

Supplemental Material

Appendix S1- National Drug Codes (NDCs) used to define DOACs

NDC	Generic Name	Brand Name
00003089331	apixaban	Eliquis
00003089421	apixaban	Eliquis
00003089321	apixaban	Eliquis
00003089431	apixaban	Eliquis
00003089470	apixaban	Eliquis
00003376474	apixaban	Eliquis
00597035556	dabigatran etexilate mesylate	Pradaxa
00597013554	dabigatran etexilate mesylate	Pradaxa
00597014960	dabigatran etexilate mesylate	Pradaxa
00597035509	dabigatran etexilate mesylate	Pradaxa
00597010760	dabigatran etexilate mesylate	Pradaxa
00597036055	dabigatran etexilate mesylate	Pradaxa
00597013560	dabigatran etexilate mesylate	Pradaxa
00597014954	dabigatran etexilate mesylate	Pradaxa
21695089960	dabigatran etexilate mesylate	Pradaxa
00597010860	dabigatran etexilate mesylate	Pradaxa
00597010754	dabigatran etexilate mesylate	Pradaxa
54569627600	dabigatran etexilate mesylate	Pradaxa
00597036082	dabigatran etexilate mesylate	Pradaxa
00597010854	dabigatran etexilate mesylate	Pradaxa
65597020230	edoxaban tosylate	Savaysa
65597020330	edoxaban tosylate	Savaysa
65597020310	edoxaban tosylate	Savaysa
65597020390	edoxaban tosylate	Savaysa
65597020130	edoxaban tosylate	Savaysa
65597020205	edoxaban tosylate	Savaysa
65597020210	edoxaban tosylate	Savaysa
65597020290	edoxaban tosylate	Savaysa
65597020305	edoxaban tosylate	Savaysa
50458057810	rivaroxaban	Xarelto
50458058451	rivaroxaban	Xarelto
50458057930	rivaroxaban	Xarelto
50458058010	rivaroxaban	Xarelto
50458057890	rivaroxaban	Xarelto
50458058090	rivaroxaban	Xarelto
50458057990	rivaroxaban	Xarelto
50458057830	rivaroxaban	Xarelto
50458058030	rivaroxaban	Xarelto
50458057910	rivaroxaban	Xarelto

Appendix S2- Codes used to define CSVV

Code	Description	Code Type
Cutaneous Small Vessel Vasculitis		
287.0	Allergic purpura	ICD-9-CM
446.2	Hypersensitivity angiitis	ICD-9-CM
446.29	Other specified hypersensitivity angiitis	ICD-9-CM
446.20	Unspecified hypersensitivity angiitis	ICD-9-CM
709.1	Vascular disorder of skin	ICD-9-CM
D69.0	Allergic purpura	ICD-10-CM
L95.8	Other vasculitis limited to the skin	ICD-10-CM
L95.9	Vasculitis limited to the skin, unspecified	ICD-10-CM
M31.0	Hypersensitivity angiitis	ICD-10-CM

Appendix S3-Codes used to define select autoimmune diseases

Code	Description	Code Type
Select Autoimmune Disease Codes		
714.0	Rheumatoid arthritis	ICD-9-CM
714	Rheumatoid arthritis and other inflammatory polyarthropathies	ICD-9-CM
M05.8	Other rheumatoid arthritis with rheumatoid factor	ICD-10-CM
M06.872	Other specified rheumatoid arthritis, left ankle and foot	ICD-10-CM
M06.89	Other specified rheumatoid arthritis, multiple sites	ICD-10-CM
M06.871	Other specified rheumatoid arthritis, right ankle and foot	ICD-10-CM
M06.879	Other specified rheumatoid arthritis, unspecified ankle and foot	ICD-10-CM
M06.87	Other specified rheumatoid arthritis, ankle and foot	ICD-10-CM
M06.812	Other specified rheumatoid arthritis, left shoulder	ICD-10-CM
M06.811	Other specified rheumatoid arthritis, right shoulder	ICD-10-CM
M06.819	Other specified rheumatoid arthritis, unspecified shoulder	ICD-10-CM
M05.872	Other rheumatoid arthritis with rheumatoid factor of left ankle and foot	ICD-10-CM
M05.871	Other rheumatoid arthritis with rheumatoid factor of right ankle and foot	ICD-10-CM
M05.839	Other rheumatoid arthritis with rheumatoid factor of unspecified wrist	ICD-10-CM
M05.879	Other rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot	ICD-10-CM
M05.819	Other rheumatoid arthritis with rheumatoid factor of unspecified shoulder	ICD-10-CM
M05.829	Other rheumatoid arthritis with rheumatoid factor of unspecified elbow	ICD-10-CM
M05.87	Other rheumatoid arthritis with rheumatoid factor of ankle and foot	ICD-10-CM
M05.82	Other rheumatoid arthritis with rheumatoid factor of elbow	ICD-10-CM
M05.84	Other rheumatoid arthritis with rheumatoid factor of hand	ICD-10-CM
M05.85	Other rheumatoid arthritis with rheumatoid factor of hip	ICD-10-CM
M05.86	Other rheumatoid arthritis with rheumatoid factor of knee	ICD-10-CM
M05.822	Other rheumatoid arthritis with rheumatoid factor of left elbow	ICD-10-CM
M05.842	Other rheumatoid arthritis with rheumatoid factor of left hand	ICD-10-CM

