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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 Query Builder analysis.

If you are using a web page screen reader and are unable to access this document, please contact the Sentinel Operations Center for assistance at info@sentinelsystem.org.

Overview

Query Builder Report: This report details the results of an analysis generated by the Sentinel Query Builder application. Query Builder enables FDA to visualize, draft, and create standardized medical product utilization queries examining dispensing patterns and cohort characteristics using a set of pre-defined parameters. This is a Type 5 (Medical Product Utilization) analysis as described in the Query Request Package (QRP) documentation.

Request Description: In this request, we examined utilization patterns of four biologic products indicated for treatment of ulcerative colitis in adults: adalimumab, golimumab, infliximab, and vedolizumab. Patient cohorts were assessed with an inclusion requirement of a diagnosis of ulcerative colitis and exclusion requirements of diagnoses of psoriasis, psoriatic arthritis, rheumatoid arthritis/juvenile idiopathic arthritis (RA/JIA), Crohn's disease, ankylosing spondylitis, and hidradenitis suppurativa.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 9.1.0

Data Source: We executed this request on IBM® MarketScan® Commercial Claims and Encounters Database and Medicare Supplemental Database, which included 142 million members, on September 30, 2020. The study period included data from January 1, 2017 to December 31, 2019. Please see Appendix A for data availability dates.

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

Notes: Please contact the Sentinel Operations Center (info@sentinelsystem.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel Query Builder, please refer to the documentation (<https://dev.sentinelsystem.org/projects/QB/repos/querybuilder/browse>).

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Table 1a: Baseline table (Adalimumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Number of unique patients	2,435	
Demographics		
Mean Age (Years)	40.6	15.3
Age (Years): 00-01	0	0.0%
Age (Years): 02-04	1	0.0%
Age (Years): 05-09	11	0.5%
Age (Years): 10-14	35	1.4%
Age (Years): 15-18	119	4.9%
Age (Years): 19-21	143	5.9%
Age (Years): 22-44	1,148	47.1%
Age (Years): 45-64	899	36.9%
Age (Years): 65-74	52	2.1%
Age (Years): 75+	27	1.1%
Sex (Female)	1,173	48.2%
Sex (Male)	1,262	51.8%
Year (2017)	1,122	46.1%
Year (2018)	1,022	42.0%
Year (2019)	291	12.0%
Recorded history of:		
Prior combined comorbidity score ³	0.8	1.3
Acquired Hypothyroidism	133	5.5%
Acute Myocardial Infarction	10	0.4%
Alzheimer's Disease	0	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	5	0.2%
Anemia	558	22.9%
Asthma	149	6.1%
Atrial Fibrillation	33	1.4%
Benign Prostatic Hyperplasia	42	1.7%
Breast Cancer	9	0.4%
Cataracts	63	2.6%
Chronic Kidney Disease	115	4.7%
Chronic Obstructive Pulmonary Disease	71	2.9%
Colorectal Cancer	8	0.3%
Depression	234	9.6%
Diabetes	160	6.6%
Endometrial Cancer	0	0.0%
Glaucoma	46	1.9%
Heart Failure	18	0.7%
Hip / Pelvic Fracture	2	0.1%
Hyperlipidemia	363	14.9%
Hypertension	422	17.3%
Ischemic Heart Disease	66	2.7%
Lung Cancer	4	0.2%
Osteoporosis	25	1.0%
Prostate Cancer	14	0.6%
Rheumatoid Arthritis / Osteoarthritis	220	9.0%
Stroke / Transient Ischemic Attack	20	0.8%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	9.7	7.2
Mean number of emergency room encounters (ED)	0.4	1.0
Mean number of inpatient hospital encounters (IP)	0.2	0.5

Table 1a: Baseline table (Adalimumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	2.4	3.3
Mean number of filled prescriptions	13.6	11.1
Mean number of generics	6.4	4.3
Mean number of unique drug classes	6.1	3.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

³The 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).

Table 1b: Baseline table (Infliximab)

Characteristic ¹	N/Mean	%/Std Dev ²
Number of unique patients	1,839	
Demographics		
Mean Age (Years)	37.7	16.3
Age (Years): 00-01	0	0.0%
Age (Years): 02-04	0	0.0%
Age (Years): 05-09	30	1.6%
Age (Years): 10-14	93	5.1%
Age (Years): 15-18	148	8.0%
Age (Years): 19-21	121	6.6%
Age (Years): 22-44	794	43.2%
Age (Years): 45-64	596	32.4%
Age (Years): 65-74	41	2.2%
Age (Years): 75+	16	0.9%
Sex (Female)	860	46.8%
Sex (Male)	979	53.2%
Year (2017)	798	43.4%
Year (2018)	828	45.0%
Year (2019)	213	11.6%
Recorded history of:		
Prior combined comorbidity score ³	1.2	1.8
Acquired Hypothyroidism	79	4.3%
Acute Myocardial Infarction	8	0.4%
Alzheimer's Disease	1	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	7	0.4%
Anemia	602	32.7%
Asthma	118	6.4%
Atrial Fibrillation	29	1.6%
Benign Prostatic Hyperplasia	23	1.3%
Breast Cancer	8	0.4%
Cataracts	51	2.8%
Chronic Kidney Disease	130	7.1%
Chronic Obstructive Pulmonary Disease	58	3.2%
Colorectal Cancer	2	0.1%
Depression	177	9.6%
Diabetes	117	6.4%
Endometrial Cancer	0	0.0%
Glaucoma	38	2.1%
Heart Failure	11	0.6%
Hip / Pelvic Fracture	0	0.0%
Hyperlipidemia	228	12.4%
Hypertension	289	15.7%
Ischemic Heart Disease	48	2.6%
Lung Cancer	8	0.4%
Osteoporosis	15	0.8%
Prostate Cancer	9	0.5%
Rheumatoid Arthritis / Osteoarthritis	125	6.8%
Stroke / Transient Ischemic Attack	12	0.7%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	9.9	7.7
Mean number of emergency room encounters (ED)	0.5	1.0
Mean number of inpatient hospital encounters (IP)	0.4	0.7

Table 1b: Baseline table (Infliximab)

Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.1
Mean number of other ambulatory encounters (OA)	2.7	3.8
Mean number of filled prescriptions	13.3	10.7
Mean number of generics	6.4	4.3
Mean number of unique drug classes	6.0	3.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

³The 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).

Table 1c: Baseline table (Vedolizumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Number of unique patients	1,894	
Demographics		
Mean Age (Years)	41.6	15.0
Age (Years): 00-01	0	0.0%
Age (Years): 02-04	0	0.0%
Age (Years): 05-09	10	0.5%
Age (Years): 10-14	19	1.0%
Age (Years): 15-18	57	3.0%
Age (Years): 19-21	93	4.9%
Age (Years): 22-44	915	48.3%
Age (Years): 45-64	726	38.3%
Age (Years): 65-74	49	2.6%
Age (Years): 75+	25	1.3%
Sex (Female)	918	48.5%
Sex (Male)	976	51.5%
Year (2017)	736	38.9%
Year (2018)	899	47.5%
Year (2019)	259	13.7%
Recorded history of:		
Prior combined comorbidity score ³	0.9	1.5
Acquired Hypothyroidism	86	4.5%
Acute Myocardial Infarction	5	0.3%
Alzheimer's Disease	0	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	2	0.1%
Anemia	474	25.0%
Asthma	95	5.0%
Atrial Fibrillation	22	1.2%
Benign Prostatic Hyperplasia	27	1.4%
Breast Cancer	14	0.7%
Cataracts	59	3.1%
Chronic Kidney Disease	123	6.5%
Chronic Obstructive Pulmonary Disease	54	2.9%
Colorectal Cancer	3	0.2%
Depression	176	9.3%
Diabetes	124	6.5%
Endometrial Cancer	1	0.1%
Glaucoma	39	2.1%
Heart Failure	18	1.0%
Hip / Pelvic Fracture	0	0.0%
Hyperlipidemia	249	13.1%
Hypertension	306	16.2%
Ischemic Heart Disease	48	2.5%
Lung Cancer	3	0.2%
Osteoporosis	32	1.7%
Prostate Cancer	17	0.9%
Rheumatoid Arthritis / Osteoarthritis	114	6.0%
Stroke / Transient Ischemic Attack	14	0.7%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	10.6	8.1
Mean number of emergency room encounters (ED)	0.3	0.9
Mean number of inpatient hospital encounters (IP)	0.2	0.5

Table 1c: Baseline table (Vedolizumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	2.6	3.0
Mean number of filled prescriptions	14.1	10.5
Mean number of generics	6.5	4.3
Mean number of unique drug classes	6.1	3.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

³The 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).

