

***Rare variants in drug target genes contributing to complex diseases, phenome-
wide***

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Supplementary Text:

Additional Results:

Over 200 results were observed in each filter category. There were 25 results that showed Bonferroni significant associations with All Variants as well as with all functionally annotated filters. A total of 17 results were observed only in variants filtered by functional annotation before burden testing, not in all variants nor non-functionally annotated filtered variant based associations, highlighting the importance of functional annotation of specific variants in the associations. We observed 13 associations shared among functional annotation Filter 2 and 3, and 8 associations for functional annotation filter 2 and 3 only, which suggests the importance of the specific type of annotation filtering for those associations. The least overlap in various filtering approaches was between the non-functionally annotated -filtered data (no low frequency variants with putative functional impact) and the other filtering approaches. There were 37 gene-phenotype associations (among those with $P\text{-value} < 0.001$) in both the non-functionally annotated filtered data and 'all variants'. There was one association shared across the non-functionally annotated filter based associations as well as functional annotation filter 3.

Next, we further inspected associations that were unique to each filtering approach. **Table** below provides the unique count of associations that are observed exclusively in each filtering category. We noted that among the annotation filtering approaches, the most significant as well as unique associations were observed in functional annotation filter 2 category (176).

Table: Number of associations observed uniquely for each variant filtering approach, where results were not significant with $P\text{-value} < 0.001$ in any other categories, shown with ascending order of count.

Filter Category	Count
Non-functionally annotated Variants	201
Functional Annotation Filter 2	176
All Variants	88
Functional Annotation Filter 3	72
Functional Annotation Filter 1	63

Data Visualization

Plot 2 and Supplementary figures 1, 2 and 3 are generated using circos perl package⁷⁵.

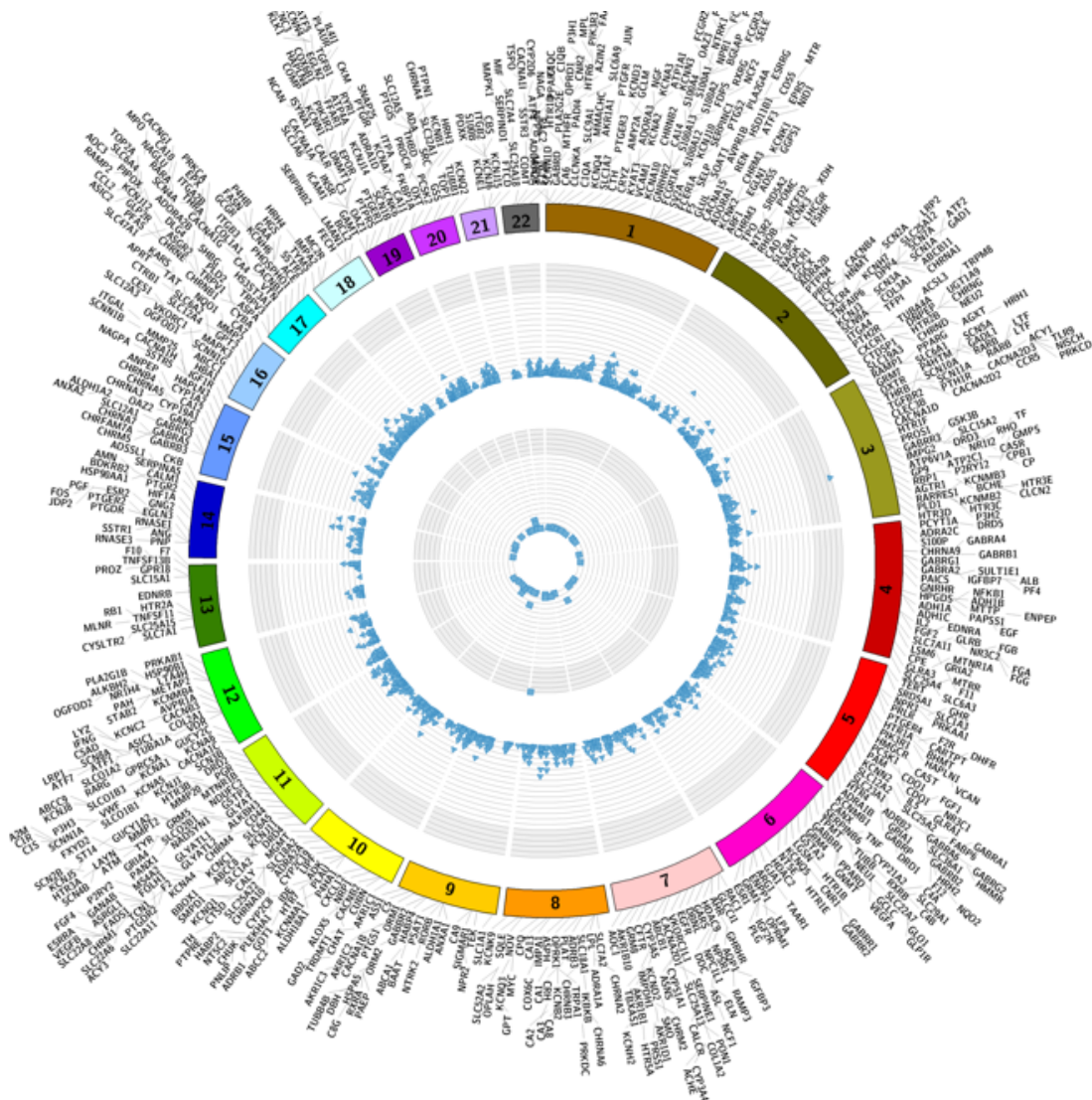
Plots 10 and 12 are generated using UpSetR package in Shiny⁷⁶.

Plots 11 and 13 are generated using Synthesis- View⁵¹

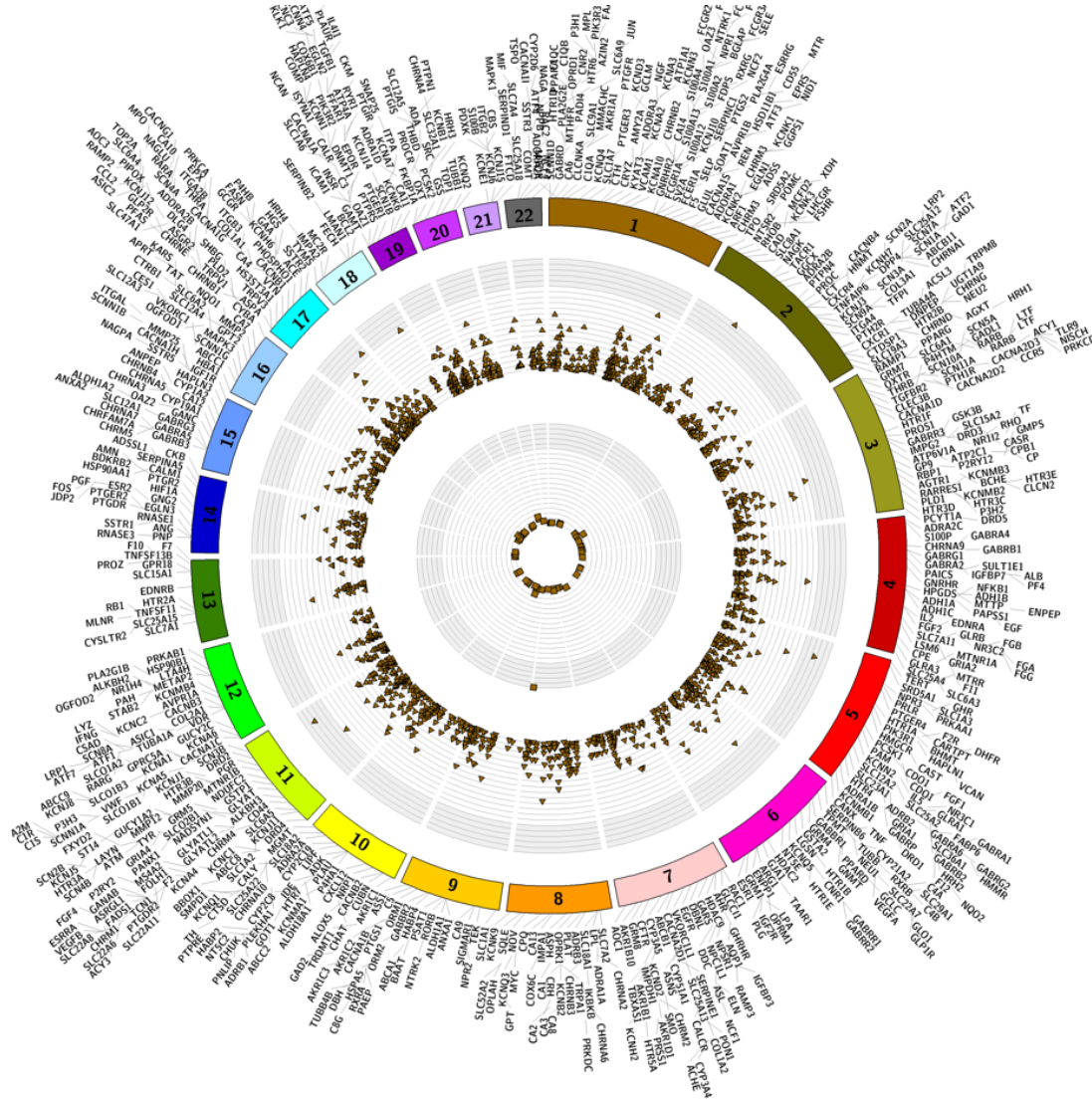
Plot 14 are generated using Phenogram package⁷⁷

Supplementary Figures:

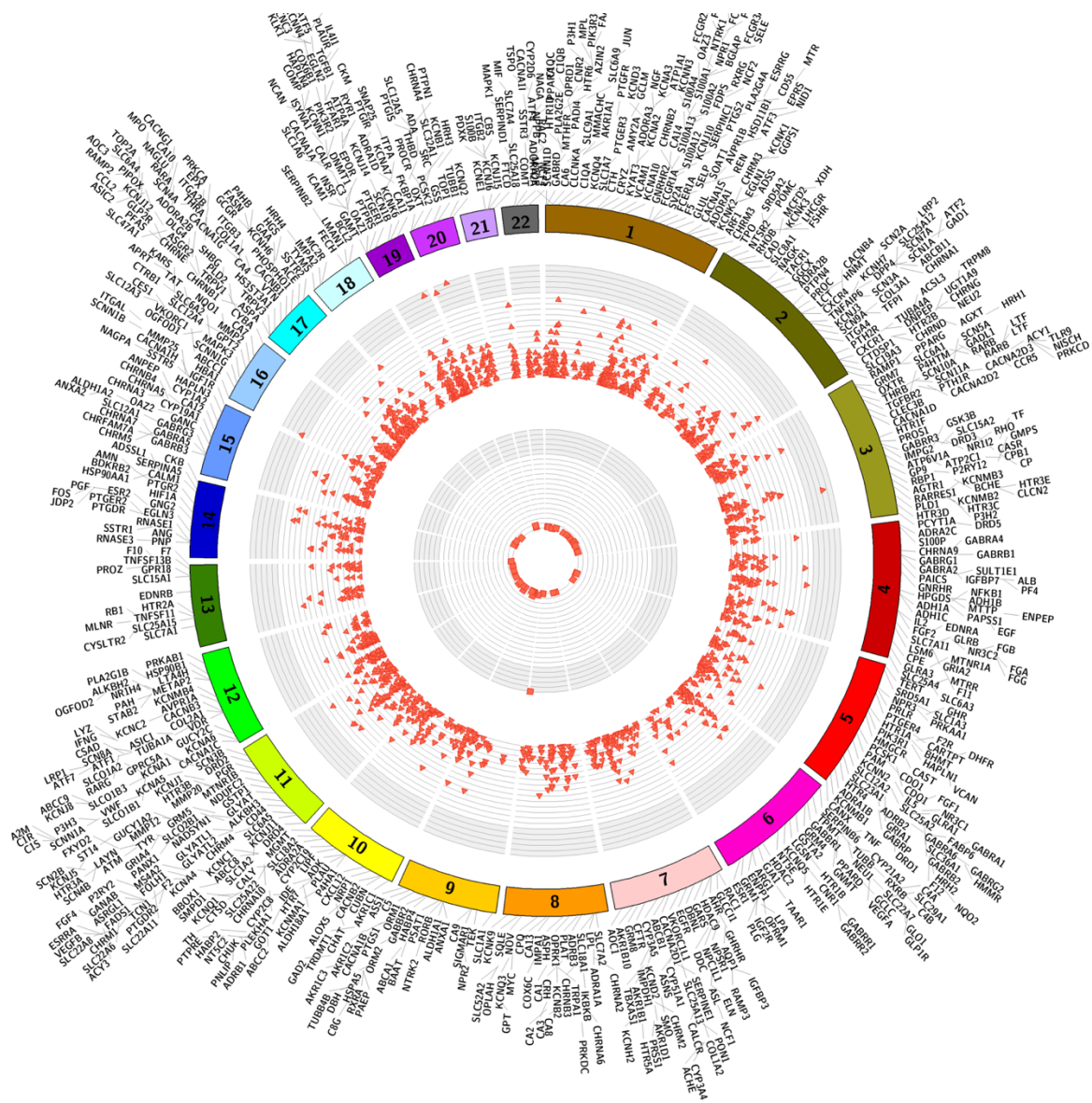
Supplementary Figure 1: Circos plot for Functional Filter 2 category