M05.852	Other rheumatoid arthritis with rheumatoid factor of left hip	ICD-10-CM
M05.862	Other rheumatoid arthritis with rheumatoid factor of left knee	ICD-10-CM
M05.812	Other rheumatoid arthritis with rheumatoid factor of left shoulder	ICD-10-CM
M05.832	Other rheumatoid arthritis with rheumatoid factor of left wrist	ICD-10-CM
M05.89	Other rheumatoid arthritis with rheumatoid factor of multiple sites	ICD-10-CM
M05.821	Other rheumatoid arthritis with rheumatoid factor of right elbow	ICD-10-CM
M05.841	Other rheumatoid arthritis with rheumatoid factor of right hand	ICD-10-CM
M05.851	Other rheumatoid arthritis with rheumatoid factor of right hip	ICD-10-CM
M05.861	Other rheumatoid arthritis with rheumatoid factor of right knee	ICD-10-CM
M05.811	Other rheumatoid arthritis with rheumatoid factor of right shoulder	ICD-10-CM
M05.831	Other rheumatoid arthritis with rheumatoid factor of right wrist	ICD-10-CM
M05.81	Other rheumatoid arthritis with rheumatoid factor of shoulder	ICD-10-CM
M05.849	Other rheumatoid arthritis with rheumatoid factor of unspecified hand	ICD-10-CM
M05.859	Other rheumatoid arthritis with rheumatoid factor of unspecified hip	ICD-10-CM
M05.869	Other rheumatoid arthritis with rheumatoid factor of unspecified knee	ICD-10-CM
M05.80	Other rheumatoid arthritis with rheumatoid factor of unspecified site	ICD-10-CM
M05.83	Other rheumatoid arthritis with rheumatoid factor of wrist	ICD-10-CM
M06	Other rheumatoid arthritis	ICD-10-CM
M06.80	Other specified rheumatoid arthritis, unspecified site	ICD-10-CM
M06.8	Other specified rheumatoid arthritis	ICD-10-CM
M06.82	Other specified rheumatoid arthritis, elbow	ICD-10-CM
M06.84	Other specified rheumatoid arthritis, hand	ICD-10-CM
M06.85	Other specified rheumatoid arthritis, hip	ICD-10-CM
M06.86	Other specified rheumatoid arthritis, knee	ICD-10-CM
M06.822	Other specified rheumatoid arthritis, left elbow	ICD-10-CM
M06.842	Other specified rheumatoid arthritis, left hand	ICD-10-CM
M06.852	Other specified rheumatoid arthritis, left hip	ICD-10-CM
M06.862	Other specified rheumatoid arthritis, left knee	ICD-10-CM
M06.832	Other specified rheumatoid arthritis, left wrist	ICD-10-CM
M06.821	Other specified rheumatoid arthritis, right elbow	ICD-10-CM
M06.841	Other specified rheumatoid arthritis, right hand	ICD-10-CM
M06.851	Other specified rheumatoid arthritis, right hip	ICD-10-CM
M06.861	Other specified rheumatoid arthritis, right knee	ICD-10-CM
M06.831	Other specified rheumatoid arthritis, right wrist	ICD-10-CM
M06.81	Other specified rheumatoid arthritis, shoulder	ICD-10-CM
M06.859	Other specified rheumatoid arthritis, unspecified hip	ICD-10-CM
M06.829	Other specified rheumatoid arthritis, unspecified elbow	ICD-10-CM
M06.849	Other specified rheumatoid arthritis, unspecified hand	ICD-10-CM
M06.869	Other specified rheumatoid arthritis, unspecified knee	ICD-10-CM
M06.839	Other specified rheumatoid arthritis, unspecified wrist	ICD-10-CM
M06.88	Other specified rheumatoid arthritis, vertebrae	ICD-10-CM
M06.83	Other specified rheumatoid arthritis, wrist	ICD-10-CM
M05.67	Rheumatoid arthritis of ankle and foot with involvement of other organs and systems	ICD-10-CM
M05.62	Rheumatoid arthritis of elbow with involvement of other organs and systems	ICD-10-CM
M05.64	Rheumatoid arthritis of hand with involvement of other organs and systems	ICD-10-CM
M05.65	Rheumatoid arthritis of hip with involvement of other organs and systems	ICD-10-CM
M05.66	Rheumatoid arthritis of knee with involvement of other organs and systems	ICD-10-CM
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems	ICD-10-CM
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems	ICD-10-CM
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems	ICD-10-CM