Table 1d: Baseline table (Golimumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Number of unique patients	202	
Demographics		
Mean Age (Years)	41.8	14.1
Age (Years): 00-01	0	0.0%
Age (Years): 02-04	0	0.0%
Age (Years): 05-09	1	0.5%
Age (Years): 10-14	0	0.0%
Age (Years): 15-18	3	1.5%
Age (Years): 19-21	12	5.9%
Age (Years): 22-44	100	49.5%
Age (Years): 45-64	81	40.1%
Age (Years): 65-74	5	2.5%
Age (Years): 75+	0	0.0%
Sex (Female)	98	48.5%
Sex (Male)	104	51.5%
Year (2017)	80	39.6%
Year (2018)	100	49.5%
Year (2019)	22	10.9%
Recorded history of:		
Prior combined comorbidity score ³	0.7	1.3
Acquired Hypothyroidism	9	4.5%
Acute Myocardial Infarction	1	0.5%
Alzheimer's Disease	0	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	0	0.0%
Anemia	58	28.7%
Asthma	5	2.5%
Atrial Fibrillation	2	1.0%
Benign Prostatic Hyperplasia	2	1.0%
Breast Cancer	0	0.0%
Cataracts	9	4.5%
Chronic Kidney Disease	7	3.5%
Chronic Obstructive Pulmonary Disease	3	1.5%
Colorectal Cancer	0	0.0%
Depression	24	11.9%
Diabetes	17	8.4%
Endometrial Cancer	0	0.0%
Glaucoma	1	0.5%
Heart Failure	1	0.5%
Hip / Pelvic Fracture	0	0.0%
Hyperlipidemia	22	10.9%
Hypertension	42	20.8%
Ischemic Heart Disease	9	4.5%
Lung Cancer	0	0.0%
Osteoporosis	4	2.0%
Prostate Cancer	1	0.5%
Rheumatoid Arthritis / Osteoarthritis	23	11.4%
Stroke / Transient Ischemic Attack	0	0.0%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	9.2	6.6
Mean number of emergency room encounters (ED)	0.3	0.7
Mean number of inpatient hospital encounters (IP)	0.2	0.4

Table 1d: Baseline table (Golimumab)

Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.1
Mean number of other ambulatory encounters (OA)	2.5	4.1
Mean number of filled prescriptions	13.7	9.6
Mean number of generics	6.3	4.1
Mean number of unique drug classes	5.9	3.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

³The 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).

Table 2a: Descriptive statistics of cumulative exposure duration, all episodes, in days

Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	247.48	195.39	1	98	191	359	817
Infliximab	1,839	265.74	194.97	1	112	216	381	816
Vedolizumab	1,894	276.91	205.96	3	112	217	398	817
Golimumab	202	233.97	187.63	1	88	183	318	812

Table 2b: Descriptive statistics of cumulative exposure duration, all episodes, in days, by sex

Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	247.48	195.39	1	98	191	359	817
Female	1,173	240.96	193.05	3	87	183	348	817
Male	1,262	253.53	197.42	1	98	200	371	817
Other	0	-	-	-	-	-	-	-
Infliximab	1,839	265.74	194.97	1	112	216	381	816
Female	860	268.51	196.51	2	116	217	381	816
Male	979	263.31	193.68	1	112	214	381	812
Other	0	-	-	-	-	-	-	-
Vedolizumab	1,894	276.91	205.96	3	112	217	398	817
Female	918	269.19	199.67	3	116	214	370	817
Male	976	284.17	211.55	3	112	222	416	815
Other	0	-	-	-	-	-	-	-
Golimumab	202	233.97	187.63	1	88	183	318	812
Female	98	236.92	194.25	6	91	173	318	812
Male	104	231.18	182.06	1	86	193	322	772
Other	0	-	-	-	-	-	-	-

Table 2c: Descriptive statistics of cumulative exposure duration, all episodes, in days, by age group (years)

Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	247.48	195.39	1	98	191	359	817
00-01	0	-	-	-	-	-	-	-
02-04	1	332.00	-	332	332	332	332	332
05-09	11	211.73	105.86	75	84	217	278	391
10-14	35	272.86	193.49	42	126	210	314	762
15-18	119	235.34	200.28	4	81	154	340	803
19-21	143	253.22	198.24	4	110	196	363	817
22-44	1,148	243.71	193.36	1	89	188	354	810
45-64	899	256.54	200.27	3	98	198	378	817
65-74	52	236.31	178.35	5	119	201	316	685
75+	27	129.19	78.50	12	70	126	171	311
Infliximab	1,839	265.74	194.97	1	112	216	381	816
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	30	278.17	161.95	31	160	238	360	668
10-14	93	286.27	199.51	4	139	257	388	777
15-18	148	300.87	189.05	2	163	276	416	790
19-21	121	286.56	210.84	3	121	234	395	812
22-44	794	256.66	193.19	2	112	210	359	816
45-64	596	266.55	195.11	1	112	217	394	811
65-74	41	201.63	202.97	12	92	131	227	797
75+	16	225.88	168.85	23	119	160	304	622
Vedolizumab	1,894	276.91	205.96	3	112	217	398	817
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	10	219.60	130.05	31	140	196	336	440
10-14	19	217.26	190.83	13	88	180	227	755
15-18	57	258.28	179.05	5	126	214	336	789
19-21	93	284.72	202.85	4	108	263	423	801
22-44	915	276.78	204.14	3	112	220	404	815
45-64	726	279.82	211.94	3	117	216	395	817
65-74	49	301.65	226.20	10	123	221	462	815
75+	25	230.44	156.19	61	126	164	313	665
Golimumab	202	233.97	187.63	1	88	183	318	812
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	1	553.00	-	553	553	553	553	553
10-14	0	-	-	-	-	-	-	-

Table 2c: Descriptive statistics of cumulative exposure duration, all episodes, in days, by age group (years)

Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
15-18	3	166.00	59.73	98	98	190	210	210
19-21	12	298.83	226.40	56	95	236	483	698
22-44	100	221.89	193.93	1	81	162	313	812
45-64	81	230.81	175.41	6	110	191	315	768
65-74	5	347.80	135.98	239	252	328	343	577
75+	0	-	-	-	-	-	-	-

Table 3a: Descriptive statistics of first exposure episode duration, in days

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	206.61	181.71	1	70	145	298	817
Infliximab	1,839	257.56	191.72	1	112	210	363	816
Vedolizumab	1,894	265.90	200.57	3	112	210	378	817
Golimumab	202	206.34	175.98	1	70	157	278	812

Table 3b: Descriptive statistics of first exposure episode duration, in days, by sex

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	206.61	181.71	1	70	145	298	817
Female	1,173	203.32	179.81	3	69	136	294	817
Male	1,262	209.67	183.48	1	70	154	299	817
Other	0	-	-	-	-	-	-	-
Infliximab	1,839	257.56	191.72	1	112	210	363	816
Female	860	258.44	192.53	2	112	209	362	816
Male	979	256.79	191.11	1	112	210	364	812
Other	0	-	-	-	-	-	-	-
Vedolizumab	1,894	265.90	200.57	3	112	210	378	817
Female	918	259.01	193.02	3	112	209	357	817
Male	976	272.39	207.32	3	112	210	398	815
Other	0	-	-	-	-	-	-	-
Golimumab	202	206.34	175.98	1	70	157	278	812
Female	98	208.06	185.98	6	72	152	252	812
Male	104	204.71	166.89	1	70	168	296	768
Other	0	-	-	-	-	-	-	-