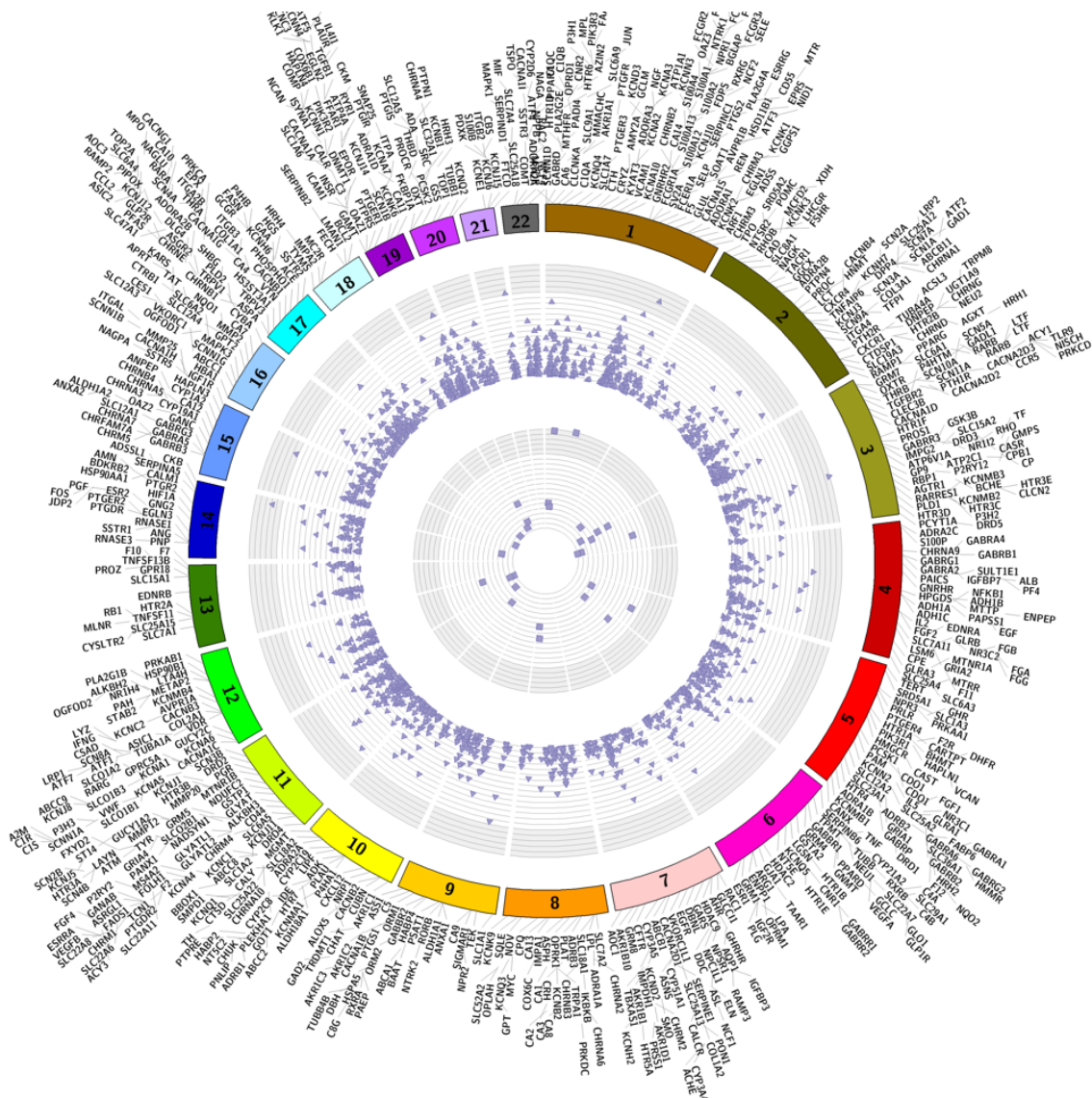
Supplementary Figure 2: Circos plot for Functional filter 3 category



Supplementary Figure 3: Circos plot for All variants category



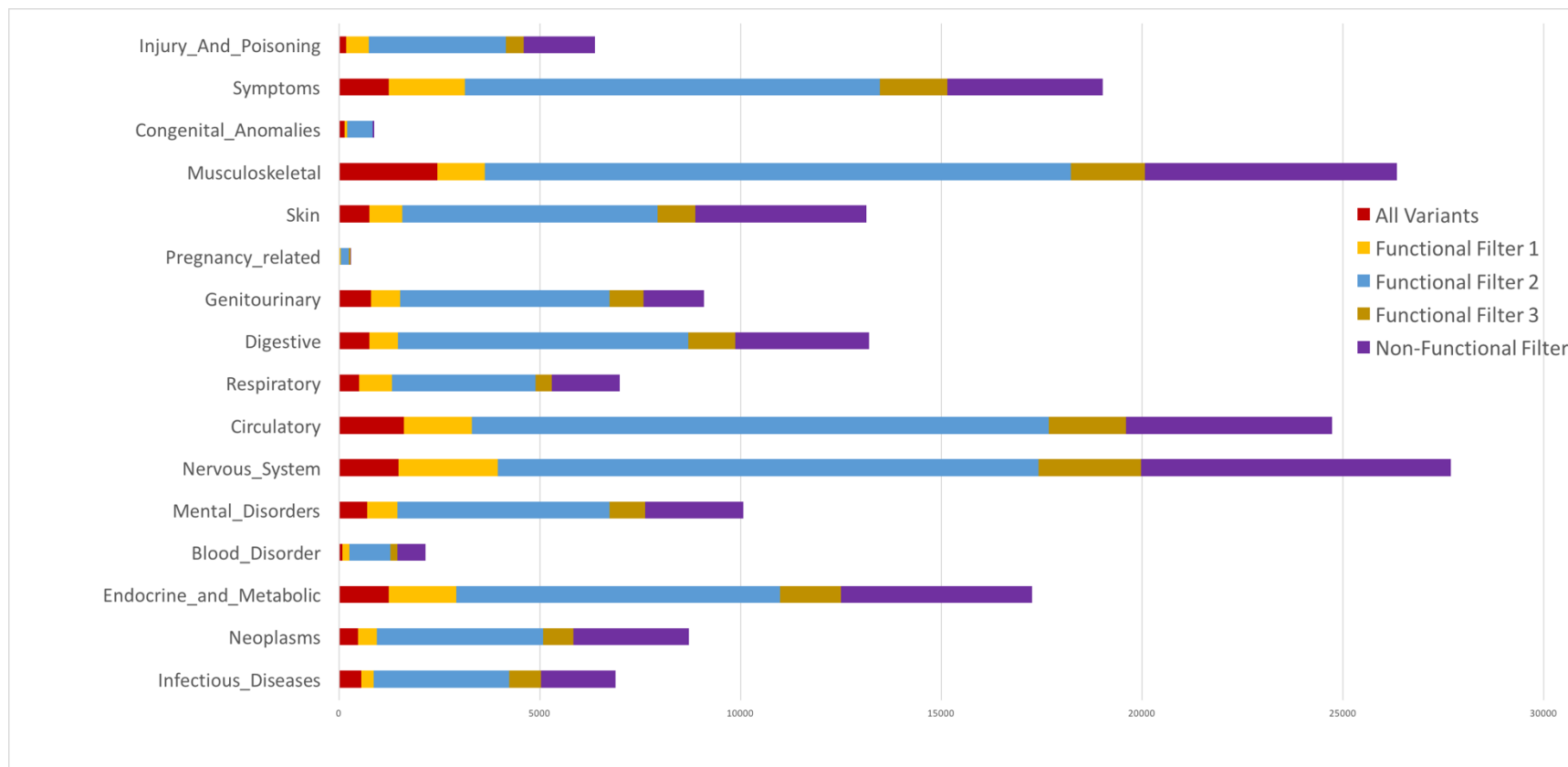
Supplementary Figure 4: Circos plot for Non-functional Filter category



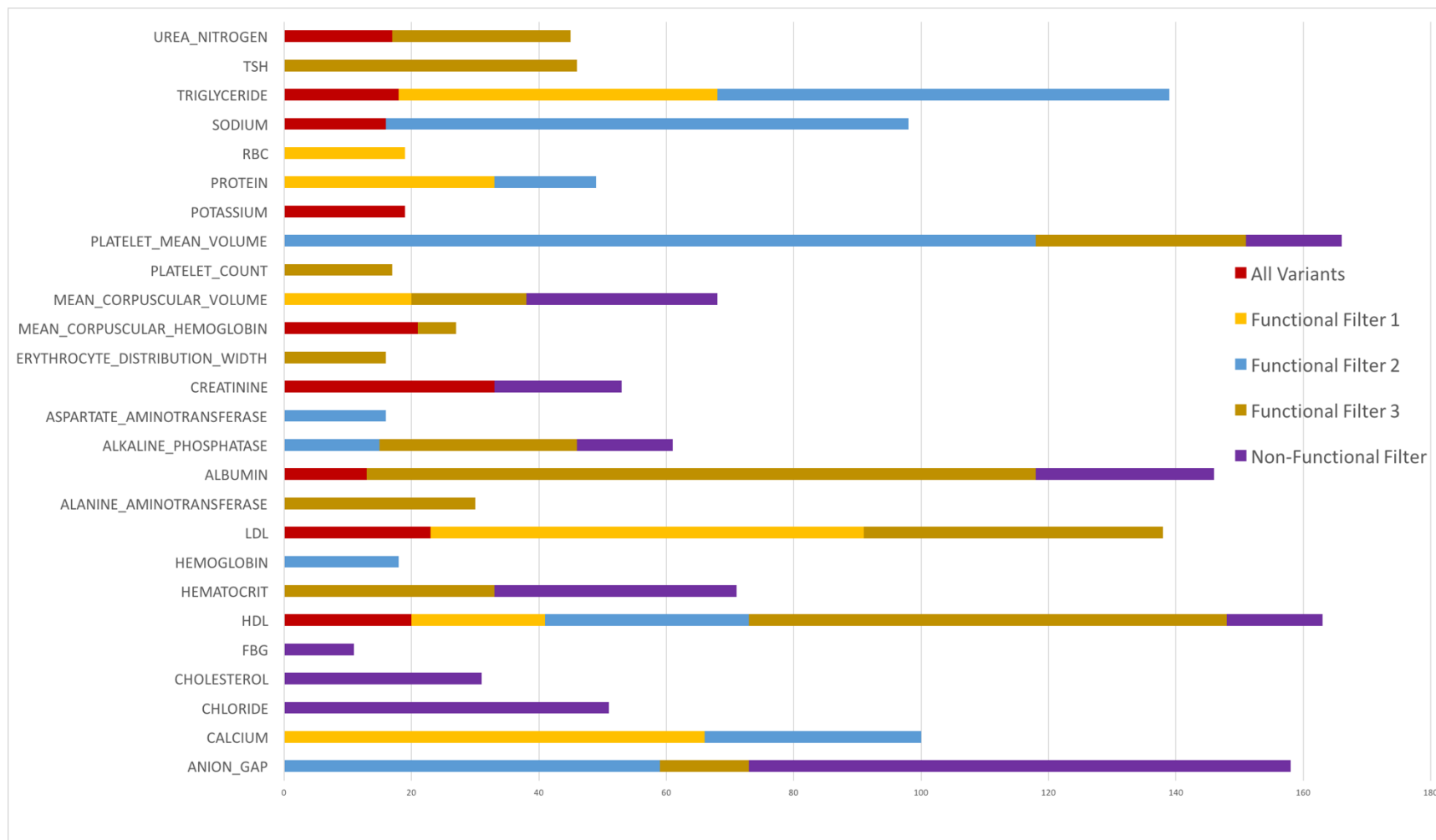
Supplementary Figure 5: Phenogram plot representing cross-phenotype associations from results with P-values < 1e-08. Shapes correspond to ICD-9 code description or Laboratory measurements for both results that are Bonferroni significant and P-value < 1e-04 significant



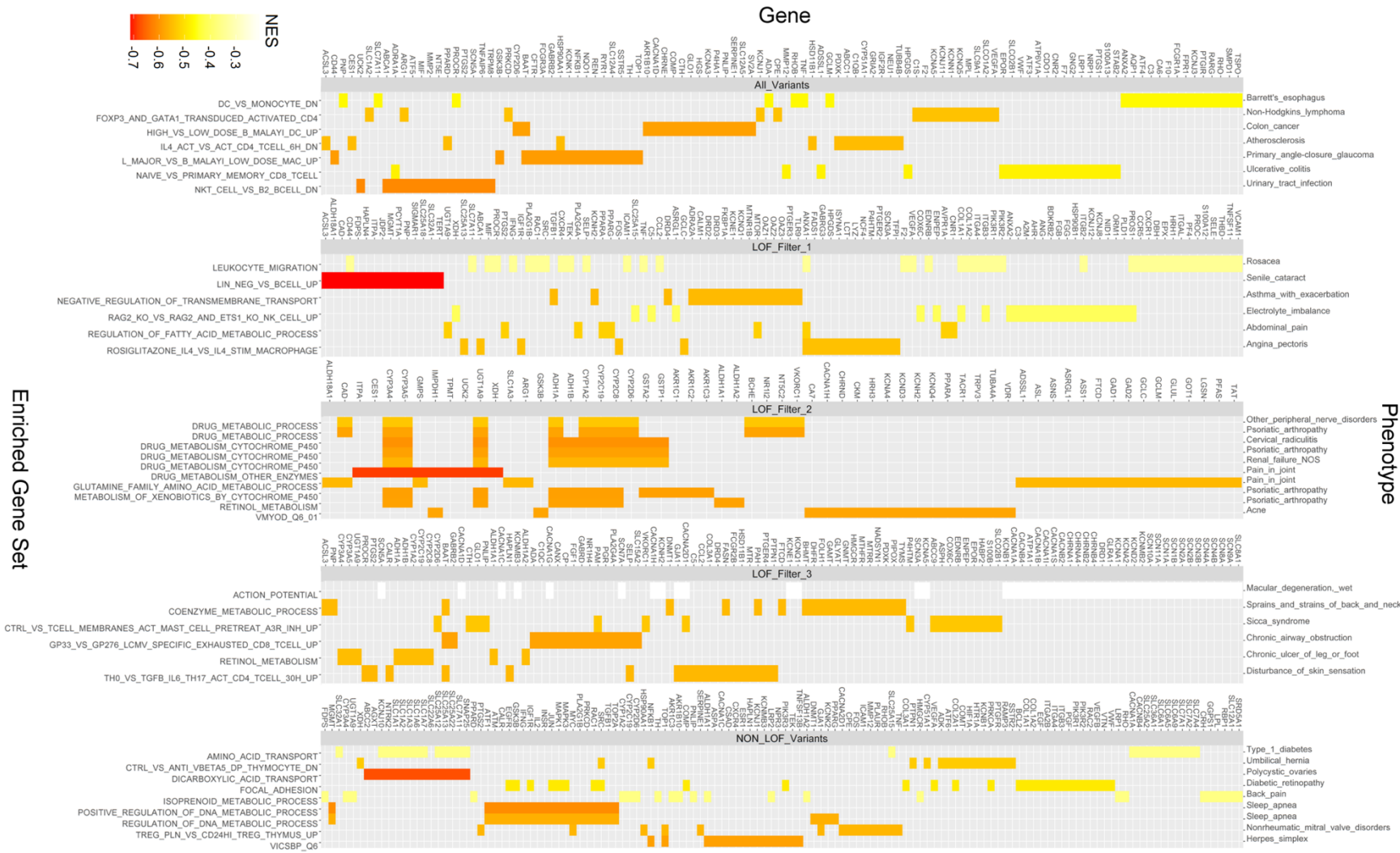
Supplementary Figure 6: Count of results below FDR q-value 0.25 from GSEA for ICD-9 codes