M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems	ICD-10-CM
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems	ICD-10-CM
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems	ICD-10-CM
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems	ICD-10-CM
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems	ICD-10-CM
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems	ICD-10-CM
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems	ICD-10-CM
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems	ICD-10-CM
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems	ICD-10-CM
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems	ICD-10-CM
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems	ICD-10-CM
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems	ICD-10-CM
M05.61	Rheumatoid arthritis of shoulder with involvement of other organs and systems	ICD-10-CM
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems	ICD-10-CM
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems	ICD-10-CM
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems	ICD-10-CM
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems	ICD-10-CM
M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems	ICD-10-CM
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems	ICD-10-CM
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems	ICD-10-CM
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems	ICD-10-CM
M05.772	Rheumatoid arthritis with rheumatoid factor of left ankle and foot without organ or systems involvement	ICD-10-CM
M05.771	Rheumatoid arthritis with rheumatoid factor of right ankle and foot without organ or systems involvement	ICD-10-CM
M05.779	Rheumatoid arthritis with rheumatoid factor of unspecified ankle and foot without organ or systems involvement	ICD-10-CM
M05.72	Rheumatoid arthritis with rheumatoid factor of elbow without organ or systems involvement	ICD-10-CM
M05.74	Rheumatoid arthritis with rheumatoid factor of hand without organ or systems involvement	ICD-10-CM
M05.75	Rheumatoid arthritis with rheumatoid factor of hip without organ or systems involvement	ICD-10-CM
M05.7	Rheumatoid arthritis with rheumatoid factor without organ or systems involvement	ICD-10-CM
M05.77	Rheumatoid arthritis with rheumatoid factor of ankle and foot without organ or systems involvement	ICD-10-CM
M05.76	Rheumatoid arthritis with rheumatoid factor of knee without organ or systems involvement	ICD-10-CM
M05.722	Rheumatoid arthritis with rheumatoid factor of left elbow without organ or systems involvement	ICD-10-CM
M05.742	Rheumatoid arthritis with rheumatoid factor of left hand without organ or systems involvement	ICD-10-CM
M05.752	Rheumatoid arthritis with rheumatoid factor of left hip without organ or systems involvement	ICD-10-CM
M05.762	Rheumatoid arthritis with rheumatoid factor of left knee without organ or systems involvement	ICD-10-CM
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement	ICD-10-CM
M05.732	Rheumatoid arthritis with rheumatoid factor of left wrist without organ or systems involvement	ICD-10-CM
M05.79	Rheumatoid arthritis with rheumatoid factor of multiple sites without organ or systems involvement	ICD-10-CM

