diagnosis	ICD-10-CM
H26.011	Infantile and juvenile cortical, lamellar, or zonular cataract, right eye	Diagnosis	ICD-10-CM
H26.012	Infantile and juvenile cortical, lamellar, or zonular cataract, left eye	Diagnosis	ICD-10-CM
H26.013	Infantile and juvenile cortical, lamellar, or zonular cataract, bilateral	Diagnosis	ICD-10-CM
H26.019	Infantile and juvenile cortical, lamellar, or zonular cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.031	Infantile and juvenile nuclear cataract, right eye	Diagnosis	ICD-10-CM
H26.032	Infantile and juvenile nuclear cataract, left eye	Diagnosis	ICD-10-CM
H26.033	Infantile and juvenile nuclear cataract, bilateral	Diagnosis	ICD-10-CM
H26.039	Infantile and juvenile nuclear cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.041	Anterior subcapsular polar infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.042	Anterior subcapsular polar infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.043	Anterior subcapsular polar infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H26.049	Anterior subcapsular polar infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
H26.051	Posterior subcapsular polar infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.052	Posterior subcapsular polar infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.053	Posterior subcapsular polar infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H26.059	Posterior subcapsular polar infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.061	Combined forms of infantile and juvenile cataract, right eye	Diagnosis	ICD-10-CM
H26.062	Combined forms of infantile and juvenile cataract, left eye	Diagnosis	ICD-10-CM
H26.063	Combined forms of infantile and juvenile cataract, bilateral	Diagnosis	ICD-10-CM
H26.069	Combined forms of infantile and juvenile cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.09	Other infantile and juvenile cataract	Diagnosis	ICD-10-CM
H26.101	Unspecified traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.102	Unspecified traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.103	Unspecified traumatic cataract, bilateral	Diagnosis	ICD-10-CM
H26.109	Unspecified traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.111	Localized traumatic opacities, right eye	Diagnosis	ICD-10-CM
H26.112	Localized traumatic opacities, left eye	Diagnosis	ICD-10-CM
H26.113	Localized traumatic opacities, bilateral	Diagnosis	ICD-10-CM
H26.119	Localized traumatic opacities, unspecified eye	Diagnosis	ICD-10-CM
H26.121	Partially resolved traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.122	Partially resolved traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.123	Partially resolved traumatic cataract, bilateral	Diagnosis	ICD-10-CM
H26.129	Partially resolved traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.131	Total traumatic cataract, right eye	Diagnosis	ICD-10-CM
H26.132	Total traumatic cataract, left eye	Diagnosis	ICD-10-CM
H26.133	Total traumatic cataract, bilateral	Diagnosis	ICD-10-CM
H26.139	Total traumatic cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.20	Unspecified complicated cataract	Diagnosis	ICD-10-CM
H26.211	Cataract with neovascularization, right eye	Diagnosis	ICD-10-CM
H26.212	Cataract with neovascularization, left eye	Diagnosis	ICD-10-CM
H26.213	Cataract with neovascularization, bilateral	Diagnosis	ICD-10-CM
H26.219	Cataract with neovascularization, unspecified eye	Diagnosis	ICD-10-CM
H26.30	Drug-induced cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.31	Drug-induced cataract, right eye	Diagnosis	ICD-10-CM
H26.32	Drug-induced cataract, left eye	Diagnosis	ICD-10-CM
H26.33	Drug-induced cataract, bilateral	Diagnosis	ICD-10-CM
H26.40	Unspecified secondary cataract	Diagnosis	ICD-10-CM
H26.411	Soemmering's ring, right eye	Diagnosis	ICD-10-CM
H26.412	Soemmering's ring, left eye	Diagnosis	ICD-10-CM
H26.413	Soemmering's ring, bilateral	Diagnosis	ICD-10-CM
H26.419	Soemmering's ring, unspecified eye	Diagnosis	ICD-10-CM
H26.491	Other secondary cataract, right eye	Diagnosis	ICD-10-CM
H26.492	Other secondary cataract, left eye	Diagnosis	ICD-10-CM
H26.493	Other secondary cataract, bilateral	Diagnosis	ICD-10-CM
H26.499	Other secondary cataract, unspecified eye	Diagnosis	ICD-10-CM
H26.8	Other specified cataract	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
H26.9	Unspecified cataract	Diagnosis	ICD-10-CM
Q12.0	Congenital cataract	Diagnosis	ICD-10-CM
V43.1	Lens replaced by other means	Diagnosis	ICD-9-CM
Z96.1	Presence of intraocular lens	Diagnosis	ICD-10-CM
<b>Chronic Kidney Disease</b>			
016.00	Tuberculosis of kidney, confirmation unspecified	Diagnosis	ICD-9-CM
016.01	Tuberculosis of kidney, bacteriological or histological examination not done	Diagnosis	ICD-9-CM
016.02	Tuberculosis of kidney, bacteriological or histological examination unknown (at present)	Diagnosis	ICD-9-CM
016.03	Tuberculosis of kidney, tubercle bacilli found (in sputum) by microscopy	Diagnosis	ICD-9-CM
016.04	Tuberculosis of kidney, tubercle bacilli not found (in sputum) by microscopy, but found by bacterial culture	Diagnosis	ICD-9-CM
016.05	Tuberculosis of kidney, tubercle bacilli not found by bacteriological examination, but tuberculosis confirmed histologically	Diagnosis	ICD-9-CM
016.06	Tuberculosis of kidney, tubercle bacilli not found by bacteriological or histological examination, but tuberculosis confirmed by other methods [inoculation of animals]	Diagnosis	ICD-9-CM
095.4	Syphilis of kidney	Diagnosis	ICD-9-CM
189.0	Malignant neoplasm of kidney, except pelvis	Diagnosis	ICD-9-CM
189.9	Malignant neoplasm of urinary organ, site unspecified	Diagnosis	ICD-9-CM
223.0	Benign neoplasm of kidney, except pelvis	Diagnosis	ICD-9-CM
236.91	Neoplasm of uncertain behavior of kidney and ureter	Diagnosis	ICD-9-CM
249.40	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
250.40	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
271.4	Renal glycosuria	Diagnosis	ICD-9-CM
274.10	Gouty nephropathy, unspecified	Diagnosis	ICD-9-CM
283.11	Hemolytic-uremic syndrome	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM



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

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

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Code	Description	Code Category	Code Type
583.89	Other nephritis and nephropathy, not specified as acute or chronic, with specified pathological lesion in kidney	Diagnosis	ICD-9-CM
583.9	Nephritis and nephropathy, not specified as acute or chronic, with unspecified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.5	Acute kidney failure with lesion of tubular necrosis	Diagnosis	ICD-9-CM
584.6	Acute kidney failure with lesion of renal cortical necrosis	Diagnosis	ICD-9-CM
584.7	Acute kidney failure with lesion of medullary [papillary] necrosis	Diagnosis	ICD-9-CM
584.8	Acute kidney failure with other specified pathological lesion in kidney	Diagnosis	ICD-9-CM
584.9	Acute kidney failure, unspecified	Diagnosis	ICD-9-CM
585.1	Chronic kidney disease, Stage I	Diagnosis	ICD-9-CM
585.2	Chronic kidney disease, Stage II (mild)	Diagnosis	ICD-9-CM
585.3	Chronic kidney disease, Stage III (moderate)	Diagnosis	ICD-9-CM
585.4	Chronic kidney disease, Stage IV (severe)	Diagnosis	ICD-9-CM
585.5	Chronic kidney disease, Stage V	Diagnosis	ICD-9-CM
585.6	End stage renal disease	Diagnosis	ICD-9-CM
585.9	Chronic kidney disease, unspecified	Diagnosis	ICD-9-CM
586	Unspecified renal failure	Diagnosis	ICD-9-CM
587	Unspecified renal sclerosis	Diagnosis	ICD-9-CM
588.0	Renal osteodystrophy	Diagnosis	ICD-9-CM
588.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-9-CM
588.81	Secondary hyperparathyroidism (of renal origin)	Diagnosis	ICD-9-CM
588.89	Other specified disorders resulting from impaired renal function	Diagnosis	ICD-9-CM
588.9	Unspecified disorder resulting from impaired renal function	Diagnosis	ICD-9-CM
591	Hydronephrosis	Diagnosis	ICD-9-CM
753.12	Congenital polycystic kidney, unspecified type	Diagnosis	ICD-9-CM
753.13	Congenital polycystic kidney, autosomal dominant	Diagnosis	ICD-9-CM
753.14	Congenital polycystic kidney, autosomal recessive	Diagnosis	ICD-9-CM
753.15	Congenital renal dysplasia	Diagnosis	ICD-9-CM
753.16	Congenital medullary cystic kidney	Diagnosis	ICD-9-CM
753.17	Congenital medullary sponge kidney	Diagnosis	ICD-9-CM
753.19	Other specified congenital cystic kidney disease	Diagnosis	ICD-9-CM
753.20	Unspecified obstructive defect of renal pelvis and ureter	Diagnosis	ICD-9-CM
753.21	Congenital obstruction of ureteropelvic junction	Diagnosis	ICD-9-CM
753.22	Congenital obstruction of ureterovesical junction	Diagnosis	ICD-9-CM
753.23	Congenital ureterocele	Diagnosis	ICD-9-CM
753.29	Other obstructive defect of renal pelvis and ureter	Diagnosis	ICD-9-CM
794.4	Nonspecific abnormal results of kidney function study	Diagnosis	ICD-9-CM
A18.11	Tuberculosis of kidney and ureter	Diagnosis	ICD-10-CM
A52.75	Syphilis of kidney and ureter	Diagnosis	ICD-10-CM
B52.0	Plasmodium malariae malaria with nephropathy	Diagnosis	ICD-10-CM
C64.1	Malignant neoplasm of right kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.2	Malignant neoplasm of left kidney, except renal pelvis	Diagnosis	ICD-10-CM
C64.9	Malignant neoplasm of unspecified kidney, except renal pelvis	Diagnosis	ICD-10-CM
C68.9	Malignant neoplasm of urinary organ, unspecified	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
D30.00	Benign neoplasm of unspecified kidney	Diagnosis	ICD-10-CM
D30.01	Benign neoplasm of right kidney	Diagnosis	ICD-10-CM
D30.02	Benign neoplasm of left kidney	Diagnosis	ICD-10-CM
D41.00	Neoplasm of uncertain behavior of unspecified kidney	Diagnosis	ICD-10-CM
D41.01	Neoplasm of uncertain behavior of right kidney	Diagnosis	ICD-10-CM
D41.02	Neoplasm of uncertain behavior of left kidney	Diagnosis	ICD-10-CM
D41.10	Neoplasm of uncertain behavior of unspecified renal pelvis	Diagnosis	ICD-10-CM
D41.11	Neoplasm of uncertain behavior of right renal pelvis	Diagnosis	ICD-10-CM
D41.12	Neoplasm of uncertain behavior of left renal pelvis	Diagnosis	ICD-10-CM
D41.20	Neoplasm of uncertain behavior of unspecified ureter	Diagnosis	ICD-10-CM
D41.21	Neoplasm of uncertain behavior of right ureter	Diagnosis	ICD-10-CM
D41.22	Neoplasm of uncertain behavior of left ureter	Diagnosis	ICD-10-CM
D59.3	Hemolytic-uremic syndrome	Diagnosis	ICD-10-CM
E08.21	Diabetes mellitus due to underlying condition with diabetic nephropathy	Diagnosis	ICD-10-CM
E08.22	Diabetes mellitus due to underlying condition with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E08.29	Diabetes mellitus due to underlying condition with other diabetic kidney complication	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	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
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	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
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E74.8	Other specified disorders of carbohydrate metabolism	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
I70.1	Atherosclerosis of renal artery	Diagnosis	ICD-10-CM
I72.2	Aneurysm of renal artery	Diagnosis	ICD-10-CM
K76.7	Hepatorenal syndrome	Diagnosis	ICD-10-CM
M10.30	Gout due to renal impairment, unspecified site	Diagnosis	ICD-10-CM
M10.311	Gout due to renal impairment, right shoulder	Diagnosis	ICD-10-CM
M10.312	Gout due to renal impairment, left shoulder	Diagnosis	ICD-10-CM
M10.319	Gout due to renal impairment, unspecified shoulder	Diagnosis	ICD-10-CM
M10.321	Gout due to renal impairment, right elbow	Diagnosis	ICD-10-CM
M10.322	Gout due to renal impairment, left elbow	Diagnosis	ICD-10-CM
M10.329	Gout due to renal impairment, unspecified elbow	Diagnosis	ICD-10-CM
M10.331	Gout due to renal impairment, right wrist	Diagnosis	ICD-10-CM
M10.332	Gout due to renal impairment, left wrist	Diagnosis	ICD-10-CM
M10.339	Gout due to renal impairment, unspecified wrist	Diagnosis	ICD-10-CM
M10.341	Gout due to renal impairment, right hand	Diagnosis	ICD-10-CM
M10.342	Gout due to renal impairment, left hand	Diagnosis	ICD-10-CM
M10.349	Gout due to renal impairment, unspecified hand	Diagnosis	ICD-10-CM
M10.351	Gout due to renal impairment, right hip	Diagnosis	ICD-10-CM
M10.352	Gout due to renal impairment, left hip	Diagnosis	ICD-10-CM
M10.359	Gout due to renal impairment, unspecified hip	Diagnosis	ICD-10-CM
M10.361	Gout due to renal impairment, right knee	Diagnosis	ICD-10-CM
M10.362	Gout due to renal impairment, left knee	Diagnosis	ICD-10-CM
M10.369	Gout due to renal impairment, unspecified knee	Diagnosis	ICD-10-CM
M10.371	Gout due to renal impairment, right ankle and foot	Diagnosis	ICD-10-CM
M10.372	Gout due to renal impairment, left ankle and foot	Diagnosis	ICD-10-CM
M10.379	Gout due to renal impairment, unspecified ankle and foot	Diagnosis	ICD-10-CM
M10.38	Gout due to renal impairment, vertebrae	Diagnosis	ICD-10-CM
M10.39	Gout due to renal impairment, multiple sites	Diagnosis	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	Diagnosis	ICD-10-CM
M35.04	Sjogren syndrome with tubulo-interstitial nephropathy	Diagnosis	ICD-10-CM
N00.0	Acute nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N00.1	Acute nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N00.2	Acute nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N00.3	Acute nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.4	Acute nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N00.5	Acute nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N00.6	Acute nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N00.7	Acute nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N00.8	Acute nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N00.9	Acute nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N00.A	Acute nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N01.0	Rapidly progressive nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N01.1	Rapidly progressive nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N01.2	Rapidly progressive nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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	Diagnosis	ICD-10-CM
N02.4	Recurrent and persistent hematuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N02.5	Recurrent and persistent hematuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N02.6	Recurrent and persistent hematuria with dense deposit disease	Diagnosis	ICD-10-CM
N02.7	Recurrent and persistent hematuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N02.8	Recurrent and persistent hematuria with other morphologic changes	Diagnosis	ICD-10-CM
N02.9	Recurrent and persistent hematuria with unspecified morphologic changes	Diagnosis	ICD-10-CM
N02.A	Recurrent and persistent hematuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N03.0	Chronic nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N03.1	Chronic nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N03.2	Chronic nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N03.3	Chronic nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.4	Chronic nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N03.5	Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N03.6	Chronic nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N03.7	Chronic nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N03.8	Chronic nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N03.9	Chronic nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N03.A	Chronic nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N04.0	Nephrotic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N04.1	Nephrotic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N04.2	Nephrotic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N04.3	Nephrotic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.4	Nephrotic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N04.5	Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N04.6	Nephrotic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N04.7	Nephrotic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N04.8	Nephrotic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N04.9	Nephrotic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N04.A	Nephrotic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
N05.0	Unspecified nephritic syndrome with minor glomerular abnormality	Diagnosis	ICD-10-CM
N05.1	Unspecified nephritic syndrome with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N05.2	Unspecified nephritic syndrome with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N05.3	Unspecified nephritic syndrome with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.4	Unspecified nephritic syndrome with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N05.5	Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N05.6	Unspecified nephritic syndrome with dense deposit disease	Diagnosis	ICD-10-CM
N05.7	Unspecified nephritic syndrome with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N05.8	Unspecified nephritic syndrome with other morphologic changes	Diagnosis	ICD-10-CM
N05.9	Unspecified nephritic syndrome with unspecified morphologic changes	Diagnosis	ICD-10-CM
N05.A	Unspecified nephritic syndrome with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N06.0	Isolated proteinuria with minor glomerular abnormality	Diagnosis	ICD-10-CM
N06.1	Isolated proteinuria with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N06.2	Isolated proteinuria with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N06.3	Isolated proteinuria with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.4	Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N06.5	Isolated proteinuria with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N06.6	Isolated proteinuria with dense deposit disease	Diagnosis	ICD-10-CM
N06.7	Isolated proteinuria with diffuse crescentic glomerulonephritis	Diagnosis	ICD-10-CM
N06.8	Isolated proteinuria with other morphologic lesion	Diagnosis	ICD-10-CM
N06.9	Isolated proteinuria with unspecified morphologic lesion	Diagnosis	ICD-10-CM
N06.A	Isolated proteinuria with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N07.0	Hereditary nephropathy, not elsewhere classified with minor glomerular abnormality	Diagnosis	ICD-10-CM
N07.1	Hereditary nephropathy, not elsewhere classified with focal and segmental glomerular lesions	Diagnosis	ICD-10-CM
N07.2	Hereditary nephropathy, not elsewhere classified with diffuse membranous glomerulonephritis	Diagnosis	ICD-10-CM
N07.3	Hereditary nephropathy, not elsewhere classified with diffuse mesangial proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.4	Hereditary nephropathy, not elsewhere classified with diffuse endocapillary proliferative glomerulonephritis	Diagnosis	ICD-10-CM
N07.5	Hereditary nephropathy, not elsewhere classified with diffuse mesangiocapillary glomerulonephritis	Diagnosis	ICD-10-CM
N07.6	Hereditary nephropathy, not elsewhere classified with dense deposit disease	Diagnosis	ICD-10-CM
N07.7	Hereditary nephropathy, not elsewhere classified with diffuse crescentic	Diagnosis	ICD-10-CM
N07.8	Hereditary nephropathy, not elsewhere classified with other morphologic lesions	Diagnosis	ICD-10-CM
N07.9	Hereditary nephropathy, not elsewhere classified with unspecified morphologic lesions	Diagnosis	ICD-10-CM
N07.A	Hereditary nephropathy, not elsewhere classified with C3 glomerulonephritis	Diagnosis	ICD-10-CM
N08	Glomerular disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N13.1	Hydronephrosis with ureteral stricture, not elsewhere classified	Diagnosis	ICD-10-CM
N13.2	Hydronephrosis with renal and ureteral calculous obstruction	Diagnosis	ICD-10-CM
N13.30	Unspecified hydronephrosis	Diagnosis	ICD-10-CM
N13.39	Other hydronephrosis	Diagnosis	ICD-10-CM
N14.0	Analgesic nephropathy	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
N14.1	Nephropathy induced by other drugs, medicaments and biological substances	Diagnosis	ICD-10-CM
N14.2	Nephropathy induced by unspecified drug, medicament or biological substance	Diagnosis	ICD-10-CM
N14.3	Nephropathy induced by heavy metals	Diagnosis	ICD-10-CM
N14.4	Toxic nephropathy, not elsewhere classified	Diagnosis	ICD-10-CM
N15.0	Balkan nephropathy	Diagnosis	ICD-10-CM
N15.8	Other specified renal tubulo-interstitial diseases	Diagnosis	ICD-10-CM
N15.9	Renal tubulo-interstitial disease, unspecified	Diagnosis	ICD-10-CM
N16	Renal tubulo-interstitial disorders in diseases classified elsewhere	Diagnosis	ICD-10-CM
N17.0	Acute kidney failure with tubular necrosis	Diagnosis	ICD-10-CM
N17.1	Acute kidney failure with acute cortical necrosis	Diagnosis	ICD-10-CM
N17.2	Acute kidney failure with medullary necrosis	Diagnosis	ICD-10-CM
N17.8	Other acute kidney failure	Diagnosis	ICD-10-CM
N17.9	Acute kidney failure, unspecified	Diagnosis	ICD-10-CM
N18.1	Chronic kidney disease, stage 1	Diagnosis	ICD-10-CM
N18.2	Chronic kidney disease, stage 2 (mild)	Diagnosis	ICD-10-CM
N18.3	Chronic kidney disease, stage 3 (moderate)	Diagnosis	ICD-10-CM
N18.30	Chronic kidney disease, stage 3 unspecified	Diagnosis	ICD-10-CM
N18.31	Chronic kidney disease, stage 3a	Diagnosis	ICD-10-CM
N18.32	Chronic kidney disease, stage 3b	Diagnosis	ICD-10-CM
N18.4	Chronic kidney disease, stage 4 (severe)	Diagnosis	ICD-10-CM
N18.5	Chronic kidney disease, stage 5	Diagnosis	ICD-10-CM
N18.6	End stage renal disease	Diagnosis	ICD-10-CM
N18.9	Chronic kidney disease, unspecified	Diagnosis	ICD-10-CM
N19	Unspecified kidney failure	Diagnosis	ICD-10-CM
N25.0	Renal osteodystrophy	Diagnosis	ICD-10-CM
N25.1	Nephrogenic diabetes insipidus	Diagnosis	ICD-10-CM
N25.81	Secondary hyperparathyroidism of renal origin	Diagnosis	ICD-10-CM
N25.89	Other disorders resulting from impaired renal tubular function	Diagnosis	ICD-10-CM
N25.9	Disorder resulting from impaired renal tubular function, unspecified	Diagnosis	ICD-10-CM
N26.1	Atrophy of kidney (terminal)	Diagnosis	ICD-10-CM
N26.9	Renal sclerosis, unspecified	Diagnosis	ICD-10-CM
Q61.02	Congenital multiple renal cysts	Diagnosis	ICD-10-CM
Q61.11	Cystic dilatation of collecting ducts	Diagnosis	ICD-10-CM
Q61.19	Other polycystic kidney, infantile type	Diagnosis	ICD-10-CM
Q61.2	Polycystic kidney, adult type	Diagnosis	ICD-10-CM
Q61.3	Polycystic kidney, unspecified	Diagnosis	ICD-10-CM
Q61.4	Renal dysplasia	Diagnosis	ICD-10-CM
Q61.5	Medullary cystic kidney	Diagnosis	ICD-10-CM
Q61.8	Other cystic kidney diseases	Diagnosis	ICD-10-CM
Q62.0	Congenital hydronephrosis	Diagnosis	ICD-10-CM
Q62.10	Congenital occlusion of ureter, unspecified	Diagnosis	ICD-10-CM
Q62.11	Congenital occlusion of ureteropelvic junction	Diagnosis	ICD-10-CM
Q62.12	Congenital occlusion of ureterovesical orifice	Diagnosis	ICD-10-CM
Q62.2	Congenital megaureter	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
Q62.31	Congenital ureterocele, orthotopic	Diagnosis	ICD-10-CM
Q62.32	Cecoureterocele	Diagnosis	ICD-10-CM
Q62.39	Other obstructive defects of renal pelvis and ureter	Diagnosis	ICD-10-CM
R94.4	Abnormal results of kidney function studies	Diagnosis	ICD-10-CM
<b>Chronic Obstructive Pulmonary Disease (COPD) or Bronchiectasis</b>			
490	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-9-CM
491.0	Simple chronic bronchitis	Diagnosis	ICD-9-CM
491.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-9-CM
491.20	Obstructive chronic bronchitis, without exacerbation	Diagnosis	ICD-9-CM
491.21	Obstructive chronic bronchitis, with (acute) exacerbation	Diagnosis	ICD-9-CM
491.22	Obstructive chronic bronchitis with acute bronchitis	Diagnosis	ICD-9-CM
491.8	Other chronic bronchitis	Diagnosis	ICD-9-CM
491.9	Unspecified chronic bronchitis	Diagnosis	ICD-9-CM
492.0	Emphysematous bleb	Diagnosis	ICD-9-CM
492.8	Other emphysema	Diagnosis	ICD-9-CM
494.0	Bronchiectasis without acute exacerbation	Diagnosis	ICD-9-CM
494.1	Bronchiectasis with acute exacerbation	Diagnosis	ICD-9-CM
496	Chronic airway obstruction, not elsewhere classified	Diagnosis	ICD-9-CM
J40	Bronchitis, not specified as acute or chronic	Diagnosis	ICD-10-CM
J41.0	Simple chronic bronchitis	Diagnosis	ICD-10-CM
J41.1	Mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J41.8	Mixed simple and mucopurulent chronic bronchitis	Diagnosis	ICD-10-CM
J42	Unspecified chronic bronchitis	Diagnosis	ICD-10-CM
J43.0	Unilateral pulmonary emphysema [MacLeod's syndrome]	Diagnosis	ICD-10-CM
J43.1	Panlobular emphysema	Diagnosis	ICD-10-CM
J43.2	Centrilobular emphysema	Diagnosis	ICD-10-CM
J43.8	Other emphysema	Diagnosis	ICD-10-CM
J43.9	Emphysema, unspecified	Diagnosis	ICD-10-CM
J44.0	Chronic obstructive pulmonary disease with (acute) lower respiratory infection	Diagnosis	ICD-10-CM
J44.1	Chronic obstructive pulmonary disease with (acute) exacerbation	Diagnosis	ICD-10-CM
J44.9	Chronic obstructive pulmonary disease, unspecified	Diagnosis	ICD-10-CM
J47.0	Bronchiectasis with acute lower respiratory infection	Diagnosis	ICD-10-CM
J47.1	Bronchiectasis with (acute) exacerbation	Diagnosis	ICD-10-CM
J47.9	Bronchiectasis, uncomplicated	Diagnosis	ICD-10-CM
<b>Depression</b>			
296.20	Major depressive disorder, single episode, unspecified	Diagnosis	ICD-9-CM
296.21	Major depressive disorder, single episode, mild	Diagnosis	ICD-9-CM
296.22	Major depressive disorder, single episode, moderate	Diagnosis	ICD-9-CM
296.23	Major depressive disorder, single episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.24	Major depressive disorder, single episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.25	Major depressive disorder, single episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.26	Major depressive disorder, single episode in full remission	Diagnosis	ICD-9-CM
296.30	Major depressive disorder, recurrent episode, unspecified	Diagnosis	ICD-9-CM
296.31	Major depressive disorder, recurrent episode, mild	Diagnosis	ICD-9-CM