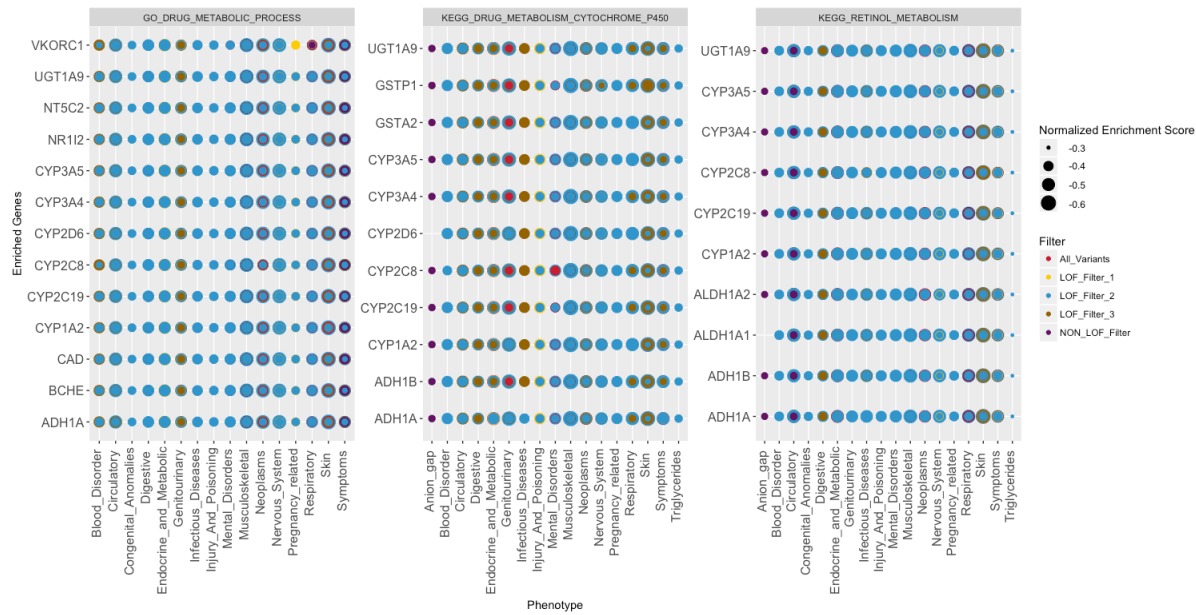
Supplementary Figure 7: Count of results below FDR q-value 0,25 from GSEA for Clinical laboratory measurements



Supplementary Figure 8: Heat map of GSEA results where FDR q-value=0. These results are separated by LOF filter category. X-axis is the gene name and Y-axis represent combination on Phenotype (on right) and Gene-set (On left). Gradient of color corresponds to the normalized enrichment score (NES).



Supplementary Figure 9: The top 3 enriched gene sets along with the genes that are found to be enriched in these pathways. The size of the points corresponds to the normalized enrichment score, and the color corresponds to the Filter type from the tests. X-axis labels are gene names and y-axis labels are clinical lab measures or ICD-9 phenotype categories)



Supplementary Table 1: Bonferroni Significant Results

Phenotype	Category	Gene	Num		Case		Case		Analysis	Beta	Pval	SE	Novel or Known	
			Cases	Num ols	Num Vars	Vars	Vars	Capacity						Control Capacity
Platelet Counts	Platelet Counts	<i>TUBB1</i>	0	35786	844	0	844	0	5648666	Filter 2	-34.1	7.85E-11	5.24	Known
Alanine AminoTransferase	Alanine AminoTrans ferase	<i>GPT</i>	0	34350	910	0	910	0	8808146	Filter 3	-0.72	3.29E-83	0.03	Known
Alanine AminoTransferase	Alanine AminoTrans ferase	<i>GPT</i>	0	34350	348	0	348	0	5343252	Filter 2	-0.84	3.29E-83	0.04	Known
Alanine AminoTransferase	Alanine AminoTrans ferase	<i>GPT</i>	0	34350	1697	0	1697	0	15643938	AllVar	-0.43	2.80E-78	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A1</i>	0	33769	502	0	502	0	7833072	Filter 1	0.29	4.61E-17	0.03	Known
Bilirubin	Bilirubin	<i>UGT1A1</i>	0	33769	378	0	378	0	7022704	Filter 3	0.3	1.42E-16	0.04	Known
HDL	HDL	<i>ABCA1</i>	0	29665	587	0	587	0	7528332	Filter 2	-0.18	3.81E-15	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A3</i>	0	33769	860	0	860	0	9048832	Filter 3	0.24	5.85E-15	0.03	Known
Bilirubin	Bilirubin	<i>UGT1A3</i>	0	33769	1142	0	1142	0	11547646	Filter 1	0.2	9.54E-14	0.03	Known
Bilirubin	Bilirubin	<i>UGT1A5</i>	0	33769	1843	0	1843	0	13100988	Filter 3	0.19	1.99E-13	0.03	Known
Bilirubin	Bilirubin	<i>UGT1A4</i>	0	33769	1313	0	1313	0	11345066	Filter 3	0.19	2.02E-12	0.03	Known
Bilirubin	Bilirubin	<i>UGT1A6</i>	0	33769	1972	0	1972	0	15734846	Filter 3	0.16	5.71E-12	0.02	Known

Bilirubin	Bilirubin	<i>UGT1A7</i>	0	33769	2284	0	2284	0	17558210	Filter 3	0.15	2.00E-11	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A5</i>	0	33769	2663	0	2663	0	18233706	Filter 1	0.13	1.37E-10	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A6</i>	0	33769	2871	0	2871	0	21745420	Filter 1	0.12	1.60E-10	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A10</i>	0	33769	2539	0	2539	0	19584322	Filter 3	0.13	8.15E-10	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A</i>	0	33769	2539	0	2539	0	19584322	Filter 3	0.13	8.15E-10	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A8</i>	0	33769	2539	0	2539	0	19584322	Filter 3	0.13	8.15E-10	0.02	Known
Bilirubin	Bilirubin	<i>UGT1A9</i>	0	33769	2539	0	2539	0	19584322	Filter 3	0.13	8.15E-10	0.02	Known
HDL	HDL	<i>ABCA1</i>	0	29665	1995	0	1995	0	19327520	Filter 3	-0.08	9.59E-10	0.01	Known
Hypercalcemia	Metabolic	<i>CASR</i>	252	37742	94	11	83	22136	3313030	Filter 2	3.89	1.34E-22	0.40	Known
Alcohol abuse, unspecified	Mental Disorders	<i>ADRA2B</i>	149	37775	78	4	74	2948	748612	Filter 2	4.59	3.88E-10	0.73	Known
Other specified erythematous conditions	Skin	<i>RBP1</i>	184	37318	207	7	200	14286	2898302	Filter 1	3.26	1.28E-09	0.54	Known
Other specified erythematous conditions	Skin	<i>RBP1</i>	184	37318	235	7	228	17176	3484988	AllVar	3.05	9.82E-09	0.53	Known
Hypercalcemia	Metabolic Endocrine and	<i>CASR</i>	252	37742	337	12	325	52322	7833962	Filter 3	2.34	1.32E-08	0.41	Known
Hypercalcemia	Metabolic	<i>CASR</i>	252	37742	633	17	616	61392	9192314	Filter 1	2.19	1.74E-08	0.39	Known

Tachycardia, unspecified	Symptoms	<i>KCNJ12</i>	226	36588	429	6	423	12158	1965614	Filter 2	3.37	2.98E-08	0.61	Known
Vitreous hemorrhage	Nervous System	<i>PF4</i>	210	38174	46	3	43	2520	458052	VarOnly	5.53	3.54E-08	1.00	Known
Lesion of ulnar nerve	Nervous System	<i>CACNB1</i>	188	37821	909	9	900	31878	6413544	Filter 1	2.63	5.61E-08	0.49	Known
Chronic pain syndrome	Nervous System	<i>SERPINA5</i>	217	37906	111	4	107	9970	1740536	Filter 2	3.51	5.80E-08	0.65	Known
Unspecified disorder of kidney and ureter	Genitourinary	<i>AKR1C3</i>	339	36914	343	10	333	18960	2064600	Filter 2	3.17	7.56E-08	0.59	Known
Postinflammatory pulmonary fibrosis	Respiratory	<i>AGTR1</i>	193	38077	531	8	523	20138	3943358	Filter 3	2.94	1.03E-07	0.55	Known
Ptosis of eyelid, unspecified	Nervous System	<i>S100B</i>	253	37877	39	3	36	9108	1363556	Filter 1	3.66	1.04E-07	0.69	Known
Attention deficit disorder with hyperactivity	Mental Disorders	<i>VEGFA</i>	178	38209	69	6	63	9098	1959638	Filter 2	2.7	1.08E-07	0.51	Known
WBC Counts	WBC Counts	<i>GLCCI1</i>	0	36587	82	0	82	0	2122688	Filter 2	-0.33	2.33E-13	0.04	Novel
Unspecified sinusitis (chronic)	Respiratory	<i>TACR1</i>	578	35475	267	15	252	77318	4746300	Filter 3	2.35	2.02E-10	0.37	Novel
Orthostatic hypotension	Circulatory	<i>GUCY1A2</i>	186	37300	437	9	428	29498	5921056	Filter 3	2.81	7.79E-10	0.46	Novel
Unspecified sinusitis (chronic)	Respiratory	<i>TACR1</i>	578	35475	275	15	260	83098	5100974	Filter 1	2.26	7.98E-10	0.37	Novel

Thoracic aneurysm without mention of rupture	Circulatory	<i>GSK3B</i>	223 38131	228	7	221 11596	1981910	VarOnly	3.89	1.08E-09	0.64	Novel
Adjustment disorder with anxiety	Mental Disorders	<i>NPR3</i>	206 37764	718	10	708 39226	7194718	Filter 3	2.45	1.21E-09	0.40	Novel
Other closed fractures of distal end of radius (alone)	Injury And Poisoning	<i>THBD</i>	183 38128	1269	13	1256 57000	11972710	AllVar	2.11	3.54E-09	0.36	Novel
Psoriatic arthropathy	Skin	<i>SSTR2</i>	172 38308	121	5	116 18904	4210310	Filter 3	2.91	3.78E-09	0.49	Novel
Proliferative diabetic retinopathy	Nervous System	<i>GSTA2</i>	243 38194	571	7	564 14580	2291582	Filter 1	3.54	3.81E-09	0.60	Novel
Chronic lymphocytic thyroiditis	Endocrine and Metabolic	<i>BGLAP</i>	222 38080	23	2	21 3988	681930	Filter 2	5.22	5.02E-09	0.89	Novel
Sacroiliitis, not elsewhere classified	Musculoskeletal	<i>KCNJ14</i>	708 36820	1763	45	1718 2E+05	9621778	AllVar	1.63	5.13E-09	0.28	Novel
Malignant neoplasm of upper lobe, bronchus or lung	Neoplasms	<i>REN</i>	144 38318	214	4	210 8912	2373662	VarOnly	3.63	5.17E-09	0.62	Novel

Abnormal glucose tolerance of mother, antepartum condition or complication	Pregnancy related	<i>PTGR2</i>	207 38106	141	5	136 11158	2054380	Filter 2	4.02	5.49E-09	0.69	Novel
Deviated nasal septum	Respiratory	<i>FKBP1A</i>	227 37572	22	3	19 4432	738012	AllVar	4.27	6.79E-09	0.74	Novel
Orthostatic hypotension	Circulatory	<i>GUCY1A2</i>	186 37300	553	10	543 36792	7386224	Filter 1	2.54	7.11E-09	0.44	Novel
Postlaminectomy syndrome, lumbar region	Musculoskeletal	<i>SERPINB2</i>	578 37622	755	23	732 97076	6317542	Filter 3	1.97	8.02E-09	0.34	Novel
Hyposmolality and/or hyponatremia	Endocrine and Metabolic	<i>COX6C</i>	239 36793	10	3	7 2384	367652	Filter 2	6.37	8.28E-09	1.10	Novel
Nonspecific abnormal results of function study of liver	Symptoms	<i>BDKRB2</i>	591 36386	253	17	236 46478	2856568	VarOnly	2.44	8.90E-09	0.42	Novel
Urgency of urination	Symptoms	<i>HTR1D</i>	178 37035	420	10	410 29138	6060614	Filter 1	2.73	9.65E-09	0.48	Novel
Panniculitis, unspecified site	Musculoskeletal	<i>ARVCF</i>	308 38015	238	8	230 28788	3552416	AllVar	2.92	1.02E-08	0.51	Novel
Psoriatic arthropathy	Skin	<i>SSTR2</i>	172 38308	136	5	131 21648	4820996	Filter 1	2.77	1.12E-08	0.49	Novel