M05.721	Rheumatoid arthritis with rheumatoid factor of right elbow without organ or systems involvement	ICD-10-CM
M05.741	Rheumatoid arthritis with rheumatoid factor of right hand without organ or systems involvement	ICD-10-CM
M05.751	Rheumatoid arthritis with rheumatoid factor of right hip without organ or systems involvement	ICD-10-CM
M05.761	Rheumatoid arthritis with rheumatoid factor of right knee without organ or systems involvement	ICD-10-CM
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement	ICD-10-CM
M05.731	Rheumatoid arthritis with rheumatoid factor of right wrist without organ or systems involvement	ICD-10-CM
M05.71	Rheumatoid arthritis with rheumatoid factor of shoulder without organ or systems involvement	ICD-10-CM
M05.729	Rheumatoid arthritis with rheumatoid factor of unspecified elbow without organ or systems involvement	ICD-10-CM
M05.749	Rheumatoid arthritis with rheumatoid factor of unspecified hand without organ or systems involvement	ICD-10-CM
M05.759	Rheumatoid arthritis with rheumatoid factor of unspecified hip without organ or systems involvement	ICD-10-CM
M05.769	Rheumatoid arthritis with rheumatoid factor of unspecified knee without organ or systems involvement	ICD-10-CM
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement	ICD-10-CM
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement	ICD-10-CM
M05.739	Rheumatoid arthritis with rheumatoid factor of unspecified wrist without organ or systems involvement	ICD-10-CM
M05.73	Rheumatoid arthritis with rheumatoid factor of wrist without organ or systems involvement	ICD-10-CM
M05.9	Rheumatoid arthritis with rheumatoid factor, unspecified	ICD-10-CM
M06.07	Rheumatoid arthritis without rheumatoid factor, ankle and foot	ICD-10-CM
M06.02	Rheumatoid arthritis without rheumatoid factor, elbow	ICD-10-CM
M06.04	Rheumatoid arthritis without rheumatoid factor, hand	ICD-10-CM
M06.05	Rheumatoid arthritis without rheumatoid factor, hip	ICD-10-CM
M06.06	Rheumatoid arthritis without rheumatoid factor, knee	ICD-10-CM
M06.072	Rheumatoid arthritis without rheumatoid factor, left ankle and foot	ICD-10-CM
M06.022	Rheumatoid arthritis without rheumatoid factor, left elbow	ICD-10-CM
M06.042	Rheumatoid arthritis without rheumatoid factor, left hand	ICD-10-CM
M06.052	Rheumatoid arthritis without rheumatoid factor, left hip	ICD-10-CM
M06.062	Rheumatoid arthritis without rheumatoid factor, left knee	ICD-10-CM
M06.012	Rheumatoid arthritis without rheumatoid factor, left shoulder	ICD-10-CM
M06.032	Rheumatoid arthritis without rheumatoid factor, left wrist	ICD-10-CM
M06.09	Rheumatoid arthritis without rheumatoid factor, multiple sites	ICD-10-CM
M06.071	Rheumatoid arthritis without rheumatoid factor, right ankle and foot	ICD-10-CM
M06.021	Rheumatoid arthritis without rheumatoid factor, right elbow	ICD-10-CM
M06.041	Rheumatoid arthritis without rheumatoid factor, right hand	ICD-10-CM
M06.051	Rheumatoid arthritis without rheumatoid factor, right hip	ICD-10-CM
M06.061	Rheumatoid arthritis without rheumatoid factor, right knee	ICD-10-CM
M06.011	Rheumatoid arthritis without rheumatoid factor, right shoulder	ICD-10-CM
M06.031	Rheumatoid arthritis without rheumatoid factor, right wrist	ICD-10-CM
M06.01	Rheumatoid arthritis without rheumatoid factor, shoulder	ICD-10-CM