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Code	Description	Code Category	Code Type
296.32	Major depressive disorder, recurrent episode, moderate	Diagnosis	ICD-9-CM
296.33	Major depressive disorder, recurrent episode, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.34	Major depressive disorder, recurrent episode, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.35	Major depressive disorder, recurrent episode, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.36	Major depressive disorder, recurrent episode, in full remission	Diagnosis	ICD-9-CM
296.51	Bipolar I disorder, most recent episode (or current) depressed, mild	Diagnosis	ICD-9-CM
296.52	Bipolar I disorder, most recent episode (or current) depressed, moderate	Diagnosis	ICD-9-CM
296.53	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.54	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.55	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.56	Bipolar I disorder, most recent episode (or current) depressed, in full remission	Diagnosis	ICD-9-CM
296.60	Bipolar I disorder, most recent episode (or current) mixed, unspecified	Diagnosis	ICD-9-CM
296.61	Bipolar I disorder, most recent episode (or current) mixed, mild	Diagnosis	ICD-9-CM
296.62	Bipolar I disorder, most recent episode (or current) mixed, moderate	Diagnosis	ICD-9-CM
296.63	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior	Diagnosis	ICD-9-CM
296.64	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior	Diagnosis	ICD-9-CM
296.65	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission	Diagnosis	ICD-9-CM
296.66	Bipolar I disorder, most recent episode (or current) mixed, in full remission	Diagnosis	ICD-9-CM
296.89	Other and unspecified bipolar disorders	Diagnosis	ICD-9-CM
298.0	Depressive type psychosis	Diagnosis	ICD-9-CM
300.4	Dysthymic disorder	Diagnosis	ICD-9-CM
309.1	Prolonged depressive reaction as adjustment reaction	Diagnosis	ICD-9-CM
311	Depressive disorder, not elsewhere classified	Diagnosis	ICD-9-CM
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
F31.75	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

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Code	Description	Code Category	Code Type
F31.81	Bipolar II disorder	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
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
F32.9	Major depressive disorder, single episode, 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
F34.1	Dysthymic disorder	Diagnosis	ICD-10-CM
F43.21	Adjustment disorder with depressed mood	Diagnosis	ICD-10-CM
F43.23	Adjustment disorder with mixed anxiety and depressed mood	Diagnosis	ICD-10-CM
<b>Diabetes</b>			
249	Secondary diabetes mellitus without mention of complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.01	Secondary diabetes mellitus without mention of complication, uncontrolled	Diagnosis	ICD-9-CM
249.1	Secondary diabetes mellitus with ketoacidosis, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.11	Secondary diabetes mellitus with ketoacidosis, uncontrolled	Diagnosis	ICD-9-CM
249.2	Secondary diabetes mellitus with hyperosmolarity, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.21	Secondary diabetes mellitus with hyperosmolarity, uncontrolled	Diagnosis	ICD-9-CM
249.3	Secondary diabetes mellitus with other coma, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.31	Secondary diabetes mellitus with other coma, uncontrolled	Diagnosis	ICD-9-CM
249.4	Secondary diabetes mellitus with renal manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.41	Secondary diabetes mellitus with renal manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.5	Secondary diabetes mellitus with ophthalmic manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.51	Secondary diabetes mellitus with ophthalmic manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.6	Secondary diabetes mellitus with neurological manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.61	Secondary diabetes mellitus with neurological manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.7	Secondary diabetes mellitus with peripheral circulatory disorders, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.71	Secondary diabetes mellitus with peripheral circulatory disorders, uncontrolled	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
249.8	Secondary diabetes mellitus with other specified manifestations, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.81	Secondary diabetes mellitus with other specified manifestations, uncontrolled	Diagnosis	ICD-9-CM
249.9	Secondary diabetes mellitus with unspecified complication, not stated as uncontrolled, or unspecified	Diagnosis	ICD-9-CM
249.91	Secondary diabetes mellitus with unspecified complication, uncontrolled	Diagnosis	ICD-9-CM
250	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.02	Diabetes mellitus without mention of complication, type II or unspecified type,	Diagnosis	ICD-9-CM
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.1	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.12	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.2	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.22	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.3	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.32	Diabetes with other coma, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.4	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.42	Diabetes with renal manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.5	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.52	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.6	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as	Diagnosis	ICD-9-CM
250.62	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM
250.7	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled	Diagnosis	ICD-9-CM
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled	Diagnosis	ICD-9-CM
250.72	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled	Diagnosis	ICD-9-CM
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled	Diagnosis	ICD-9-CM

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



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

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

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

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

Code	Description	Code Category	Code Type
E08.649	Diabetes mellitus due to underlying condition with hypoglycemia without coma	Diagnosis	ICD-10-CM
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia	Diagnosis	ICD-10-CM
E08.69	Diabetes mellitus due to underlying condition with other specified complication	Diagnosis	ICD-10-CM
E08.8	Diabetes mellitus due to underlying condition with unspecified complications	Diagnosis	ICD-10-CM
E08.9	Diabetes mellitus due to underlying condition without complications	Diagnosis	ICD-10-CM
E09.00	Drug or chemical induced diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E09.22	Drug or chemical induced diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E09.29	Drug or chemical induced diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.321	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3211	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3212	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3213	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3219	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.329	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3291	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3292	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3293	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3299	Drug or chemical induced diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.331	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3311	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3312	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
E09.3313	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3319	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.339	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3391	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3392	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3393	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3399	Drug or chemical induced diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.341	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3411	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3412	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3413	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3419	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.349	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E09.3491	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E09.3492	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E09.3493	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3499	Drug or chemical induced diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E09.351	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E09.3511	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E09.3512	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E09.3513	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E09.3519	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E09.3521	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3522	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E09.3523	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3529	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3531	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E09.3532	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E09.3533	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E09.3539	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E09.3541	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E09.3542	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E09.3543	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E09.3549	Drug or chemical induced diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E09.3551	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E09.3552	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E09.3553	Drug or chemical induced diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
E09.37X1	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E09.37X2	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E09.37X3	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E09.37X9	Drug or chemical induced diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy	Diagnosis	ICD-10-CM
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication	Diagnosis	ICD-10-CM
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E09.52	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E09.59	Drug or chemical induced diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E09.621	Drug or chemical induced diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E09.628	Drug or chemical induced diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E09.638	Drug or chemical induced diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E09.69	Drug or chemical induced diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E09.9	Drug or chemical induced diabetes mellitus without complications	Diagnosis	ICD-10-CM
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E10.21	Type 1 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM

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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
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3219	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3299	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E10.3312	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E10.3313	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3319	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3392	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3393	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3399	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM

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

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Code	Description	Code Category	Code Type
E10.3539	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E10.3549	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E10.3559	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E10.3599	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E10.36	Type 1 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E10.37X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E10.49	Type 1 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E10.51	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E10.59	Type 1 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
E10.620	Type 1 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E10.621	Type 1 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E10.622	Type 1 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E10.628	Type 1 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E10.630	Type 1 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E10.638	Type 1 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E10.65	Type 1 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E10.69	Type 1 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E10.8	Type 1 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E10.9	Type 1 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E11.01	Type 2 diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E11.10	Type 2 diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E11.11	Type 2 diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E11.21	Type 2 diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E11.3211	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E11.3212	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E11.3213	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3219	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3291	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3292	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3293	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3299	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

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



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Code	Description	Code Category	Code Type
E11.3513	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3519	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.3521	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3522	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3523	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3529	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3531	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye	Diagnosis	ICD-10-CM
E11.3532	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye	Diagnosis	ICD-10-CM
E11.3533	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral	Diagnosis	ICD-10-CM
E11.3539	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye	Diagnosis	ICD-10-CM
E11.3541	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye	Diagnosis	ICD-10-CM
E11.3542	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye	Diagnosis	ICD-10-CM
E11.3543	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral	Diagnosis	ICD-10-CM
E11.3549	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye	Diagnosis	ICD-10-CM
E11.3551	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye	Diagnosis	ICD-10-CM
E11.3552	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye	Diagnosis	ICD-10-CM
E11.3553	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral	Diagnosis	ICD-10-CM
E11.3559	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye	Diagnosis	ICD-10-CM
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E11.3591	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E11.3592	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E11.3593	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E11.3599	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E11.36	Type 2 diabetes mellitus with diabetic cataract	Diagnosis	ICD-10-CM
E11.37X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E11.37X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	Diagnosis	ICD-10-CM
E11.37X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	Diagnosis	ICD-10-CM
E11.37X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	Diagnosis	ICD-10-CM
E11.39	Type 2 diabetes mellitus with other diabetic ophthalmic complication	Diagnosis	ICD-10-CM
E11.40	Type 2 diabetes mellitus with diabetic neuropathy, unspecified	Diagnosis	ICD-10-CM
E11.41	Type 2 diabetes mellitus with diabetic mononeuropathy	Diagnosis	ICD-10-CM
E11.42	Type 2 diabetes mellitus with diabetic polyneuropathy	Diagnosis	ICD-10-CM
E11.43	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy	Diagnosis	ICD-10-CM
E11.44	Type 2 diabetes mellitus with diabetic amyotrophy	Diagnosis	ICD-10-CM
E11.49	Type 2 diabetes mellitus with other diabetic neurological complication	Diagnosis	ICD-10-CM
E11.51	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene	Diagnosis	ICD-10-CM
E11.52	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene	Diagnosis	ICD-10-CM
E11.59	Type 2 diabetes mellitus with other circulatory complications	Diagnosis	ICD-10-CM
E11.610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy	Diagnosis	ICD-10-CM
E11.618	Type 2 diabetes mellitus with other diabetic arthropathy	Diagnosis	ICD-10-CM
E11.620	Type 2 diabetes mellitus with diabetic dermatitis	Diagnosis	ICD-10-CM
E11.621	Type 2 diabetes mellitus with foot ulcer	Diagnosis	ICD-10-CM
E11.622	Type 2 diabetes mellitus with other skin ulcer	Diagnosis	ICD-10-CM
E11.628	Type 2 diabetes mellitus with other skin complications	Diagnosis	ICD-10-CM
E11.630	Type 2 diabetes mellitus with periodontal disease	Diagnosis	ICD-10-CM
E11.638	Type 2 diabetes mellitus with other oral complications	Diagnosis	ICD-10-CM
E11.641	Type 2 diabetes mellitus with hypoglycemia with coma	Diagnosis	ICD-10-CM
E11.649	Type 2 diabetes mellitus with hypoglycemia without coma	Diagnosis	ICD-10-CM
E11.65	Type 2 diabetes mellitus with hyperglycemia	Diagnosis	ICD-10-CM
E11.69	Type 2 diabetes mellitus with other specified complication	Diagnosis	ICD-10-CM
E11.8	Type 2 diabetes mellitus with unspecified complications	Diagnosis	ICD-10-CM
E11.9	Type 2 diabetes mellitus without complications	Diagnosis	ICD-10-CM
E13.00	Other specified diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)	Diagnosis	ICD-10-CM
E13.01	Other specified diabetes mellitus with hyperosmolarity with coma	Diagnosis	ICD-10-CM
E13.10	Other specified diabetes mellitus with ketoacidosis without coma	Diagnosis	ICD-10-CM
E13.11	Other specified diabetes mellitus with ketoacidosis with coma	Diagnosis	ICD-10-CM
E13.21	Other specified diabetes mellitus with diabetic nephropathy	Diagnosis	ICD-10-CM
E13.22	Other specified diabetes mellitus with diabetic chronic kidney disease	Diagnosis	ICD-10-CM
E13.29	Other specified diabetes mellitus with other diabetic kidney complication	Diagnosis	ICD-10-CM
E13.311	Other specified diabetes mellitus with unspecified diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.319	Other specified diabetes mellitus with unspecified diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.321	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
E13.3211	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3212	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3213	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3219	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.329	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3291	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3292	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3293	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3299	Other specified diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.331	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3311	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3312	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM
E13.3313	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3319	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.339	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema	Diagnosis	ICD-10-CM
E13.3391	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye	Diagnosis	ICD-10-CM
E13.3392	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye	Diagnosis	ICD-10-CM
E13.3393	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral	Diagnosis	ICD-10-CM
E13.3399	Other specified diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye	Diagnosis	ICD-10-CM
E13.341	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema	Diagnosis	ICD-10-CM
E13.3411	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye	Diagnosis	ICD-10-CM
E13.3412	Other specified diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
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
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

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		Code	
Code	Description	Category	Code Type
Glaucoma			
362.85	Retinal nerve fiber bundle defects	Diagnosis	ICD-9-CM
365	Unspecified preglaucoma	Diagnosis	ICD-9-CM
365.01	Borderline glaucoma, open angle with borderline findings, low risk	Diagnosis	ICD-9-CM
365.02	Borderline glaucoma with anatomical narrow angle	Diagnosis	ICD-9-CM
365.03	Borderline glaucoma with steroid responders	Diagnosis	ICD-9-CM
365.04	Borderline glaucoma with ocular hypertension	Diagnosis	ICD-9-CM
365.1	Unspecified open-angle glaucoma	Diagnosis	ICD-9-CM
365.11	Primary open-angle glaucoma	Diagnosis	ICD-9-CM
365.12	Low tension open-angle glaucoma	Diagnosis	ICD-9-CM
365.13	Pigmentary open-angle glaucoma	Diagnosis	ICD-9-CM
365.15	Residual stage of open angle glaucoma	Diagnosis	ICD-9-CM
365.2	Unspecified primary angle-closure glaucoma	Diagnosis	ICD-9-CM
365.21	Intermittent angle-closure glaucoma	Diagnosis	ICD-9-CM
365.22	Acute angle-closure glaucoma	Diagnosis	ICD-9-CM
365.23	Chronic angle-closure glaucoma	Diagnosis	ICD-9-CM
365.24	Residual stage of angle-closure glaucoma	Diagnosis	ICD-9-CM
365.31	Corticosteroid-induced glaucoma, glaucomatous stage	Diagnosis	ICD-9-CM
365.32	Corticosteroid-induced glaucoma, residual stage	Diagnosis	ICD-9-CM
365.41	Glaucoma associated with chamber angle anomalies	Diagnosis	ICD-9-CM
365.42	Glaucoma associated with anomalies of iris	Diagnosis	ICD-9-CM
365.43	Glaucoma associated with other anterior segment anomalies	Diagnosis	ICD-9-CM
365.51	Phacolytic glaucoma	Diagnosis	ICD-9-CM
365.52	Pseudoexfoliation glaucoma	Diagnosis	ICD-9-CM
365.59	Glaucoma associated with other lens disorders	Diagnosis	ICD-9-CM
365.6	Glaucoma associated with unspecified ocular disorder	Diagnosis	ICD-9-CM
365.61	Glaucoma associated with pupillary block	Diagnosis	ICD-9-CM
365.62	Glaucoma associated with ocular inflammations	Diagnosis	ICD-9-CM
365.63	Glaucoma associated with vascular disorders of eye	Diagnosis	ICD-9-CM
365.64	Glaucoma associated with tumors or cysts	Diagnosis	ICD-9-CM
365.65	Glaucoma associated with ocular trauma	Diagnosis	ICD-9-CM
365.81	Hypersecretion glaucoma	Diagnosis	ICD-9-CM
365.82	Glaucoma with increased episcleral venous pressure	Diagnosis	ICD-9-CM
365.83	Aqueous misdirection	Diagnosis	ICD-9-CM
365.89	Other specified glaucoma	Diagnosis	ICD-9-CM
365.9	Unspecified glaucoma	Diagnosis	ICD-9-CM
377.14	Glaucomatous atrophy (cupping) of optic disc	Diagnosis	ICD-9-CM
H40.001	Preglaucoma, unspecified, right eye	Diagnosis	ICD-10-CM
H40.002	Preglaucoma, unspecified, left eye	Diagnosis	ICD-10-CM
H40.003	Preglaucoma, unspecified, bilateral	Diagnosis	ICD-10-CM
H40.009	Preglaucoma, unspecified, unspecified eye	Diagnosis	ICD-10-CM
H40.011	Open angle with borderline findings, low risk, right eye	Diagnosis	ICD-10-CM
H40.012	Open angle with borderline findings, low risk, left eye	Diagnosis	ICD-10-CM
H40.013	Open angle with borderline findings, low risk, bilateral	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
H40.019	Open angle with borderline findings, low risk, unspecified eye	Diagnosis	ICD-10-CM
H40.031	Anatomical narrow angle, right eye	Diagnosis	ICD-10-CM
H40.032	Anatomical narrow angle, left eye	Diagnosis	ICD-10-CM
H40.033	Anatomical narrow angle, bilateral	Diagnosis	ICD-10-CM
H40.039	Anatomical narrow angle, unspecified eye	Diagnosis	ICD-10-CM
H40.041	Steroid responder, right eye	Diagnosis	ICD-10-CM
H40.042	Steroid responder, left eye	Diagnosis	ICD-10-CM
H40.043	Steroid responder, bilateral	Diagnosis	ICD-10-CM
H40.049	Steroid responder, unspecified eye	Diagnosis	ICD-10-CM
H40.051	Ocular hypertension, right eye	Diagnosis	ICD-10-CM
H40.052	Ocular hypertension, left eye	Diagnosis	ICD-10-CM
H40.053	Ocular hypertension, bilateral	Diagnosis	ICD-10-CM
H40.059	Ocular hypertension, unspecified eye	Diagnosis	ICD-10-CM
H40.10X0	Unspecified open-angle glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.10X1	Unspecified open-angle glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.10X2	Unspecified open-angle glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.10X3	Unspecified open-angle glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.10X4	Unspecified open-angle glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.1110	Primary open-angle glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1111	Primary open-angle glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1112	Primary open-angle glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1113	Primary open-angle glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1114	Primary open-angle glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1120	Primary open-angle glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1121	Primary open-angle glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1122	Primary open-angle glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1123	Primary open-angle glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1124	Primary open-angle glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1130	Primary open-angle glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
H40.1211	Low-tension glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1212	Low-tension glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1213	Low-tension glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1214	Low-tension glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1220	Low-tension glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1221	Low-tension glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1222	Low-tension glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1223	Low-tension glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1224	Low-tension glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1230	Low-tension glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1231	Low-tension glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1232	Low-tension glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1233	Low-tension glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1234	Low-tension glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1290	Low-tension glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1291	Low-tension glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1292	Low-tension glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1293	Low-tension glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1294	Low-tension glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1310	Pigmentary glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1311	Pigmentary glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.1312	Pigmentary glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.1313	Pigmentary glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.1314	Pigmentary glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1320	Pigmentary glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1321	Pigmentary glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1322	Pigmentary glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1323	Pigmentary glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
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