Temporomandibular joint disorders, unspecified	Digestive	<i>PTGDR2</i>	218 37188	260	8	252 24316	4159712	Filter 3	2.84	1.36E-08	0.50	Novel
Other												
tenosynovitis of hand and wrist	Musculoskeletal	<i>CACNA1H</i>	164 36967	7377	47	7330 3E+05	58268070	Filter 1	1.35	1.50E-08	0.24	Novel
Sinoatrial node dysfunction	Circulatory	<i>LIPF</i>	268 38020	150	3	147 8558	1214432	Filter 2	3.96	1.56E-08	0.70	Novel
Other syndromes affecting cervical region	Musculoskeletal	<i>HTR3B</i>	149 38163	1152	12	1140 29198	7477184	Filter 1	2.27	1.77E-08	0.40	Novel
Lesion of ulnar nerve	Nervous System	<i>CACNB1</i>	188 37821	718	9	709 30000	6035500	Filter 3	2.71	1.79E-08	0.48	Novel
Ostium secundum type atrial septal defect	Congenital Anomalies	<i>HSD11B1</i>	164 38148	80	3	77 7216	1678092	Filter 3	3.69	1.89E-08	0.66	Novel
Proliferative diabetic retinopathy	Nervous System	<i>GSTA2</i>	243 38194	550	6	544 11178	1756900	Filter 3	3.7	1.92E-08	0.66	Novel
Sinoatrial node dysfunction	Circulatory	<i>CHRN4</i>	268 38020	637	16	621 20020	2824836	VarOnly	3.3	2.26E-08	0.59	Novel
Postinflammatory pulmonary fibrosis	Respiratory	<i>AGTR1</i>	193 38077	344	6	338 9922	1939538	Filter 2	3.45	2.28E-08	0.62	Novel

Degeneration of intervertebral disc, site unspecified	Musculoskeletal	<i>SCN7A</i>	178	38006	612	11	601	30914	6594694	Filter 2	2.56	2.45E-08	0.46	Novel
Bipolar disorder, unspecified	Mental Disorders	<i>PDXK</i>	427	37727	226	7	219	31392	2772698	VarOnly	2.82	2.47E-08	0.51	Novel
Varicose veins of lower extremities with ulcer	Circulatory	<i>TYMS</i>	159	38153	741	11	730	19148	4603708	Filter 1	2.79	2.49E-08	0.50	Novel
Chronic diastolic heart failure	Circulatory	<i>KCNJ14</i>	270	37673	884	16	868	18518	2592428	VarOnly	3.22	2.62E-08	0.58	Novel
Other tenosynovitis of hand and wrist	Musculoskeletal	<i>CACNA1H</i>	164	36967	12883	76	12807	4E+05	91080326	AllVar	1.15	3.69E-08	0.21	Novel
Endothelial corneal dystrophy	Nervous System	<i>NFKB1</i>	155	38251	323	7	316	30334	7491708	Filter 3	2.71	3.73E-08	0.49	Novel
Closed fracture of metatarsal bone(s)	Injury And Poisoning	<i>NPR2</i>	147	38119	322	8	314	18736	4858588	VarOnly	2.99	4.24E-08	0.55	Novel
Bunion	Musculoskeletal	<i>DBH-AS1</i>	155	37559	301	4	297	3948	954562	Filter 2	4.52	4.46E-08	0.83	Novel

Cerebral artery occlusion, unspecified with cerebral infarction	Circulatory	<i>GNRHR</i>	325 37467	511	11	500 8878	1022112	Filter 2	3.76	4.85E-08	0.69	Novel
Chronic obstructive asthma, unspecified	Respiratory	<i>PTGS2</i>	183 37841	164	5	159 15720	3253268	VarOnly	3.1	4.91E-08	0.57	Novel
Alcohol abuse, unspecified	Mental Disorders	<i>DNMT1</i>	149 37775	113	4	109 12206	3092700	Filter 2	3.1	5.88E-08	0.57	Novel
Unspecified pleural effusion	Respiratory	<i>GHR</i>	294 37163	932	17	915 52316	6613700	Filter 3	2.23	6.01E-08	0.41	Novel
Acute maxillary sinusitis	Respiratory	<i>TFPI</i>	159 37059	11	2	9 2844	662252	Filter 2	4.4	6.44E-08	0.81	Novel
Sensorineural hearing loss, unspecified	Nervous System	<i>FOS</i>	899 35965	467	21	446 36530	1464190	Filter 2	3.03	6.73E-08	0.56	Novel
Degeneration of intervertebral disc, site unspecified	Musculoskeletal	<i>KCNJ11</i>	178 38006	470	8	462 21966	4699252	VarOnly	2.68	7.09E-08	0.50	Novel
Dehydration	Metabolic	<i>SLC22A6</i>	162 36308	650	7	643 39032	8742788	Filter 1	2.53	7.24E-08	0.47	Novel
Deviated nasal septum	Respiratory	<i>ANPEP</i>	227 37572	365	8	357 26864	4445828	Filter 2	2.77	7.79E-08	0.52	Novel

Solitary pulmonary nodule	Symptoms	<i>CACNA2D</i> <i>3-AS1</i>	201	37675	31	3	28	5224	979330	VarOnly	3.91	7.93E-08	0.73	Novel
Ocular hypertension	Nervous System	<i>ADH1C</i>	446	37452	1453	25	1428	46384	3894932	VarOnly	2.49	7.98E-08	0.46	Novel
Cellulitis and abscess of foot, except toes	Skin	<i>ACSL3</i>	209	37324	1192	19	1173	20026	3576910	VarOnly	2.99	8.23E-08	0.56	Novel
Osteoarthritis, generalized, site unspecified	Musculoskeletal	<i>RARA</i>	2813	32960	350	47	303	5E+05	5508298	Filter 3	1.5	8.69E-08	0.28	Novel
Unspecified episodic mood disorder	Mental Disorders	<i>SELP</i>	235	37548	239	6	233	25844	4129570	Filter 2	2.78	9.80E-08	0.52	Novel
Difficulty in walking	Musculoskeletal	<i>CA3</i>	196	37992	62	4	58	10174	1972856	Filter 2	3.54	9.98E-08	0.67	Novel
Atherosclerosis of native arteries of the extremities, unspecified	Circulatory	<i>GABBR2</i>	305	37502	38	4	34	13022	1608186	Filter 2	3.31	1.03E-07	0.62	Novel
Pain in thoracic spine	Musculoskeletal	<i>NPPB</i>	148	37332	701	9	692	2068	522400	VarOnly	5.13	1.04E-07	0.96	Novel

Migraine,
unspecified,
without
mention of
intractable
migraine
without
mention of
status
migrainosus
Adjustment
disorder with
anxiety

Nervous System	<i>NR1/2</i>	1395	35151	961	56	905	1E+05	2948762	VarOnly	2.09	1.04E-07	0.39	Novel
Mental Disorders	<i>NPR3</i>	206	37764	820	10	810	52404	9610368	Filter 1	2.15	1.08E-07	0.41	Novel

Supplementary Table 2: Genes and their positions

Gene	Chr	startpos	endpos
<i>A2M</i>	12	9220304	9268558
<i>ABCA1</i>	9	107543283	107690527
<i>ABCB1</i>	7	87133179	87342639
<i>ABCB11</i>	2	169779312	169891400
<i>ABCC1</i>	16	16043434	16236931
<i>ABCC2</i>	10	101542355	101612333
<i>ABCC8</i>	11	17414432	17498392
<i>ABCC9</i>	12	21950323	22094797
<i>ACE</i>	17	61554422	61575741
<i>ACHE</i>	7	100487615	100494306
<i>ACSL3</i>	2	223725702	223808119
<i>ACY1</i>	3	52017300	52023218
<i>ACY3</i>	11	67410026	67418278
<i>ADA</i>	20	43248163	43280874
<i>ADH1A</i>	4	100197523	100212185
<i>ADH1B</i>	4	100227544	100242599
<i>ADH1C</i>	4	100257649	100274202
<i>ADK</i>	10	75910943	76469061
<i>ADORA1</i>	1	203096833	203136533
<i>ADORA2A</i>	22	24819565	24838328
<i>ADORA2B</i>	17	15831097	15879210
<i>ADORA3</i>	1	112042051	112046743
<i>ADRA1A</i>	8	26600364	26728525
<i>ADRA1B</i>	5	159343740	159413185
<i>ADRA1D</i>	20	4201278	4229659
<i>ADRA2A</i>	10	112836790	112840665
<i>ADRA2B</i>	2	96778623	96781984
<i>ADRA2C</i>	4	3768296	3770253
<i>ADRB1</i>	10	115803806	115806667
<i>ADRB2</i>	5	148206156	148208197
<i>ADRB3</i>	8	37820513	37824184
<i>ADSS</i>	1	244571794	244615436
<i>ADSSL1</i>	14	105190534	105213662
<i>AGTR1</i>	3	148415658	148460790
<i>AGXT</i>	2	241808162	241818536
<i>AHR</i>	7	17338276	17385775
<i>AKR1A1</i>	1	46016455	46035723
<i>AKR1B1</i>	7	134127103	134143888
<i>AKR1B10</i>	7	134212344	134226166
<i>AKR1C1</i>	10	5005454	5020158

<i>AKR1C2</i>	10	5029967	5060225
<i>AKR1C3</i>	10	5090958	5149878
<i>AKR1D1</i>	7	137761178	137803050
<i>ALB</i>	4	74269972	74287129
<i>ALDH18A1</i>	10	97365686	97416567
<i>ALDH1A1</i>	9	75515578	75568233
<i>ALDH1A2</i>	15	58245622	58358121
<i>ALKBH2</i>	12	109525993	109531436
<i>ALKBH3</i>	11	43902357	43941825
<i>ALOX5</i>	10	45869624	45941569
<i>AMN</i>	14	103388885	103397184
<i>AMY2A</i>	1	104159954	104168402
<i>ANG</i>	14	21152336	21162345
<i>ANPEP</i>	15	90328126	90358086
<i>ANXA1</i>	9	75766647	75785309
<i>ANXA2</i>	15	60639350	60690185
<i>AOC3</i>	17	41003140	41010147
<i>APRT</i>	16	88875877	88878342
<i>AQP1</i>	7	30951415	30965131
<i>ARF1</i>	1	228270361	228286913
<i>ARG1</i>	6	131894343	131905472
<i>ASGR2</i>	17	7004641	7018841
<i>ASL</i>	7	65540776	65558330
<i>ASNS</i>	7	97481429	97501854
<i>ASPA</i>	17	3377404	3402700
<i>ASPH</i>	8	62413115	62627199
<i>ASRGL1</i>	11	62104774	62168850
<i>ASS1</i>	9	133320094	133376661
<i>ATF1</i>	12	51157493	51214950
<i>ATF2</i>	2	175936978	176032934
<i>ATF3</i>	1	212738676	212794119
<i>ATF4</i>	22	39916564	39918691
<i>ATF5</i>	19	50431959	50437193
<i>ATF6</i>	1	161736034	161933860
<i>ATF7</i>	12	53901640	54020199
<i>ATM</i>	11	108093227	108239829
<i>ATP1A1</i>	1	116914807	116947396
<i>ATP2C1</i>	3	130569327	130735556
<i>ATP4A</i>	19	36041095	36054560
<i>ATP6V1A</i>	3	113465866	113530905
<i>AVPR1A</i>	12	63536067	63547640
<i>AVPR1B</i>	1	206224283	206231482

<i>BAAT</i>	9	104122699	104147287
<i>BBOX1</i>	11	27062252	27149354
<i>BCHE</i>	3	165490692	165555260
<i>BCL2</i>	18	60790579	60987011
<i>BDKRB2</i>	14	96671135	96710666
<i>BGLAP</i>	1	156211951	156213123
<i>BHMT</i>	5	78407604	78428113
<i>C1QA</i>	1	22963118	22966175
<i>C1QB</i>	1	22979672	22988045
<i>C1QC</i>	1	22970118	22974603
<i>C1R</i>	12	7187513	7189412
<i>C1S</i>	12	7167980	7178336
<i>C3</i>	19	6677846	6720693
<i>C4A</i>	6	31949834	31970457
<i>C4B</i>	6	31982572	32003195
<i>C5</i>	9	123714613	123837203
<i>C8G</i>	9	139839327	139841426
<i>CA1</i>	8	86240458	86290383
<i>CA10</i>	17	49707674	50237377
<i>CA11</i>	19	49141272	49149451
<i>CA12</i>	15	63615730	63674309
<i>CA13</i>	8	86157716	86196302
<i>CA14</i>	1	150229554	150237478
<i>CA2</i>	8	86376131	86393721
<i>CA3</i>	8	86351056	86361269
<i>CA4</i>	17	58227302	58236907
<i>CA6</i>	1	9005844	9035151
<i>CA7</i>	16	66878282	66888052
<i>CA8</i>	8	61099906	61193954
<i>CA9</i>	9	35673915	35681156
<i>CACNA1A</i>	19	13317256	13617274
<i>CACNA1B</i>	9	140772241	141019076
<i>CACNA1C</i>	12	2079952	2807115
<i>CACNA1D</i>	3	53529003	53847178
<i>CACNA1G</i>	17	48638429	48706986
<i>CACNA1H</i>	16	1203241	1271772
<i>CACNA1I</i>	22	39953974	40085744
<i>CACNA1S</i>	1	201008635	201081694
<i>CACNA2D1</i>	7	81575760	82073122
<i>CACNA2D2</i>	3	50400044	50541675
<i>CACNA2D3</i>	3	54156620	55108584
<i>CACNB1</i>	17	37329709	37353956