Table 3c: Descriptive statistics of first exposure episode duration, in days, by age group (years)

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	2,435	206.61	181.71	1	70	145	298	817
00-01	0	-	-	-	-	-	-	-
02-04	1	332.00	-	332	332	332	332	332
05-09	11	167.64	127.28	28	42	152	274	391
10-14	35	233.51	180.19	42	98	196	306	622
15-18	119	208.45	181.96	4	70	141	320	706
19-21	143	199.74	176.60	4	70	146	247	817
22-44	1,148	201.00	181.14	1	59	134	290	810
45-64	899	217.92	186.46	3	70	156	326	817
65-74	52	183.85	159.79	5	46	151	233	685
75+	27	117.56	76.71	12	56	97	164	311
Infliximab	1,839	257.56	191.72	1	112	210	363	816
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	30	278.17	161.95	31	160	238	360	668
10-14	93	274.75	191.96	4	138	244	376	777
15-18	148	293.87	189.14	2	160	261	406	790
19-21	121	271.66	208.19	3	112	208	385	812
22-44	794	248.05	188.71	2	112	201	347	816
45-64	596	259.51	192.94	1	112	214	378	811
65-74	41	199.17	202.74	12	92	131	205	797
75+	16	225.88	168.85	23	119	160	304	622
Vedolizumab	1,894	265.90	200.57	3	112	210	378	817
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	10	219.60	130.05	31	140	196	336	440
10-14	19	217.26	190.83	13	88	180	227	755
15-18	57	247.53	173.62	5	112	210	327	789
19-21	93	273.75	199.54	4	108	245	402	801
22-44	915	263.76	197.28	3	112	210	379	815
45-64	726	270.29	207.37	3	112	209	381	817
65-74	49	293.65	227.34	10	122	220	406	815
75+	25	230.44	156.19	61	126	164	313	665
Golimumab	202	206.34	175.98	1	70	157	278	812
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	1	553.00	-	553	553	553	553	553
10-14	0	-	-	-	-	-	-	-

Table 3c: Descriptive statistics of first exposure episode duration, in days, by age group (years)

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
15-18	3	166.00	59.73	98	98	190	210	210
19-21	12	178.25	146.37	42	77	108	236	490
22-44	100	196.15	183.36	1	57	144	268	812
45-64	81	213.81	174.36	6	72	168	278	768
65-74	5	311.20	64.94	239	252	328	343	394
75+	0	-	-	-	-	-	-	-

Table 4a: Descriptive statistics of all exposure episode durations, in days

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	3,184	189.26	174.96	1	54	126	269	817
Infliximab	1,930	253.21	190.32	1	112	207	357	816
Vedolizumab	1,998	262.50	198.89	3	112	208	374	817
Golimumab	240	196.92	169.20	1	70	153	263	812

Table 4b: Descriptive statistics of all exposure episode durations, in days, by sex

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	3,184	189.26	174.96	1	54	126	269	817
Female	1,521	185.83	173.73	2	54	124	266	817
Male	1,663	192.40	176.08	1	55	128	271	817
Other	0	-	-	-	-	-	-	-
Infliximab	1,930	253.21	190.32	1	112	207	357	816
Female	909	254.04	190.85	2	112	205	357	816
Male	1,021	252.48	189.94	1	112	208	357	812
Other	0	-	-	-	-	-	-	-
Vedolizumab	1,998	262.50	198.89	3	112	208	374	817
Female	967	255.55	192.10	3	112	206	353	817
Male	1,031	269.01	204.93	3	112	210	390	815
Other	0	-	-	-	-	-	-	-
Golimumab	240	196.92	169.20	1	70	153	263	812
Female	117	198.44	176.57	5	72	147	238	812
Male	123	195.47	162.59	1	61	165	278	768
Other	0	-	-	-	-	-	-	-

Table 4c: Descriptive statistics of all exposure episode durations, in days, by age group (years)

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	3,184	189.26	174.96	1	54	126	269	817
00-01	0	-	-	-	-	-	-	-
02-04	1	332.00	-	332	332	332	332	332
05-09	17	137.00	111.39	28	42	98	184	391
10-14	44	217.05	169.54	42	84	180	290	622
15-18	148	189.22	177.67	4	50	126	286	706
19-21	206	175.78	163.21	3	54	126	226	817
22-44	1,541	181.56	172.22	1	45	119	264	810
45-64	1,132	203.74	182.95	2	66	134	294	817
65-74	63	195.05	157.15	5	70	165	268	685
75+	32	109.00	73.30	12	55	78	147	311
Infliximab	1,930	253.21	190.32	1	112	207	357	816
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	30	278.17	161.95	31	160	238	360	668
10-14	96	277.32	193.06	4	138	247	385	777
15-18	156	285.44	188.16	2	148	251	390	790
19-21	130	266.72	203.08	3	112	208	382	812
22-44	836	243.76	187.68	2	112	193	346	816
45-64	624	254.58	191.26	1	112	210	364	811
65-74	42	196.83	200.83	12	92	129	205	797
75+	16	225.88	168.85	23	119	160	304	622
Vedolizumab	1,998	262.50	198.89	3	112	208	374	817
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	10	219.60	130.05	31	140	196	336	440
10-14	19	217.26	190.83	13	88	180	227	755
15-18	59	249.53	173.46	5	112	210	336	789
19-21	99	267.46	196.44	4	102	244	396	801
22-44	974	260.02	195.10	3	112	210	376	815
45-64	760	267.30	206.38	3	112	208	379	817
65-74	52	284.25	224.42	10	117	211	397	815
75+	25	230.44	156.19	61	126	164	313	665
Golimumab	240	196.92	169.20	1	70	153	263	812
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	1	553.00	-	553	553	553	553	553
10-14	0	-	-	-	-	-	-	-

Table 4c: Descriptive statistics of all exposure episode durations, in days, by age group (years)

Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
15-18	3	166.00	59.73	98	98	190	210	210
19-21	20	179.30	131.73	42	78	121	258	490
22-44	119	186.46	177.75	1	56	132	258	812
45-64	91	205.45	167.97	6	72	165	266	768
65-74	6	289.83	78.18	183	239	290	343	394
75+	0	-	-	-	-	-	-	-

Table 5a: Descriptive statistics of days supplied per dispensing

Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	18,927	29.91	12.97	1	28	28	28	90
Infliximab	11,635	51.30	11.96	1	56	56	56	90
Vedolizumab	12,101	50.87	12.54	1	56	56	56	98
Golimumab	1,399	29.66	13.35	1	28	28	28	112

Table 5b: Descriptive statistics of days supplied per dispensing, by sex

Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	18,927	29.91	12.97	1	28	28	28	90
Female	8,983	29.52	12.18	1	28	28	28	84
Male	9,944	30.26	13.63	1	28	28	28	90
Other	0	-	-	-	-	-	-	-
Infliximab	11,635	51.30	11.96	1	56	56	56	90
Female	5,489	51.37	11.94	1	56	56	56	90
Male	6,146	51.23	11.98	1	56	56	56	56
Other	0	-	-	-	-	-	-	-
Vedolizumab	12,101	50.87	12.54	1	56	56	56	98
Female	5,668	50.68	12.77	1	56	56	56	98
Male	6,433	51.04	12.33	1	56	56	56	90
Other	0	-	-	-	-	-	-	-
Golimumab	1,399	29.66	13.35	1	28	28	28	112
Female	703	28.61	11.02	1	28	28	28	90
Male	696	30.71	15.28	1	28	28	28	112
Other	0	-	-	-	-	-	-	-

Table 5c: Descriptive statistics of days supplied per dispensing, by age group (years)

Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	18,927	29.91	12.97	1	28	28	28	90
00-01	0	-	-	-	-	-	-	-
02-04	7	47.29	26.45	28	28	28	84	84
05-09	70	29.47	10.40	12	28	28	28	84
10-14	314	28.89	10.03	4	28	28	28	84
15-18	891	29.64	12.79	1	28	28	28	85
19-21	1,096	30.55	13.85	1	28	28	28	84
22-44	8,883	29.50	12.28	1	28	28	28	90
45-64	7,181	30.34	13.70	1	28	28	28	84
65-74	370	31.19	14.73	2	28	28	28	84
75+	115	27.63	8.73	3	28	28	28	84
Infliximab	11,635	51.30	11.96	1	56	56	56	90
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	231	51.16	12.30	3	56	56	56	56
10-14	671	51.99	11.05	1	56	56	56	56
15-18	1,095	50.90	11.99	1	56	56	56	56
19-21	792	50.99	12.16	3	56	56	56	56
22-44	4,871	51.30	12.07	1	56	56	56	90
45-64	3,697	51.43	11.76	1	56	56	56	56
65-74	205	49.23	14.50	1	56	56	56	56
75+	73	53.19	9.73	13	56	56	56	56
Vedolizumab	12,101	50.87	12.54	1	56	56	56	98
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	47	53.32	8.61	10	56	56	56	56
10-14	102	49.66	14.29	3	56	56	56	56
15-18	370	50.12	12.98	1	56	56	56	56
19-21	609	50.23	12.36	3	56	56	56	60
22-44	5,822	51.11	12.28	1	56	56	56	90
45-64	4,694	50.70	12.89	1	56	56	56	98
65-74	331	50.81	12.44	1	56	56	56	84
75+	126	51.98	10.83	4	56	56	56	56
Golimumab	1,399	29.66	13.35	1	28	28	28	112
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	20	27.30	4.45	12	28	28	30	30
10-14	0	-	-	-	-	-	-	-

Table 5c: Descriptive statistics of days supplied per dispensing, by age group (years)

Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
15-18	12	34.50	17.14	14	28	30	36	84
19-21	98	29.83	13.81	10	28	28	28	84
22-44	668	29.50	13.85	1	28	28	28	112
45-64	559	29.35	11.85	1	28	28	28	90
65-74	42	35.60	21.41	2	28	28	30	90
75+	0	-	-	-	-	-	-	-

Table 6a: Descriptive statistics of the length of all gaps between treatment episodes, in days

Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	749	26.51	49.95	1	5	11	27	431
Infliximab	91	99.51	103.27	1	18	57	163	431
Vedolizumab	104	57.21	77.55	1	8	26	78	463
Golimumab	38	30.63	44.96	1	4	14	35	173

Table 6b: Descriptive statistics of the length of all gaps between treatment episodes, in days, by sex

Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	749	26.51	49.95	1	5	11	27	431
Female	348	28.44	56.30	1	5	12	28	431
Male	401	24.84	43.71	1	4	10	25	390
Other	0	-	-	-	-	-	-	-
Infliximab	91	99.51	103.27	1	18	57	163	431
Female	49	111.43	116.99	2	21	63	168	431
Male	42	85.60	83.79	1	18	54	141	295
Other	0	-	-	-	-	-	-	-
Vedolizumab	104	57.21	77.55	1	8	26	78	463
Female	49	45.57	64.04	1	7	23	49	280
Male	55	67.58	87.15	1	12	30	105	463
Other	0	-	-	-	-	-	-	-
Golimumab	38	30.63	44.96	1	4	14	35	173
Female	19	34.89	53.05	1	4	8	39	173
Male	19	26.37	36.09	2	3	15	35	151
Other	0	-	-	-	-	-	-	-

Table 6c: Descriptive statistics of the length of all gaps between treatment episodes, in days, by age group (years)

Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Adalimumab	749	26.51	49.95	1	5	11	27	431
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	6	57.33	123.96	1	1	7	19	310
10-14	9	37.56	75.73	6	10	11	19	239
15-18	29	30.86	56.45	1	5	12	40	297
19-21	63	21.21	36.19	1	4	11	18	187
22-44	393	26.48	45.37	1	5	12	28	373
45-64	233	26.79	56.66	1	4	9	27	431
65-74	11	19.91	32.77	1	4	4	19	105
75+	5	15.80	14.01	7	8	8	16	40
Infliximab	91	99.51	103.27	1	18	57	163	431
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	0	-	-	-	-	-	-	-
10-14	3	100.33	80.14	15	15	112	174	174
15-18	8	61.75	100.54	2	4	11	101	261
19-21	9	88.22	77.94	1	14	91	143	200
22-44	42	109.40	104.49	1	36	67	168	406
45-64	28	96.71	115.33	1	20	50	137	431
65-74	1	163.00	-	163	163	163	163	163
75+	0	-	-	-	-	-	-	-
Vedolizumab	104	57.21	77.55	1	8	26	78	463
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	0	-	-	-	-	-	-	-
10-14	0	-	-	-	-	-	-	-
15-18	2	29.50	36.06	4	4	30	55	55
19-21	6	38.17	29.38	15	19	26	52	92
22-44	59	54.78	82.81	1	8	23	56	463
45-64	34	62.03	75.37	1	7	28	90	280
65-74	3	107.00	90.42	12	12	117	192	192
75+	0	-	-	-	-	-	-	-
Golimumab	38	30.63	44.96	1	4	14	35	173
00-01	0	-	-	-	-	-	-	-
02-04	0	-	-	-	-	-	-	-
05-09	0	-	-	-	-	-	-	-
10-14	0	-	-	-	-	-	-	-

Table 6c: Descriptive statistics of the length of all gaps between treatment episodes, in days, by age group (years)

Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
15-18	0	-	-	-	-	-	-	-
19-21	8	33.13	52.31	2	4	16	33	159
22-44	19	27.11	37.69	1	3	15	35	151
45-64	10	38.00	56.31	2	6	11	39	173
65-74	1	4.00	-	4	4	4	4	4
75+	0	-	-	-	-	-	-	-

Table 7: Counts of reason for censoring, all episodes and first episode

	Total		Disenrollment		Evidence of death		DP/Query end date		Episode end	
	N	%	N	%	N	%	N	%	N	%
Exposures										
Adalimumab	3,184	100.0	1,616	50.8	0	0.0	0	0.0	1,575	49.5
Infliximab	1,930	100.0	1,351	70.0	0	0.0	0	0.0	583	30.2
Vedolizumab	1,998	100.0	1,580	79.1	0	0.0	0	0.0	419	21.0
Golimumab	240	100.0	128	53.3	0	0.0	0	0.0	113	47.1
Patients' First Episode										
Adalimumab	2,435	100.0	1,276	52.4	0	0.0	0	0.0	1,163	47.8
Infliximab	1,839	100.0	1,288	70.0	0	0.0	0	0.0	555	30.2
Vedolizumab	1,894	100.0	1,504	79.4	0	0.0	0	0.0	391	20.6
Golimumab	202	100.0	108	53.5	0	0.0	0	0.0	95	47.0

Appendix A. Dates of Available Data for Each Data Partner (DP) up to Request End Date (12/31/2019) as of Query Distribution Date

Data Partner (Masked)	Start Date	End Date
DP01	01/01/2010	03/31/2019

Preview Appendix B. Specifications Used to Define Parameters in this Query

Global Values

Enrollment Criteria: Medical and Drug Coverage

Enrollment Gap (Days): 45

Age Groups (Years): 00-01, 02-04, 05-09, 10-14, 15-18, 19-21, 22-44, 45-64, 65-74, 75+

Reporting Output:

Query Period: 01/01/2017-12/31/2019

Baseline Characteristics Table: Yes

Baseline Evaluation Window (Day): -183,-1

#	Cohort Name	Index Exposure	Pre-Index Enrollment Period (Days)	Washout Period (Days)	Treatment Episode Gap (Days)	Treatment Episode Extension (Days)	Inclusion/Exclusion	Criteria	Criteria Definition	Evaluation Period Start (Day)	Evaluation Period End (Day)
1	Infliximab	Infliximab ^[1]	183	183	56	56	Inclusion	Ulcerative Colitis	UC DX ^[2]	-183	0
							Exclusion	Psoriasis	PSO DX ^[3]	-183	0
							Exclusion	Psoriatic Arthritis	PSA DX ^[4]	-183	0
							Exclusion	RA/JIA	RA/JIA DX ^[5]	-183	0
							Exclusion	Ankylosing Spondylitis	ASO DX ^[6]	-183	0
							Exclusion	Hidradenitis	HS DX ^[7]	-183	0
							Exclusion	Crohn's Disease	CD DX ^[8]	-183	0
2	Adalimumab	Adalimumab ^[9]	183	183	14	14	Inclusion	Ulcerative Colitis	UC DX ^[10]	-183	0
							Exclusion	Psoriasis	PSO DX ^[11]	-183	0
							Exclusion	Psoriatic Arthritis	PSA DX ^[12]	-183	0
							Exclusion	RA/JIA	RA/JIA DX ^[13]	-183	0
							Exclusion	Ankylosing Spondylitis	ASO DX ^[14]	-183	0
							Exclusion	Hidradenitis	HS DX ^[15]	-183	0
							Exclusion	Crohn's Disease	CD DX ^[16]	-183	0
3	Vedolizumab	Vedolizumab ^[17]	183	183	56	56	Inclusion	Ulcerative Colitis	UC DX ^[18]	-183	0
							Exclusion	Psoriasis	PSO DX ^[19]	-183	0
							Exclusion	Psoriatic Arthritis	PSA DX ^[20]	-183	0
							Exclusion	RA/JIA	RA/JIA DX ^[21]	-183	0
							Exclusion	Ankylosing Spondylitis	ASO DX ^[22]	-183	0
							Exclusion	Hidradenitis	HS DX ^[23]	-183	0
							Exclusion	Crohn's Disease	CD DX ^[24]	-183	0
4	Golimumab	Golimumab ^[25]	183	183	28	28	Inclusion	Ulcerative Colitis	UC DX ^[26]	-183	0
							Exclusion	Psoriasis	PSO DX ^[27]	-183	0
							Exclusion	Psoriatic Arthritis	PSA DX ^[28]	-183	0
							Exclusion	RA/JIA	RA/JIA DX ^[29]	-183	0
							Exclusion	Ankylosing Spondylitis	ASO DX ^[30]	-183	0
							Exclusion	Hidradenitis	HS DX ^[31]	-183	0
							Exclusion	Crohn's Disease	CD DX ^[32]	-183	0

ICD-9/ICD-10/HCPGs AND CPT are provided by Optum360.

NDCs are checked against First Data Bank's MedKnowledge.

Appendix of Generic Names and Chronic Conditions

[1] See Appendices C and D for index exposure definitions.

[2] See Appendix E for inclusion criteria definitions.

[3] See Appendix F for exclusion criteria definitions.

[4] See Appendix F for exclusion criteria definitions.

[5] See Appendix F for exclusion criteria definitions.

[6] See Appendix F for exclusion criteria definitions.

[7] See Appendix F for exclusion criteria definitions.

[8] See Appendix F for exclusion criteria definitions.

[9] See Appendices C and D for index exposure definitions.

[10] See Appendix E for inclusion criteria definitions.

[11] See Appendix F for exclusion criteria definitions.

[12] See Appendix F for exclusion criteria definitions.

[13] See Appendix F for exclusion criteria definitions.

[14] See Appendix F for exclusion criteria definitions.

[15] See Appendix F for exclusion criteria definitions.

[16] See Appendix F for exclusion criteria definitions.

[17] See Appendices C and D for index exposure definitions.

[18] See Appendix E for inclusion criteria definitions.

[19] See Appendix F for exclusion criteria definitions.

[20] See Appendix F for exclusion criteria definitions.

[21] See Appendix F for exclusion criteria definitions.

[22] See Appendix F for exclusion criteria definitions.

[23] See Appendix F for exclusion criteria definitions.

[24] See Appendix F for exclusion criteria definitions.

[25] See Appendices C and D for index exposure definitions.

[26] See Appendix E for inclusion criteria definitions.

[27] See Appendix F for exclusion criteria definitions.

[28] See Appendix F for exclusion criteria definitions.

[29] See Appendix F for exclusion criteria definitions.

[30] See Appendix F for exclusion criteria definitions.

[31] See Appendix F for exclusion criteria definitions.

[32] See Appendix F for exclusion criteria definitions.

Baseline Characteristics Table

Acquired Hypothyroidism

Acute Myocardial Infarction

Alzheimer's Disease

Alzheimer's Disease, Related Disorders, or Senile Dementia

Anemia

Asthma

Atrial Fibrillation

Benign Prostatic Hyperplasia

Breast Cancer

Cataracts

Chronic Kidney Disease

Chronic Obstructive Pulmonary Disease

Colorectal Cancer

Depression

Diabetes

Endometrial Cancer

Glaucoma

Heart Failure

Hip / Pelvic Fracture

Hyperlipidemia

Hypertension

Ischemic Heart Disease

Lung Cancer

Osteoporosis

Prostate Cancer

Rheumatoid Arthritis / Osteoarthritis

Stroke / Transient Ischemic Attack

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

Age Groups - Age groups of members included in the cohort. Strata also used for reporting purposes.

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

Baseline Characteristics Table - Optional table containing general characteristics of study population, including background rates of 27 chronic conditions from the CMS Chronic Condition Warehouse (see above if table requested). Users define an evaluation period for the presence of baseline characteristics.

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.

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).

Cohort Definition - Cohort includes all valid exposure episodes during the query period. Only the first valid episode's incidence is assessed using the washout period.

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

Enrollment Criteria - Type of coverage required during enrollment period. By default, all patients must have medical and drug coverage.

Enrollment Gap - Allowed gap between coverage periods.

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

Inclusion/Exclusion - Contains the comprehensive set of codes used to define additional cohort inclusion and/or exclusion criteria (e.g., restrict cohort to individuals with evidence of a pre-existing condition 183 days before the index date). Criteria could be defined with complex algorithms (e.g., diagnosis codes and drug codes) defined under Criteria Definition.

Inpatient Hospital Stay (IP) - A care setting value including hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

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

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

Query Period - The period of time which patients can contribute index-defining exposure/events. Data prior to the start date may be used to determine enrollment, washout, and other cohort inclusion criteria.

Treatment Episode Extension - The episode extension adds the selected number of days to the end of an episode to count as exposed time.

Treatment Episode Gap - The maximum number of days allowed between two dispensings to consider them part of the same episode.

Washout Period - The period before an exposure episode during which an individual cannot have evidence of incidence-defining criteria.

Appendix C. List of Healthcare Common Procedure Coding System (HCPCS) Procedure Codes Used to Define Index Exposures in this Request

Code	Code Category	Code Type	Description
Vedolizumab			
C9026	Procedure	HCPCS	Injection, vedolizumab, 1 mg
J3380	Procedure	HCPCS	Injection, vedolizumab, 1 mg
Infliximab			
S9359	Procedure	HCPCS	Home infusion therapy, antitumor necrosis factor intravenous therapy; (e.g., Infliximab); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem
Q5104	Procedure	HCPCS	Injection, infliximab-abda, biosimilar, (Renflexis), 10 mg
Q5103	Procedure	HCPCS	Injection, infliximab-dyyb, biosimilar, (Inflectra), 10 mg
Q5109	Procedure	HCPCS	Injection, infliximab-qbtx, biosimilar, (Ixifi), 10 mg
Q5102	Procedure	HCPCS	Injection, infliximab, biosimilar, 10 mg
J1745	Procedure	HCPCS	Injection, infliximab, excludes biosimilar, 10 mg
Golimumab			
J1602	Procedure	HCPCS	Injection, golimumab, 1 mg, for intravenous use
Adalimumab			
J0135	Procedure	HCPCS	Injection, adalimumab, 20 mg