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

Code	Description	Code Category	Code Type
H40.1420	Capsular glaucoma with pseudoexfoliation of lens, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1421	Capsular glaucoma with pseudoexfoliation of lens, left eye, mild stage	Diagnosis	ICD-10-CM
H40.1422	Capsular glaucoma with pseudoexfoliation of lens, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.1423	Capsular glaucoma with pseudoexfoliation of lens, left eye, severe stage	Diagnosis	ICD-10-CM
H40.1424	Capsular glaucoma with pseudoexfoliation of lens, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.1430	Capsular glaucoma with pseudoexfoliation of lens, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.1431	Capsular glaucoma with pseudoexfoliation of lens, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.1432	Capsular glaucoma with pseudoexfoliation of lens, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.1433	Capsular glaucoma with pseudoexfoliation of lens, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.1434	Capsular glaucoma with pseudoexfoliation of lens, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.1490	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.1491	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.1492	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.1493	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.1494	Capsular glaucoma with pseudoexfoliation of lens, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.151	Residual stage of open-angle glaucoma, right eye	Diagnosis	ICD-10-CM
H40.152	Residual stage of open-angle glaucoma, left eye	Diagnosis	ICD-10-CM
H40.153	Residual stage of open-angle glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.159	Residual stage of open-angle glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.20X0	Unspecified primary angle-closure glaucoma, stage unspecified	Diagnosis	ICD-10-CM
H40.20X1	Unspecified primary angle-closure glaucoma, mild stage	Diagnosis	ICD-10-CM
H40.20X2	Unspecified primary angle-closure glaucoma, moderate stage	Diagnosis	ICD-10-CM
H40.20X3	Unspecified primary angle-closure glaucoma, severe stage	Diagnosis	ICD-10-CM
H40.20X4	Unspecified primary angle-closure glaucoma, indeterminate stage	Diagnosis	ICD-10-CM
H40.211	Acute angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.212	Acute angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.213	Acute angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.219	Acute angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.2210	Chronic angle-closure glaucoma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2211	Chronic angle-closure glaucoma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.2212	Chronic angle-closure glaucoma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.2213	Chronic angle-closure glaucoma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.2214	Chronic angle-closure glaucoma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2220	Chronic angle-closure glaucoma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.2221	Chronic angle-closure glaucoma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.2222	Chronic angle-closure glaucoma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.2223	Chronic angle-closure glaucoma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.2224	Chronic angle-closure glaucoma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.2230	Chronic angle-closure glaucoma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.2231	Chronic angle-closure glaucoma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.2232	Chronic angle-closure glaucoma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.2233	Chronic angle-closure glaucoma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.2234	Chronic angle-closure glaucoma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.2290	Chronic angle-closure glaucoma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
H40.2291	Chronic angle-closure glaucoma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.2292	Chronic angle-closure glaucoma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.2293	Chronic angle-closure glaucoma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.2294	Chronic angle-closure glaucoma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.231	Intermittent angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.232	Intermittent angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.233	Intermittent angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.239	Intermittent angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.241	Residual stage of angle-closure glaucoma, right eye	Diagnosis	ICD-10-CM
H40.242	Residual stage of angle-closure glaucoma, left eye	Diagnosis	ICD-10-CM
H40.243	Residual stage of angle-closure glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.249	Residual stage of angle-closure glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.30X0	Glaucoma secondary to eye trauma, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.30X1	Glaucoma secondary to eye trauma, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.30X2	Glaucoma secondary to eye trauma, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.30X3	Glaucoma secondary to eye trauma, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.30X4	Glaucoma secondary to eye trauma, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.31X0	Glaucoma secondary to eye trauma, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.31X1	Glaucoma secondary to eye trauma, right eye, mild stage	Diagnosis	ICD-10-CM
H40.31X2	Glaucoma secondary to eye trauma, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.31X3	Glaucoma secondary to eye trauma, right eye, severe stage	Diagnosis	ICD-10-CM
H40.31X4	Glaucoma secondary to eye trauma, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.32X0	Glaucoma secondary to eye trauma, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.32X1	Glaucoma secondary to eye trauma, left eye, mild stage	Diagnosis	ICD-10-CM
H40.32X2	Glaucoma secondary to eye trauma, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.32X3	Glaucoma secondary to eye trauma, left eye, severe stage	Diagnosis	ICD-10-CM
H40.32X4	Glaucoma secondary to eye trauma, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.33X0	Glaucoma secondary to eye trauma, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.33X1	Glaucoma secondary to eye trauma, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.33X2	Glaucoma secondary to eye trauma, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.33X3	Glaucoma secondary to eye trauma, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.33X4	Glaucoma secondary to eye trauma, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.40X0	Glaucoma secondary to eye inflammation, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.40X1	Glaucoma secondary to eye inflammation, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.40X2	Glaucoma secondary to eye inflammation, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.40X3	Glaucoma secondary to eye inflammation, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.40X4	Glaucoma secondary to eye inflammation, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.41X0	Glaucoma secondary to eye inflammation, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.41X1	Glaucoma secondary to eye inflammation, right eye, mild stage	Diagnosis	ICD-10-CM
H40.41X2	Glaucoma secondary to eye inflammation, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.41X3	Glaucoma secondary to eye inflammation, right eye, severe stage	Diagnosis	ICD-10-CM
H40.41X4	Glaucoma secondary to eye inflammation, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.42X0	Glaucoma secondary to eye inflammation, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.42X1	Glaucoma secondary to eye inflammation, left eye, mild stage	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
H40.42X2	Glaucoma secondary to eye inflammation, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.42X3	Glaucoma secondary to eye inflammation, left eye, severe stage	Diagnosis	ICD-10-CM
H40.42X4	Glaucoma secondary to eye inflammation, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.43X0	Glaucoma secondary to eye inflammation, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.43X1	Glaucoma secondary to eye inflammation, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.43X2	Glaucoma secondary to eye inflammation, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.43X3	Glaucoma secondary to eye inflammation, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.43X4	Glaucoma secondary to eye inflammation, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.50X0	Glaucoma secondary to other eye disorders, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.50X1	Glaucoma secondary to other eye disorders, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.50X2	Glaucoma secondary to other eye disorders, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.50X3	Glaucoma secondary to other eye disorders, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.50X4	Glaucoma secondary to other eye disorders, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.51X0	Glaucoma secondary to other eye disorders, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.51X1	Glaucoma secondary to other eye disorders, right eye, mild stage	Diagnosis	ICD-10-CM
H40.51X2	Glaucoma secondary to other eye disorders, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.51X3	Glaucoma secondary to other eye disorders, right eye, severe stage	Diagnosis	ICD-10-CM
H40.51X4	Glaucoma secondary to other eye disorders, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.52X0	Glaucoma secondary to other eye disorders, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.52X1	Glaucoma secondary to other eye disorders, left eye, mild stage	Diagnosis	ICD-10-CM
H40.52X2	Glaucoma secondary to other eye disorders, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.52X3	Glaucoma secondary to other eye disorders, left eye, severe stage	Diagnosis	ICD-10-CM
H40.52X4	Glaucoma secondary to other eye disorders, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.53X0	Glaucoma secondary to other eye disorders, bilateral, stage unspecified	Diagnosis	ICD-10-CM
H40.53X1	Glaucoma secondary to other eye disorders, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.53X2	Glaucoma secondary to other eye disorders, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.53X3	Glaucoma secondary to other eye disorders, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.53X4	Glaucoma secondary to other eye disorders, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.60X0	Glaucoma secondary to drugs, unspecified eye, stage unspecified	Diagnosis	ICD-10-CM
H40.60X1	Glaucoma secondary to drugs, unspecified eye, mild stage	Diagnosis	ICD-10-CM
H40.60X2	Glaucoma secondary to drugs, unspecified eye, moderate stage	Diagnosis	ICD-10-CM
H40.60X3	Glaucoma secondary to drugs, unspecified eye, severe stage	Diagnosis	ICD-10-CM
H40.60X4	Glaucoma secondary to drugs, unspecified eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.61X0	Glaucoma secondary to drugs, right eye, stage unspecified	Diagnosis	ICD-10-CM
H40.61X1	Glaucoma secondary to drugs, right eye, mild stage	Diagnosis	ICD-10-CM
H40.61X2	Glaucoma secondary to drugs, right eye, moderate stage	Diagnosis	ICD-10-CM
H40.61X3	Glaucoma secondary to drugs, right eye, severe stage	Diagnosis	ICD-10-CM
H40.61X4	Glaucoma secondary to drugs, right eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.62X0	Glaucoma secondary to drugs, left eye, stage unspecified	Diagnosis	ICD-10-CM
H40.62X1	Glaucoma secondary to drugs, left eye, mild stage	Diagnosis	ICD-10-CM
H40.62X2	Glaucoma secondary to drugs, left eye, moderate stage	Diagnosis	ICD-10-CM
H40.62X3	Glaucoma secondary to drugs, left eye, severe stage	Diagnosis	ICD-10-CM
H40.62X4	Glaucoma secondary to drugs, left eye, indeterminate stage	Diagnosis	ICD-10-CM
H40.63X0	Glaucoma secondary to drugs, bilateral, stage unspecified	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
H40.63X1	Glaucoma secondary to drugs, bilateral, mild stage	Diagnosis	ICD-10-CM
H40.63X2	Glaucoma secondary to drugs, bilateral, moderate stage	Diagnosis	ICD-10-CM
H40.63X3	Glaucoma secondary to drugs, bilateral, severe stage	Diagnosis	ICD-10-CM
H40.63X4	Glaucoma secondary to drugs, bilateral, indeterminate stage	Diagnosis	ICD-10-CM
H40.811	Glaucoma with increased episcleral venous pressure, right eye	Diagnosis	ICD-10-CM
H40.812	Glaucoma with increased episcleral venous pressure, left eye	Diagnosis	ICD-10-CM
H40.813	Glaucoma with increased episcleral venous pressure, bilateral	Diagnosis	ICD-10-CM
H40.819	Glaucoma with increased episcleral venous pressure, unspecified eye	Diagnosis	ICD-10-CM
H40.821	Hypersecretion glaucoma, right eye	Diagnosis	ICD-10-CM
H40.822	Hypersecretion glaucoma, left eye	Diagnosis	ICD-10-CM
H40.823	Hypersecretion glaucoma, bilateral	Diagnosis	ICD-10-CM
H40.829	Hypersecretion glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H40.831	Aqueous misdirection, right eye	Diagnosis	ICD-10-CM
H40.832	Aqueous misdirection, left eye	Diagnosis	ICD-10-CM
H40.833	Aqueous misdirection, bilateral	Diagnosis	ICD-10-CM
H40.839	Aqueous misdirection, unspecified eye	Diagnosis	ICD-10-CM
H40.89	Other specified glaucoma	Diagnosis	ICD-10-CM
H40.9	Unspecified glaucoma	Diagnosis	ICD-10-CM
H42	Glaucoma in diseases classified elsewhere	Diagnosis	ICD-10-CM
H44.511	Absolute glaucoma, right eye	Diagnosis	ICD-10-CM
H44.512	Absolute glaucoma, left eye	Diagnosis	ICD-10-CM
H44.513	Absolute glaucoma, bilateral	Diagnosis	ICD-10-CM
H44.519	Absolute glaucoma, unspecified eye	Diagnosis	ICD-10-CM
H47.231	Glaucomatous optic atrophy, right eye	Diagnosis	ICD-10-CM
H47.232	Glaucomatous optic atrophy, left eye	Diagnosis	ICD-10-CM
H47.233	Glaucomatous optic atrophy, bilateral	Diagnosis	ICD-10-CM
H47.239	Glaucomatous optic atrophy, unspecified eye	Diagnosis	ICD-10-CM
Q15.0	Congenital glaucoma	Diagnosis	ICD-10-CM
<b>Heart Failure</b>			
398.91	Rheumatic heart failure (congestive)	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
428	Congestive heart failure, unspecified	Diagnosis	ICD-9-CM
428.1	Left heart failure	Diagnosis	ICD-9-CM
428.2	Unspecified systolic heart failure	Diagnosis	ICD-9-CM
428.21	Acute systolic heart failure	Diagnosis	ICD-9-CM
428.22	Chronic systolic heart failure	Diagnosis	ICD-9-CM
428.23	Acute on chronic systolic heart failure	Diagnosis	ICD-9-CM
428.3	Unspecified diastolic heart failure	Diagnosis	ICD-9-CM
428.31	Acute diastolic heart failure	Diagnosis	ICD-9-CM
428.32	Chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.33	Acute on chronic diastolic heart failure	Diagnosis	ICD-9-CM
428.4	Unspecified combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.41	Acute combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.42	Chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.43	Acute on chronic combined systolic and diastolic heart failure	Diagnosis	ICD-9-CM
428.9	Unspecified heart failure	Diagnosis	ICD-9-CM
I09.81	Rheumatic heart failure	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I50.1	Left ventricular failure, unspecified	Diagnosis	ICD-10-CM
I50.20	Unspecified systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.21	Acute systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.22	Chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.23	Acute on chronic systolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.30	Unspecified diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.31	Acute diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.32	Chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.33	Acute on chronic diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure	Diagnosis	ICD-10-CM
I50.810	Right heart failure, unspecified	Diagnosis	ICD-10-CM
I50.811	Acute right heart failure	Diagnosis	ICD-10-CM
I50.812	Chronic right heart failure	Diagnosis	ICD-10-CM
I50.813	Acute on chronic right heart failure	Diagnosis	ICD-10-CM
I50.814	Right heart failure due to left heart failure	Diagnosis	ICD-10-CM
I50.82	Biventricular heart failure	Diagnosis	ICD-10-CM
I50.83	High output heart failure	Diagnosis	ICD-10-CM
I50.84	End stage heart failure	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
I50.89	Other heart failure	Diagnosis	ICD-10-CM
I50.9	Heart failure, unspecified	Diagnosis	ICD-10-CM
<b>Hip or Pelvic Fracture</b>			
733.14	Pathologic fracture of neck of femur	Diagnosis	ICD-9-CM
733.15	Pathologic fracture of other specified part of femur	Diagnosis	ICD-9-CM
733.96	Stress fracture of femoral neck	Diagnosis	ICD-9-CM
733.97	Stress fracture of shaft of femur	Diagnosis	ICD-9-CM
733.98	Stress fracture of pelvis	Diagnosis	ICD-9-CM
808.0	Closed fracture of acetabulum	Diagnosis	ICD-9-CM
808.1	Open fracture of acetabulum	Diagnosis	ICD-9-CM
808.2	Closed fracture of pubis	Diagnosis	ICD-9-CM
808.3	Open fracture of pubis	Diagnosis	ICD-9-CM
808.41	Closed fracture of ilium	Diagnosis	ICD-9-CM
808.42	Closed fracture of ischium	Diagnosis	ICD-9-CM
808.43	Multiple closed pelvic fractures with disruption of pelvic circle	Diagnosis	ICD-9-CM
808.44	Multiple closed pelvic fractures without disruption of pelvic circle	Diagnosis	ICD-9-CM
808.49	Closed fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.51	Open fracture of ilium	Diagnosis	ICD-9-CM
808.52	Open fracture of ischium	Diagnosis	ICD-9-CM
808.53	Multiple open pelvic fractures with disruption of pelvic circle	Diagnosis	ICD-9-CM
808.54	Multiple open pelvic fractures without disruption of pelvic circle	Diagnosis	ICD-9-CM
808.59	Open fracture of other specified part of pelvis	Diagnosis	ICD-9-CM
808.8	Unspecified closed fracture of pelvis	Diagnosis	ICD-9-CM
808.9	Unspecified open fracture of pelvis	Diagnosis	ICD-9-CM
820.00	Closed fracture of unspecified intracapsular section of neck of femur	Diagnosis	ICD-9-CM
820.01	Closed fracture of epiphysis (separation) (upper) of neck of femur	Diagnosis	ICD-9-CM
820.02	Closed fracture of midcervical section of femur	Diagnosis	ICD-9-CM
820.03	Closed fracture of base of neck of femur	Diagnosis	ICD-9-CM
820.09	Other closed transcervical fracture of femur	Diagnosis	ICD-9-CM
820.10	Open fracture of unspecified intracapsular section of neck of femur	Diagnosis	ICD-9-CM
820.11	Open fracture of epiphysis (separation) (upper) of neck of femur	Diagnosis	ICD-9-CM
820.12	Open fracture of midcervical section of femur	Diagnosis	ICD-9-CM
820.13	Open fracture of base of neck of femur	Diagnosis	ICD-9-CM
820.19	Other open transcervical fracture of femur	Diagnosis	ICD-9-CM
820.20	Closed fracture of unspecified trochanteric section of femur	Diagnosis	ICD-9-CM
820.21	Closed fracture of intertrochanteric section of femur	Diagnosis	ICD-9-CM
820.22	Closed fracture of subtrochanteric section of femur	Diagnosis	ICD-9-CM
820.30	Open fracture of unspecified trochanteric section of femur	Diagnosis	ICD-9-CM
820.31	Open fracture of intertrochanteric section of femur	Diagnosis	ICD-9-CM
820.32	Open fracture of subtrochanteric section of femur	Diagnosis	ICD-9-CM
820.8	Closed fracture of unspecified part of neck of femur	Diagnosis	ICD-9-CM
820.9	Open fracture of unspecified part of neck of femur	Diagnosis	ICD-9-CM
M80.051A	Age-related osteoporosis with current pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
M80.851A	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
M84.350A	Stress fracture, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.351A	Stress fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.352A	Stress fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.353A	Stress fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.359A	Stress fracture, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.451A	Pathological fracture, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.452A	Pathological fracture, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.453A	Pathological fracture, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.459A	Pathological fracture, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.550A	Pathological fracture in neoplastic disease, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.551A	Pathological fracture in neoplastic disease, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.552A	Pathological fracture in neoplastic disease, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.553A	Pathological fracture in neoplastic disease, unspecified femur, initial encounter for	Diagnosis	ICD-10-CM
M84.559A	Pathological fracture in neoplastic disease, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.650A	Pathological fracture in other disease, pelvis, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.651A	Pathological fracture in other disease, right femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.652A	Pathological fracture in other disease, left femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.653A	Pathological fracture in other disease, unspecified femur, initial encounter for fracture	Diagnosis	ICD-10-CM
M84.659A	Pathological fracture in other disease, hip, unspecified, initial encounter for fracture	Diagnosis	ICD-10-CM
S32.301A	Unspecified fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.301B	Unspecified fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.302A	Unspecified fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.302B	Unspecified fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.309A	Unspecified fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.309B	Unspecified fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.311A	Displaced avulsion fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.311B	Displaced avulsion fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.312A	Displaced avulsion fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.312B	Displaced avulsion fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.313A	Displaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.313B	Displaced avulsion fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.314A	Nondisplaced avulsion fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.314B	Nondisplaced avulsion fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.315A	Nondisplaced avulsion fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
S32.315B	Nondisplaced avulsion fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.316A	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.316B	Nondisplaced avulsion fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.391A	Other fracture of right ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.391B	Other fracture of right ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.392A	Other fracture of left ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.392B	Other fracture of left ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.399A	Other fracture of unspecified ilium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.399B	Other fracture of unspecified ilium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.401A	Unspecified fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.401B	Unspecified fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.402A	Unspecified fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.402B	Unspecified fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.409A	Unspecified fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.409B	Unspecified fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.411A	Displaced fracture of anterior wall of right acetabulum, initial encounter for closed	Diagnosis	ICD-10-CM
S32.411B	Displaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.412A	Displaced fracture of anterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.412B	Displaced fracture of anterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.413A	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.413B	Displaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.414A	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.414B	Nondisplaced fracture of anterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.415A	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.415B	Nondisplaced fracture of anterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.416A	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.416B	Nondisplaced fracture of anterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.421A	Displaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.421B	Displaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.422A	Displaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.422B	Displaced fracture of posterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.423A	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.423B	Displaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.424A	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
S32.424B	Nondisplaced fracture of posterior wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.425A	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.425B	Nondisplaced fracture of posterior wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.426A	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.426B	Nondisplaced fracture of posterior wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.431A	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.431B	Displaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.432A	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.432B	Displaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.433A	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.433B	Displaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.434A	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.434B	Nondisplaced fracture of anterior column [iliopubic] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.435A	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.435B	Nondisplaced fracture of anterior column [iliopubic] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.436A	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.436B	Nondisplaced fracture of anterior column [iliopubic] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.441A	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.441B	Displaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.442A	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.442B	Displaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.443A	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
S32.443B	Displaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.444A	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.444B	Nondisplaced fracture of posterior column [ilioischial] of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.445A	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.445B	Nondisplaced fracture of posterior column [ilioischial] of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.446A	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.446B	Nondisplaced fracture of posterior column [ilioischial] of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.451A	Displaced transverse fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.451B	Displaced transverse fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.452A	Displaced transverse fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.452B	Displaced transverse fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.453A	Displaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.453B	Displaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.454A	Nondisplaced transverse fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.454B	Nondisplaced transverse fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.455A	Nondisplaced transverse fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.455B	Nondisplaced transverse fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.456A	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.456B	Nondisplaced transverse fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.461A	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.461B	Displaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.462A	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.462B	Displaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.463A	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.463B	Displaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.464A	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
S32.464B	Nondisplaced associated transverse-posterior fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.465A	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.465B	Nondisplaced associated transverse-posterior fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.466A	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.466B	Nondisplaced associated transverse-posterior fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.471A	Displaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.471B	Displaced fracture of medial wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.472A	Displaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.472B	Displaced fracture of medial wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.473A	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.473B	Displaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.474A	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.474B	Nondisplaced fracture of medial wall of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.475A	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.475B	Nondisplaced fracture of medial wall of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.476A	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.476B	Nondisplaced fracture of medial wall of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.481A	Displaced dome fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.481B	Displaced dome fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.482A	Displaced dome fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.482B	Displaced dome fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.483A	Displaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.483B	Displaced dome fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.484A	Nondisplaced dome fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.484B	Nondisplaced dome fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.485A	Nondisplaced dome fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.485B	Nondisplaced dome fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.486A	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.486B	Nondisplaced dome fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.491A	Other specified fracture of right acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.491B	Other specified fracture of right acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.492A	Other specified fracture of left acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.492B	Other specified fracture of left acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.499A	Other specified fracture of unspecified acetabulum, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.499B	Other specified fracture of unspecified acetabulum, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.501A	Unspecified fracture of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.501B	Unspecified fracture of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.502A	Unspecified fracture of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.502B	Unspecified fracture of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.509A	Unspecified fracture of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.509B	Unspecified fracture of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.511A	Fracture of superior rim of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.511B	Fracture of superior rim of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.512A	Fracture of superior rim of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.512B	Fracture of superior rim of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.519A	Fracture of superior rim of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.519B	Fracture of superior rim of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.591A	Other specified fracture of right pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.591B	Other specified fracture of right pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.592A	Other specified fracture of left pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.592B	Other specified fracture of left pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.599A	Other specified fracture of unspecified pubis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.599B	Other specified fracture of unspecified pubis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.601A	Unspecified fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.601B	Unspecified fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.602A	Unspecified fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.602B	Unspecified fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.609A	Unspecified fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.609B	Unspecified fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.611A	Displaced avulsion fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.611B	Displaced avulsion fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.612A	Displaced avulsion fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.612B	Displaced avulsion fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.613A	Displaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.613B	Displaced avulsion fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.614A	Nondisplaced avulsion fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.614B	Nondisplaced avulsion fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.615A	Nondisplaced avulsion fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.615B	Nondisplaced avulsion fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.616A	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.616B	Nondisplaced avulsion fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.691A	Other specified fracture of right ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.691B	Other specified fracture of right ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.692A	Other specified fracture of left ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.692B	Other specified fracture of left ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.699A	Other specified fracture of unspecified ischium, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.699B	Other specified fracture of unspecified ischium, initial encounter for open fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S32.810A	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.810B	Multiple fractures of pelvis with stable disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.811A	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.811B	Multiple fractures of pelvis with unstable disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.82XA	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.82XB	Multiple fractures of pelvis without disruption of pelvic ring, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.89XA	Fracture of other parts of pelvis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.89XB	Fracture of other parts of pelvis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S32.9XXA	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S32.9XXB	Fracture of unspecified parts of lumbosacral spine and pelvis, initial encounter for open fracture	Diagnosis	ICD-10-CM
S72.001A	Fracture of unspecified part of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.001B	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.001C	Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.002A	Fracture of unspecified part of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.002B	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.002C	Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.009A	Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.009B	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.009C	Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.011A	Unspecified intracapsular fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.011B	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.011C	Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.012A	Unspecified intracapsular fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.012B	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.012C	Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.019A	Unspecified intracapsular fracture of unspecified femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.019B	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.019C	Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.021A	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.021B	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.021C	Displaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.022A	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.022B	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.022C	Displaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.023A	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.023B	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.023C	Displaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.024A	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.024B	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.024C	Nondisplaced fracture of epiphysis (separation) (upper) of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.025A	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.025B	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.025C	Nondisplaced fracture of epiphysis (separation) (upper) of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.026A	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.026B	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.026C	Nondisplaced fracture of epiphysis (separation) (upper) of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.031A	Displaced midcervical fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.031B	Displaced midcervical fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
S72.031C	Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.032A	Displaced midcervical fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.032B	Displaced midcervical fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.032C	Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.033A	Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.033B	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.033C	Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.034A	Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.034B	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.034C	Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.035A	Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.035B	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.035C	Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.036A	Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.036B	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.036C	Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.041A	Displaced fracture of base of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.041B	Displaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.041C	Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.042A	Displaced fracture of base of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.042B	Displaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.042C	Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.043A	Displaced fracture of base of neck of unspecified femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.043B	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.043C	Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.044A	Nondisplaced fracture of base of neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.044B	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.044C	Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.045A	Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.045B	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.045C	Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.046A	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.046B	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.046C	Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.051A	Unspecified fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.051B	Unspecified fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.051C	Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.052A	Unspecified fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.052B	Unspecified fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.052C	Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.059A	Unspecified fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.059B	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.059C	Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.061A	Displaced articular fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.061B	Displaced articular fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.061C	Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.062A	Displaced articular fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.062B	Displaced articular fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.062C	Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.063A	Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.063B	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.063C	Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.064A	Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
S72.064B	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.064C	Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.065A	Nondisplaced articular fracture of head of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.065B	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.065C	Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.066A	Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.066B	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.066C	Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.091A	Other fracture of head and neck of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.091B	Other fracture of head and neck of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.091C	Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.092A	Other fracture of head and neck of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.092B	Other fracture of head and neck of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.092C	Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.099A	Other fracture of head and neck of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.099B	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.099C	Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.101A	Unspecified trochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.101B	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.101C	Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.102A	Unspecified trochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.102B	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.102C	Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.109A	Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.109B	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.109C	Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.111A	Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.111B	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.111C	Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.112A	Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.112B	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.112C	Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.113A	Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.113B	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.113C	Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.114A	Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.114B	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.114C	Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.115A	Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.115B	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.115C	Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.116A	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.116B	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.116C	Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.121A	Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.121B	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.121C	Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.122A	Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.122B	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.122C	Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.123A	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.123B	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.123C	Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.124A	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.124B	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.124C	Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.125A	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.125B	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.125C	Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.126A	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.126B	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.126C	Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.131A	Displaced apophyseal fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.131B	Displaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.131C	Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.132A	Displaced apophyseal fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.132B	Displaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.132C	Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.133A	Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.133B	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.133C	Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.134A	Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.134B	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.134C	Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.135A	Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.135B	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.135C	Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.136A	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.136B	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.136C	Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.141A	Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.141B	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.141C	Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.142A	Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.142B	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.142C	Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.143A	Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.143B	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.143C	Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.144A	Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.144B	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.144C	Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.145A	Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.145B	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.145C	Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.146A	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.146B	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.146C	Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.21XA	Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.21XB	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.21XC	Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
S72.22XA	Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.22XB	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.22XC	Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.23XA	Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed	Diagnosis	ICD-10-CM
S72.23XB	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.23XC	Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.24XA	Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.24XB	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.24XC	Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.25XA	Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.25XB	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.25XC	Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S72.26XA	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S72.26XB	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II	Diagnosis	ICD-10-CM
S72.26XC	Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC	Diagnosis	ICD-10-CM
S79.001A	Unspecified physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.002A	Unspecified physeal fracture of upper end of left femur, initial encounter for closed	Diagnosis	ICD-10-CM
S79.009A	Unspecified physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.011A	Salter-Harris Type I physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.012A	Salter-Harris Type I physeal fracture of upper end of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.019A	Salter-Harris Type I physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.091A	Other physeal fracture of upper end of right femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.092A	Other physeal fracture of upper end of left femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
S79.099A	Other physeal fracture of upper end of unspecified femur, initial encounter for closed fracture	Diagnosis	ICD-10-CM
<b>Hyperlipidemia</b>			
272.0	Pure hypercholesterolemia	Diagnosis	ICD-9-CM
272.1	Pure hyperglyceridemia	Diagnosis	ICD-9-CM