M06.079	Rheumatoid arthritis without rheumatoid factor, unspecified ankle and foot	ICD-10-CM
M06.019	Rheumatoid arthritis without rheumatoid factor, unspecified shoulder	ICD-10-CM
M06.029	Rheumatoid arthritis without rheumatoid factor, unspecified elbow	ICD-10-CM
M06.049	Rheumatoid arthritis without rheumatoid factor, unspecified hand	ICD-10-CM
M06.059	Rheumatoid arthritis without rheumatoid factor, unspecified hip	ICD-10-CM
M06.069	Rheumatoid arthritis without rheumatoid factor, unspecified knee	ICD-10-CM
M06.00	Rheumatoid arthritis without rheumatoid factor, unspecified site	ICD-10-CM
M06.039	Rheumatoid arthritis without rheumatoid factor, unspecified wrist	ICD-10-CM
M06.08	Rheumatoid arthritis without rheumatoid factor, vertebrae	ICD-10-CM
M06.03	Rheumatoid arthritis without rheumatoid factor, wrist	ICD-10-CM
M05.63	Rheumatoid arthritis of wrist with involvement of other organs and systems	ICD-10-CM
M06.9	Rheumatoid arthritis, unspecified	ICD-10-CM
M05.6	Rheumatoid arthritis with involvement of other organs and systems	ICD-10-CM
M05	Rheumatoid arthritis with rheumatoid factor	ICD-10-CM
M06.0	Rheumatoid arthritis without rheumatoid factor	ICD-10-CM
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot	ICD-10-CM
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow	ICD-10-CM
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand	ICD-10-CM
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee	ICD-10-CM
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site	ICD-10-CM
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist	ICD-10-CM
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot	ICD-10-CM
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot	ICD-10-CM
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder	ICD-10-CM
M05.3	Rheumatoid heart disease with rheumatoid arthritis	ICD-10-CM
M05.37	Rheumatoid heart disease with rheumatoid arthritis of ankle and foot	ICD-10-CM
M05.32	Rheumatoid heart disease with rheumatoid arthritis of elbow	ICD-10-CM
M05.34	Rheumatoid heart disease with rheumatoid arthritis of hand	ICD-10-CM
M05.35	Rheumatoid heart disease with rheumatoid arthritis of hip	ICD-10-CM
M05.36	Rheumatoid heart disease with rheumatoid arthritis of knee	ICD-10-CM
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow	ICD-10-CM
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand	ICD-10-CM
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip	ICD-10-CM
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee	ICD-10-CM
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder	ICD-10-CM
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist	ICD-10-CM
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites	ICD-10-CM
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow	ICD-10-CM
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand	ICD-10-CM
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip	ICD-10-CM
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee	ICD-10-CM
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder	ICD-10-CM
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist	ICD-10-CM
M05.31	Rheumatoid heart disease with rheumatoid arthritis of shoulder	ICD-10-CM
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip	ICD-10-CM
M05.33	Rheumatoid heart disease with rheumatoid arthritis of wrist	ICD-10-CM
M05.172	Rheumatoid lung disease with rheumatoid arthritis of left ankle and foot	ICD-10-CM
M05.171	Rheumatoid lung disease with rheumatoid arthritis of right ankle and foot	ICD-10-CM
M05.129	Rheumatoid lung disease with rheumatoid arthritis of unspecified elbow	ICD-10-CM
M05.139	Rheumatoid lung disease with rheumatoid arthritis of unspecified wrist	ICD-10-CM