<i>CACNB2</i>	10	18429606	18830688
<i>CACNB3</i>	12	49208215	49222726
<i>CACNB4</i>	2	152689285	152956502
<i>CACNG1</i>	17	65040652	65052913
<i>CAD</i>	2	27440258	27466660
<i>CALCR</i>	7	93053799	93204042
<i>CALM1</i>	14	90863327	90874619
<i>CALR</i>	19	13049414	13055304
<i>CALY</i>	10	135137576	135150475
<i>CANX</i>	5	179105647	179158642
<i>CARTPT</i>	5	71014990	71016875
<i>CASR</i>	3	121902514	122005350
<i>CAST</i>	5	95997741	96110387
<i>CBS</i>	21	44473301	44496978
<i>CCL2</i>	17	32582296	32584222
<i>CCR5</i>	3	46411633	46417697
<i>CD44</i>	11	35160417	35253949
<i>CD55</i>	1	207494817	207534311
<i>CDO1</i>	5	115140430	115152651
<i>CDO1</i>	5	115149317	115151808
<i>CES1</i>	16	55836763	55867098
<i>CFTR</i>	7	117118394	117308719
<i>CHAT</i>	10	50817141	50873150
<i>CHRFAM7A</i>	15	30649973	30686052
<i>CHRM1</i>	11	62676151	62689333
<i>CHRM2</i>	7	136553399	136705002
<i>CHRM3</i>	1	239549818	239550527
<i>CHRM3</i>	1	239549865	240074762
<i>CHRM4</i>	11	46406342	46408158
<i>CHRM5</i>	15	34260446	34357295
<i>CHRNA1</i>	2	175612320	175629200
<i>CHRNA10</i>	11	3686817	3694438
<i>CHRNA2</i>	8	27317278	27336813
<i>CHRNA3</i>	15	78885394	78913637
<i>CHRNA4</i>	20	61974662	61992748
<i>CHRNA5</i>	15	78857862	78887611
<i>CHRNA6</i>	8	42607763	42623929
<i>CHRNA7</i>	15	32322686	32464722
<i>CHRNA9</i>	4	40337346	40357234
<i>CHRNB1</i>	17	7348406	7360932
<i>CHRNB2</i>	1	154540257	154552354
<i>CHRNB3</i>	8	42552562	42592550

<i>CHRNBA</i>	15	78915639	78947928
<i>CHRND</i>	2	233390870	233401375
<i>CHRNE</i>	17	4801064	4806423
<i>CHRNG</i>	2	233404437	233411038
<i>CHUK</i>	10	101945870	101989367
<i>CKB</i>	14	103985995	103989196
<i>CKM</i>	19	45809671	45826235
<i>CLCN2</i>	3	184063973	184079439
<i>CLCNKA</i>	1	16348486	16360545
<i>CLEC3B</i>	3	45067759	45077563
<i>CNR1</i>	6	88849583	88876464
<i>CNR2</i>	1	24199953	24239817
<i>COL1A1</i>	17	48261457	48279009
<i>COL1A2</i>	7	94023873	94060544
<i>COL2A1</i>	12	48366748	48419069
<i>COL3A1</i>	2	189839099	189877472
<i>COMP</i>	19	18893583	18902114
<i>COMT</i>	22	19929263	19957498
<i>COX6B1</i>	19	36139125	36149686
<i>COX6C</i>	8	100890223	100906242
<i>CP</i>	3	148880197	148939837
<i>CPB1</i>	3	148508967	148577979
<i>CPE</i>	4	166300097	166419482
<i>CRH</i>	8	67088612	67090846
<i>CRYZ</i>	1	75171166	75199092
<i>CSAD</i>	12	53551447	53574693
<i>CTDSP1</i>	2	219263061	219270664
<i>CTH</i>	1	70876901	70905797
<i>CTRB1</i>	16	75252884	75258822
<i>CTSD</i>	11	1773982	1785222
<i>CUBN</i>	10	16865965	17172248
<i>CXCL12</i>	10	44865601	44880545
<i>CXCR1</i>	2	219027568	219031716
<i>CXCR4</i>	2	136871919	136875725
<i>CYBA</i>	16	88709697	88717493
<i>CYP19A1</i>	15	51500254	51630795
<i>CYP1A2</i>	15	75041184	75048941
<i>CYP21A2</i>	6	32006093	32009447
<i>CYP2C19</i>	10	96522438	96612962
<i>CYP2C8</i>	10	96796529	96829255
<i>CYP2D6</i>	22	42521661	42531387
<i>CYP3A4</i>	7	99354583	99381811

<i>CYP3A5</i>	7	99245812	99277649
<i>CYP51A1</i>	7	91741463	91764059
<i>CYSLTR2</i>	13	49280951	49283498
<i>DBH</i>	9	136501485	136524466
<i>DDC</i>	7	50526134	50633154
<i>DHFR</i>	5	79922045	79950800
<i>DLG4</i>	17	7093209	7123369
<i>DNMT1</i>	19	10244021	10305755
<i>DNPEP</i>	2	220238180	220264739
<i>DPP4</i>	2	162848751	162931052
<i>DRD1</i>	5	174867675	174871163
<i>DRD2</i>	11	113280317	113346001
<i>DRD3</i>	3	113846644	113918254
<i>DRD4</i>	11	637305	640706
<i>DRD5</i>	4	9783258	9785633
<i>EDNRA</i>	4	148402069	148466106
<i>EDNRB</i>	13	78469616	78549664
<i>EGF</i>	4	110834039	110934118
<i>EGFR</i>	7	55086725	55275031
<i>EGLN1</i>	1	231499497	231560790
<i>EGLN2</i>	19	41305048	41314346
<i>EGLN3</i>	14	34393421	34420289
<i>ELN</i>	7	73442102	73484237
<i>ENPEP</i>	4	111397229	111484493
<i>ENPP1</i>	6	132129156	132216295
<i>EPOR</i>	19	11487881	11495018
<i>EPRS</i>	1	220141942	220220000
<i>EPX</i>	17	56270089	56282535
<i>ESR1</i>	6	152011631	152424409
<i>ESR2</i>	14	64639643	64805268
<i>ESRRA</i>	11	64073000	64084215
<i>ESRRG</i>	1	216676588	217311097
<i>F10</i>	13	113777113	113803843
<i>F11</i>	4	187187099	187210835
<i>F12</i>	5	176829139	176843525
<i>F2</i>	11	46740742	46761056
<i>F2R</i>	5	76011868	76031595
<i>F5</i>	1	169481192	169555769
<i>F7</i>	13	113760102	113774995
<i>FAAH</i>	1	46859939	46879520
<i>FABP6</i>	5	159614374	159665729
<i>FADS1</i>	11	61567097	61584529

<i>FASN</i>	17	80036214	80056165
<i>FCER1A</i>	1	159253678	159278014
<i>FCGR1A</i>	1	149752831	149764074
<i>FCGR2A</i>	1	161475205	161493838
<i>FCGR2B</i>	1	161632905	161648444
<i>FCGR2C</i>	1	161551129	161571010
<i>FCGR3A</i>	1	161511549	161520413
<i>FCGR3B</i>	1	161592986	161601753
<i>FDPS</i>	1	155278539	155290457
<i>FFAR1</i>	19	35842445	35843367
<i>FGA</i>	4	155504280	155511897
<i>FGB</i>	4	155484132	155493915
<i>FGF1</i>	5	141971743	142077635
<i>FGF2</i>	4	123747863	123819390
<i>FGF4</i>	11	69573811	69590171
<i>FGG</i>	4	155525286	155533902
<i>FKBP1A</i>	20	1349621	1373816
<i>FOLH1</i>	11	49168187	49230222
<i>FOS</i>	14	75745481	75748937
<i>FPR1</i>	19	52249023	52255150
<i>FSHR</i>	2	49093574	49381666
<i>FTCD</i>	21	47556065	47575770
<i>FXD2</i>	11	117690790	117698807
<i>GAA</i>	17	78075330	78093680
<i>GABBR1</i>	6	29570005	29600962
<i>GABBR2</i>	9	101050364	101471479
<i>GABRA1</i>	5	161274197	161326965
<i>GABRA2</i>	4	46245565	46392056
<i>GABRA4</i>	4	46920917	46996424
<i>GABRA5</i>	15	27111866	27194357
<i>GABRA6</i>	5	161112658	161129598
<i>GABRB1</i>	4	46995875	47429360
<i>GABRB2</i>	5	160715426	160975130
<i>GABRB3</i>	15	26788693	27018935
<i>GABRD</i>	1	1950768	1962192
<i>GABRG1</i>	4	46037786	46126082
<i>GABRG2</i>	5	161494648	161582545
<i>GABRG3</i>	15	27216429	27779041
<i>GABRP</i>	5	170199570	170241051
<i>GABRR1</i>	6	89887223	89941007
<i>GABRR2</i>	6	89965780	90025018
<i>GABRR3</i>	3	97705527	97754148

<i>GAD1</i>	2	171669720	171717661
<i>GAD2</i>	10	26505236	26593491
<i>GAMT</i>	19	1397025	1401569
<i>GANAB</i>	11	62392298	62414198
<i>GANC</i>	15	42565856	42645864
<i>GARS</i>	7	30634181	30673649
<i>GCGR</i>	17	79762008	79771889
<i>GCLC</i>	6	53362139	53409927
<i>GCLM</i>	1	94350761	94375154
<i>GGCX</i>	2	85771978	85788657
<i>GGPS1</i>	1	235491753	235507847
<i>GHR</i>	5	42423877	42721980
<i>GHRHR</i>	7	31003636	31019146
<i>GJA1</i>	6	121756723	121770890
<i>GLO1</i>	6	38643701	38670952
<i>GLP1R</i>	6	39016557	39059079
<i>GLP2R</i>	17	9728860	9795421
<i>GLRA1</i>	5	151202074	151304427
<i>GLRA3</i>	4	175545292	175750466
<i>GLRB</i>	4	157997277	158093251
<i>GLUL</i>	1	182347228	182361341
<i>GLYAT</i>	11	58476230	58499447
<i>GLYATL1</i>	11	58695102	58724547
<i>GLYATL2</i>	11	58601538	58612281
<i>GMPS</i>	3	155587219	155657397
<i>GNG2</i>	14	52313849	52436518
<i>GNMT</i>	6	42907153	42931618
<i>GNRHR</i>	4	68603093	68621804
<i>GNRHR2</i>	1	145509752	145516076
<i>GP9</i>	3	128774292	128781254
<i>GPR18</i>	13	99906967	99914702
<i>GPRC5A</i>	12	13043956	13066600
<i>GPT</i>	8	145727604	145732557
<i>GPT2</i>	16	46918308	46965201
<i>GRIA1</i>	5	152869256	153193433
<i>GRIA2</i>	4	158141736	158287227
<i>GRIA4</i>	11	105480721	105852819
<i>GRM1</i>	6	146285905	146758734
<i>GRM4</i>	6	33986420	34123399
<i>GRM5</i>	11	88237744	88799129
<i>GRM7</i>	3	6902784	7783218
<i>GRM8</i>	7	126078652	126893348

<i>GSK3B</i>	3	119540168	119813264
<i>GSS</i>	20	33516236	33543795
<i>GSTA2</i>	6	52614885	52628361
<i>GSTP1</i>	11	67351066	67354124
<i>GUCY1A2</i>	11	106544738	106889171
<i>GUCY2C</i>	12	14765566	14849552
<i>HABP2</i>	10	115310590	115349361
<i>HABP4</i>	9	99212437	99253618
<i>HAPLN1</i>	5	82934017	83016896
<i>HAPLN3</i>	15	89420519	89438857
<i>HAPLN4</i>	19	19366450	19373596
<i>HBA1</i>	16	226650	227521
<i>HDAC2</i>	6	114257320	114292359
<i>HDAC9</i>	7	18126565	19039144
<i>HGS</i>	17	79650962	79669151
<i>HIF1A</i>	14	62162119	62214977
<i>HMGCR</i>	5	74632159	74657926
<i>HMMR</i>	5	162887517	162918951
<i>HNMT</i>	2	138721808	138773934
<i>HPGDS</i>	4	95219707	95264027
<i>HRH1</i>	3	11178779	11304939
<i>HRH2</i>	5	175084799	175137759
<i>HRH3</i>	20	60789822	60795334
<i>HRH4</i>	18	22040532	22067391
<i>HS3ST3A1</i>	17	13397349	13505291
<i>HSD11B1</i>	1	209859525	209908295
<i>HSP90AA1</i>	14	102547075	102606096
<i>HSP90B1</i>	12	104324112	104341708
<i>HSPA5</i>	9	127997127	128003666
<i>HTR1A</i>	5	63255875	63258119
<i>HTR1B</i>	6	78171948	78173120
<i>HTR1D</i>	1	23518388	23521222
<i>HTR1E</i>	6	87647024	87726397
<i>HTR1F</i>	3	87841917	88044006
<i>HTR2A</i>	13	47405677	47471211
<i>HTR2B</i>	2	231972944	231990492
<i>HTR3A</i>	11	113845797	113861035
<i>HTR3B</i>	11	113769645	113817283
<i>HTR3C</i>	3	183770835	183778461
<i>HTR3D</i>	3	183749332	183757157
<i>HTR3E</i>	3	183814852	183824783
<i>HTR4</i>	5	147830595	148034090

<i>HTR5A</i>	7	154862034	154879102
<i>HTR6</i>	1	19991780	20007459
<i>HTR7</i>	10	92500575	92617671
<i>ICAM1</i>	19	10381517	10397291
<i>IDE</i>	10	94211441	94333852
<i>IFNG</i>	12	68548550	68553521
<i>IGF1R</i>	15	99191768	99507759
<i>IGF2R</i>	6	160390131	160527583
<i>IGFBP3</i>	7	45951844	45960871
<i>IGFBP7</i>	4	57897237	57976551
<i>IKKBK</i>	8	42128820	42190171
<i>IL2</i>	4	123372625	123377650
<i>IL4I1</i>	19	50392911	50432796
<i>IL5</i>	5	131877136	131892582
<i>IMPA1</i>	8	82569151	82598589
<i>IMPA2</i>	18	11981427	12030885
<i>IMPDH1</i>	7	128032331	128050041
<i>IMPG2</i>	3	100941390	101039419
<i>INSR</i>	19	7112266	7294011
<i>ISYNA1</i>	19	18545198	18549111
<i>ITGA2B</i>	17	42449549	42466873
<i>ITGA4</i>	2	182321619	182402474
<i>ITGAL</i>	16	30483983	30534506
<i>ITGB2</i>	21	46305864	46348788
<i>ITGB3</i>	17	45331208	45390077
<i>ITPA</i>	20	3189514	3208095
<i>JDP2</i>	14	75894509	75939404
<i>JUN</i>	1	59246463	59249785
<i>KARS</i>	16	75661622	75681585
<i>KCNA1</i>	12	5019073	5027422
<i>KCNA10</i>	1	111059839	111061797
<i>KCNA2</i>	1	111136202	111174136
<i>KCNA3</i>	1	111196182	111217655
<i>KCNA4</i>	11	30031288	30038577
<i>KCNA5</i>	12	5153085	5155954
<i>KCNA6</i>	12	4916051	4960280
<i>KCNA7</i>	19	49570675	49576198
<i>KCNB1</i>	20	47980414	48100579
<i>KCNB2</i>	8	73449626	73850584
<i>KCNC1</i>	11	17757457	17885835
<i>KCNC2</i>	12	75433858	75603528
<i>KCNC3</i>	19	50815199	50836772