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

Code	Description	Code Category	Code Type
272.2	Mixed hyperlipidemia	Diagnosis	ICD-9-CM
272.3	Hyperchylomicronemia	Diagnosis	ICD-9-CM
272.4	Other and unspecified hyperlipidemia	Diagnosis	ICD-9-CM
E78.0	Pure hypercholesterolemia	Diagnosis	ICD-10-CM
E78.00	Pure hypercholesterolemia, unspecified	Diagnosis	ICD-10-CM
E78.01	Familial hypercholesterolemia	Diagnosis	ICD-10-CM
E78.1	Pure hyperglyceridemia	Diagnosis	ICD-10-CM
E78.2	Mixed hyperlipidemia	Diagnosis	ICD-10-CM
E78.3	Hyperchylomicronemia	Diagnosis	ICD-10-CM
E78.4	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.41	Elevated Lipoprotein(a)	Diagnosis	ICD-10-CM
E78.49	Other hyperlipidemia	Diagnosis	ICD-10-CM
E78.5	Hyperlipidemia, unspecified	Diagnosis	ICD-10-CM
<b>Hypertension</b>			
362.11	Hypertensive retinopathy	Diagnosis	ICD-9-CM
401.0	Essential hypertension, malignant	Diagnosis	ICD-9-CM
401.1	Essential hypertension, benign	Diagnosis	ICD-9-CM
401.9	Unspecified essential hypertension	Diagnosis	ICD-9-CM
402.00	Malignant hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.01	Malignant hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.10	Benign hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.11	Benign hypertensive heart disease with heart failure	Diagnosis	ICD-9-CM
402.90	Unspecified hypertensive heart disease without heart failure	Diagnosis	ICD-9-CM
402.91	Hypertensive heart disease, unspecified, with heart failure	Diagnosis	ICD-9-CM
403.00	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.01	Hypertensive chronic kidney disease, malignant, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.10	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.11	Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
403.90	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
403.91	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.00	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.02	Hypertensive heart and chronic kidney disease, malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM



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

Code	Description	Code Category	Code Type
404.10	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.12	Hypertensive heart and chronic kidney disease, benign, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.90	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified	Diagnosis	ICD-9-CM
404.92	Hypertensive heart and chronic kidney disease, unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease	Diagnosis	ICD-9-CM
405.01	Secondary renovascular hypertension, malignant	Diagnosis	ICD-9-CM
405.09	Other secondary hypertension, malignant	Diagnosis	ICD-9-CM
405.11	Secondary renovascular hypertension, benign	Diagnosis	ICD-9-CM
405.19	Other secondary hypertension, benign	Diagnosis	ICD-9-CM
405.91	Secondary renovascular hypertension, unspecified	Diagnosis	ICD-9-CM
405.99	Other secondary hypertension, unspecified	Diagnosis	ICD-9-CM
437.2	Hypertensive encephalopathy	Diagnosis	ICD-9-CM
H35.031	Hypertensive retinopathy, right eye	Diagnosis	ICD-10-CM
H35.032	Hypertensive retinopathy, left eye	Diagnosis	ICD-10-CM
H35.033	Hypertensive retinopathy, bilateral	Diagnosis	ICD-10-CM
H35.039	Hypertensive retinopathy, unspecified eye	Diagnosis	ICD-10-CM
I10	Essential (primary) hypertension	Diagnosis	ICD-10-CM
I11.0	Hypertensive heart disease with heart failure	Diagnosis	ICD-10-CM
I11.9	Hypertensive heart disease without heart failure	Diagnosis	ICD-10-CM
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease	Diagnosis	ICD-10-CM
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	Diagnosis	ICD-10-CM
I13.11	Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease	Diagnosis	ICD-10-CM
I15.0	Renovascular hypertension	Diagnosis	ICD-10-CM
I15.1	Hypertension secondary to other renal disorders	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I15.2	Hypertension secondary to endocrine disorders	Diagnosis	ICD-10-CM
I15.8	Other secondary hypertension	Diagnosis	ICD-10-CM
I15.9	Secondary hypertension, unspecified	Diagnosis	ICD-10-CM
I67.4	Hypertensive encephalopathy	Diagnosis	ICD-10-CM
N26.2	Page kidney	Diagnosis	ICD-10-CM
<b>Ischemic Heart Disease</b>			
410.00	Acute myocardial infarction of anterolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.01	Acute myocardial infarction of anterolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.02	Acute myocardial infarction of anterolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.10	Acute myocardial infarction of other anterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.11	Acute myocardial infarction of other anterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.12	Acute myocardial infarction of other anterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.20	Acute myocardial infarction of inferolateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.21	Acute myocardial infarction of inferolateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.22	Acute myocardial infarction of inferolateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.30	Acute myocardial infarction of inferoposterior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.31	Acute myocardial infarction of inferoposterior wall, initial episode of care	Diagnosis	ICD-9-CM
410.32	Acute myocardial infarction of inferoposterior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.40	Acute myocardial infarction of other inferior wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.41	Acute myocardial infarction of other inferior wall, initial episode of care	Diagnosis	ICD-9-CM
410.42	Acute myocardial infarction of other inferior wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.50	Acute myocardial infarction of other lateral wall, episode of care unspecified	Diagnosis	ICD-9-CM
410.51	Acute myocardial infarction of other lateral wall, initial episode of care	Diagnosis	ICD-9-CM
410.52	Acute myocardial infarction of other lateral wall, subsequent episode of care	Diagnosis	ICD-9-CM
410.60	Acute myocardial infarction, true posterior wall infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.61	Acute myocardial infarction, true posterior wall infarction, initial episode of care	Diagnosis	ICD-9-CM
410.62	Acute myocardial infarction, true posterior wall infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.70	Acute myocardial infarction, subendocardial infarction, episode of care unspecified	Diagnosis	ICD-9-CM
410.71	Acute myocardial infarction, subendocardial infarction, initial episode of care	Diagnosis	ICD-9-CM
410.72	Acute myocardial infarction, subendocardial infarction, subsequent episode of care	Diagnosis	ICD-9-CM
410.80	Acute myocardial infarction of other specified sites, episode of care unspecified	Diagnosis	ICD-9-CM
410.81	Acute myocardial infarction of other specified sites, initial episode of care	Diagnosis	ICD-9-CM
410.82	Acute myocardial infarction of other specified sites, subsequent episode of care	Diagnosis	ICD-9-CM
410.90	Acute myocardial infarction, unspecified site, episode of care unspecified	Diagnosis	ICD-9-CM
410.91	Acute myocardial infarction, unspecified site, initial episode of care	Diagnosis	ICD-9-CM
410.92	Acute myocardial infarction, unspecified site, subsequent episode of care	Diagnosis	ICD-9-CM
411.0	Postmyocardial infarction syndrome	Diagnosis	ICD-9-CM
411.1	Intermediate coronary syndrome	Diagnosis	ICD-9-CM
411.81	Acute coronary occlusion without myocardial infarction	Diagnosis	ICD-9-CM
411.89	Other acute and subacute form of ischemic heart disease	Diagnosis	ICD-9-CM
412	Old myocardial infarction	Diagnosis	ICD-9-CM
413.0	Angina decubitus	Diagnosis	ICD-9-CM
413.1	Prinzmetal angina	Diagnosis	ICD-9-CM
413.9	Other and unspecified angina pectoris	Diagnosis	ICD-9-CM



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Code	Description	Code Category	Code Type
414.00	Coronary atherosclerosis of unspecified type of vessel, native or graft	Diagnosis	ICD-9-CM
414.01	Coronary atherosclerosis of native coronary artery	Diagnosis	ICD-9-CM
414.02	Coronary atherosclerosis of autologous vein bypass graft	Diagnosis	ICD-9-CM
414.03	Coronary atherosclerosis of nonautologous biological bypass graft	Diagnosis	ICD-9-CM
414.04	Coronary atherosclerosis of artery bypass graft	Diagnosis	ICD-9-CM
414.05	Coronary atherosclerosis of unspecified type of bypass graft	Diagnosis	ICD-9-CM
414.06	Coronary atherosclerosis, of native coronary artery of transplanted heart	Diagnosis	ICD-9-CM
414.07	Coronary atherosclerosis, of bypass graft (artery) (vein) of transplanted heart	Diagnosis	ICD-9-CM
414.12	Dissection of coronary artery	Diagnosis	ICD-9-CM
414.2	Chronic total occlusion of coronary artery	Diagnosis	ICD-9-CM
414.3	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-9-CM
414.4	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-9-CM
414.8	Other specified forms of chronic ischemic heart disease	Diagnosis	ICD-9-CM
414.9	Unspecified chronic ischemic heart disease	Diagnosis	ICD-9-CM
I20.0	Unstable angina	Diagnosis	ICD-10-CM
I20.1	Angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I20.8	Other forms of angina pectoris	Diagnosis	ICD-10-CM
I20.9	Angina pectoris, unspecified	Diagnosis	ICD-10-CM
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery	Diagnosis	ICD-10-CM
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery	Diagnosis	ICD-10-CM
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall	Diagnosis	ICD-10-CM
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery	Diagnosis	ICD-10-CM
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall	Diagnosis	ICD-10-CM
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery	Diagnosis	ICD-10-CM
I21.29	ST elevation (STEMI) myocardial infarction involving other sites	Diagnosis	ICD-10-CM
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I21.4	Non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I21.A1	Myocardial infarction type 2	Diagnosis	ICD-10-CM
I21.A9	Other myocardial infarction type	Diagnosis	ICD-10-CM
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall	Diagnosis	ICD-10-CM
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall	Diagnosis	ICD-10-CM
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction	Diagnosis	ICD-10-CM
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites	Diagnosis	ICD-10-CM
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site	Diagnosis	ICD-10-CM
I23.0	Hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.1	Atrial septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.2	Ventricular septal defect as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.4	Rupture of chordae tendineae as current complication following acute myocardial	Diagnosis	ICD-10-CM
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction	Diagnosis	ICD-10-CM
I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
I23.7	Postinfarction angina	Diagnosis	ICD-10-CM
I23.8	Other current complications following acute myocardial infarction	Diagnosis	ICD-10-CM
I24.0	Acute coronary thrombosis not resulting in myocardial infarction	Diagnosis	ICD-10-CM
I24.1	Dressler's syndrome	Diagnosis	ICD-10-CM
I24.8	Other forms of acute ischemic heart disease	Diagnosis	ICD-10-CM
I24.9	Acute ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris	Diagnosis	ICD-10-CM
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.2	Old myocardial infarction	Diagnosis	ICD-10-CM
I25.3	Aneurysm of heart	Diagnosis	ICD-10-CM
I25.41	Coronary artery aneurysm	Diagnosis	ICD-10-CM
I25.42	Coronary artery dissection	Diagnosis	ICD-10-CM
I25.5	Ischemic cardiomyopathy	Diagnosis	ICD-10-CM
I25.6	Silent myocardial ischemia	Diagnosis	ICD-10-CM
I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM

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

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
I25.738	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
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina	Diagnosis	ICD-10-CM
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris	Diagnosis	ICD-10-CM
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris	Diagnosis	ICD-10-CM
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm	Diagnosis	ICD-10-CM
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina	Diagnosis	ICD-10-CM
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris	Diagnosis	ICD-10-CM
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris	Diagnosis	ICD-10-CM
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris	Diagnosis	ICD-10-CM
I25.82	Chronic total occlusion of coronary artery	Diagnosis	ICD-10-CM
I25.83	Coronary atherosclerosis due to lipid rich plaque	Diagnosis	ICD-10-CM
I25.84	Coronary atherosclerosis due to calcified coronary lesion	Diagnosis	ICD-10-CM
I25.89	Other forms of chronic ischemic heart disease	Diagnosis	ICD-10-CM
I25.9	Chronic ischemic heart disease, unspecified	Diagnosis	ICD-10-CM
<b>Osteoporosis</b>			
733.00	Unspecified osteoporosis	Diagnosis	ICD-9-CM
733.01	Senile osteoporosis	Diagnosis	ICD-9-CM
733.02	Idiopathic osteoporosis	Diagnosis	ICD-9-CM
733.03	Disuse osteoporosis	Diagnosis	ICD-9-CM
733.09	Other osteoporosis	Diagnosis	ICD-9-CM
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