M05.179	Rheumatoid lung disease with rheumatoid arthritis of unspecified ankle and foot	ICD-10-CM
M05.119	Rheumatoid lung disease with rheumatoid arthritis of unspecified shoulder	ICD-10-CM
M05.1	Rheumatoid lung disease with rheumatoid arthritis	ICD-10-CM
M05.17	Rheumatoid lung disease with rheumatoid arthritis of ankle and foot	ICD-10-CM
M05.12	Rheumatoid lung disease with rheumatoid arthritis of elbow	ICD-10-CM
M05.14	Rheumatoid lung disease with rheumatoid arthritis of hand	ICD-10-CM
M05.15	Rheumatoid lung disease with rheumatoid arthritis of hip	ICD-10-CM
M05.16	Rheumatoid lung disease with rheumatoid arthritis of knee	ICD-10-CM
M05.122	Rheumatoid lung disease with rheumatoid arthritis of left elbow	ICD-10-CM
M05.142	Rheumatoid lung disease with rheumatoid arthritis of left hand	ICD-10-CM
M05.152	Rheumatoid lung disease with rheumatoid arthritis of left hip	ICD-10-CM
M05.162	Rheumatoid lung disease with rheumatoid arthritis of left knee	ICD-10-CM
M05.112	Rheumatoid lung disease with rheumatoid arthritis of left shoulder	ICD-10-CM
M05.132	Rheumatoid lung disease with rheumatoid arthritis of left wrist	ICD-10-CM
M05.19	Rheumatoid lung disease with rheumatoid arthritis of multiple sites	ICD-10-CM
M05.121	Rheumatoid lung disease with rheumatoid arthritis of right elbow	ICD-10-CM
M05.141	Rheumatoid lung disease with rheumatoid arthritis of right hand	ICD-10-CM
M05.151	Rheumatoid lung disease with rheumatoid arthritis of right hip	ICD-10-CM
M05.161	Rheumatoid lung disease with rheumatoid arthritis of right knee	ICD-10-CM
M05.111	Rheumatoid lung disease with rheumatoid arthritis of right shoulder	ICD-10-CM
M05.131	Rheumatoid lung disease with rheumatoid arthritis of right wrist	ICD-10-CM
M05.11	Rheumatoid lung disease with rheumatoid arthritis of shoulder	ICD-10-CM
M05.149	Rheumatoid lung disease with rheumatoid arthritis of unspecified hand	ICD-10-CM
M05.159	Rheumatoid lung disease with rheumatoid arthritis of unspecified hip	ICD-10-CM
M05.169	Rheumatoid lung disease with rheumatoid arthritis of unspecified knee	ICD-10-CM
M05.10	Rheumatoid lung disease with rheumatoid arthritis of unspecified site	ICD-10-CM
M05.13	Rheumatoid lung disease with rheumatoid arthritis of wrist	ICD-10-CM
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot	ICD-10-CM
M05.47	Rheumatoid myopathy with rheumatoid arthritis of ankle and foot	ICD-10-CM
M05.42	Rheumatoid myopathy with rheumatoid arthritis of elbow	ICD-10-CM
M05.44	Rheumatoid myopathy with rheumatoid arthritis of hand	ICD-10-CM
M05.45	Rheumatoid myopathy with rheumatoid arthritis of hip	ICD-10-CM
M05.46	Rheumatoid myopathy with rheumatoid arthritis of knee	ICD-10-CM
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot	ICD-10-CM
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow	ICD-10-CM
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand	ICD-10-CM
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip	ICD-10-CM
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee	ICD-10-CM
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder	ICD-10-CM
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist	ICD-10-CM
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites	ICD-10-CM
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot	ICD-10-CM
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow	ICD-10-CM
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand	ICD-10-CM
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip	ICD-10-CM
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee	ICD-10-CM
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder	ICD-10-CM
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist	ICD-10-CM
M05.41	Rheumatoid myopathy with rheumatoid arthritis of shoulder	ICD-10-CM
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow	ICD-10-CM

M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand	ICD-10-CM
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip	ICD-10-CM
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee	ICD-10-CM
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder	ICD-10-CM
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site	ICD-10-CM
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist	ICD-10-CM
M05.43	Rheumatoid myopathy with rheumatoid arthritis of wrist	ICD-10-CM
M05.4	Rheumatoid myopathy with rheumatoid arthritis	ICD-10-CM
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand	ICD-10-CM
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip	ICD-10-CM
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee	ICD-10-CM
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site	ICD-10-CM
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot	ICD-10-CM
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot	ICD-10-CM
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot	ICD-10-CM
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow	ICD-10-CM
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder	ICD-10-CM
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist	ICD-10-CM
M05.5	Rheumatoid polyneuropathy with rheumatoid arthritis	ICD-10-CM
M05.57	Rheumatoid polyneuropathy with rheumatoid arthritis of ankle and foot	ICD-10-CM
M05.52	Rheumatoid polyneuropathy with rheumatoid arthritis of elbow	ICD-10-CM
M05.54	Rheumatoid polyneuropathy with rheumatoid arthritis of hand	ICD-10-CM
M05.55	Rheumatoid polyneuropathy with rheumatoid arthritis of hip	ICD-10-CM
M05.56	Rheumatoid polyneuropathy with rheumatoid arthritis of knee	ICD-10-CM
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow	ICD-10-CM
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand	ICD-10-CM
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip	ICD-10-CM
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee	ICD-10-CM
M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder	ICD-10-CM
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist	ICD-10-CM
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites	ICD-10-CM
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow	ICD-10-CM
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand	ICD-10-CM
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip	ICD-10-CM
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee	ICD-10-CM
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder	ICD-10-CM
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist	ICD-10-CM
M05.51	Rheumatoid polyneuropathy with rheumatoid arthritis of shoulder	ICD-10-CM
M05.53	Rheumatoid polyneuropathy with rheumatoid arthritis of wrist	ICD-10-CM
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder	ICD-10-CM
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot	ICD-10-CM
M05.27	Rheumatoid vasculitis with rheumatoid arthritis of ankle and foot	ICD-10-CM
M05.22	Rheumatoid vasculitis with rheumatoid arthritis of elbow	ICD-10-CM
M05.25	Rheumatoid vasculitis with rheumatoid arthritis of hip	ICD-10-CM
M05.26	Rheumatoid vasculitis with rheumatoid arthritis of knee	ICD-10-CM
M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot	ICD-10-CM
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow	ICD-10-CM
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand	ICD-10-CM
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip	ICD-10-CM
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee	ICD-10-CM