<i>KCND2</i>	7	119913695	120390387
<i>KCND3</i>	1	112318444	112532198
<i>KCNE1</i>	21	35791013	35884573
<i>KCNH2</i>	7	150642044	150675402
<i>KCNH6</i>	17	61600695	61626338
<i>KCNH7</i>	2	163227917	163695257
<i>KCNJ1</i>	11	128707909	128737268
<i>KCNJ10</i>	1	160007257	160040051
<i>KCNJ11</i>	11	17386371	17410878
<i>KCNJ12</i>	17	21279699	21323184
<i>KCNJ14</i>	19	48958964	48969367
<i>KCNJ15</i>	21	39601837	39675048
<i>KCNJ3</i>	2	155555093	155714864
<i>KCNJ5</i>	11	128761313	128791058
<i>KCNJ6</i>	21	38989784	39292034
<i>KCNJ8</i>	12	21917889	21928436
<i>KCNK1</i>	1	233749750	233808258
<i>KCNK2</i>	1	215175982	215410436
<i>KCNK3</i>	2	26915581	26954066
<i>KCNK6</i>	19	38810454	38819654
<i>KCNK9</i>	8	140613081	140715311
<i>KCNMA1</i>	10	78629359	79397577
<i>KCNMB1</i>	5	169805165	169816681
<i>KCNMB2</i>	3	178254086	178562217
<i>KCNMB3</i>	3	178957537	178984838
<i>KCNMB4</i>	12	70760003	70828072
<i>KCNN1</i>	19	18062111	18109930
<i>KCNN2</i>	5	113391703	113832197
<i>KCNN3</i>	1	154669938	154842754
<i>KCNN4</i>	19	44270685	44286291
<i>KCNQ1</i>	11	2466221	2870340
<i>KCNQ2</i>	20	62031561	62103993
<i>KCNQ3</i>	8	133133105	133493004
<i>KCNQ4</i>	1	41249684	41306124
<i>KCNQ5</i>	6	73331008	73908574
<i>KLK1</i>	19	51322402	51327043
<i>LAYN</i>	11	111409710	111432470
<i>LCT</i>	2	136545415	136594750
<i>LGSN</i>	6	63985856	64277826
<i>LHCGR</i>	2	48913913	48982880
<i>LIPF</i>	10	90424146	90438572
<i>LMAN1</i>	18	56995055	57026508

<i>LPA</i>	6	160952515	161087407
<i>LPL</i>	8	19796582	19824770
<i>LRP1</i>	12	57522282	57607142
<i>LRP2</i>	2	169983619	170219123
<i>LSM6</i>	4	147096835	147111213
<i>LTA4H</i>	12	96394531	96437298
<i>LTF</i>	3	46477496	46506632
<i>LTF</i>	3	46509625	46526724
<i>LYZ</i>	12	69742134	69748013
<i>MAPK1</i>	22	22113946	22221970
<i>MAPK3</i>	16	30125426	30134630
<i>MC2R</i>	18	13882043	13915706
<i>MCFD2</i>	2	47129009	47168994
<i>METAP2</i>	12	95867822	95909615
<i>MGMT</i>	10	131265454	131566306
<i>MIF</i>	22	24236565	24237409
<i>MLNR</i>	13	49794474	49796513
<i>MMACHC</i>	1	45965856	45976739
<i>MMP12</i>	11	102733464	102745764
<i>MMP2</i>	16	55512742	55540603
<i>MPL</i>	1	43803089	43820135
<i>MPO</i>	17	56347216	56361674
<i>MS4A2</i>	11	59855734	59865940
<i>MTHFR</i>	1	11845787	11866160
<i>MTNR1A</i>	4	187454154	187476537
<i>MTNR1B</i>	11	92702789	92719406
<i>MTOR</i>	1	11166588	11322614
<i>MTR</i>	1	236957604	237067281
<i>MTRR</i>	5	7851299	7901237
<i>MTTP</i>	4	100485235	100545154
<i>MYC</i>	8	128748315	128753680
<i>NADSYN1</i>	11	71164217	71212584
<i>NAGA</i>	22	42454338	42466875
<i>NAGK</i>	2	71295371	71305998
<i>NAGLU</i>	17	40687951	40696467
<i>NAGPA</i>	16	5074845	5083942
<i>NCAN</i>	19	19322773	19363061
<i>NCF1</i>	7	74188309	74203720
<i>NCF2</i>	1	183524697	183560056
<i>NCF4</i>	22	37257030	37274059
<i>NDUFC2</i>	11	77779393	77791265
<i>NEU1</i>	6	31826829	31830709

<i>NEU2</i>	2	233887766	233900242
<i>NFKB1</i>	4	103422486	103538459
<i>NGF</i>	1	115828537	115881005
<i>NID1</i>	1	236139130	236228481
<i>NISCH</i>	3	52489524	52527088
<i>NOV</i>	8	120428552	120436678
<i>NPC1L1</i>	7	44552134	44580929
<i>NPPB</i>	1	11917521	11918992
<i>NPR1</i>	1	153651093	153666468
<i>NPR2</i>	9	35752942	35809728
<i>NPR3</i>	5	32689182	32791830
<i>NPSR1</i>	7	34697851	34917944
<i>NQO1</i>	16	69743304	69760571
<i>NQO2</i>	6	2988874	3020110
<i>NR1H4</i>	12	100867537	100957645
<i>NR1I2</i>	3	119499331	119537332
<i>NR3C1</i>	5	142657496	142815077
<i>NR3C2</i>	4	148999915	149366430
<i>NRP1</i>	10	33466419	33623833
<i>NT5C2</i>	10	104847774	104953063
<i>NT5E</i>	6	86159302	86205509
<i>NTRK1</i>	1	156785542	156851642
<i>NTRK2</i>	9	87283373	87641985
<i>NTSR2</i>	2	11798304	11810329
<i>OAZ1</i>	19	2269485	2273487
<i>OAZ2</i>	15	64979773	64995480
<i>OAZ3</i>	1	151735445	151743806
<i>OGFOD1</i>	16	56485329	56511407
<i>OGFOD2</i>	12	123459250	123464588
<i>OPLAH</i>	8	145106167	145118929
<i>OPRD1</i>	1	29138654	29190208
<i>OPRK1</i>	8	54138276	54164257
<i>OPRM1</i>	6	154331631	154568001
<i>ORM1</i>	9	117085303	117088759
<i>ORM2</i>	9	117092069	117095536
<i>OXT</i>	20	3049517	3053163
<i>OXTR</i>	3	8792094	8896233
<i>P2RY12</i>	3	151054631	151102600
<i>P2RY2</i>	11	72927493	72953472
<i>P4HA1</i>	10	74766975	74856732
<i>P4HB</i>	17	79801034	79818544
<i>P4HTM</i>	3	49026533	49044582

<i>PADI4</i>	1	17634690	17690499
<i>PAEP</i>	9	138453600	138458622
<i>PAH</i>	12	103232099	103311381
<i>PAICS</i>	4	57301915	57327534
<i>PAM</i>	5	102090980	102366809
<i>PANX1</i>	11	93862094	93918762
<i>PAPSS1</i>	4	108534822	108641419
<i>PCSK1</i>	5	95726040	95768985
<i>PCSK2</i>	20	17206752	17465223
<i>PCYT1A</i>	3	195965253	196014584
<i>PDXK</i>	21	45138978	45182188
<i>PF4</i>	4	74846542	74847841
<i>PFAS</i>	17	8152573	8173809
<i>PGF</i>	14	75408533	75422467
<i>PGR</i>	11	100900355	101001399
<i>PHOSPHO1</i>	17	47300728	47309054
<i>PIK3R1</i>	5	67511584	67597649
<i>PIK3R2</i>	19	18263988	18281343
<i>PIK3R3</i>	1	46505812	46642167
<i>PIPOX</i>	17	27369918	27384236
<i>PLA2G1B</i>	12	120759914	120765592
<i>PLA2G2E</i>	1	20246800	20250110
<i>PLA2G4A</i>	1	186798032	186958113
<i>PLAT</i>	8	42032236	42065194
<i>PLAU</i>	10	75668940	75677259
<i>PLAUR</i>	19	44150247	44174498
<i>PLD1</i>	3	171318195	171528284
<i>PLD2</i>	17	4710396	4726727
<i>PLEKHA1</i>	10	124134094	124191871
<i>PLG</i>	6	161123225	161175086
<i>PNLIP</i>	10	118305428	118327367
<i>PNP</i>	14	20937538	20946165
<i>POMC</i>	2	25383722	25391740
<i>PON1</i>	7	94927669	94953884
<i>PPARA</i>	22	46546450	46639653
<i>PPARD</i>	6	35310335	35395968
<i>PPARG</i>	3	12329349	12512512
<i>PRKAA1</i>	5	40759481	40798297
<i>PRKAB1</i>	12	120105669	120119429
<i>PRKCA</i>	17	64298900	64806862
<i>PRKCD</i>	3	53195223	53226733
<i>PRKDC</i>	8	48685669	48872743

<i>PRLR</i>	5	35048861	35230691
<i>PROC</i>	2	128175981	128186822
<i>PROCR</i>	20	33759740	33803792
<i>PROS1</i>	3	93591881	93692934
<i>PROZ</i>	13	113809375	113826700
<i>PRSS1</i>	7	142448082	142460927
<i>PSAT1</i>	9	80911991	80945009
<i>PTGDR</i>	14	52733974	52743442
<i>PTGER1</i>	19	14583278	14586174
<i>PTGER2</i>	14	52781016	52795324
<i>PTGER3</i>	1	71318036	71513497
<i>PTGER4</i>	5	40679600	40741866
<i>PTGFR</i>	1	78941925	79006386
<i>PTGIR</i>	19	47113297	47128375
<i>PTGIS</i>	20	48120411	48184707
<i>PTGR2</i>	14	74318534	74352168
<i>PTGS1</i>	9	125132809	125157984
<i>PTGS2</i>	1	186640944	186649559
<i>PTH1R</i>	3	46919207	46945289
<i>PTH2R</i>	2	209224569	209359231
<i>PTPN1</i>	20	49126858	49201299
<i>PTPN4</i>	2	120517207	120742475
<i>PTPRE</i>	10	129705325	129884180
<i>PTPRS</i>	19	5205514	5340814
<i>RAC1</i>	7	6414126	6443598
<i>RAC2</i>	22	37621301	37640339
<i>RAMP1</i>	2	238768187	238820756
<i>RAMP2</i>	17	40913212	40915059
<i>RAMP3</i>	7	45197367	45223849
<i>RARA</i>	17	38465423	38513895
<i>RARB</i>	3	24870835	25162112
<i>RARB</i>	3	25215823	25639423
<i>RARG</i>	12	53604350	53626040
<i>RARRES1</i>	3	158414681	158450480
<i>RB1</i>	13	48877883	49056026
<i>RBP1</i>	3	139236276	139258671
<i>REN</i>	1	204123944	204135465
<i>RHO</i>	3	129247482	129254187
<i>RHOB</i>	2	20646832	20649206
<i>RNASE1</i>	14	21269515	21271036
<i>RNASE3</i>	14	21359562	21360507
<i>RORB</i>	9	77112252	77302117

<i>RXRA</i>	9	137218309	137332432
<i>RXRB</i>	6	33161362	33168630
<i>RXRG</i>	1	165370159	165414592
<i>RYR1</i>	19	38924340	39078204
<i>S100A1</i>	1	153600873	153604513
<i>S100A12</i>	1	153346184	153348075
<i>S100A13</i>	1	153591275	153606568
<i>S100A2</i>	1	153533584	153538306
<i>S100A4</i>	1	153516095	153518282
<i>S100B</i>	21	48018531	48025035
<i>S100P</i>	4	6695566	6698897
<i>SCN10A</i>	3	38738382	38835501
<i>SCN11A</i>	3	38887260	38995142
<i>SCN1A</i>	2	166845670	167005782
<i>SCN1B</i>	19	35521592	35531353
<i>SCN2A</i>	2	165986659	166248820
<i>SCN2B</i>	11	118033519	118047337
<i>SCN3A</i>	2	165944030	166060598
<i>SCN3B</i>	11	123499895	123525315
<i>SCN4A</i>	17	62015914	62067510
<i>SCN4B</i>	11	118004092	118023630
<i>SCN5A</i>	3	38589549	38691164
<i>SCN7A</i>	2	167259978	167350768
<i>SCN8A</i>	12	51983977	52206648
<i>SCN9A</i>	2	167051695	167232497
<i>SCNN1A</i>	12	6456009	6486523
<i>SCNN1B</i>	16	23313591	23392620
<i>SCNN1D</i>	1	1215795	1227409
<i>SCNN1G</i>	16	23194040	23228200
<i>SELE</i>	1	169691781	169703220
<i>SELP</i>	1	169558087	169599377
<i>SERPINA5</i>	14	95047706	95059457
<i>SERPINB2</i>	18	61554939	61571124
<i>SERPINB6</i>	6	2948393	2972399
<i>SERPINC1</i>	1	173872938	173886516
<i>SERPIND1</i>	22	21128383	21142008
<i>SERPINE1</i>	7	100770370	100782547
<i>SHBG</i>	17	7517382	7536701
<i>SIGMAR1</i>	9	34634719	34637823
<i>SLC12A1</i>	15	48498498	48596275
<i>SLC12A2</i>	5	127419483	127525380
<i>SLC12A3</i>	16	56899119	56949762