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

Code	Description	Code Category	Code Type
<b>Rheumatoid Arthritis or Osteoarthritis</b>			
714.0	Rheumatoid arthritis	Diagnosis	ICD-9-CM
714.1	Felty's syndrome	Diagnosis	ICD-9-CM
714.2	Other rheumatoid arthritis with visceral or systemic involvement	Diagnosis	ICD-9-CM
714.30	Polyarticular juvenile rheumatoid arthritis, chronic or unspecified	Diagnosis	ICD-9-CM
714.31	Polyarticular juvenile rheumatoid arthritis, acute	Diagnosis	ICD-9-CM
714.32	Pauciarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
714.33	Monoarticular juvenile rheumatoid arthritis	Diagnosis	ICD-9-CM
715.00	Generalized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.04	Generalized osteoarthritis, involving hand	Diagnosis	ICD-9-CM
715.09	Generalized osteoarthritis, involving multiple sites	Diagnosis	ICD-9-CM
715.10	Primary localized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.11	Primary localized osteoarthritis, shoulder region	Diagnosis	ICD-9-CM
715.12	Primary localized osteoarthritis, upper arm	Diagnosis	ICD-9-CM
715.13	Primary localized osteoarthritis, forearm	Diagnosis	ICD-9-CM
715.14	Primary localized osteoarthritis, hand	Diagnosis	ICD-9-CM
715.15	Primary localized osteoarthritis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.16	Primary localized osteoarthritis, lower leg	Diagnosis	ICD-9-CM
715.17	Primary localized osteoarthritis, ankle and foot	Diagnosis	ICD-9-CM
715.18	Primary localized osteoarthritis, other specified sites	Diagnosis	ICD-9-CM
715.20	Secondary localized osteoarthritis, unspecified site	Diagnosis	ICD-9-CM
715.21	Secondary localized osteoarthritis, shoulder region	Diagnosis	ICD-9-CM
715.22	Secondary localized osteoarthritis, upper arm	Diagnosis	ICD-9-CM
715.23	Secondary localized osteoarthritis, forearm	Diagnosis	ICD-9-CM
715.24	Secondary localized osteoarthritis, involving hand	Diagnosis	ICD-9-CM
715.25	Secondary localized osteoarthritis, pelvic region and thigh	Diagnosis	ICD-9-CM
715.26	Secondary localized osteoarthritis, lower leg	Diagnosis	ICD-9-CM
715.27	Secondary localized osteoarthritis, ankle and foot	Diagnosis	ICD-9-CM
715.28	Secondary localized osteoarthritis, other specified site	Diagnosis	ICD-9-CM
715.30	Localized osteoarthritis not specified whether primary or secondary, unspecified site	Diagnosis	ICD-9-CM
715.31	Localized osteoarthritis not specified whether primary or secondary, shoulder region	Diagnosis	ICD-9-CM
715.32	Localized osteoarthritis not specified whether primary or secondary, upper arm	Diagnosis	ICD-9-CM
715.33	Localized osteoarthritis not specified whether primary or secondary, forearm	Diagnosis	ICD-9-CM
715.34	Localized osteoarthritis not specified whether primary or secondary, hand	Diagnosis	ICD-9-CM
715.35	Localized osteoarthritis not specified whether primary or secondary, pelvic region and thigh	Diagnosis	ICD-9-CM
715.36	Localized osteoarthritis not specified whether primary or secondary, lower leg	Diagnosis	ICD-9-CM
715.37	Localized osteoarthritis not specified whether primary or secondary, ankle and foot	Diagnosis	ICD-9-CM
715.38	Localized osteoarthritis not specified whether primary or secondary, other specified sites	Diagnosis	ICD-9-CM
715.80	Osteoarthritis involving more than one site, but not specified as generalized, unspecified site	Diagnosis	ICD-9-CM
715.89	Osteoarthritis involving multiple sites, but not specified as generalized	Diagnosis	ICD-9-CM
715.90	Osteoarthritis, unspecified whether generalized or localized, unspecified site	Diagnosis	ICD-9-CM
715.91	Osteoarthritis, unspecified whether generalized or localized, shoulder region	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
715.92	Osteoarthritis, unspecified whether generalized or localized, upper arm	Diagnosis	ICD-9-CM
715.93	Osteoarthritis, unspecified whether generalized or localized, forearm	Diagnosis	ICD-9-CM
715.94	Osteoarthritis, unspecified whether generalized or localized, hand	Diagnosis	ICD-9-CM
715.95	Osteoarthritis, unspecified whether generalized or localized, pelvic region and thigh	Diagnosis	ICD-9-CM
715.96	Osteoarthritis, unspecified whether generalized or localized, lower leg	Diagnosis	ICD-9-CM
715.97	Osteoarthritis, unspecified whether generalized or localized, ankle and foot	Diagnosis	ICD-9-CM
715.98	Osteoarthritis, unspecified whether generalized or localized, other specified sites	Diagnosis	ICD-9-CM
720.0	Ankylosing spondylitis	Diagnosis	ICD-9-CM
721.0	Cervical spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.1	Cervical spondylosis with myelopathy	Diagnosis	ICD-9-CM
721.2	Thoracic spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.3	Lumbosacral spondylosis without myelopathy	Diagnosis	ICD-9-CM
721.90	Spondylosis of unspecified site without mention of myelopathy	Diagnosis	ICD-9-CM
721.91	Spondylosis of unspecified site with myelopathy	Diagnosis	ICD-9-CM
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
M05.09	Felty's syndrome, 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



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Code	Description	Code Category	Code Type
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	Diagnosis	ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	Diagnosis	ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	Diagnosis	ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	Diagnosis	ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	Diagnosis	ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	Diagnosis	ICD-10-CM
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	Diagnosis	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist	Diagnosis	ICD-10-CM
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	Diagnosis	ICD-10-CM
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	Diagnosis	ICD-10-CM
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand	Diagnosis	ICD-10-CM
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	Diagnosis	ICD-10-CM
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	Diagnosis	ICD-10-CM
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	Diagnosis	ICD-10-CM
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	Diagnosis	ICD-10-CM
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	Diagnosis	ICD-10-CM
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee	Diagnosis	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and	Diagnosis	ICD-10-CM
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	Diagnosis	ICD-10-CM
M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	Diagnosis	ICD-10-CM
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



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Code	Description	Code Category	Code Type
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	Diagnosis	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	Diagnosis	ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	Diagnosis	ICD-10-CM
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	Diagnosis	ICD-10-CM
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	Diagnosis	ICD-10-CM
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	Diagnosis	ICD-10-CM
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder	Diagnosis	ICD-10-CM
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow	Diagnosis	ICD-10-CM
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow	Diagnosis	ICD-10-CM
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	Diagnosis	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand	Diagnosis	ICD-10-CM
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand	Diagnosis	ICD-10-CM
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	Diagnosis	ICD-10-CM
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip	Diagnosis	ICD-10-CM
M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip	Diagnosis	ICD-10-CM
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	Diagnosis	ICD-10-CM
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee	Diagnosis	ICD-10-CM
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	Diagnosis	ICD-10-CM
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	Diagnosis	ICD-10-CM
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	Diagnosis	ICD-10-CM
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	Diagnosis	ICD-10-CM
M05.8A	Other rheumatoid arthritis with rheumatoid factor of other specified site	Diagnosis	ICD-10-CM
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	Diagnosis	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder	Diagnosis	ICD-10-CM
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder	Diagnosis	ICD-10-CM
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	Diagnosis	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist	Diagnosis	ICD-10-CM
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist	Diagnosis	ICD-10-CM
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	Diagnosis	ICD-10-CM
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand	Diagnosis	ICD-10-CM
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand	Diagnosis	ICD-10-CM
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	Diagnosis	ICD-10-CM
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip	Diagnosis	ICD-10-CM
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip	Diagnosis	ICD-10-CM
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	Diagnosis	ICD-10-CM
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee	Diagnosis	ICD-10-CM
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee	Diagnosis	ICD-10-CM
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	Diagnosis	ICD-10-CM
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	Diagnosis	ICD-10-CM
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	Diagnosis	ICD-10-CM
M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae	Diagnosis	ICD-10-CM
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	Diagnosis	ICD-10-CM
M06.0A	Rheumatoid arthritis without rheumatoid factor, other specified site	Diagnosis	ICD-10-CM
M06.1	Adult-onset Still's disease	Diagnosis	ICD-10-CM
M06.20	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M06.211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06.212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06.219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.221	Rheumatoid bursitis, right elbow	Diagnosis	ICD-10-CM
M06.222	Rheumatoid bursitis, left elbow	Diagnosis	ICD-10-CM
M06.229	Rheumatoid bursitis, unspecified elbow	Diagnosis	ICD-10-CM
M06.231	Rheumatoid bursitis, right wrist	Diagnosis	ICD-10-CM
M06.232	Rheumatoid bursitis, left wrist	Diagnosis	ICD-10-CM
M06.239	Rheumatoid bursitis, unspecified wrist	Diagnosis	ICD-10-CM
M06.241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06.249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M06.251	Rheumatoid bursitis, right hip	Diagnosis	ICD-10-CM
M06.252	Rheumatoid bursitis, left hip	Diagnosis	ICD-10-CM
M06.259	Rheumatoid bursitis, unspecified hip	Diagnosis	ICD-10-CM
M06.261	Rheumatoid bursitis, right knee	Diagnosis	ICD-10-CM
M06.262	Rheumatoid bursitis, left knee	Diagnosis	ICD-10-CM
M06.269	Rheumatoid bursitis, unspecified knee	Diagnosis	ICD-10-CM
M06.271	Rheumatoid bursitis, right ankle and foot	Diagnosis	ICD-10-CM
M06.272	Rheumatoid bursitis, left ankle and foot	Diagnosis	ICD-10-CM
M06.279	Rheumatoid bursitis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.28	Rheumatoid bursitis, vertebrae	Diagnosis	ICD-10-CM
M06.29	Rheumatoid bursitis, multiple sites	Diagnosis	ICD-10-CM
M06.30	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M06.311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06.312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06.319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M06.321	Rheumatoid nodule, right elbow	Diagnosis	ICD-10-CM
M06.322	Rheumatoid nodule, left elbow	Diagnosis	ICD-10-CM
M06.329	Rheumatoid nodule, unspecified elbow	Diagnosis	ICD-10-CM
M06.331	Rheumatoid nodule, right wrist	Diagnosis	ICD-10-CM
M06.332	Rheumatoid nodule, left wrist	Diagnosis	ICD-10-CM
M06.339	Rheumatoid nodule, unspecified wrist	Diagnosis	ICD-10-CM
M06.341	Rheumatoid nodule, right hand	Diagnosis	ICD-10-CM
M06.342	Rheumatoid nodule, left hand	Diagnosis	ICD-10-CM
M06.349	Rheumatoid nodule, unspecified hand	Diagnosis	ICD-10-CM
M06.351	Rheumatoid nodule, right hip	Diagnosis	ICD-10-CM
M06.352	Rheumatoid nodule, left hip	Diagnosis	ICD-10-CM
M06.359	Rheumatoid nodule, unspecified hip	Diagnosis	ICD-10-CM
M06.361	Rheumatoid nodule, right knee	Diagnosis	ICD-10-CM
M06.362	Rheumatoid nodule, left knee	Diagnosis	ICD-10-CM
M06.369	Rheumatoid nodule, unspecified knee	Diagnosis	ICD-10-CM
M06.371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM
M06.372	Rheumatoid nodule, left ankle and foot	Diagnosis	ICD-10-CM
M06.379	Rheumatoid nodule, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.38	Rheumatoid nodule, vertebrae	Diagnosis	ICD-10-CM
M06.39	Rheumatoid nodule, multiple sites	Diagnosis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.821	Other specified rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M06.822	Other specified rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M06.829	Other specified rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M06.831	Other specified rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M06.832	Other specified rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M06.839	Other specified rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M06.842	Other specified rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M06.849	Other specified rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M06.851	Other specified rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M06.852	Other specified rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M06.859	Other specified rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M06.861	Other specified rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M06.862	Other specified rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M06.869	Other specified rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M06.8A	Other specified rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.041	Unspecified juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.042	Unspecified juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.051	Unspecified juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.052	Unspecified juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.061	Unspecified juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM
M08.062	Unspecified juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M08.1	Juvenile ankylosing spondylitis	Diagnosis	ICD-10-CM
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site	Diagnosis	ICD-10-CM
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder	Diagnosis	ICD-10-CM
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder	Diagnosis	ICD-10-CM
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder	Diagnosis	ICD-10-CM
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow	Diagnosis	ICD-10-CM
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow	Diagnosis	ICD-10-CM
M08.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow	Diagnosis	ICD-10-CM
M08.231	Juvenile rheumatoid arthritis with systemic onset, right wrist	Diagnosis	ICD-10-CM
M08.232	Juvenile rheumatoid arthritis with systemic onset, left wrist	Diagnosis	ICD-10-CM
M08.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist	Diagnosis	ICD-10-CM
M08.241	Juvenile rheumatoid arthritis with systemic onset, right hand	Diagnosis	ICD-10-CM
M08.242	Juvenile rheumatoid arthritis with systemic onset, left hand	Diagnosis	ICD-10-CM
M08.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand	Diagnosis	ICD-10-CM
M08.251	Juvenile rheumatoid arthritis with systemic onset, right hip	Diagnosis	ICD-10-CM
M08.252	Juvenile rheumatoid arthritis with systemic onset, left hip	Diagnosis	ICD-10-CM
M08.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip	Diagnosis	ICD-10-CM
M08.261	Juvenile rheumatoid arthritis with systemic onset, right knee	Diagnosis	ICD-10-CM
M08.262	Juvenile rheumatoid arthritis with systemic onset, left knee	Diagnosis	ICD-10-CM
M08.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee	Diagnosis	ICD-10-CM
M08.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot	Diagnosis	ICD-10-CM
M08.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot	Diagnosis	ICD-10-CM
M08.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae	Diagnosis	ICD-10-CM
M08.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites	Diagnosis	ICD-10-CM
M08.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site	Diagnosis	ICD-10-CM
M08.3	Juvenile rheumatoid polyarthritis (seronegative)	Diagnosis	ICD-10-CM
M08.40	Pauciarticular juvenile rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.411	Pauciarticular juvenile rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.412	Pauciarticular juvenile rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.419	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.421	Pauciarticular juvenile rheumatoid arthritis, right elbow	Diagnosis	ICD-10-CM
M08.422	Pauciarticular juvenile rheumatoid arthritis, left elbow	Diagnosis	ICD-10-CM
M08.429	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.431	Pauciarticular juvenile rheumatoid arthritis, right wrist	Diagnosis	ICD-10-CM
M08.432	Pauciarticular juvenile rheumatoid arthritis, left wrist	Diagnosis	ICD-10-CM
M08.439	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.441	Pauciarticular juvenile rheumatoid arthritis, right hand	Diagnosis	ICD-10-CM
M08.442	Pauciarticular juvenile rheumatoid arthritis, left hand	Diagnosis	ICD-10-CM
M08.449	Pauciarticular juvenile rheumatoid arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.451	Pauciarticular juvenile rheumatoid arthritis, right hip	Diagnosis	ICD-10-CM
M08.452	Pauciarticular juvenile rheumatoid arthritis, left hip	Diagnosis	ICD-10-CM
M08.459	Pauciarticular juvenile rheumatoid arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.461	Pauciarticular juvenile rheumatoid arthritis, right knee	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
M08.462	Pauciarticular juvenile rheumatoid arthritis, left knee	Diagnosis	ICD-10-CM
M08.469	Pauciarticular juvenile rheumatoid arthritis, unspecified knee	Diagnosis	ICD-10-CM
M08.471	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M08.472	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M08.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M08.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M08.4A	Pauciarticular juvenile rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M08.80	Other juvenile arthritis, unspecified site	Diagnosis	ICD-10-CM
M08.811	Other juvenile arthritis, right shoulder	Diagnosis	ICD-10-CM
M08.812	Other juvenile arthritis, left shoulder	Diagnosis	ICD-10-CM
M08.819	Other juvenile arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M08.821	Other juvenile arthritis, right elbow	Diagnosis	ICD-10-CM
M08.822	Other juvenile arthritis, left elbow	Diagnosis	ICD-10-CM
M08.829	Other juvenile arthritis, unspecified elbow	Diagnosis	ICD-10-CM
M08.831	Other juvenile arthritis, right wrist	Diagnosis	ICD-10-CM
M08.832	Other juvenile arthritis, left wrist	Diagnosis	ICD-10-CM
M08.839	Other juvenile arthritis, unspecified wrist	Diagnosis	ICD-10-CM
M08.841	Other juvenile arthritis, right hand	Diagnosis	ICD-10-CM
M08.842	Other juvenile arthritis, left hand	Diagnosis	ICD-10-CM
M08.849	Other juvenile arthritis, unspecified hand	Diagnosis	ICD-10-CM
M08.851	Other juvenile arthritis, right hip	Diagnosis	ICD-10-CM
M08.852	Other juvenile arthritis, left hip	Diagnosis	ICD-10-CM
M08.859	Other juvenile arthritis, unspecified hip	Diagnosis	ICD-10-CM
M08.861	Other juvenile arthritis, right knee	Diagnosis	ICD-10-CM
M08.862	Other juvenile arthritis, left knee	Diagnosis	ICD-10-CM
M08.869	Other juvenile arthritis, unspecified knee	Diagnosis	ICD-10-CM
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

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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
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

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Code	Description	Code Category	Code Type
M17.9	Osteoarthritis of knee, unspecified	Diagnosis	ICD-10-CM
M18.0	Bilateral primary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.10	Unilateral primary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.11	Unilateral primary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.12	Unilateral primary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.2	Bilateral post-traumatic osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.30	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.31	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.32	Unilateral post-traumatic osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.4	Other bilateral secondary osteoarthritis of first carpometacarpal joints	Diagnosis	ICD-10-CM
M18.50	Other unilateral secondary osteoarthritis of first carpometacarpal joint, unspecified hand	Diagnosis	ICD-10-CM
M18.51	Other unilateral secondary osteoarthritis of first carpometacarpal joint, right hand	Diagnosis	ICD-10-CM
M18.52	Other unilateral secondary osteoarthritis of first carpometacarpal joint, left hand	Diagnosis	ICD-10-CM
M18.9	Osteoarthritis of first carpometacarpal joint, unspecified	Diagnosis	ICD-10-CM
M19.011	Primary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.012	Primary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.019	Primary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.021	Primary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.022	Primary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.029	Primary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.031	Primary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.032	Primary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.039	Primary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.041	Primary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.042	Primary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.049	Primary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.071	Primary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.072	Primary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.079	Primary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.09	Primary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.111	Post-traumatic osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.112	Post-traumatic osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.119	Post-traumatic osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.121	Post-traumatic osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.122	Post-traumatic osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.129	Post-traumatic osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.131	Post-traumatic osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.132	Post-traumatic osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.139	Post-traumatic osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.141	Post-traumatic osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.142	Post-traumatic osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.149	Post-traumatic osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.171	Post-traumatic osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.172	Post-traumatic osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
M19.179	Post-traumatic osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.19	Post-traumatic osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.211	Secondary osteoarthritis, right shoulder	Diagnosis	ICD-10-CM
M19.212	Secondary osteoarthritis, left shoulder	Diagnosis	ICD-10-CM
M19.219	Secondary osteoarthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M19.221	Secondary osteoarthritis, right elbow	Diagnosis	ICD-10-CM
M19.222	Secondary osteoarthritis, left elbow	Diagnosis	ICD-10-CM
M19.229	Secondary osteoarthritis, unspecified elbow	Diagnosis	ICD-10-CM
M19.231	Secondary osteoarthritis, right wrist	Diagnosis	ICD-10-CM
M19.232	Secondary osteoarthritis, left wrist	Diagnosis	ICD-10-CM
M19.239	Secondary osteoarthritis, unspecified wrist	Diagnosis	ICD-10-CM
M19.241	Secondary osteoarthritis, right hand	Diagnosis	ICD-10-CM
M19.242	Secondary osteoarthritis, left hand	Diagnosis	ICD-10-CM
M19.249	Secondary osteoarthritis, unspecified hand	Diagnosis	ICD-10-CM
M19.271	Secondary osteoarthritis, right ankle and foot	Diagnosis	ICD-10-CM
M19.272	Secondary osteoarthritis, left ankle and foot	Diagnosis	ICD-10-CM
M19.279	Secondary osteoarthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M19.29	Secondary osteoarthritis, other specified site	Diagnosis	ICD-10-CM
M19.90	Unspecified osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.91	Primary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.92	Post-traumatic osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M19.93	Secondary osteoarthritis, unspecified site	Diagnosis	ICD-10-CM
M45.0	Ankylosing spondylitis of multiple sites in spine	Diagnosis	ICD-10-CM
M45.1	Ankylosing spondylitis of occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M45.2	Ankylosing spondylitis of cervical region	Diagnosis	ICD-10-CM
M45.3	Ankylosing spondylitis of cervicothoracic region	Diagnosis	ICD-10-CM
M45.4	Ankylosing spondylitis of thoracic region	Diagnosis	ICD-10-CM
M45.5	Ankylosing spondylitis of thoracolumbar region	Diagnosis	ICD-10-CM
M45.6	Ankylosing spondylitis lumbar region	Diagnosis	ICD-10-CM
M45.7	Ankylosing spondylitis of lumbosacral region	Diagnosis	ICD-10-CM
M45.8	Ankylosing spondylitis sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M45.9	Ankylosing spondylitis of unspecified sites in spine	Diagnosis	ICD-10-CM
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
M47.11	Other spondylosis with myelopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
M47.12	Other spondylosis with myelopathy, cervical region	Diagnosis	ICD-10-CM
M47.13	Other spondylosis with myelopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.20	Other spondylosis with radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.21	Other spondylosis with radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.22	Other spondylosis with radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.23	Other spondylosis with radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.24	Other spondylosis with radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.25	Other spondylosis with radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.26	Other spondylosis with radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.27	Other spondylosis with radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.28	Other spondylosis with radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.811	Spondylosis without myelopathy or radiculopathy, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.812	Spondylosis without myelopathy or radiculopathy, cervical region	Diagnosis	ICD-10-CM
M47.813	Spondylosis without myelopathy or radiculopathy, cervicothoracic region	Diagnosis	ICD-10-CM
M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region	Diagnosis	ICD-10-CM
M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region	Diagnosis	ICD-10-CM
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region	Diagnosis	ICD-10-CM
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region	Diagnosis	ICD-10-CM
M47.818	Spondylosis without myelopathy or radiculopathy, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.819	Spondylosis without myelopathy or radiculopathy, site unspecified	Diagnosis	ICD-10-CM
M47.891	Other spondylosis, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M47.892	Other spondylosis, cervical region	Diagnosis	ICD-10-CM
M47.893	Other spondylosis, cervicothoracic region	Diagnosis	ICD-10-CM
M47.894	Other spondylosis, thoracic region	Diagnosis	ICD-10-CM
M47.895	Other spondylosis, thoracolumbar region	Diagnosis	ICD-10-CM
M47.896	Other spondylosis, lumbar region	Diagnosis	ICD-10-CM
M47.897	Other spondylosis, lumbosacral region	Diagnosis	ICD-10-CM
M47.898	Other spondylosis, sacral and sacrococcygeal region	Diagnosis	ICD-10-CM
M47.899	Other spondylosis, site unspecified	Diagnosis	ICD-10-CM
M47.9	Spondylosis, unspecified	Diagnosis	ICD-10-CM
M48.8X1	Other specified spondylopathies, occipito-atlanto-axial region	Diagnosis	ICD-10-CM
M48.8X2	Other specified spondylopathies, cervical region	Diagnosis	ICD-10-CM
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