Appendix D. List of Generic Names of Medical Products Used to Define Index Exposures in this Request

Generic Name

Adalimumab

Golimumab

Infliximab

Vedolizumab

Appendix E. List of International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)

Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
Ulcerative Colitis			
K5100	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis without complications
K51011	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with rectal bleeding
K51012	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with intestinal obstruction
K51013	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with fistula
K51014	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with abscess
K51018	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with other complication
K51019	Diagnosis	ICD-10-CM	Ulcerative (chronic) pancolitis with unspecified complications
K5120	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis without complications
K51211	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with rectal bleeding
K51212	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with intestinal obstruction
K51213	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with fistula
K51214	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with abscess
K51218	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with other complication
K51219	Diagnosis	ICD-10-CM	Ulcerative (chronic) proctitis with unspecified complications
K5130	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis without complications
K51311	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with rectal bleeding
K51312	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction
K51313	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with fistula
K51314	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with abscess
K51318	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with other complication
K51319	Diagnosis	ICD-10-CM	Ulcerative (chronic) rectosigmoiditis with unspecified complications
K5140	Diagnosis	ICD-10-CM	Inflammatory polyps of colon without complications
K51411	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with rectal bleeding
K51412	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with intestinal obstruction
K51413	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with fistula
K51414	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with abscess
K51418	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with other complication
K51419	Diagnosis	ICD-10-CM	Inflammatory polyps of colon with unspecified complications
K5150	Diagnosis	ICD-10-CM	Left sided colitis without complications
K51511	Diagnosis	ICD-10-CM	Left sided colitis with rectal bleeding
K51512	Diagnosis	ICD-10-CM	Left sided colitis with intestinal obstruction
K51513	Diagnosis	ICD-10-CM	Left sided colitis with fistula
K51514	Diagnosis	ICD-10-CM	Left sided colitis with abscess
K51518	Diagnosis	ICD-10-CM	Left sided colitis with other complication
K51519	Diagnosis	ICD-10-CM	Left sided colitis with unspecified complications
K5180	Diagnosis	ICD-10-CM	Other ulcerative colitis without complications
K51811	Diagnosis	ICD-10-CM	Other ulcerative colitis with rectal bleeding
K51812	Diagnosis	ICD-10-CM	Other ulcerative colitis with intestinal obstruction
K51813	Diagnosis	ICD-10-CM	Other ulcerative colitis with fistula
K51814	Diagnosis	ICD-10-CM	Other ulcerative colitis with abscess
K51818	Diagnosis	ICD-10-CM	Other ulcerative colitis with other complication
K51819	Diagnosis	ICD-10-CM	Other ulcerative colitis with unspecified complications
K5190	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified, without complications
K51911	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with rectal bleeding
K51912	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with intestinal obstruction

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

Code	Code Category	Code Type	Description
K51913	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with fistula
K51914	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with abscess
K51918	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with other complication
K51919	Diagnosis	ICD-10-CM	Ulcerative colitis, unspecified with unspecified complications

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

Code	Code Category	Code Type	Description
Hidradenitis			
L732	Diagnosis	ICD-10-CM	Hidradenitis suppurativa
Ankylosing Spondylitis			
M081	Diagnosis	ICD-10-CM	Juvenile ankylosing spondylitis
M450	Diagnosis	ICD-10-CM	Ankylosing spondylitis of multiple sites in spine
M451	Diagnosis	ICD-10-CM	Ankylosing spondylitis of occipito-atlanto-axial region
M452	Diagnosis	ICD-10-CM	Ankylosing spondylitis of cervical region
M453	Diagnosis	ICD-10-CM	Ankylosing spondylitis of cervicothoracic region
M454	Diagnosis	ICD-10-CM	Ankylosing spondylitis of thoracic region
M455	Diagnosis	ICD-10-CM	Ankylosing spondylitis of thoracolumbar region
M456	Diagnosis	ICD-10-CM	Ankylosing spondylitis lumbar region
M457	Diagnosis	ICD-10-CM	Ankylosing spondylitis of lumbosacral region
M458	Diagnosis	ICD-10-CM	Ankylosing spondylitis sacral and sacrococcygeal region
M459	Diagnosis	ICD-10-CM	Ankylosing spondylitis of unspecified sites in spine
Crohn's Disease			
K500	Diagnosis	ICD-10-CM	Crohn's disease of small intestine
K5000	Diagnosis	ICD-10-CM	Crohn's disease of small intestine without complications
K5001	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with complications
K50011	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with rectal bleeding
K50012	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with intestinal obstruction
K50013	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with fistula
K50014	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with abscess
K50018	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with other complication
K50019	Diagnosis	ICD-10-CM	Crohn's disease of small intestine with unspecified complications
K501	Diagnosis	ICD-10-CM	Crohn's disease of large intestine
K5010	Diagnosis	ICD-10-CM	Crohn's disease of large intestine without complications
K5011	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with complications
K50111	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with rectal bleeding
K50112	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with intestinal obstruction
K50113	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with fistula
K50114	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with abscess
K50118	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with other complication
K50119	Diagnosis	ICD-10-CM	Crohn's disease of large intestine with unspecified complications
K508	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine
K5080	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine without complications
K5081	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with complications
K50811	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with rectal bleeding
K50812	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with intestinal obstruction
K50813	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with fistula
K50814	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with abscess

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

Code	Code Category	Code Type	Description
K50818	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with other complication
K50819	Diagnosis	ICD-10-CM	Crohn's disease of both small and large intestine with unspecified complications
K509	Diagnosis	ICD-10-CM	Crohn's disease, unspecified
K5090	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, without complications
K5091	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with complications
K50911	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with rectal bleeding
K50912	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with intestinal obstruction
K50913	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with fistula
K50914	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with abscess
K50918	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with other complication
K50919	Diagnosis	ICD-10-CM	Crohn's disease, unspecified, with unspecified complications
Rheumatoid Arthritis/Juvenile Idiopathic Arthritis (RA/JIA)			
M051	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis
M0510	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified site
M0511	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of shoulder
M05111	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right shoulder
M05112	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left shoulder
M05119	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified shoulder
M0512	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of elbow
M05121	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right elbow
M05122	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left elbow
M05129	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow
M0513	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of wrist
M05131	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right wrist
M05132	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left wrist
M05139	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist
M0514	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of hand
M05141	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right hand
M05142	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left hand
M05149	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand
M0515	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of hip
M05151	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right hip
M05152	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left hip
M05159	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip
M0516	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of knee
M05161	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right knee

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

Code	Code Category	Code Type	Description
M05162	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left knee
M05169	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee
M0517	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of ankle and foot
M05171	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot
M05172	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot
M05179	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot
M0519	Diagnosis	ICD-10-CM	Rheumatoid lung disease with rheumatoid arthritis of multiple sites
M052	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis
M0520	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site
M0521	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of shoulder
M05211	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder
M05212	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder
M05219	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder
M0522	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of elbow
M05221	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right elbow
M05222	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left elbow
M05229	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow
M0523	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of wrist
M05231	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right wrist
M05232	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left wrist
M05239	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist
M0524	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of hand
M05241	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right hand
M05242	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left hand
M05249	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand
M0525	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of hip
M05251	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right hip
M05252	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left hip
M05259	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip
M0526	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of knee
M05261	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right knee
M05262	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left knee
M05269	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee
M0527	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of ankle and foot
M05271	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot
M05272	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot

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

Code	Code Category	Code Type	Description
M05279	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot
M0529	Diagnosis	ICD-10-CM	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites
M053	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis
M0530	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified site
M0531	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of shoulder
M05311	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right shoulder
M05312	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left shoulder
M05319	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder
M0532	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of elbow
M05321	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right elbow
M05322	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left elbow
M05329	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow
M0533	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of wrist
M05331	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right wrist
M05332	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left wrist
M05339	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist
M0534	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of hand
M05341	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right hand
M05342	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left hand
M05349	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand
M0535	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of hip
M05351	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right hip
M05352	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left hip
M05359	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip
M0536	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of knee
M05361	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right knee
M05362	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left knee
M05369	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee
M0537	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of ankle and foot
M05371	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot
M05372	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot
M05379	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot

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

Code	Code Category	Code Type	Description
M0539	Diagnosis	ICD-10-CM	Rheumatoid heart disease with rheumatoid arthritis of multiple sites
M054	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis
M0540	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified site
M0541	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of shoulder
M05411	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right shoulder
M05412	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left shoulder
M05419	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder
M0542	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of elbow
M05421	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right elbow
M05422	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left elbow
M05429	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow
M0543	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of wrist
M05431	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right wrist
M05432	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left wrist
M05439	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist
M0544	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of hand
M05441	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right hand
M05442	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left hand
M05449	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand
M0545	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of hip
M05451	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right hip
M05452	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left hip
M05459	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip
M0546	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of knee
M05461	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right knee
M05462	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left knee
M05469	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee
M0547	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of ankle and foot
M05471	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot
M05472	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot
M05479	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot
M0549	Diagnosis	ICD-10-CM	Rheumatoid myopathy with rheumatoid arthritis of multiple sites
M055	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis
M0550	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site
M0551	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of shoulder
M05511	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder

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

Code	Code Category	Code Type	Description
M05512	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder
M05519	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder
M0552	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of elbow
M05521	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow
M05522	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow
M05529	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow
M0553	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of wrist
M05531	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist
M05532	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist
M05539	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist
M0554	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of hand
M05541	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand
M05542	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand
M05549	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand
M0555	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of hip
M05551	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip
M05552	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip
M05559	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip
M0556	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of knee
M05561	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee
M05562	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee
M05569	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee
M0557	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of ankle and foot
M05571	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot
M05572	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot
M05579	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot
M0559	Diagnosis	ICD-10-CM	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites
M056	Diagnosis	ICD-10-CM	Rheumatoid arthritis with involvement of other organs and systems
M0560	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified site with involvement of other organs and systems
M0561	Diagnosis	ICD-10-CM	Rheumatoid arthritis of shoulder with involvement of other organs and systems

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

Code	Code Category	Code Type	Description
M05611	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right shoulder with involvement of other organs and systems
M05612	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left shoulder with involvement of other organs and systems
M05619	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems
M0562	Diagnosis	ICD-10-CM	Rheumatoid arthritis of elbow with involvement of other organs and systems
M05621	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right elbow with involvement of other organs and systems
M05622	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left elbow with involvement of other organs and systems
M05629	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems
M0563	Diagnosis	ICD-10-CM	Rheumatoid arthritis of wrist with involvement of other organs and systems
M05631	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right wrist with involvement of other organs and systems
M05632	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left wrist with involvement of other organs and systems
M05639	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems
M0564	Diagnosis	ICD-10-CM	Rheumatoid arthritis of hand with involvement of other organs and systems
M05641	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right hand with involvement of other organs and systems
M05642	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left hand with involvement of other organs and systems
M05649	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems
M0565	Diagnosis	ICD-10-CM	Rheumatoid arthritis of hip with involvement of other organs and systems
M05651	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right hip with involvement of other organs and systems
M05652	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left hip with involvement of other organs and systems
M05659	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems
M0566	Diagnosis	ICD-10-CM	Rheumatoid arthritis of knee with involvement of other organs and systems
M05661	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right knee with involvement of other organs and systems
M05662	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left knee with involvement of other organs and systems
M05669	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems

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

Code	Code Category	Code Type	Description
M0567	Diagnosis	ICD-10-CM	Rheumatoid arthritis of ankle and foot with involvement of other organs and systems
M05671	Diagnosis	ICD-10-CM	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems
M05672	Diagnosis	ICD-10-CM	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems
M05679	Diagnosis	ICD-10-CM	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems
M0569	Diagnosis	ICD-10-CM	Rheumatoid arthritis of multiple sites with involvement of other organs and systems
M057	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor without organ or systems involvement
M0570	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement
M0571	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of shoulder without organ or systems involvement
M05711	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement
M05712	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement
M05719	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement
M0572	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of elbow without organ or systems involvement
M05721	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement
M05722	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement
M05729	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement
M0573	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of wrist without organ or systems involvement
M05731	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement
M05732	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement
M05739	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement
M0574	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of hand without organ or systems involvement
M05741	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement
M05742	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement
M05749	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement

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

Code	Code Category	Code Type	Description
M0575	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of hip without organ or systems involvement
M05751	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement
M05752	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement
M05759	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement
M0576	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of knee without organ or systems involvement
M05761	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement
M05762	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement
M05769	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement
M0577	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of ankle and foot without organ or systems involvement
M05771	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement
M05772	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement
M05779	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement
M0579	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement
M058	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor
M0580	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified site
M0581	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of shoulder
M05811	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right shoulder
M05812	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left shoulder
M05819	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder
M0582	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of elbow
M05821	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right elbow
M05822	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left elbow
M05829	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow
M0583	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of wrist
M05831	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right wrist
M05832	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left wrist
M05839	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist
M0584	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of hand

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

Code	Code Category	Code Type	Description
M05841	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right hand
M05842	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left hand
M05849	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified hand
M0585	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of hip
M05851	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right hip
M05852	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left hip
M05859	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified hip
M0586	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of knee
M05861	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right knee
M05862	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left knee
M05869	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified knee
M0587	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of ankle and foot
M05871	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot
M05872	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot
M05879	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot
M0589	Diagnosis	ICD-10-CM	Other rheumatoid arthritis with rheumatoid factor of multiple sites
M059	Diagnosis	ICD-10-CM	Rheumatoid arthritis with rheumatoid factor, unspecified
M060	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor
M0600	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified site
M0601	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, shoulder
M06011	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right shoulder
M06012	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left shoulder
M06019	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder
M0602	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, elbow
M06021	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right elbow
M06022	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left elbow
M06029	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified elbow
M0603	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, wrist
M06031	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right wrist
M06032	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left wrist
M06039	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified wrist
M0604	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, hand
M06041	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right hand
M06042	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left hand
M06049	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified hand
M0605	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, hip
M06051	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right hip
M06052	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left hip

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

Code	Code Category	Code Type	Description
M06059	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified hip
M0606	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, knee
M06061	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right knee
M06062	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left knee
M06069	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified knee
M0607	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, ankle and foot
M06071	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, right ankle and foot
M06072	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, left ankle and foot
M06079	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot
M0608	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, vertebrae
M0609	Diagnosis	ICD-10-CM	Rheumatoid arthritis without rheumatoid factor, multiple sites
M061	Diagnosis	ICD-10-CM	Adult-onset Still's disease
M062	Diagnosis	ICD-10-CM	Rheumatoid bursitis
M0620	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified site
M0621	Diagnosis	ICD-10-CM	Rheumatoid bursitis, shoulder
M06211	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right shoulder
M06212	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left shoulder
M06219	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified shoulder
M0622	Diagnosis	ICD-10-CM	Rheumatoid bursitis, elbow
M06221	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right elbow
M06222	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left elbow
M06229	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified elbow
M0623	Diagnosis	ICD-10-CM	Rheumatoid bursitis, wrist
M06231	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right wrist
M06232	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left wrist
M06239	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified wrist
M0624	Diagnosis	ICD-10-CM	Rheumatoid bursitis, hand
M06241	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right hand
M06242	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left hand
M06249	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified hand
M0625	Diagnosis	ICD-10-CM	Rheumatoid bursitis, hip
M06251	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right hip
M06252	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left hip
M06259	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified hip
M0626	Diagnosis	ICD-10-CM	Rheumatoid bursitis, knee
M06261	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right knee
M06262	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left knee
M06269	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified knee
M0627	Diagnosis	ICD-10-CM	Rheumatoid bursitis, ankle and foot
M06271	Diagnosis	ICD-10-CM	Rheumatoid bursitis, right ankle and foot
M06272	Diagnosis	ICD-10-CM	Rheumatoid bursitis, left ankle and foot
M06279	Diagnosis	ICD-10-CM	Rheumatoid bursitis, unspecified ankle and foot