<i>SLC12A4</i>	16	67977377	68002597
<i>SLC12A5</i>	20	44650329	44688789
<i>SLC15A1</i>	13	99336055	99404929
<i>SLC15A2</i>	3	121613171	121663034
<i>SLC18A1</i>	8	20002366	20040849
<i>SLC18A2</i>	10	119000584	119038941
<i>SLC19A3</i>	2	228549926	228582745
<i>SLC1A1</i>	9	4490427	4587469
<i>SLC1A2</i>	11	35272752	35441610
<i>SLC1A3</i>	5	36606457	36688436
<i>SLC1A6</i>	19	15060845	15121455
<i>SLC1A7</i>	1	53552851	53608304
<i>SLC22A11</i>	11	64323098	64340347
<i>SLC22A6</i>	11	62744069	62752495
<i>SLC22A7</i>	6	43263448	43273276
<i>SLC22A8</i>	11	62760296	62783317
<i>SLC23A1</i>	5	138702885	138720242
<i>SLC25A12</i>	2	172639915	172750816
<i>SLC25A13</i>	7	95749532	95951459
<i>SLC25A15</i>	13	41363547	41386596
<i>SLC25A18</i>	22	18042865	18073656
<i>SLC25A2</i>	5	140682196	140683630
<i>SLC25A22</i>	11	790475	798269
<i>SLC25A4</i>	4	186064417	186071538
<i>SLC29A1</i>	6	44187242	44201888
<i>SLC32A1</i>	20	37353105	37358015
<i>SLC36A1</i>	5	150790905	150941522
<i>SLC47A1</i>	17	19437167	19482346
<i>SLC52A2</i>	8	145582217	145584946
<i>SLC6A1</i>	3	11034415	11080935
<i>SLC6A2</i>	16	55689516	55740104
<i>SLC6A3</i>	5	1392905	1445543
<i>SLC6A4</i>	17	28521337	28562986
<i>SLC6A5</i>	11	20620946	20680831
<i>SLC6A9</i>	1	44462155	44497164
<i>SLC7A1</i>	13	30083547	30169825
<i>SLC7A11</i>	4	139085248	139233814
<i>SLC7A2</i>	8	17354597	17428077
<i>SLC7A4</i>	22	21383007	21386847
<i>SLC8A1</i>	2	40339286	40739626
<i>SLC9A1</i>	1	27425300	27481621
<i>SLCO1A2</i>	12	21417534	21556591

<i>SLCO1B1</i>	12	21284128	21392730
<i>SLCO1B3</i>	12	20963638	21069845
<i>SLCO2B1</i>	11	74862032	74917445
<i>SMO</i>	7	128828713	128853387
<i>SMPD1</i>	11	6411531	6416228
<i>SNAP25</i>	20	10199477	10288068
<i>SOAT1</i>	1	179262849	179327815
<i>SQLE</i>	8	126010720	126034526
<i>SRC</i>	20	35973088	36033835
<i>SRD5A1</i>	5	6633473	6669675
<i>SRD5A2</i>	2	31747558	31925853
<i>SSTR1</i>	14	38677204	38682268
<i>SSTR2</i>	17	71161160	71168094
<i>SSTR3</i>	22	37600277	37616487
<i>SSTR5</i>	16	1122756	1131454
<i>ST14</i>	11	130029682	130080257
<i>STAB2</i>	12	103981033	104160507
<i>SULT1E1</i>	4	70706930	70726483
<i>SV2A</i>	1	149874870	149889434
<i>TAAR1</i>	6	132966123	132967142
<i>TACR1</i>	2	75273590	75426645
<i>TAT</i>	16	71600754	71610998
<i>TBXAS1</i>	7	139478047	139720125
<i>TCN1</i>	11	59620281	59634041
<i>TEK</i>	9	27109139	27230176
<i>TERT</i>	5	1253282	1295162
<i>TF</i>	3	133380842	133497850
<i>TFPI</i>	2	188328957	188419221
<i>TGFB1</i>	19	41836436	41859838
<i>TGFBR2</i>	3	30647985	30735634
<i>TH</i>	11	2185159	2193367
<i>THBD</i>	20	23026270	23030301
<i>THRA</i>	17	38218446	38250120
<i>THRB</i>	3	24158644	24536772
<i>TLR9</i>	3	52255096	52260179
<i>TNF</i>	6	31543344	31546113
<i>TNFAIP6</i>	2	152214097	152237759
<i>TNFSF11</i>	13	43136872	43182149
<i>TNFSF13B</i>	13	108921768	108960832
<i>TOP1</i>	20	39657462	39753127
<i>TOP2A</i>	17	38544773	38574202
<i>TPMT</i>	6	18128542	18155396

<i>TPO</i>	2	1417233	1546499
<i>TRDMT1</i>	10	17179801	17244070
<i>TRPA1</i>	8	72933486	73002244
<i>TRPM8</i>	2	234826007	234928166
<i>TRPV1</i>	17	3468740	3512705
<i>TRPV3</i>	17	3413796	3461289
<i>TSPO</i>	22	43547520	43559248
<i>TUBA1A</i>	12	49578578	49583107
<i>TUBA4A</i>	2	220114433	220119330
<i>TUBB</i>	6	30687978	30693203
<i>TUBB1</i>	20	57594309	57601709
<i>TYMS</i>	18	657604	673499
<i>TYR</i>	11	88911026	89028927
<i>UCK2</i>	1	165796732	165880855
<i>UGT1A9</i>	2	234580544	234681951
<i>VCAM1</i>	1	101185196	101204601
<i>VCAN</i>	5	82767493	82878122
<i>VDR</i>	12	48235320	48298814
<i>VEGFA</i>	6	43737946	43754224
<i>VEGFB</i>	11	64002056	64006736
<i>VKORC1</i>	16	31102175	31107658
<i>VKORC1L1</i>	7	65301323	65424550
<i>VTN</i>	17	26694298	26697373
<i>VWF</i>	12	6058040	6233836
<i>XDH</i>	2	31557175	31637615
<i>AOC1</i>	7	150523481	150558379
<i>ASIC2</i>	17	31340105	32483825
<i>ASIC1</i>	12	50451420	50477405
<i>FECH</i>	18	55212073	55253969
<i>GOT1</i>	10	101156627	101190530
<i>MMP20</i>	11	102447566	102496063
<i>TUBB4B</i>	9	140135711	140138159
<i>CPQ</i>	8	97657455	98155731
<i>P3H3</i>	12	6937538	6949018
<i>PTGDR2</i>	11	60618398	60623444
<i>DBNL</i>	7	44084239	44101315
<i>P3H2</i>	3	189674517	189840226
<i>KYAT3</i>	1	89401456	89458643
<i>P3H1</i>	1	43212006	43232755
<i>MMP25</i>	16	3095964	3110730
<i>GADL1</i>	3	30767692	30936153
<i>GLCCI1</i>	7	8008374	8128710

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Supplementary Table 3: All ICD-9 codes used in the study along with their descriptions and categories

ICD-9_Code	ICD9_Description	ICD9_Category
110.1	Dermatophytosis_of_nail	Infectious_Diseases
110.4	Dermatophytosis_of_foot	Infectious_Diseases
110.5	Dermatophytosis_of_the_body	Infectious_Diseases
112	Candidiasis_of_mouth	Infectious_Diseases
112.1	Candidiasis_of_vulva_and_vagina	Infectious_Diseases
112.3	Candidiasis_of_skin_and_nails	Infectious_Diseases
135	Sarcoidosis	Infectious_Diseases
153.9	Malignant_neoplasm_of_colon,_unspecified_site	Neoplasms
162.3	Malignant_neoplasm_of_upper_lobe,_bronchus_or_lung	Neoplasms
162.9	Malignant_neoplasm_of_bronchus_and_lung,_unspecified	Neoplasms
173.3	Other_and_unspecified_malignant_neoplasm_of_skin_of_other_and_unspecified_parts_of_face	Neoplasms
174.4	Malignant_neoplasm_of_upper-outer_quadrant_of_female_breast	Neoplasms
174.9	Malignant_neoplasm_of_breast_(female),_unspecified	Neoplasms
188.9	Malignant_neoplasm_of_bladder,_part_unspecified	Neoplasms
189	Malignant_neoplasm_of_kidney,_except_pelvis	Neoplasms
193	Malignant_neoplasm_of_thyroid_gland	Neoplasms
202.8	Other_malignant_lymphomas,_unspecified_site,_extranodal_and_solid_organ_sites	Neoplasms
211.3	Benign_neoplasm_of_colon	Neoplasms
216.9	Benign_neoplasm_of_skin,_site_unspecified	Neoplasms
227.3	Benign_neoplasm_of_pituitary_gland_and_craniopharyngeal_duct	Neoplasms
238.2	Neoplasm_of_uncertain_behavior_of_skin	Neoplasms
238.9	Neoplasm_of_uncertain_behavior,_site_unspecified	Neoplasms
240.9	Goiter,_unspecified	Endocrine_and_Metabolic
241	Nontoxic_uninodular_goiter	Endocrine_and_Metabolic

241.1	Nontoxic_multinodular_goiter	Endocrine_and_Metabolic
242	Toxic_diffuse_goiter_without_mention_of_thyrotoxic_crisis_or_storm Thyrotoxicosis_without_mention_of_goiter_or_other_cause,_and_without_mentio	Endocrine_and_Metabolic
242.9	n_of_thyrotoxic_crisis_or_storm	Endocrine_and_Metabolic
244	Postsurgical_hypothyroidism	Endocrine_and_Metabolic
244.1	Other_postablative_hypothyroidism	Endocrine_and_Metabolic
244.8	Other_specified_acquired_hypothyroidism	Endocrine_and_Metabolic
244.9	Unspecified_acquired_hypothyroidism	Endocrine_and_Metabolic
245.2	Chronic_lymphocytic_thyroiditis	Endocrine_and_Metabolic
	Diabetes_mellitus_without_mention_of_complication,_type_II_or_unspecified_typ	
250	e,_not_stated_as_uncontrolled	Endocrine_and_Metabolic
	Diabetes_mellitus_without_mention_of_complication,_type_I_[juvenile_type],_not	
250.01	_stated_as_uncontrolled	Endocrine_and_Metabolic
	Diabetes_with_renal_manifestations,_type_II_or_unspecified_type,_not_stated_as	
250.4	_uncontrolled	Endocrine_and_Metabolic
	Diabetes_with_ophthalmic_manifestations,_type_II_or_unspecified_type,_not_stat	
250.5	ed_as_uncontrolled	Endocrine_and_Metabolic
	Diabetes_with_neurological_manifestations,_type_II_or_unspecified_type,_not_sta	
250.6	ted_as_uncontrolled	Endocrine_and_Metabolic
	Diabetes_with_peripheral_circulatory_disorders,_type_II_or_unspecified_type,_not	
250.7	_stated_as_uncontrolled	Endocrine_and_Metabolic
	Diabetes_with_other_specified_manifestations,_type_II_or_unspecified_type,_not	
250.8	_stated_as_uncontrolled	Endocrine_and_Metabolic
251.1	Other_specified_hypoglycemia	Endocrine_and_Metabolic
251.2	Hypoglycemia,_unspecified	Endocrine_and_Metabolic
252.01	Primary_hyperparathyroidism	Endocrine_and_Metabolic
266.2	Other_B-complex_deficiencies	Endocrine_and_Metabolic
268.9	Unspecified_vitamin_D_deficiency	Endocrine_and_Metabolic
269.2	Unspecified_vitamin_deficiency	Endocrine_and_Metabolic

272 Pure_hypercholesterolemia	Endocrine_and_Metabolic
272.1 Pure_hyperglyceridemia	Endocrine_and_Metabolic
272.2 Mixed_hyperlipidemia	Endocrine_and_Metabolic
272.4 Other_and_unspecified_hyperlipidemia	Endocrine_and_Metabolic
272.5 Lipoprotein_deficiencies	Endocrine_and_Metabolic
273.1 Monoclonal_paraproteinemia	Endocrine_and_Metabolic
274 Gouty_arthropathy	Endocrine_and_Metabolic
274 Gouty_arthropathy,_unspecified	Endocrine_and_Metabolic
274.9 Gout,_unspecified	Endocrine_and_Metabolic
275.42 Hypercalcemia	Endocrine_and_Metabolic
276.1 Hyposmolality_and/or_hyponatremia	Endocrine_and_Metabolic
276.51 Dehydration	Endocrine_and_Metabolic
276.6 Fluid_overload	Endocrine_and_Metabolic
276.7 Hyperpotassemia	Endocrine_and_Metabolic
276.8 Hypopotassemia	Endocrine_and_Metabolic
276.9 Electrolyte_and_fluid_disorders_not_elsewhere_classified	Endocrine_and_Metabolic
277.7 Dysmetabolic_syndrome_X	Endocrine_and_Metabolic
278 Obesity,_unspecified	Endocrine_and_Metabolic
278.01 Morbid_obesity	Endocrine_and_Metabolic
278.02 Overweight	Endocrine_and_Metabolic
278.1 Localized_adiposity	Endocrine_and_Metabolic
280.9 Iron_deficiency_anemia,_unspecified	Blood_Disorder
281 Pernicious_anemia	Blood_Disorder
281.1 Other_vitamin_B12_deficiency_anemia	Blood_Disorder
285.1 Acute_posthemorrhagic_anemia	Blood_Disorder
285.21 Anemia_in_chronic_kidney_disease	Blood_Disorder
285.9 Anemia,_unspecified	Blood_Disorder
287.5 Thrombocytopenia,_unspecified	Blood_Disorder
289.81 Primary_hypercoagulable_state	Blood_Disorder