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Code	Description	Code Category	Code Type
<b>Stroke or Transient Ischemic Attack</b>			
430	Subarachnoid hemorrhage	Diagnosis	ICD-9-CM
431	Intracerebral hemorrhage	Diagnosis	ICD-9-CM
433.01	Occlusion and stenosis of basilar artery with cerebral infarction	Diagnosis	ICD-9-CM
433.11	Occlusion and stenosis of carotid artery with cerebral infarction	Diagnosis	ICD-9-CM
433.21	Occlusion and stenosis of vertebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.31	Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral	Diagnosis	ICD-9-CM
433.81	Occlusion and stenosis of other specified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
433.91	Occlusion and stenosis of unspecified precerebral artery with cerebral infarction	Diagnosis	ICD-9-CM
434.00	Cerebral thrombosis without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.01	Cerebral thrombosis with cerebral infarction	Diagnosis	ICD-9-CM
434.10	Cerebral embolism without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.11	Cerebral embolism with cerebral infarction	Diagnosis	ICD-9-CM
434.90	Unspecified cerebral artery occlusion without mention of cerebral infarction	Diagnosis	ICD-9-CM
434.91	Unspecified cerebral artery occlusion with cerebral infarction	Diagnosis	ICD-9-CM
435.0	Basilar artery syndrome	Diagnosis	ICD-9-CM
435.1	Vertebral artery syndrome	Diagnosis	ICD-9-CM
435.3	Vertebrobasilar artery syndrome	Diagnosis	ICD-9-CM
435.8	Other specified transient cerebral ischemias	Diagnosis	ICD-9-CM
435.9	Unspecified transient cerebral ischemia	Diagnosis	ICD-9-CM
436	Acute, but ill-defined, cerebrovascular disease	Diagnosis	ICD-9-CM
997.02	Iatrogenic cerebrovascular infarction or hemorrhage	Diagnosis	ICD-9-CM
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
G45.8	Other transient cerebral ischemic attacks and related syndromes	Diagnosis	ICD-10-CM
G45.9	Transient cerebral ischemic attack, unspecified	Diagnosis	ICD-10-CM
G46.0	Middle cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.1	Anterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.2	Posterior cerebral artery syndrome	Diagnosis	ICD-10-CM
G46.3	Brain stem stroke syndrome	Diagnosis	ICD-10-CM
G46.4	Cerebellar stroke syndrome	Diagnosis	ICD-10-CM
G46.5	Pure motor lacunar syndrome	Diagnosis	ICD-10-CM
G46.6	Pure sensory lacunar syndrome	Diagnosis	ICD-10-CM
G46.7	Other lacunar syndromes	Diagnosis	ICD-10-CM
G46.8	Other vascular syndromes of brain in cerebrovascular diseases	Diagnosis	ICD-10-CM
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure	Diagnosis	ICD-10-CM
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure	Diagnosis	ICD-10-CM
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation	Diagnosis	ICD-10-CM
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
I60.20	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	Diagnosis	ICD-10-CM
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery	Diagnosis	ICD-10-CM
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery	Diagnosis	ICD-10-CM
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery	Diagnosis	ICD-10-CM
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery	Diagnosis	ICD-10-CM
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery	Diagnosis	ICD-10-CM
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery	Diagnosis	ICD-10-CM
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries	Diagnosis	ICD-10-CM
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery	Diagnosis	ICD-10-CM
I60.8	Other nontraumatic subarachnoid hemorrhage	Diagnosis	ICD-10-CM
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified	Diagnosis	ICD-10-CM
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical	Diagnosis	ICD-10-CM
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical	Diagnosis	ICD-10-CM
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified	Diagnosis	ICD-10-CM
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
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
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery	Diagnosis	ICD-10-CM
I63.09	Cerebral infarction due to thrombosis of other precerebral artery	Diagnosis	ICD-10-CM
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery	Diagnosis	ICD-10-CM
I63.111	Cerebral infarction due to embolism of right vertebral artery	Diagnosis	ICD-10-CM
I63.112	Cerebral infarction due to embolism of left vertebral artery	Diagnosis	ICD-10-CM
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries	Diagnosis	ICD-10-CM
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery	Diagnosis	ICD-10-CM
I63.12	Cerebral infarction due to embolism of basilar artery	Diagnosis	ICD-10-CM
I63.131	Cerebral infarction due to embolism of right carotid artery	Diagnosis	ICD-10-CM
I63.132	Cerebral infarction due to embolism of left carotid artery	Diagnosis	ICD-10-CM
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
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
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
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



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Code	Description	Code Category	Code Type
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	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	Diagnosis	ICD-10-CM
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery	Diagnosis	ICD-10-CM
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery	Diagnosis	ICD-10-CM
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries	Diagnosis	ICD-10-CM
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar	Diagnosis	ICD-10-CM
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery	Diagnosis	ICD-10-CM
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic	Diagnosis	ICD-10-CM
I63.8	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery	Diagnosis	ICD-10-CM
I63.89	Other cerebral infarction	Diagnosis	ICD-10-CM
I63.9	Cerebral infarction, unspecified	Diagnosis	ICD-10-CM
I66.01	Occlusion and stenosis of right middle cerebral artery	Diagnosis	ICD-10-CM
I66.02	Occlusion and stenosis of left middle cerebral artery	Diagnosis	ICD-10-CM
I66.03	Occlusion and stenosis of bilateral middle cerebral arteries	Diagnosis	ICD-10-CM
I66.09	Occlusion and stenosis of unspecified middle cerebral artery	Diagnosis	ICD-10-CM
I66.11	Occlusion and stenosis of right anterior cerebral artery	Diagnosis	ICD-10-CM
I66.12	Occlusion and stenosis of left anterior cerebral artery	Diagnosis	ICD-10-CM
I66.13	Occlusion and stenosis of bilateral anterior cerebral arteries	Diagnosis	ICD-10-CM
I66.19	Occlusion and stenosis of unspecified anterior cerebral artery	Diagnosis	ICD-10-CM
I66.21	Occlusion and stenosis of right posterior cerebral artery	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
I66.22	Occlusion and stenosis of left posterior cerebral artery	Diagnosis	ICD-10-CM
I66.23	Occlusion and stenosis of bilateral posterior cerebral arteries	Diagnosis	ICD-10-CM
I66.29	Occlusion and stenosis of unspecified posterior cerebral artery	Diagnosis	ICD-10-CM
I66.3	Occlusion and stenosis of cerebellar arteries	Diagnosis	ICD-10-CM
I66.8	Occlusion and stenosis of other cerebral arteries	Diagnosis	ICD-10-CM
I66.9	Occlusion and stenosis of unspecified cerebral artery	Diagnosis	ICD-10-CM
I67.841	Reversible cerebrovascular vasoconstriction syndrome	Diagnosis	ICD-10-CM
I67.848	Other cerebrovascular vasospasm and vasoconstriction	Diagnosis	ICD-10-CM
I67.89	Other cerebrovascular disease	Diagnosis	ICD-10-CM
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery	Diagnosis	ICD-10-CM
I97.811	Intraoperative cerebrovascular infarction during other surgery	Diagnosis	ICD-10-CM
I97.820	Postprocedural cerebrovascular infarction following cardiac surgery	Diagnosis	ICD-10-CM
I97.821	Postprocedural cerebrovascular infarction following other surgery	Diagnosis	ICD-10-CM
<b>Systemic Sclerosis</b>			
359.6	Symptomatic inflammatory myopathy in diseases classified elsewhere	Diagnosis	ICD-9-CM
517.2	Lung involvement in systemic sclerosis	Diagnosis	ICD-9-CM
701.0	Circumscribed scleroderma	Diagnosis	ICD-9-CM
710.1	Systemic sclerosis	Diagnosis	ICD-9-CM
L94.0	Localized scleroderma [morphea]	Diagnosis	ICD-10-CM
L94.1	Linear scleroderma	Diagnosis	ICD-10-CM
M34	Systemic sclerosis [scleroderma]	Diagnosis	ICD-10-CM
M34.0	Progressive systemic sclerosis	Diagnosis	ICD-10-CM
M34.1	CR(E)ST syndrome	Diagnosis	ICD-10-CM
M34.2	Systemic sclerosis induced by drug and chemical	Diagnosis	ICD-10-CM
M34.8	Other forms of systemic sclerosis	Diagnosis	ICD-10-CM
M34.81	Systemic sclerosis with lung involvement	Diagnosis	ICD-10-CM
M34.82	Systemic sclerosis with myopathy	Diagnosis	ICD-10-CM
M34.83	Systemic sclerosis with polyneuropathy	Diagnosis	ICD-10-CM
M34.89	Other systemic sclerosis	Diagnosis	ICD-10-CM
M34.9	Systemic sclerosis, unspecified	Diagnosis	ICD-10-CM
<b>Rheumatoid Arthritis</b>			
359.6	Symptomatic inflammatory myopathy in diseases classified elsewhere	Diagnosis	ICD-9-CM
714	Rheumatoid arthritis and other inflammatory polyarthropathies	Diagnosis	ICD-9-CM
714.0	Rheumatoid arthritis	Diagnosis	ICD-9-CM
714.1	Felty's syndrome	Diagnosis	ICD-9-CM
714.2	Other rheumatoid arthritis with visceral or systemic involvement	Diagnosis	ICD-9-CM
714.81	Rheumatoid lung	Diagnosis	ICD-9-CM
M05	Rheumatoid arthritis with rheumatoid factor	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

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

Code	Description	Code Category	Code Type
M05.029	Felty's syndrome, unspecified elbow	Diagnosis	ICD-10-CM
M05.031	Felty's syndrome, right wrist	Diagnosis	ICD-10-CM
M05.032	Felty's syndrome, left wrist	Diagnosis	ICD-10-CM
M05.039	Felty's syndrome, unspecified wrist	Diagnosis	ICD-10-CM
M05.041	Felty's syndrome, right hand	Diagnosis	ICD-10-CM
M05.042	Felty's syndrome, left hand	Diagnosis	ICD-10-CM
M05.049	Felty's syndrome, unspecified hand	Diagnosis	ICD-10-CM
M05.051	Felty's syndrome, right hip	Diagnosis	ICD-10-CM
M05.052	Felty's syndrome, left hip	Diagnosis	ICD-10-CM
M05.059	Felty's syndrome, unspecified hip	Diagnosis	ICD-10-CM
M05.061	Felty's syndrome, right knee	Diagnosis	ICD-10-CM
M05.062	Felty's syndrome, left knee	Diagnosis	ICD-10-CM
M05.069	Felty's syndrome, unspecified knee	Diagnosis	ICD-10-CM
M05.071	Felty's syndrome, right ankle and foot	Diagnosis	ICD-10-CM
M05.072	Felty's syndrome, left ankle and foot	Diagnosis	ICD-10-CM
M05.079	Felty's syndrome, unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.09	Felty's syndrome, multiple sites	Diagnosis	ICD-10-CM
M05.1	Rheumatoid lung disease with rheumatoid arthritis	Diagnosis	ICD-10-CM
M05.10	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.11	Rheumatoid lung disease with rheumatoid arthritis of shoulder	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
M05.12	Rheumatoid lung disease with rheumatoid arthritis of elbow	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
M05.13	Rheumatoid lung disease with rheumatoid arthritis of wrist	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
M05.14	Rheumatoid lung disease with rheumatoid arthritis of hand	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
M05.15	Rheumatoid lung disease with rheumatoid arthritis of hip	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
M05.16	Rheumatoid lung disease with rheumatoid arthritis of knee	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
M05.17	Rheumatoid lung disease with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
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
M05.19	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.2	Rheumatoid vasculitis with rheumatoid arthritis	Diagnosis	ICD-10-CM
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.21	Rheumatoid vasculitis with rheumatoid arthritis of shoulder	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
M05.22	Rheumatoid vasculitis with rheumatoid arthritis of elbow	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
M05.23	Rheumatoid vasculitis with rheumatoid arthritis of wrist	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
M05.24	Rheumatoid vasculitis with rheumatoid arthritis of hand	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
M05.25	Rheumatoid vasculitis with rheumatoid arthritis of hip	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
M05.26	Rheumatoid vasculitis with rheumatoid arthritis of knee	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
M05.27	Rheumatoid vasculitis with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.3	Rheumatoid heart disease with rheumatoid arthritis	Diagnosis	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.31	Rheumatoid heart disease with rheumatoid arthritis of shoulder	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
M05.32	Rheumatoid heart disease with rheumatoid arthritis of elbow	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

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

Code	Description	Code Category	Code Type
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	Diagnosis	ICD-10-CM
M05.33	Rheumatoid heart disease with rheumatoid arthritis of wrist	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
M05.34	Rheumatoid heart disease with rheumatoid arthritis of hand	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
M05.35	Rheumatoid heart disease with rheumatoid arthritis of hip	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
M05.36	Rheumatoid heart disease with rheumatoid arthritis of knee	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
M05.37	Rheumatoid heart disease with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.4	Rheumatoid myopathy with rheumatoid arthritis	Diagnosis	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.41	Rheumatoid myopathy with rheumatoid arthritis of shoulder	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
M05.42	Rheumatoid myopathy with rheumatoid arthritis of elbow	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
M05.43	Rheumatoid myopathy with rheumatoid arthritis of wrist	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
M05.44	Rheumatoid myopathy with rheumatoid arthritis of hand	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
M05.45	Rheumatoid myopathy with rheumatoid arthritis of hip	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

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

Code	Description	Code Category	Code Type
M05.46	Rheumatoid myopathy with rheumatoid arthritis of knee	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
M05.47	Rheumatoid myopathy with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.5	Rheumatoid polyneuropathy with rheumatoid arthritis	Diagnosis	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	Diagnosis	ICD-10-CM
M05.51	Rheumatoid polyneuropathy with rheumatoid arthritis of shoulder	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
M05.52	Rheumatoid polyneuropathy with rheumatoid arthritis of elbow	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
M05.53	Rheumatoid polyneuropathy with rheumatoid arthritis of wrist	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
M05.54	Rheumatoid polyneuropathy with rheumatoid arthritis of hand	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
M05.55	Rheumatoid polyneuropathy with rheumatoid arthritis of hip	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
M05.56	Rheumatoid polyneuropathy with rheumatoid arthritis of knee	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
M05.57	Rheumatoid polyneuropathy with rheumatoid arthritis of ankle and foot	Diagnosis	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	Diagnosis	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	Diagnosis	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	Diagnosis	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	Diagnosis	ICD-10-CM
M05.6	Rheumatoid arthritis with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.61	Rheumatoid arthritis of shoulder 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

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Code	Description	Code Category	Code Type
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	Diagnosis	ICD-10-CM
M05.62	Rheumatoid arthritis of elbow 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
M05.63	Rheumatoid arthritis of wrist 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
M05.64	Rheumatoid arthritis of hand 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
M05.65	Rheumatoid arthritis of hip 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
M05.66	Rheumatoid arthritis of knee 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
M05.67	Rheumatoid arthritis of ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	Diagnosis	ICD-10-CM
M05.7	Rheumatoid arthritis with rheumatoid factor without organ or systems involvement	Diagnosis	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	Diagnosis	ICD-10-CM
M05.71	Rheumatoid arthritis with rheumatoid factor of shoulder 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
M05.72	Rheumatoid arthritis with rheumatoid factor of elbow 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

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Code	Description	Code Category	Code Type
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	Diagnosis	ICD-10-CM
M05.73	Rheumatoid arthritis with rheumatoid factor of wrist 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
M05.74	Rheumatoid arthritis with rheumatoid factor of hand 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
M05.75	Rheumatoid arthritis with rheumatoid factor of hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	Diagnosis	ICD-10-CM
M05.76	Rheumatoid arthritis with rheumatoid factor of knee 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
M05.77	Rheumatoid arthritis with rheumatoid factor of ankle and foot 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



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Code	Description	Code Category	Code Type
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
M05.8	Other rheumatoid arthritis with rheumatoid factor	Diagnosis	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	Diagnosis	ICD-10-CM
M05.81	Other rheumatoid arthritis with rheumatoid factor of shoulder	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
M05.82	Other rheumatoid arthritis with rheumatoid factor of elbow	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
M05.83	Other rheumatoid arthritis with rheumatoid factor of wrist	Diagnosis	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	Diagnosis	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	Diagnosis	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	Diagnosis	ICD-10-CM
M05.84	Other rheumatoid arthritis with rheumatoid factor of hand	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
M05.85	Other rheumatoid arthritis with rheumatoid factor of hip	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
M05.86	Other rheumatoid arthritis with rheumatoid factor of knee	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
M05.87	Other rheumatoid arthritis with rheumatoid factor of ankle and foot	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	Other rheumatoid arthritis	Diagnosis	ICD-10-CM
M06.0	Rheumatoid arthritis without rheumatoid factor	Diagnosis	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	Diagnosis	ICD-10-CM
M06.01	Rheumatoid arthritis without rheumatoid factor, shoulder	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

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Code	Description	Code Category	Code Type
M06.02	Rheumatoid arthritis without rheumatoid factor, elbow	Diagnosis	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	Diagnosis	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	Diagnosis	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	Diagnosis	ICD-10-CM
M06.03	Rheumatoid arthritis without rheumatoid factor, wrist	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
M06.04	Rheumatoid arthritis without rheumatoid factor, hand	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
M06.05	Rheumatoid arthritis without rheumatoid factor, hip	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
M06.06	Rheumatoid arthritis without rheumatoid factor, knee	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
M06.07	Rheumatoid arthritis without rheumatoid factor, ankle and foot	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
M06.2	Rheumatoid bursitis	Diagnosis	ICD-10-CM
M06.20	Rheumatoid bursitis, unspecified site	Diagnosis	ICD-10-CM
M06.21	Rheumatoid bursitis, shoulder	Diagnosis	ICD-10-CM
M06.211	Rheumatoid bursitis, right shoulder	Diagnosis	ICD-10-CM
M06.212	Rheumatoid bursitis, left shoulder	Diagnosis	ICD-10-CM
M06.219	Rheumatoid bursitis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.22	Rheumatoid bursitis, elbow	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
M06.23	Rheumatoid bursitis, wrist	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
M06.24	Rheumatoid bursitis, hand	Diagnosis	ICD-10-CM
M06.241	Rheumatoid bursitis, right hand	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
M06.242	Rheumatoid bursitis, left hand	Diagnosis	ICD-10-CM
M06.249	Rheumatoid bursitis, unspecified hand	Diagnosis	ICD-10-CM
M06.25	Rheumatoid bursitis, hip	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
M06.26	Rheumatoid bursitis, knee	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
M06.27	Rheumatoid bursitis, ankle and foot	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
M06.3	Rheumatoid nodule	Diagnosis	ICD-10-CM
M06.30	Rheumatoid nodule, unspecified site	Diagnosis	ICD-10-CM
M06.31	Rheumatoid nodule, shoulder	Diagnosis	ICD-10-CM
M06.311	Rheumatoid nodule, right shoulder	Diagnosis	ICD-10-CM
M06.312	Rheumatoid nodule, left shoulder	Diagnosis	ICD-10-CM
M06.319	Rheumatoid nodule, unspecified shoulder	Diagnosis	ICD-10-CM
M06.32	Rheumatoid nodule, elbow	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
M06.33	Rheumatoid nodule, wrist	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
M06.34	Rheumatoid nodule, hand	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
M06.35	Rheumatoid nodule, hip	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
M06.36	Rheumatoid nodule, knee	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
M06.37	Rheumatoid nodule, ankle and foot	Diagnosis	ICD-10-CM
M06.371	Rheumatoid nodule, right ankle and foot	Diagnosis	ICD-10-CM



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Code	Description	Code Category	Code Type
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
M06.8	Other specified rheumatoid arthritis	Diagnosis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	Diagnosis	ICD-10-CM
M06.81	Other specified rheumatoid arthritis, shoulder	Diagnosis	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	Diagnosis	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	Diagnosis	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	Diagnosis	ICD-10-CM
M06.82	Other specified rheumatoid arthritis, elbow	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
M06.83	Other specified rheumatoid arthritis, wrist	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
M06.84	Other specified rheumatoid arthritis, hand	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
M06.85	Other specified rheumatoid arthritis, hip	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
M06.86	Other specified rheumatoid arthritis, knee	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
M06.87	Other specified rheumatoid arthritis, ankle and foot	Diagnosis	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	Diagnosis	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	Diagnosis	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	Diagnosis	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	Diagnosis	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	Diagnosis	ICD-10-CM
M06.8A	Other specified rheumatoid arthritis, other specified site	Diagnosis	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	Diagnosis	ICD-10-CM
<b>Dermatomyositis/Polymyositis</b>			
359.71	Inclusion body myositis	Diagnosis	ICD-9-CM
710.3	Dermatomyositis	Diagnosis	ICD-9-CM
710.4	Polymyositis	Diagnosis	ICD-9-CM
M33	Dermatopolymyositis	Diagnosis	ICD-10-CM
M33.1	Other dermatomyositis	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
M33.10	Other dermatomyositis, organ involvement unspecified	Diagnosis	ICD-10-CM
M33.11	Other dermatomyositis with respiratory involvement	Diagnosis	ICD-10-CM
M33.12	Other dermatomyositis with myopathy	Diagnosis	ICD-10-CM
M33.13	Other dermatomyositis without myopathy	Diagnosis	ICD-10-CM
M33.19	Other dermatomyositis with other organ involvement	Diagnosis	ICD-10-CM
M33.2	Polymyositis	Diagnosis	ICD-10-CM
M33.20	Polymyositis, organ involvement unspecified	Diagnosis	ICD-10-CM
M33.21	Polymyositis with respiratory involvement	Diagnosis	ICD-10-CM
M33.22	Polymyositis with myopathy	Diagnosis	ICD-10-CM
M33.29	Polymyositis with other organ involvement	Diagnosis	ICD-10-CM
M33.9	Dermatopolymyositis, unspecified	Diagnosis	ICD-10-CM
M33.90	Dermatopolymyositis, unspecified, organ involvement unspecified	Diagnosis	ICD-10-CM
M33.91	Dermatopolymyositis, unspecified with respiratory involvement	Diagnosis	ICD-10-CM
M33.92	Dermatopolymyositis, unspecified with myopathy	Diagnosis	ICD-10-CM
M33.93	Dermatopolymyositis, unspecified without myopathy	Diagnosis	ICD-10-CM
M33.99	Dermatopolymyositis, unspecified with other organ involvement	Diagnosis	ICD-10-CM
M36.0	Dermato(poly)myositis in neoplastic disease	Diagnosis	ICD-10-CM
<b>Antisynthetase Syndrome</b>			
359.79	Other inflammatory and immune myopathies, NEC	Diagnosis	ICD-9-CM
G72.4	Inflammatory and immune myopathies, not elsewhere classified	Diagnosis	ICD-10-CM
G72.49	Other inflammatory and immune myopathies, not elsewhere classified	Diagnosis	ICD-10-CM
<b>Tobacco Use</b>			
305.1	Nondependent tobacco use disorder	Diagnosis	ICD-9-CM
649.00	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, unspecified as to episode of care or not applicable	Diagnosis	ICD-9-CM
649.01	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with or without mention of antepartum condition	Diagnosis	ICD-9-CM
649.02	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, delivered, with mention of postpartum complication	Diagnosis	ICD-9-CM
649.03	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, antepartum condition or complication	Diagnosis	ICD-9-CM
649.04	Tobacco use disorder complicating pregnancy, childbirth, or the puerperium, postpartum condition or complication	Diagnosis	ICD-9-CM
989.84	Toxic effect of tobacco	Diagnosis	ICD-9-CM
F17.200	Nicotine dependence, unspecified, uncomplicated	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
F17.213	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
F17.220	Nicotine dependence, chewing tobacco, uncomplicated	Diagnosis	ICD-10-CM
F17.223	Nicotine dependence, chewing tobacco, with withdrawal	Diagnosis	ICD-10-CM