M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder	ICD-10-CM
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist	ICD-10-CM
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites	ICD-10-CM
M05.24	Rheumatoid vasculitis with rheumatoid arthritis of hand	ICD-10-CM
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot	ICD-10-CM
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow	ICD-10-CM
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand	ICD-10-CM
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip	ICD-10-CM
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee	ICD-10-CM
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder	ICD-10-CM
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist	ICD-10-CM
M05.21	Rheumatoid vasculitis with rheumatoid arthritis of shoulder	ICD-10-CM
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow	ICD-10-CM
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand	ICD-10-CM
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip	ICD-10-CM
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee	ICD-10-CM
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site	ICD-10-CM
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist	ICD-10-CM
M05.23	Rheumatoid vasculitis with rheumatoid arthritis of wrist	ICD-10-CM
M05.2	Rheumatoid vasculitis with rheumatoid arthritis	ICD-10-CM
6954	Lupus erythematosus	ICD-9-CM
710.0	Systemic lupus erythematosus	ICD-9-CM
M32.0	Drug-induced systemic lupus erythematosus	ICD-10-CM
M32.10	Systemic lupus erythematosus, organ or system involvement unspecified	ICD-10-CM
M32.11	Endocarditis in systemic lupus erythematosus	ICD-10-CM
M32.12	Pericarditis in systemic lupus erythematosus	ICD-10-CM
M32.13	Lung involvement in systemic lupus erythematosus	ICD-10-CM
M32.14	Glomerular disease in systemic lupus erythematosus	ICD-10-CM
M32.15	Tubulo-interstitial nephropathy in systemic lupus erythematosus	ICD-10-CM
M32.19	Other organ or system involvement in systemic lupus erythematosus	ICD-10-CM
M32.8	Other forms of systemic lupus erythematosus	ICD-10-CM
M32.9	Systemic lupus erythematosus, unspecified	ICD-10-CM
D68.62	Lupus anticoagulant syndrome	ICD-10-CM
L93	Lupus erythematosus	ICD-10-CM
M32	Systemic lupus erythematosus (SLE)	ICD-10-CM
M32.1	Systemic lupus erythematosus with organ or system involvement	ICD-10-CM
555	Regional enteritis	ICD-9-CM
555.0	Regional enteritis of small intestine	ICD-9-CM
555.1	Regional enteritis of large intestine	ICD-9-CM
555.2	Regional enteritis of small intestine with large intestine	ICD-9-CM
555.9	Regional enteritis of unspecified site	ICD-9-CM
K50	Crohn's disease [regional enteritis]	ICD-10-CM
K50.0	Crohn's disease of small intestine	ICD-10-CM
K50.00	Crohn's disease of small intestine without complications	ICD-10-CM
K50.01	Crohn's disease of small intestine with complications	ICD-10-CM
K50.011	Crohn's disease of small intestine with rectal bleeding	ICD-10-CM
K50.012	Crohn's disease of small intestine with intestinal obstruction	ICD-10-CM
K50.013	Crohn's disease of small intestine with fistula	ICD-10-CM
K50.014	Crohn's disease of small intestine with abscess	ICD-10-CM
K50.018	Crohn's disease of small intestine with other complication	ICD-10-CM