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

Code	Code Category	Code Type	Description
M0628	Diagnosis	ICD-10-CM	Rheumatoid bursitis, vertebrae
M0629	Diagnosis	ICD-10-CM	Rheumatoid bursitis, multiple sites
M063	Diagnosis	ICD-10-CM	Rheumatoid nodule
M0630	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified site
M0631	Diagnosis	ICD-10-CM	Rheumatoid nodule, shoulder
M06311	Diagnosis	ICD-10-CM	Rheumatoid nodule, right shoulder
M06312	Diagnosis	ICD-10-CM	Rheumatoid nodule, left shoulder
M06319	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified shoulder
M0632	Diagnosis	ICD-10-CM	Rheumatoid nodule, elbow
M06321	Diagnosis	ICD-10-CM	Rheumatoid nodule, right elbow
M06322	Diagnosis	ICD-10-CM	Rheumatoid nodule, left elbow
M06329	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified elbow
M0633	Diagnosis	ICD-10-CM	Rheumatoid nodule, wrist
M06331	Diagnosis	ICD-10-CM	Rheumatoid nodule, right wrist
M06332	Diagnosis	ICD-10-CM	Rheumatoid nodule, left wrist
M06339	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified wrist
M0634	Diagnosis	ICD-10-CM	Rheumatoid nodule, hand
M06341	Diagnosis	ICD-10-CM	Rheumatoid nodule, right hand
M06342	Diagnosis	ICD-10-CM	Rheumatoid nodule, left hand
M06349	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified hand
M0635	Diagnosis	ICD-10-CM	Rheumatoid nodule, hip
M06351	Diagnosis	ICD-10-CM	Rheumatoid nodule, right hip
M06352	Diagnosis	ICD-10-CM	Rheumatoid nodule, left hip
M06359	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified hip
M0636	Diagnosis	ICD-10-CM	Rheumatoid nodule, knee
M06361	Diagnosis	ICD-10-CM	Rheumatoid nodule, right knee
M06362	Diagnosis	ICD-10-CM	Rheumatoid nodule, left knee
M06369	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified knee
M0637	Diagnosis	ICD-10-CM	Rheumatoid nodule, ankle and foot
M06371	Diagnosis	ICD-10-CM	Rheumatoid nodule, right ankle and foot
M06372	Diagnosis	ICD-10-CM	Rheumatoid nodule, left ankle and foot
M06379	Diagnosis	ICD-10-CM	Rheumatoid nodule, unspecified ankle and foot
M0638	Diagnosis	ICD-10-CM	Rheumatoid nodule, vertebrae
M0639	Diagnosis	ICD-10-CM	Rheumatoid nodule, multiple sites
M068	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis
M0680	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified site
M0681	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, shoulder
M06811	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right shoulder
M06812	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left shoulder
M06819	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified shoulder
M0682	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, elbow
M06821	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right elbow
M06822	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left elbow

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

Code	Code Category	Code Type	Description
M06829	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified elbow
M0683	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, wrist
M06831	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right wrist
M06832	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left wrist
M06839	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified wrist
M0684	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, hand
M06841	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right hand
M06842	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left hand
M06849	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified hand
M0685	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, hip
M06851	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right hip
M06852	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left hip
M06859	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified hip
M0686	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, knee
M06861	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right knee
M06862	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left knee
M06869	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified knee
M0687	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, ankle and foot
M06871	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, right ankle and foot
M06872	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, left ankle and foot
M06879	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, unspecified ankle and foot
M0688	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, vertebrae
M0689	Diagnosis	ICD-10-CM	Other specified rheumatoid arthritis, multiple sites
M069	Diagnosis	ICD-10-CM	Rheumatoid arthritis, unspecified
M080	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis
M0800	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis of unspecified site
M0801	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, shoulder
M08011	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right shoulder
M08012	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left shoulder
M08019	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified shoulder
M0802	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis of elbow
M08021	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right elbow
M08022	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left elbow
M08029	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified elbow
M0803	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, wrist
M08031	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right wrist
M08032	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left wrist
M08039	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified wrist
M0804	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, hand
M08041	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right hand
M08042	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left hand
M08049	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified hand
M0805	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, hip

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

Code	Code Category	Code Type	Description
M08051	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right hip
M08052	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left hip
M08059	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified hip
M0806	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, knee
M08061	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right knee
M08062	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left knee
M08069	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified knee
M0807	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, ankle and foot
M08071	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, right ankle and foot
M08072	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, left ankle and foot
M08079	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot
M0808	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, vertebrae
M0809	Diagnosis	ICD-10-CM	Unspecified juvenile rheumatoid arthritis, multiple sites
M0820	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified site
M0821	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, shoulder
M08211	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right shoulder
M08212	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left shoulder
M08219	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder
M0822	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, elbow
M08221	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right elbow
M08222	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left elbow
M08229	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow
M0823	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, wrist
M08231	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right wrist
M08232	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left wrist
M08239	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist
M0824	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, hand
M08241	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right hand
M08242	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left hand
M08249	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified hand
M0825	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, hip
M08251	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right hip
M08252	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left hip
M08259	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified hip
M0826	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, knee
M08261	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right knee
M08262	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left knee
M08269	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified knee
M0827	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, ankle and foot
M08271	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot
M08272	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot

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

Code	Code Category	Code Type	Description
M08279	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot
M0828	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, vertebrae
M0829	Diagnosis	ICD-10-CM	Juvenile rheumatoid arthritis with systemic onset, multiple sites
M084	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis
M0840	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified site
M0841	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, shoulder
M08411	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right shoulder
M08412	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left shoulder
M08419	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder
M0842	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, elbow
M08421	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right elbow
M08422	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left elbow
M08429	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow
M0843	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, wrist
M08431	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right wrist
M08432	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left wrist
M08439	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist
M0844	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, hand
M08441	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right hand
M08442	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left hand
M08449	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified hand
M0845	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, hip
M08451	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right hip
M08452	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left hip
M08459	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified hip
M0846	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, knee
M08461	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right knee
M08462	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left knee
M08469	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified knee
M0847	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, ankle and foot
M08471	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot
M08472	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot
M08479	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot
M0848	Diagnosis	ICD-10-CM	Pauciarticular juvenile rheumatoid arthritis, vertebrae
Psoriatic Arthritis			
L4050	Diagnosis	ICD-10-CM	Arthropathic psoriasis, unspecified
L4051	Diagnosis	ICD-10-CM	Distal interphalangeal psoriatic arthropathy
L4052	Diagnosis	ICD-10-CM	Psoriatic arthritis mutilans
L4053	Diagnosis	ICD-10-CM	Psoriatic spondylitis
L4054	Diagnosis	ICD-10-CM	Psoriatic juvenile arthropathy
L4059	Diagnosis	ICD-10-CM	Other psoriatic arthropathy

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

Code	Code Category	Code Type	Description
Psoriasis			
L400	Diagnosis	ICD-10-CM	Psoriasis vulgaris
L401	Diagnosis	ICD-10-CM	Generalized pustular psoriasis
L402	Diagnosis	ICD-10-CM	Acrodermatitis continua
L403	Diagnosis	ICD-10-CM	Pustulosis palmaris et plantaris
L404	Diagnosis	ICD-10-CM	Guttate psoriasis
L408	Diagnosis	ICD-10-CM	Other psoriasis
L409	Diagnosis	ICD-10-CM	Psoriasis, unspecified