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Code	Description	Code Category	Code Type
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
F17.293	Nicotine dependence, other tobacco product, with withdrawal	Diagnosis	ICD-10-CM
F17.298	Nicotine dependence, other tobacco product, with other nicotine-induced disorders	Diagnosis	ICD-10-CM
F17.299	Nicotine dependence, other tobacco product, with unspecified nicotine-induced disorders	Diagnosis	ICD-10-CM
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
T65.211A	Toxic effect of chewing tobacco, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.212A	Toxic effect of chewing tobacco, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.213A	Toxic effect of chewing tobacco, assault, initial encounter	Diagnosis	ICD-10-CM
T65.214A	Toxic effect of chewing tobacco, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.221A	Toxic effect of tobacco cigarettes, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.222A	Toxic effect of tobacco cigarettes, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.223A	Toxic effect of tobacco cigarettes, assault, initial encounter	Diagnosis	ICD-10-CM
T65.224A	Toxic effect of tobacco cigarettes, undetermined, initial encounter	Diagnosis	ICD-10-CM
T65.291A	Toxic effect of other tobacco and nicotine, accidental (unintentional), initial encounter	Diagnosis	ICD-10-CM
T65.292A	Toxic effect of other tobacco and nicotine, intentional self-harm, initial encounter	Diagnosis	ICD-10-CM
T65.293A	Toxic effect of other tobacco and nicotine, assault, initial encounter	Diagnosis	ICD-10-CM
T65.294A	Toxic effect of other tobacco and nicotine, undetermined, initial encounter	Diagnosis	ICD-10-CM
Z72.0	Tobacco use	Diagnosis	ICD-10-CM
99406	Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes	Procedure	CPT-4
99407	Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes	Procedure	CPT-4
G9276	Documentation that patient is a current tobacco user	Procedure	HCPCS
G9458	Patient documented as tobacco user and received tobacco cessation intervention (must include at least one of the following: advice given to quit smoking or tobacco use, counseling on the benefits of quitting smoking or tobacco use, assistance with or referral to external smoking or tobacco cessation support programs, or current enrollment in smoking or tobacco use cessation program) if identified as a tobacco user	Procedure	HCPCS
<b>Inflammatory Bowel Disease</b>			
555	Regional enteritis	Diagnosis	ICD-9-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-9-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-9-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-9-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-9-CM
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM

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Code	Description	Code Category	Code Type
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM



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

Code	Description	Code Category	Code Type
K52.3	Indeterminate colitis	Diagnosis	ICD-10-CM
<b>Crohn's Disease</b>			
555	Regional enteritis	Diagnosis	ICD-10-CM
555.0	Regional enteritis of small intestine	Diagnosis	ICD-10-CM
555.1	Regional enteritis of large intestine	Diagnosis	ICD-10-CM
555.2	Regional enteritis of small intestine with large intestine	Diagnosis	ICD-10-CM
555.9	Regional enteritis of unspecified site	Diagnosis	ICD-10-CM
K50	Crohn's disease [regional enteritis]	Diagnosis	ICD-10-CM
K50.0	Crohn's disease of small intestine	Diagnosis	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	Diagnosis	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	Diagnosis	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	Diagnosis	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	Diagnosis	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	Diagnosis	ICD-10-CM
K50.019	Crohn's disease of small intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.1	Crohn's disease of large intestine	Diagnosis	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	Diagnosis	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	Diagnosis	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	Diagnosis	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	Diagnosis	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	Diagnosis	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	Diagnosis	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	Diagnosis	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	Diagnosis	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	Diagnosis	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	Diagnosis	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	Diagnosis	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	Diagnosis	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	Diagnosis	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	Diagnosis	ICD-10-CM
K50.9	Crohn's disease, unspecified	Diagnosis	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	Diagnosis	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	Diagnosis	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	Diagnosis	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	Diagnosis	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	Diagnosis	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	Diagnosis	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	Diagnosis	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	Diagnosis	ICD-10-CM

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

		Code	
Code	Description	Category	Code Type
Ulcerative Colitis			
556	Ulcerative colitis	Diagnosis	ICD-9-CM
556.0	Ulcerative (chronic) enterocolitis	Diagnosis	ICD-9-CM
556.1	Ulcerative (chronic) ileocolitis	Diagnosis	ICD-9-CM
556.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-9-CM
556.3	Ulcerative (chronic) proctosigmoiditis	Diagnosis	ICD-9-CM
556.5	Left sided ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.6	Universal ulcerative (chronic) colitis	Diagnosis	ICD-9-CM
556.8	Other ulcerative colitis	Diagnosis	ICD-9-CM
556.9	Unspecified ulcerative colitis	Diagnosis	ICD-9-CM
K51	Ulcerative colitis	Diagnosis	ICD-10-CM
K51.0	Ulcerative (chronic) pancolitis	Diagnosis	ICD-10-CM
K51.00	Ulcerative (chronic) pancolitis without complications	Diagnosis	ICD-10-CM
K51.01	Ulcerative (chronic) pancolitis with complications	Diagnosis	ICD-10-CM
K51.011	Ulcerative (chronic) pancolitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.012	Ulcerative (chronic) pancolitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.013	Ulcerative (chronic) pancolitis with fistula	Diagnosis	ICD-10-CM
K51.014	Ulcerative (chronic) pancolitis with abscess	Diagnosis	ICD-10-CM
K51.018	Ulcerative (chronic) pancolitis with other complication	Diagnosis	ICD-10-CM
K51.019	Ulcerative (chronic) pancolitis with unspecified complications	Diagnosis	ICD-10-CM
K51.2	Ulcerative (chronic) proctitis	Diagnosis	ICD-10-CM
K51.20	Ulcerative (chronic) proctitis without complications	Diagnosis	ICD-10-CM
K51.21	Ulcerative (chronic) proctitis with complications	Diagnosis	ICD-10-CM
K51.211	Ulcerative (chronic) proctitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.212	Ulcerative (chronic) proctitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.213	Ulcerative (chronic) proctitis with fistula	Diagnosis	ICD-10-CM
K51.214	Ulcerative (chronic) proctitis with abscess	Diagnosis	ICD-10-CM
K51.218	Ulcerative (chronic) proctitis with other complication	Diagnosis	ICD-10-CM
K51.219	Ulcerative (chronic) proctitis with unspecified complications	Diagnosis	ICD-10-CM
K51.3	Ulcerative (chronic) rectosigmoiditis	Diagnosis	ICD-10-CM
K51.30	Ulcerative (chronic) rectosigmoiditis without complications	Diagnosis	ICD-10-CM
K51.31	Ulcerative (chronic) rectosigmoiditis with complications	Diagnosis	ICD-10-CM
K51.311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	Diagnosis	ICD-10-CM
K51.312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.313	Ulcerative (chronic) rectosigmoiditis with fistula	Diagnosis	ICD-10-CM
K51.314	Ulcerative (chronic) rectosigmoiditis with abscess	Diagnosis	ICD-10-CM
K51.318	Ulcerative (chronic) rectosigmoiditis with other complication	Diagnosis	ICD-10-CM
K51.319	Ulcerative (chronic) rectosigmoiditis with unspecified complications	Diagnosis	ICD-10-CM
K51.8	Other ulcerative colitis	Diagnosis	ICD-10-CM
K51.80	Other ulcerative colitis without complications	Diagnosis	ICD-10-CM
K51.81	Other ulcerative colitis with complications	Diagnosis	ICD-10-CM
K51.811	Other ulcerative colitis with rectal bleeding	Diagnosis	ICD-10-CM
K51.812	Other ulcerative colitis with intestinal obstruction	Diagnosis	ICD-10-CM
K51.813	Other ulcerative colitis with fistula	Diagnosis	ICD-10-CM

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

Code	Description	Code Category	Code Type
K51.814	Other ulcerative colitis with abscess	Diagnosis	ICD-10-CM
K51.818	Other ulcerative colitis with other complication	Diagnosis	ICD-10-CM
K51.819	Other ulcerative colitis with unspecified complications	Diagnosis	ICD-10-CM
K51.9	Ulcerative colitis, unspecified	Diagnosis	ICD-10-CM
K51.90	Ulcerative colitis, unspecified, without complications	Diagnosis	ICD-10-CM
K51.91	Ulcerative colitis, unspecified, with complications	Diagnosis	ICD-10-CM
K51.911	Ulcerative colitis, unspecified with rectal bleeding	Diagnosis	ICD-10-CM
K51.912	Ulcerative colitis, unspecified with intestinal obstruction	Diagnosis	ICD-10-CM
K51.913	Ulcerative colitis, unspecified with fistula	Diagnosis	ICD-10-CM
K51.914	Ulcerative colitis, unspecified with abscess	Diagnosis	ICD-10-CM
K51.918	Ulcerative colitis, unspecified with other complication	Diagnosis	ICD-10-CM
K51.919	Ulcerative colitis, unspecified with unspecified complications	Diagnosis	ICD-10-CM



# Appendix L. Specifications Defining Parameters for This Request, Run 1

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 12.2.0 to estimate rates of interstitial lung disease (ILD) in patients with inflammatory bowel disease (IBD) treated with vedolizumab in the Sentinel Distributed Database.																			
<p><b>Query period run 01 (IBD background rate):</b> 01/01/2006 - 04/30/2023</p> <p><b>Coverage requirement:</b> Medical Coverage</p> <p><b>Pre-index enrollment requirement:</b> 183 days</p> <p><b>Post-index requirement:</b> 0 days</p> <p><b>Post-episode requirement for Type 2 analyses:</b> 0 days</p> <p><b>Enrollment gap:</b> 45 days</p> <p><b>Age groups:</b> 18-24, 25-34, 35-44, 45-54, 55-64, 65+ years</p> <p><b>Stratifications:</b> Age group, sex, race, ethnicity, number of doses received, year of diagnosis, length of IBD history in the database</p> <p><b>Censor output categorization:</b> Range of follow-up time specified</p> <p><b>Restrictions:</b> Male and female sex only</p> <p><b>Envelope macro:</b> Reclassify encounters during inpatient stay as inpatient</p> <p><b>Distribution of index-defining codes:</b> Not requested</p> <p><b>Never-exposed cohort:</b> Not requested</p> <p><b>Freeze data:</b> No</p>																			
Exposure																			
Scenario	Cohort Description	Index Event	Cohort Definition	Incident Exposure Washout Period	Exclude Evidence of Days Supply if Exposure Washout Includes Dispensings	Build Episodes on Point Exposure?	Treatment Episode Gap	Exposure Episode Extension	Minimum Exposure Episode Duration	Minimum Days Supplied	Maximum Exposure Episode Duration	Care Setting	Principal Diagnosis Position	Forced Supply to Attach to Dispensings	Forced Supply to Attach to Procedures	Create Baseline Table?	Censor Episode at Evidence of:		
1	ILD background rate in IBD; Prevalent cohort	IBD	First valid index event during query period	0	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		
2	ILD background rate in Crohn's disease (CD); Prevalent cohort	CD	First valid index event during query period	0	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		
3	ILD background rate in ulcerative colitis (UC); Prevalent cohort	UC	First valid index event during query period	0	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		
4	ILD background rate in IBD; Incident cohort	IBD	First valid index event during query period	ever	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		
5	ILD background rate in CD; Incident cohort	CD	First valid index event during query period	ever	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		
6	ILD background rate in UC; Incident cohort	UC	First valid index event during query period	ever	--	Yes	--	--	--	--	--	Any care setting	Any	--	--	Yes	*DP end date; *Query end date; *Death; *Disenrollment; *Development of the outcome of interest		

Appendix L. Specifications Defining Parameters for This Request, Run 1

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Exclude Evidence of Days Supply if Inclusion/Exclusion Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period	
1	ILD background rate in IBD; Prevalent cohort	--	--	--	--	--	--	--	--	
2	ILD background rate in CD; Prevalent cohort	--	--	--	--	--	--	--	--	
3	ILD background rate in UC; Prevalent cohort	--	--	--	--	--	--	--	--	
4	ILD background rate in IBD; Incident cohort	--	--	--	--	--	--	--	--	
5	ILD background rate in CD; Incident cohort	--	--	--	--	--	--	--	--	
6	ILD background rate in UC; Incident cohort	--	--	--	--	--	--	--	--	

\*This portion is blank because no inclusion or exclusion criteria were applied

Appendix L. Specifications Defining Parameters for This Request, Run 1

Event Outcome										
Scenario	Cohort Description	Event	Incident Event Washout Period	Care Setting	Principal Diagnosis Position	Exclude Evidence of Days Supply if Event Washout Includes Dispensings	Event De-Duplication	Blackout Period	Risk Window Interval Start	Forced Supply to Attach to Dispensings
1	ILD background rate in IBD; Prevalent cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
2	ILD background rate in CD; Prevalent cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
3	ILD background rate in UC; Prevalent cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
4	ILD background rate in IBD; Incident cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
5	ILD background rate in CD; Incident cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
6	ILD background rate in UC; Incident cohort	ILD	ever	Any care setting	Any	--	--	N/A	Day 1	N/A
ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's FDB MedKnowledge®.										

# Appendix M. Specifications Defining Parameters for This Request, Run 2

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 12.2.0 to estimate rates of interstitial lung disease (ILD) in patients with inflammatory bowel disease (IBD) treated with vedolizumab in the Sentinel Distributed Database (SDD).

**Query period run 02 (vedolizumab cohort):** 05/01/2014 - 04/30/2023  
**Coverage requirement:** Medical & Drug Coverage  
**Pre-index enrollment requirement:** 183 days  
**Post-index requirement:** 0 days  
**Post-episode requirement for Type 2 analyses:** 0 days  
**Enrollment gap:** 45 days  
**Age groups:** 18-24, 25-34, 35-44, 45-54, 55-64, 65+ years  
**Stratifications:** Age group, sex, race, ethnicity, number of doses received, year of diagnosis, length of IBD history in the database  
**Censor output categorization:** Range of follow-up time specified  
**Restrictions:** Male and female sex only  
**Envelope macro:** Reclassify encounters during inpatient stay as inpatient  
**Distribution of index-defining codes:** Not requested  
**Never-exposed cohort:** Not requested  
**Freeze data:** No

## Exposure

Scenario	Cohort Description	Index Exposure/Event	Cohort Definition	Incident Exposure Washout Period	Exclude Evidence of Days Supply if Exposure Washout		Treatment Episode Gap	Exposure Episode Extension	Minimum Exposure Episode Duration	Minimum Days Supplied	Maximum Exposure Episode Duration
					Includes Dispensings						
1	Vedolizumab Users with IBD	vedolizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No		0	0	None	1 Day	N/A
2	Vedolizumab Users with IBD: No extended at-risk period after the last claim	vedolizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No		14	0	None	1 Day	N/A
3	Vedolizumab Users with IBD: No history of radiographic chest exam	vedolizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No		0	0	None	1 Day	N/A
4	Vedolizumab Users with Crohn's disease (CD)	vedolizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No		0	0	None	1 Day	N/A
5	Vedolizumab Users with ulcerative colitis (UC)	vedolizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No		0	0	None	1 Day	N/A

Appendix M. Specifications Defining Parameters for This Request, Run 2

Exposure							
Scenario	Cohort Description	Care Setting	Principal Diagnosis Position	Forced Supply to Attach to Dispensings	Forced Supply to Attach to Procedures	Create Baseline Table?	Censor Treatment Episode at Evidence of:
1	Vedolizumab Users with IBD	Any care setting	N/A	128 days	128 days	Yes	*DP end date; *Query end date; * Receipt of natalizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
2	Vedolizumab Users with IBD: No extended at-risk period after the last claim	Any care setting	N/A	56 days	56 days	Yes	*DP end date; *Query end date; * Receipt of natalizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
3	Vedolizumab Users with IBD: No history of radiographic chest exam	Any care setting	N/A	128 days	128 days	Yes	*DP end date; *Query end date; * Receipt of natalizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest

# Appendix M. Specifications Defining Parameters for This Request, Run 2

Exposure							
Scenario	Cohort Description	Care Setting	Principal Diagnosis Position	Forced Supply to Attach to Dispensings	Forced Supply to Attach to Procedures	Create Baseline Table?	Censor Treatment Episode at Evidence of:
4	Vedolizumab Users with CD	Any care setting	N/A	128 days	128 days	Yes	*DP end date; *Query end date; * Receipt of natalizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
5	Vedolizumab Users with UC	Any care setting	N/A	128 days	128 days	Yes	*DP end date; *Query end date; * Receipt of natalizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest

Appendix M. Specifications Defining Parameters for This Request, Run 2

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
1	Vedolizumab Users with IBD	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	128 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	55 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	N/A	-183	-1	N/A	N/A	1
2	Vedolizumab Users with IBD: No extended at-risk period after the last claim	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	56 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	28 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	N/A	-183	-1	N/A	N/A	1

Appendix M. Specifications Defining Parameters for This Request, Run 2

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
3	Vedolizumab Users with IBD: No history of radiographic chest exam	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	128 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	55 days	Evaluation period should search for evidence of days supply	1
		*History of radiographic chest exam	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1
4	Vedolizumab Users with CD	*Crohn's disease	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	128 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	55 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1



Appendix M. Specifications Defining Parameters for This Request, Run 2

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
5	Vedolizumab Users with UC	*Ulcerative colitis	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	128 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	55 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1

Appendix M. Specifications Defining Parameters for This Request, Run 2

Scenario	Cohort Description	Event	Event Outcome							
			Incident Event Washout Period	Care Setting	Principal Diagnosis Position	Exclude Evidence of Days Supply if Event Washout Includes Dispensings	Event De-Duplication	Blackout Period	Risk Window Interval Start	Forced Supply to Attach to Dispensings
1	Vedolizumab Users with IBD	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
2	Vedolizumab Users with IBD: No extended at-risk period after the last claim	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
3	Vedolizumab Users with IBD: No history of radiographic chest exam	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
4	Vedolizumab Users with CD	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
5	Vedolizumab Users with UC	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's FDB MedKnowledge®.										

# Appendix N. Specifications Defining Parameters for This Request, Run 3

This request executed the Cohort Identification and Descriptive Analysis (CIDA) tool version 12.2.0 to estimate rates of interstitial lung disease (ILD) in patients with inflammatory bowel disease (IBD) treated with vedolizumab in the Sentinel Distributed Database (SDD).