K50.019	Crohn's disease of small intestine with unspecified complications	ICD-10-CM
K50.1	Crohn's disease of large intestine	ICD-10-CM
K50.10	Crohn's disease of large intestine without complications	ICD-10-CM
K50.11	Crohn's disease of large intestine with complications	ICD-10-CM
K50.111	Crohn's disease of large intestine with rectal bleeding	ICD-10-CM
K50.112	Crohn's disease of large intestine with intestinal obstruction	ICD-10-CM
K50.113	Crohn's disease of large intestine with fistula	ICD-10-CM
K50.114	Crohn's disease of large intestine with abscess	ICD-10-CM
K50.118	Crohn's disease of large intestine with other complication	ICD-10-CM
K50.119	Crohn's disease of large intestine with unspecified complications	ICD-10-CM
K50.8	Crohn's disease of both small and large intestine	ICD-10-CM
K50.80	Crohn's disease of both small and large intestine without complications	ICD-10-CM
K50.81	Crohn's disease of both small and large intestine with complications	ICD-10-CM
K50.811	Crohn's disease of both small and large intestine with rectal bleeding	ICD-10-CM
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction	ICD-10-CM
K50.813	Crohn's disease of both small and large intestine with fistula	ICD-10-CM
K50.814	Crohn's disease of both small and large intestine with abscess	ICD-10-CM
K50.818	Crohn's disease of both small and large intestine with other complication	ICD-10-CM
K50.819	Crohn's disease of both small and large intestine with unspecified complications	ICD-10-CM
K50.9	Crohn's disease, unspecified	ICD-10-CM
K50.90	Crohn's disease, unspecified, without complications	ICD-10-CM
K50.91	Crohn's disease, unspecified, with complications	ICD-10-CM
K50.911	Crohn's disease, unspecified, with rectal bleeding	ICD-10-CM
K50.912	Crohn's disease, unspecified, with intestinal obstruction	ICD-10-CM
K50.913	Crohn's disease, unspecified, with fistula	ICD-10-CM
K50.914	Crohn's disease, unspecified, with abscess	ICD-10-CM
K50.918	Crohn's disease, unspecified, with other complication	ICD-10-CM
K50.919	Crohn's disease, unspecified, with unspecified complications	ICD-10-CM
710.2	Sicca syndrome	ICD-9-CM
M35.00	Sicca syndrome, unspecified	ICD-10-CM
M35.01	Sicca syndrome with keratoconjunctivitis	ICD-10-CM
M35.02	Sicca syndrome with lung involvement	ICD-10-CM
M35.03	Sicca syndrome with myopathy	ICD-10-CM
M35.04	Sicca syndrome with tubulo-interstitial nephropathy	ICD-10-CM
M35.09	Sicca syndrome with other organ involvement	ICD-10-CM
M35.0	Sicca syndrome [Sjogren]	ICD-10-CM
710.4	Polymyositis	ICD-9-CM
M33	Dermatopolymyositis	ICD-10-CM
M33.2	Polymyositis	ICD-10-CM
M33.20	Polymyositis, organ involvement unspecified	ICD-10-CM
M33.21	Polymyositis with respiratory involvement	ICD-10-CM
M33.22	Polymyositis with myopathy	ICD-10-CM
M33.29	Polymyositis with other organ involvement	ICD-10-CM
M33.9	Dermatopolymyositis, unspecified	ICD-10-CM
M33.90	Dermatopolymyositis, unspecified, organ involvement unspecified	ICD-10-CM
M33.91	Dermatopolymyositis, unspecified with respiratory involvement	ICD-10-CM
M33.92	Dermatopolymyositis, unspecified with myopathy	ICD-10-CM
M33.93	Dermatopolymyositis, unspecified without myopathy	ICD-10-CM
M33.99	Dermatopolymyositis, unspecified with other organ involvement	ICD-10-CM
M36.0	Dermatopolymyositis in neoplastic disease	ICD-10-CM

710.3	Dermatomyositis	ICD-9-CM
M33.1	Other dermatomyositis	ICD-10-CM
M33.10	Other dermatomyositis, organ involvement unspecified	ICD-10-CM
M33.11	Other dermatomyositis with respiratory involvement	ICD-10-CM
M33.12	Other dermatomyositis with myopathy	ICD-10-CM
M33.13	Other dermatomyositis without myopathy	ICD-10-CM
M33.19	Other dermatomyositis with other organ involvement	ICD-10-CM
273.2	Other paraproteinemias	ICD-9-CM
D89.1	Cryoglobulinemia	ICD-10-CM