**Query period run 03 (natalizumab cohort):** 01/01/2008 - 04/30/2023  
**Coverage requirement:** Medical & Drug Coverage  
**Pre-index enrollment requirement:** 183 days  
**Post-index requirement:** 0 days  
**Post-episode requirement for Type 2 analyses:** 0 days  
**Enrollment gap:** 45 days  
**Age groups:** 18-24, 25-34, 35-44, 45-54, 55-64, 65+ years  
**Stratifications:** Age group, sex, race, ethnicity, number of doses received, year of diagnosis, length of IBD history in the database  
**Censor output categorization:** Range of follow-up time specified  
**Restrictions:** Male and female sex only  
**Envelope macro:** Reclassify encounters during inpatient stay as inpatient  
**Distribution of index-defining codes:** Not requested  
**Never-exposed cohort:** Not requested  
**Freeze data:** No

Exposure										
Scenario	Cohort Description	Index Exposure/Event	Cohort Definition	Incident Exposure Washout Period	Exclude Evidence of Days Supply if Exposure Washout Includes Dispensings	Treatment Episode Gap	Exposure Episode Extension	Minimum Exposure Episode Duration	Minimum Days Supplied	Maximum Exposure Episode Duration
1	Natalizumab Users with IBD	natalizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No	0	0	None	1 Day	N/A
2	Natalizumab Users with IBD: No extended at-risk period after the last claim	natalizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No	14	0	None	1 Day	N/A
3	Natalizumab Users with IBD: No history of radiographic chest exam	natalizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No	0	0	None	1 Day	N/A
4	Natalizumab Users with Crohn's disease (CD)	natalizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No	0	0	None	1 Day	N/A
5	Natalizumab Users with ulcerative colitis (UC)	natalizumab	Cohort includes all valid exposure episodes during the query period	183 days (via exclusion criteria)	No	0	0	None	1 Day	N/A

Appendix N. Specifications Defining Parameters for This Request, Run 3

Exposure							
Scenario	Cohort Description	Care Setting	Principal Diagnosis Position	Forced Supply to Attach to Dispensings	Forced Supply to Attach to Procedures	Create Baseline Table?	Censor Treatment Episode at Evidence of:
1	Natalizumab Users with IBD	Any care setting	N/A	55 days	55 days	Yes	*DP end date; *Query end date; * Receipt of vedolizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
2	Natalizumab Users with IBD: No extended at-risk period after the last claim	Any care setting	N/A	28 days	28 days	Yes	*DP end date; *Query end date; * Receipt of vedolizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
3	Natalizumab Users with IBD: No history of radiographic chest exam	Any care setting	N/A	55 days	55 days	Yes	*DP end date; *Query end date; * Receipt of vedolizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest

Appendix N. Specifications Defining Parameters for This Request, Run 3

Exposure							
Scenario	Cohort Description	Care Setting	Principal Diagnosis Position	Forced Supply to Attach to Dispensings	Forced Supply to Attach to Procedures	Create Baseline Table?	Censor Treatment Episode at Evidence of:
4	Natalizumab Users with CD	Any care setting	N/A	55 days	55 days	Yes	*DP end date; *Query end date; * Receipt of vedolizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest
5	Natalizumab Users with UC	Any care setting	N/A	55 days	55 days	Yes	*DP end date; *Query end date; * Receipt of vedolizumab; * Receipt of other IBD treatments including: methotrexate, amiodarone, bleomycin, azathioprine, cyclophosphamide, sulfasalazine, checkpoint inhibitors (Cytotoxic T lymphocyte-associated antigen 4: ipilimumab and tremelimumab; Programmed cell death receptor 1: nivolumab, pembrolizumab, cemiplimab, and dostarlimab ; and programmed cell death ligand 1: atezolimumab, durvalumab and avelumab) or tyrosine kinase inhibitors; *Death; *Disenrollment; *Development of the outcome of interest

Appendix N. Specifications Defining Parameters for This Request, Run 3

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
1	Natalizumab Users with IBD	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	-1	55 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	0	128 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x halflife rounded up to nearest whole number). See Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	N/A	-183	-1	N/A	N/A	1
2	Natalizumab Users with IBD: No extended at-risk period after the last claim	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	-1	28 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	0	56 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x halflife rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	N/A	-183	-1	N/A	N/A	1

Appendix N. Specifications Defining Parameters for This Request, Run 3

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
3	Natalizumab Users with IBD: No history of radiographic chest exam	*IBD	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	-1	55 days	Evaluation period should search for evidence of days supply	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	0	128 days	Evaluation period should search for evidence of days supply	1
		*History of radiographic chest exam	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x halflife rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1
4	Natalizumab Users with CD	*Crohn's disease	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	-1	55 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	0	128 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x halflife rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1

Appendix N. Specifications Defining Parameters for This Request, Run 3

Inclusion/Exclusion Criteria										
Scenario	Cohort Description	Inclusion/Exclusion Group	Criteria	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Forced Supply to Attach to Dispensings and Procedures	Exclude Evidence of Days Supply if Inclusion/Exclusion Evaluation Period Includes Dispensings	Number of Instances the Criteria Should Be Found in Evaluation Period
5	Natalizumab Users with UC	*Ulcerative colitis	Inclusion	Any care setting	Any	-ever	0	N/A	N/A	1
		*Prior natalizumab use	Exclusion	N/A	N/A	-183	-1	55 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab use	Exclusion	N/A	N/A	-183	0	128 days	Evaluation period should search for evidence of days supply	1
		*Prior use of other IBD treatments	Exclusion	N/A	N/A	drug dependent (-5x half-life rounded up to nearest whole number), see Appendix A	0	N/A	Evaluation period should search for evidence of days supply	1
		*Prior amiodarone use	Exclusion	N/A	N/A	0	0	710 days	Evaluation period should search for evidence of days supply	1
		*Prior vedolizumab antibody assessment CPT code(s)	Exclusion	Any care setting	Any	-183	-1	N/A	N/A	1



**Appendix N. Specifications Defining Parameters for This Request, Run 3**

Scenario	Cohort Description	Event	Event Outcome							
			Incident Event Washout Period	Care Setting	Principal Diagnosis Position	Exclude Evidence of Days Supply if Event Washout Includes Dispensings	Event De-Duplication	Blackout Period	Risk Window Interval Start	Forced Supply to Attach to Dispensings
1	Natalizumab Users with IBD	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
2	Natalizumab Users with IBD: No extended at-risk period after the last claim	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
3	Natalizumab Users with IBD: No history of radiographic chest exam	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
4	Natalizumab Users with CD	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
5	Natalizumab Users with UC	Interstitial Lung Disease (ILD)	ever	Any care setting	Any	N/A	Count all occurrences of an HOI during exposure period	None	Day 1	N/A
ICD-9, ICD-10, HCPCS, and CPT codes are provided by Optum360. NDC codes are checked against First Data Bank's FDB MedKnowledge®.										

# Appendix O. Specifications Defining Baseline Characteristics for This Request

Covariate Number	Covariate	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Exclude Evidence of Days Supply if Covariate Includes Dispensings	Number of Instances the Covariate Should Be Found in Evaluation Period	
1	Vedolizumab - at least 1 dose	N/A	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	1	
2	Vedolizumab - at least 4 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	4	
3	Vedolizumab - at least 7 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	7	
4	Vedolizumab - at least 10 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	10	
5	1-3 vedolizumab doses received	Covar1 and not Covar2	--	--	--	--	--	
6	4-6 vedolizumab doses received	Covar2 and not Covar3	--	--	--	--	--	
7	7-9 vedolizumab doses received	Covar3 and not Covar4	--	--	--	--	--	
8	Natalizumab - at least 1 dose	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	1	
9	Natalizumab - at least 4 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	4	
10	Natalizumab - at least 7 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	7	
11	Natalizumab - at least 10 doses	--	N/A	0	ever	*Evaluation period should search for only evidence of a dispensing date	10	
12	1-3 natalizumab doses received	Covar8 and not Covar9	--	--	--	--	--	
13	4-6 natalizumab doses received	Covar9 and not Covar10	--	--	--	--	--	
14	7-9 natalizumab doses received	Covar10 and not Covar11	--	--	--	--	--	
15	r02/r03: IBD in -364 to -1 (<1 year of IBD history)	Any	Any	-364 (0 for input file purpose)	-1 (0 for input file purpose)	N/A	1	
16	r02/r03: IBD in -729 to -365	Any	Any	-729 (0 for input file purpose)	365 (0 for input file purpose)	N/A	1	
17	r02/r03: ≥2 years of IBD history	Any	Any	-ever (0 for input file purpose)	-730 (0 for input file purpose)	N/A	1	
18	r02/r03: <1 year of IBD history	Not Covar16 and not Covar17						
19	r02/r03: 1-<2 years of IBD history	Covar16 and not Covar17	--	--	--	--	--	
20	Systemic sclerosis	--	*Any care setting	*Any	-183	0	N/A	1
21	Rheumatoid arthritis	--	*Any care setting	*Any	-183	0	N/A	1
22	Dermatomyositis/polymyositis	--	*Any care setting	*Any	-183	0	N/A	1
23	Anti-synthetase syndrome	--	*Any care setting	*Any	-183	0	N/A	1
24	Acquired hypothyroidism	--	*Any care setting	*Any	-ever	0	N/A	1

# Appendix O. Specifications Defining Baseline Characteristics for This Request

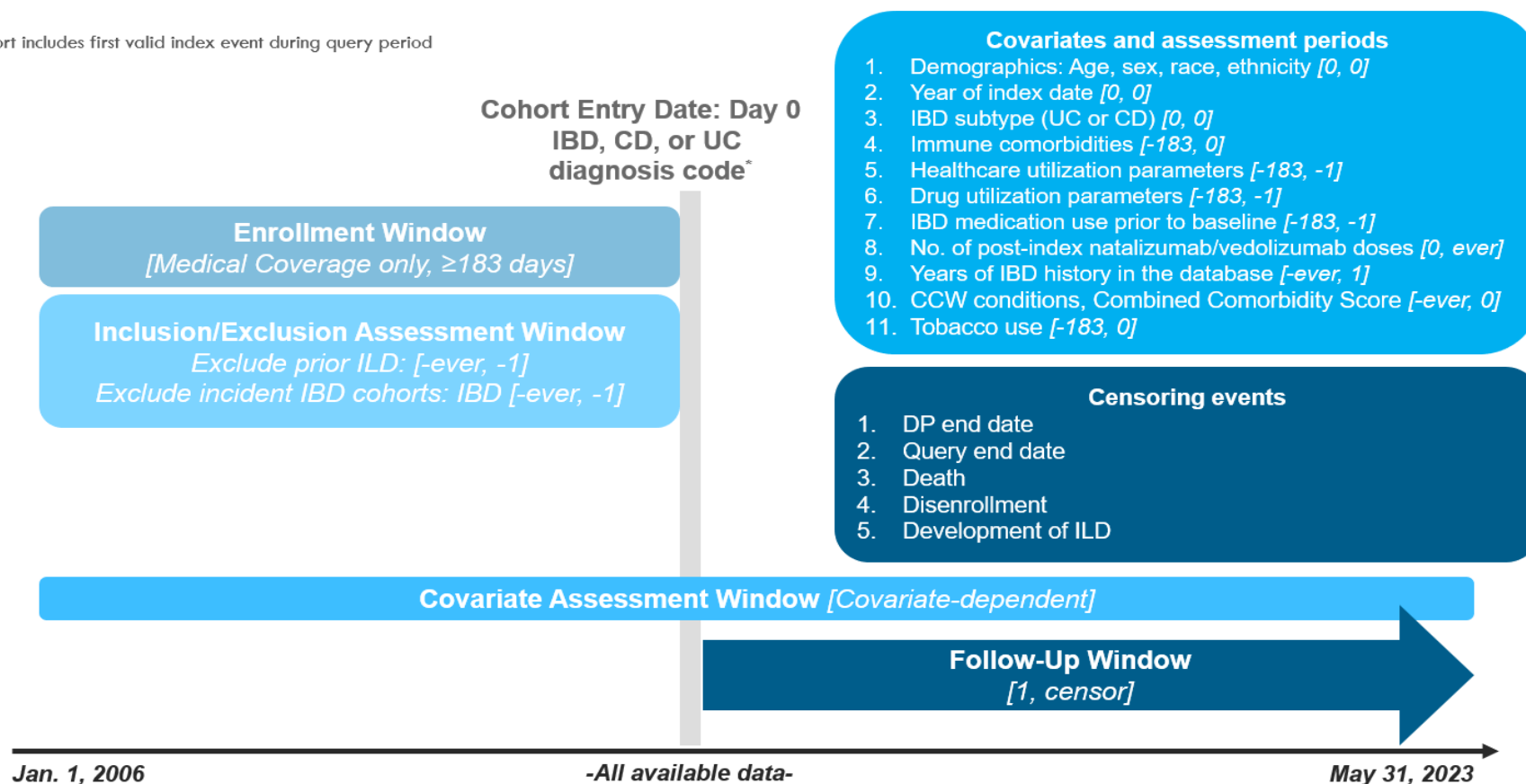
Covariate Number	Covariate	Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Exclude Evidence of Days Supply if Covariate Includes Dispensings	Number of Instances the Covariate Should Be Found in Evaluation Period	
25	Acute myocardial infarction	*Any care setting	*Any	-ever	0	N/A	1	
26	Alzheimer's disease	*Any care setting	*Any	-ever	0	N/A	1	
27	Alzheimer's disease and related disorders or senile dementia	*Any care setting	*Any	-ever	0	N/A	1	
28	Anemia	*Any care setting	*Any	-ever	0	N/A	1	
29	Asthma	*Any care setting	*Any	-ever	0	N/A	1	
30	Atrial fibrillation	*Any care setting	*Any	-ever	0	N/A	1	
31	Benign prostatic hyperplasia	*Any care setting	*Any	-ever	0	N/A	1	
32	Cancer, breast	*Any care setting	*Any	-ever	0	N/A	1	
33	Cancer, colorectal	*Any care setting	*Any	-ever	0	N/A	1	
34	Cancer, endometrial	*Any care setting	*Any	-ever	0	N/A	1	
35	Cancer, lung	*Any care setting	*Any	-ever	0	N/A	1	
36	Cancer, prostate	*Any care setting	*Any	-ever	0	N/A	1	
37	Cataract	*Any care setting	*Any	-ever	0	N/A	1	
38	Chronic kidney disease	*Any care setting	*Any	-ever	0	N/A	1	
39	Chronic obstructive pulmonary disease and bronchiectasis	*Any care setting	*Any	-ever	0	N/A	1	
40	Depression	*Any care setting	*Any	-ever	0	N/A	1	
41	Diabetes	*Any care setting	*Any	-ever	0	N/A	1	
42	Glaucoma	*Any care setting	*Any	-ever	0	N/A	1	
43	Heart failure	*Any care setting	*Any	-ever	0	N/A	1	
44	Hip/pelvic fracture	*Any care setting	*Any	-ever	0	N/A	1	
45	Hyperlipidemia	*Any care setting	*Any	-ever	0	N/A	1	
46	Hypertension	*Any care setting	*Any	-ever	0	N/A	1	
47	Ischemic heart disease	*Any care setting	*Any	-ever	0	N/A	1	
48	Osteoporosis	*Any care setting	*Any	-ever	0	N/A	1	
49	Rheumatoid arthritis/osteoarthritis	*Any care setting	*Any	-ever	0	N/A	1	
50	Stroke/transient ischemic attack	*Any care setting	*Any	-ever	0	N/A	1	
51	Combined Comorbidity Score	*Any care setting	*Any	-ever	0	N/A	1	
52	Tobacco use	*Any care setting	*Any	-183	0	N/A	1	
53	Methotrexate	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
54	Amiodarone	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1

# Appendix O. Specifications Defining Baseline Characteristics for This Request

Covariate Number	Covariate		Care Setting	Principal Diagnosis Position	Evaluation Period Start	Evaluation Period End	Exclude Evidence of Days Supply if Covariate Includes Dispensings	Number of Instances the Covariate Should Be Found in Evaluation Period
55	Bleomycin	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
56	Azathioprine	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
57	Cyclophosphamide	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
58	Sulfasalazine	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
59	Checkpoint inhibitors	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
60	Tyrosine kinase inhibitors	--	N/A	N/A	-183	0	*Evaluation period should search for evidence of days supply	1
61	r01: IBD in -364 to -1		Any	Any	-364 (0 for input file purpose)	-1 (0 for input file purpose)	N/A	1
62	r01: IBD in -729 to -365		Any	Any	-729 (0 for input file purpose)	365 (0 for input file purpose)	N/A	1
63	r01: IBD in ever to -730		Any	Any	-ever (0 for input file purpose)	-730 (0 for input file purpose)	N/A	1
64	r01: <1 year of IBD history	Not Covar62 and not Covar63	--	--	--	--	--	--
65	r01: 1-<2 years of IBD history	Cova62 and not Covar63	--	--	--	--	--	--
66	r01: ≥ 2 years of IBD history	Covar63	--	--	--	--	--	--

## Appendix P. Design Diagram of Cohort Entry Requirements, Index Exposure, and Event Outcome Assessment for Run 1

\* Cohort includes first valid index event during query period

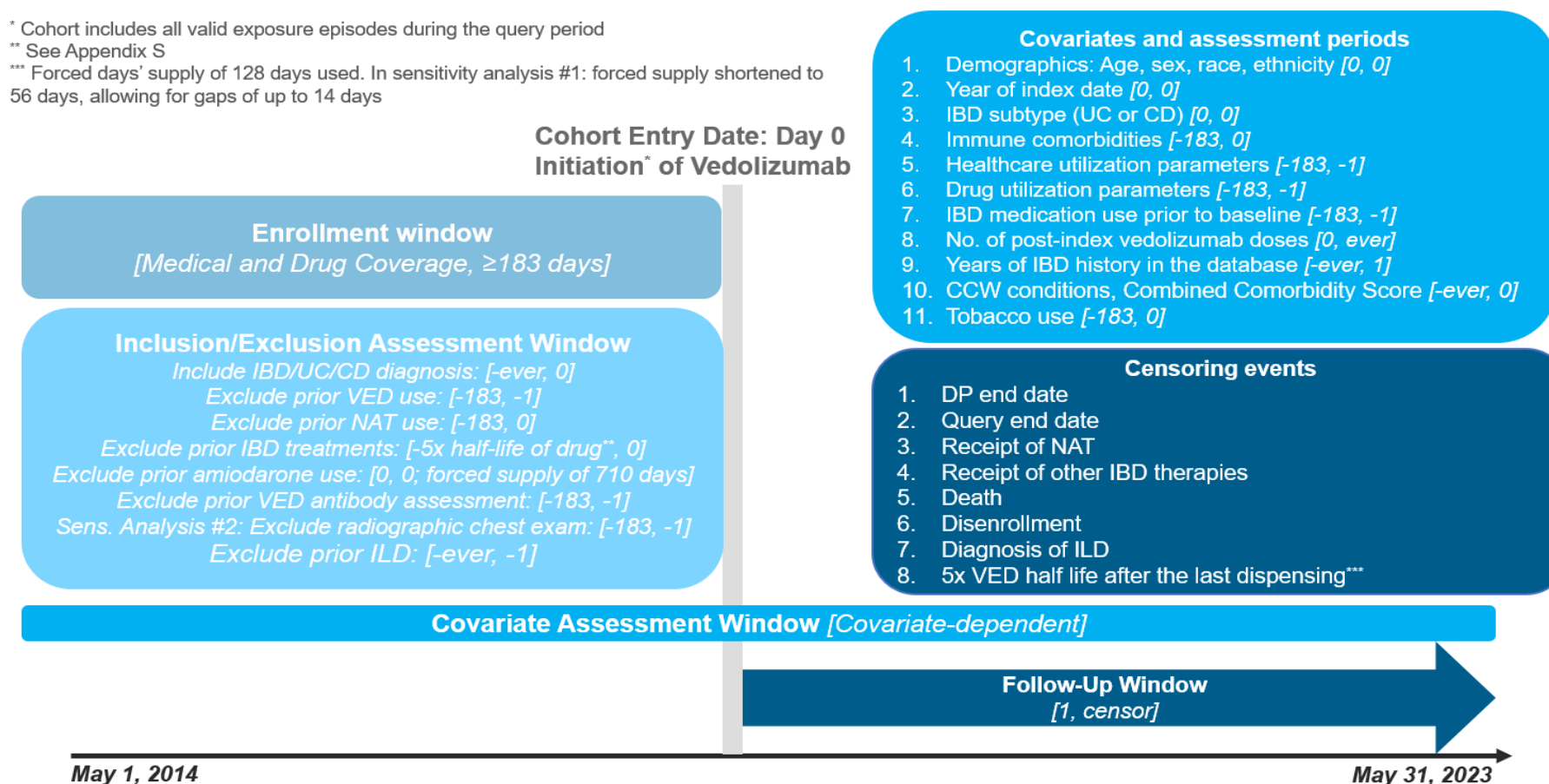


## Appendix Q. Design Diagram of Cohort Entry Requirements, Index Exposure, and Event Outcome Assessment for Run 2

\* Cohort includes all valid exposure episodes during the query period

\*\* See Appendix S

\*\*\* Forced days' supply of 128 days used. In sensitivity analysis #1: forced supply shortened to 56 days, allowing for gaps of up to 14 days



## Appendix R. Design Diagram of Cohort Entry Requirements, Index Exposure, and Event Outcome Assessment for Run 3

\* Cohort includes all valid exposure episodes during the query period

\*\* See Appendix S

\*\*\* Forced days' supply of 55 days used. In sensitivity analysis #1: forced supply shortened to 28 days, allowing for gaps of up to 14 days

### Cohort Entry Date: Day 0 Initiation\* of Natalizumab

#### Enrollment window

[Medical and Drug Coverage,  $\geq 183$  days]

#### Inclusion/Exclusion Assessment Window

Include IBD/UC/CD diagnosis: [-ever, 0]

Exclude prior NAT use: [-183, -1]

Exclude prior VED use: [-183, 0]

Exclude prior IBD treatments: [-5x half-life of drug\*\*, 0]

Exclude prior amiodarone use: [0, 0; forced supply of 710 days]

Exclude prior VED antibody assessment: [-183, -1]

Sens. Analysis #2: Exclude radiographic chest exam: [-183, -1]

Exclude prior ILD: [-ever, -1]

#### Covariates and assessment periods

1. Demographics: Age, sex, race, ethnicity [0, 0]
2. Year of index date [0, 0]
3. IBD subtype (UC or CD) [0, 0]
4. Immune comorbidities [-183, 0]
5. Healthcare utilization parameters [-183, -1]
6. Drug utilization parameters [-183, -1]
7. IBD medication use prior to baseline [-183, -1]
8. No. of post-index natalizumab doses [0, ever]
9. Years of IBD history in the database [-ever, 1]
10. CCW conditions, Combined Comorbidity Score [-ever, 0]
11. Tobacco use [-183, 0]

#### Censoring events

1. DP end date
2. Query end date
3. Receipt of VED
4. Receipt of other IBD therapies
5. Death
6. Disenrollment
7. Diagnosis of ILD
8. 5x NAT half life after the last dispensing\*\*\*

#### Covariate Assessment Window [Covariate-dependent]

#### Follow-Up Window [1, censor]

Jan. 1, 2008

May 31, 2023

**Appendix S. List of Other Inflammatory Bowel Disease (IBD) Treatments Used in Exclusion Criteria**

Drug	Half-Life	Five Times the Half-Life (Days)
Methotrexate	Low dose: 3-10 hours, High dose: 8-15 hours	3.1
Amiodarone	142 days	710
Bleomycin	1 day	5
Azathioprine	5 hours	1
Cyclophosphamide	12 hours	2.5
Sulfasalazine	14.8 hours	3.1
Tyrosine kinase inhibitors	4.5 days	22.5
<b>Checkpoint inhibitors</b>		
<i>Cytotoxic T lymphocyte-associated antigen 4</i>		
Ipilimumab	15.4 days	77
Tremelimumab	18.2 days	91
<i>Programmed cell death receptor 1</i>		
Nivolumab	26.7 days	133.5
Pembrolizumab	22 days	110
Cemiplimab	22 days	110
Dostarlimab	23.5 days	117.5
Retifanlimab	19 days	95
<i>Programmed cell death ligand 1</i>		
Atezolizumab	27 days	135
Durvalumab	21 days	105
Avelumab	6.1 days	30.5