296.2	Major_depressive_affective_disorder,_single_episode,_unspecified	Mental_Disorders
296.22	Major_depressive_affective_disorder,_single_episode,_moderate	Mental_Disorders
296.3	Major_depressive_affective_disorder,_recurrent_episode,_unspecified	Mental_Disorders
296.32	Major_depressive_affective_disorder,_recurrent_episode,_moderate	Mental_Disorders
296.8	Bipolar_disorder,_unspecified	Mental_Disorders
296.9	Unspecified_episodic_mood_disorder	Mental_Disorders
300	Anxiety_state,_unspecified	Mental_Disorders
300.01	Panic_disorder_without_agoraphobia	Mental_Disorders
300.02	Generalized_anxiety_disorder	Mental_Disorders
300.09	Other_anxiety_states	Mental_Disorders
300.4	Dysthymic_disorder	Mental_Disorders
305	Alcohol_abuse,_unspecified	Mental_Disorders
305.1	Tobacco_use_disorder	Mental_Disorders
307.42	Persistent_disorder_of_initiating_or_maintaining_sleep	Mental_Disorders
307.5	Eating_disorder,_unspecified	Mental_Disorders
307.81	Tension_headache	Mental_Disorders
309	Adjustment_disorder_with_depressed_mood	Mental_Disorders
309.24	Adjustment_disorder_with_anxiety	Mental_Disorders
309.28	Adjustment_disorder_with_mixed_anxiety_and_depressed_mood	Mental_Disorders
311	Depressive_disorder,_not_elsewhere_classified	Mental_Disorders
314	Attention_deficit_disorder_without_mention_of_hyperactivity	Mental_Disorders
314.01	Attention_deficit_disorder_with_hyperactivity	Mental_Disorders
327.23	Obstructive_sleep_apnea_(adult)(pediatric)	Nervous_System
327.8	Other_organic_sleep_disorders	Nervous_System
332	Paralysis_agitans	Nervous_System
333.1	Essential_and_other_specified_forms_of_tremor	Nervous_System
333.94	Restless_legs_syndrome_(RLS)	Nervous_System
338.29	Other_chronic_pain	Nervous_System
338.4	Chronic_pain_syndrome	Nervous_System

340	Multiple_sclerosis	Nervous_System
345.1	Generalized_convulsive_epilepsy,_without_mention_of_intractable_epilepsy	Nervous_System
345.9	Epilepsy,_unspecified,_without_mention_of_intractable_epilepsy	Nervous_System
	Migraine_with_aura,_without_mention_of_intractable_migraine_without_mention	
346	_of_status_migrainosus	Nervous_System
	Migraine_with_aura,_with_intractable_migraine,_so_stated,_without_mention_of_	
346.01	status_migrainosus	Nervous_System
	Migraine_without_aura,_without_mention_of_intractable_migraine_without_ment	
346.1	ion_of_status_migrainosus	Nervous_System
	Migraine_without_aura,_with_intractable_migraine,_so_stated,_without_mention	
346.11	_of_status_migrainosus	Nervous_System
	Variants_of_migraine,_not_elsewhere_classified,_without_mention_of_intractable	
346.2	_migraine_without_mention_of_status_migrainosus	Nervous_System
	Migraine,_unspecified,_without_mention_of_intractable_migraine_without_menti	
346.9	on_of_status_migrainosus	Nervous_System
354	Carpal_tunnel_syndrome	Nervous_System
354.2	Lesion_of_ulnar_nerve	Nervous_System
355.9	Mononeuritis_of_unspecified_site	Nervous_System
356.9	Unspecified_hereditary_and_idiopathic_peripheral_neuropathy	Nervous_System
357.2	Polyneuropathy_in_diabetes	Nervous_System
357.4	Polyneuropathy_in_other_diseases_classified_elsewhere	Nervous_System
361	Retinal_detachment_with_retinal_defect,_unspecified	Nervous_System
362.01	Background_diabetic_retinopathy	Nervous_System
362.02	Proliferative_diabetic_retinopathy	Nervous_System
362.07	Diabetic_macular_edema	Nervous_System
362.5	Macular_degeneration_(senile),_unspecified	Nervous_System
362.51	Nonexudative_senile_macular_degeneration	Nervous_System
362.52	Exudative_senile_macular_degeneration	Nervous_System
362.56	Macular_puckering	Nervous_System

362.83 Retinal_edema	Nervous_System
364.3 Unspecified_iridocyclitis	Nervous_System
365 Prolapsed_lens,_unspecified	Nervous_System
365.02 Anatomical_narrow_angle_borderline_glaucoma	Nervous_System
365.04 Ocular_hypertension	Nervous_System
365.11 Primary_open_angle_glaucoma	Nervous_System
365.2 Primary_angle-closure_glaucoma,_unspecified	Nervous_System
365.7 Glaucoma_stage,_unspecified	Nervous_System
365.9 Unspecified_glaucoma	Nervous_System
366.1 Senile_cataract,_unspecified	Nervous_System
366.12 Incipient_senile_cataract	Nervous_System
366.14 Posterior_subcapsular_polar_senile_cataract	Nervous_System
366.15 Cortical_senile_cataract	Nervous_System
366.16 Senile_nuclear_sclerosis	Nervous_System
366.52 Other_after-cataract,_not_obscuring_vision	Nervous_System
366.53 After-cataract,_obscuring_vision	Nervous_System
366.9 Unspecified_cataract	Nervous_System
367.4 Presbyopia	Nervous_System
367.9 Unspecified_disorder_of_refraction_and_accommodation	Nervous_System
368.2 Diplopia	Nervous_System
370.33 Keratoconjunctivitis_sicca,_not_specified_as_Sjogren's	Nervous_System
371.52 Other_anterior_corneal_dystrophies	Nervous_System
371.57 Endothelial_corneal_dystrophy	Nervous_System
372.14 Other_chronic_allergic_conjunctivitis	Nervous_System
372.3 Conjunctivitis,_unspecified	Nervous_System
373 Blepharitis,_unspecified	Nervous_System
374.3 Ptosis_of_eyelid,_unspecified	Nervous_System
374.87 Dermatochalasis	Nervous_System
375.15 Tear_film_insufficiency,_unspecified	Nervous_System

379.21 Vitreous_degeneration	Nervous_System
379.23 Vitreous_hemorrhage	Nervous_System
38.9 Unspecified_septicemia	Infectious_Diseases
380.1 Infective_otitis externa,_unspecified	Nervous_System
380.22 Other_acute_otitis externa	Nervous_System
380.4 Impacted_cerumen	Nervous_System
381.01 Acute_serous_otitis media	Nervous_System
381.81 Dysfunction_of_Eustachian_tube	Nervous_System
382.9 Unspecified_otitis media	Nervous_System
386.11 Benign_paroxysmal_positional_vertigo	Nervous_System
388.7 Otalgia,_unspecified	Nervous_System
389.1 Sensorineural_hearing_loss,_unspecified	Nervous_System
389.9 Unspecified_hearing_loss	Nervous_System
397 Diseases_of_tricuspid_valve	Circulatory
401.9 Unspecified_essential_hypertension	Circulatory
402.9 Unspecified_hypertensive_heart_disease_without_heart_failure	Circulatory
402.91 Unspecified_hypertensive_heart_disease_with_heart_failure	Circulatory
Hypertensive_chronic_kidney_disease,_unspecified,_with_chronic_kidney_disease_	
403.9 stage_I_through_stage_IV,_or_unspecified	Circulatory
Hypertensive_chronic_kidney_disease,_unspecified,_with_chronic_kidney_disease_	
403.91 stage_V_or_end_stage_renal_disease	Circulatory
410.7 Subendocardial_infarction,_episode_of_care_unspecified	Circulatory
410.9 Acute_myocardial_infarction_of_unspecified_site,_episode_of_care_unspecified	Circulatory
411.1 Intermediate_coronary_syndrome	Circulatory
412 Old_myocardial_infarction	Circulatory
413.9 Other_and_unspecified_angina_pectoris	Circulatory
414 Coronary_atherosclerosis_of_unspecified_type_of_vessel,_native_or_graft	Circulatory
414.01 Coronary_atherosclerosis_of_native_coronary_artery	Circulatory
414.8 Other_specified_forms_of_chronic_ischemic_heart_disease	Circulatory

414.9 Chronic_ischemic_heart_disease,_unspecified	Circulatory
415.19 Other_pulmonary_embolism_and_infarction	Circulatory
416.8 Other_chronic_pulmonary_heart_diseases	Circulatory
424 Mitral_valve_disorders	Circulatory
424.1 Aortic_valve_disorders	Circulatory
424.9 Endocarditis,_valve_unspecified,_unspecified_cause	Circulatory
425.4 Other_primary_cardiomyopathies	Circulatory
426 Atrioventricular_block,_complete	Circulatory
426.3 Other_left_bundle_branch_block	Circulatory
427 Paroxysmal_supraventricular_tachycardia	Circulatory
427.1 Paroxysmal_ventricular_tachycardia	Circulatory
427.31 Atrial_fibrillation	Circulatory
427.32 Atrial_flutter	Circulatory
427.69 Other_premature_beats	Circulatory
427.81 Sinoatrial_node_dysfunction	Circulatory
427.89 Other_specified_cardiac_dysrhythmias	Circulatory
428 Congestive_heart_failure,_unspecified	Circulatory
428.2 Systolic_heart_failure,_unspecified	Circulatory
428.22 Chronic_systolic_heart_failure	Circulatory
428.23 Acute_on_chronic_systolic_heart_failure	Circulatory
428.3 Diastolic_heart_failure,_unspecified	Circulatory
428.32 Chronic_diastolic_heart_failure	Circulatory
428.33 Acute_on_chronic_diastolic_heart_failure	Circulatory
428.9 Heart_failure,_unspecified	Circulatory
429.2 Cardiovascular_disease,_unspecified	Circulatory
429.9 Heart_disease,_unspecified	Circulatory
Occlusion_and_stenosis_of_carotid_artery_without_mention_of_cerebral_infarctio	
433.1 n	Circulatory
433.11 Occlusion_and_stenosis_of_carotid_artery_with_cerebral_infarction	Circulatory

434.91 Cerebral_artery_occlusion,_unspecified_with_cerebral_infarction	Circulatory
435.9 Unspecified_transient_cerebral_ischemia	Circulatory
436 Acute,_but_ill-defined,_cerebrovascular_disease	Circulatory
437 Cerebral_atherosclerosis	Circulatory
437.3 Cerebral_aneurysm,_nonruptured	Circulatory
440.1 Atherosclerosis_of_renal_artery	Circulatory
440.2 Atherosclerosis_of_native_arteries_of_the_extremities,_unspecified	Circulatory
Atherosclerosis_of_native_arteries_of_the_extremities_with_intermittent_claudica	
440.21 tion	Circulatory
440.23 Atherosclerosis_of_native_arteries_of_the_extremities_with_ulceration	Circulatory
440.9 Generalized_and_unspecified_atherosclerosis	Circulatory
441.2 Thoracic_aneurysm_without_mention_of_rupture	Circulatory
441.4 Abdominal_aneurysm_without_mention_of_rupture	Circulatory
443 Raynaud's_syndrome	Circulatory
443.81 Peripheral_angiopathy_in_diseases_classified_elsewhere	Circulatory
443.9 Peripheral_vascular_disease,_unspecified	Circulatory
451.19 Phlebitis_and_thrombophlebitis_of_deep_veins_of_lower_extremities,_other	Circulatory
Acute_venous_embolism_and_thrombosis_of_unspecified_deep_vessels_of_lower	
453.4 _extremity	Circulatory
453.9 Other_venous_embolism_and_thrombosis_of_unspecified_site	Circulatory
454 Varicose_veins_of_lower_extremities_with_ulcer	Circulatory
454.8 Varicose_veins_of_lower_extremities_with_other_complications	Circulatory
454.9 Asymptomatic_varicose_veins	Circulatory
455.3 External_hemorrhoids_without_mention_of_complication	Circulatory
455.6 Unspecified_hemorrhoids_without_mention_of_complication	Circulatory
458 Orthostatic_hypotension	Circulatory
458.9 Hypotension,_unspecified	Circulatory
459.81 Venous_(peripheral)_insufficiency,_unspecified	Circulatory
461 Acute_maxillary_sinusitis	Respiratory

461.9 Acute_sinusitis,_unspecified	Respiratory
462 Acute_pharyngitis	Respiratory
465.9 Acute_upper_respiratory_infections_of_unspecified_site	Respiratory
466 Acute_bronchitis	Respiratory
470 Deviated_nasal_septum	Respiratory
472 Chronic_rhinitis	Respiratory
473.8 Other_chronic_sinusitis	Respiratory
473.9 Unspecified_sinusitis_(chronic)	Respiratory
477.8 Allergic_rhinitis_due_to_other_allergen	Respiratory
477.9 Allergic_rhinitis,_cause_unspecified	Respiratory
482.9 Bacterial_pneumonia,_unspecified	Respiratory
486 Pneumonia,_organism_unspecified	Respiratory
490 Bronchitis,_not_specified_as_acute_or_chronic	Respiratory
491.21 Obstructive_chronic_bronchitis_with_(acute)_exacerbation	Respiratory
492.8 Other_emphysema	Respiratory
493.2 Chronic_obstructive_asthma,_unspecified	Respiratory
493.9 Asthma,_unspecified_type,_unspecified	Respiratory
493.92 Asthma,_unspecified_type,_with_(acute)_exacerbation	Respiratory
496 Chronic_airway_obstruction,_not_elsewhere_classified	Respiratory
511.9 Unspecified_pleural_effusion	Respiratory
515 Postinflammatory_pulmonary_fibrosis	Respiratory
518.89 Other_diseases_of_lung,_not_elsewhere_classified	Respiratory
520.6 Disturbances_in_tooth_eruption	Digestive
521 Dental_caries	Digestive
521 Dental_caries,_unspecified	Digestive
521.02 Dental_caries_extending_into_dentine	Digestive
522.5 Periapical_abscess_without_sinus	Digestive
524.6 Temporomandibular_joint_disorders,_unspecified	Digestive
525.1 Loss_of_teeth_due_to_trauma,_extraction,_or_periodontal_disease	Digestive

53.9 Herpes_zoster_without_mention_of_complication	Infectious_Diseases
530.1 Esophagitis,_unspecified	Digestive
530.11 Reflux_esophagitis	Digestive
530.81 Esophageal_reflux	Digestive
530.85 Barrett's_esophagus	Digestive
Peptic_ulcer_of_unspecified_site,_unspecified_as_acute_or_chronic,_without_men	
533.9 tion_of_hemorrhage_or_perforation,_without_mention_of_obstruction	Digestive
535.5 Unspecified_gastritis_and_gastroduodenitis,_without_mention_of_hemorrhage	Digestive
536.3 Gastroparesis	Digestive
54.9 Herpes_simplex_without_mention_of_complication	Infectious_Diseases
Inguinal_hernia,_without_mention_of_obstruction_or_gangrene,_unilateral_or_un	
550.9 specified_(not_specified_as_recurrent)	Digestive
553.1 Umbilical_hernia_without_mention_of_obstruction_or_gangrene	Digestive
553.2 Ventral,_unspecified,_hernia_without_mention_of_obstruction_or_gangrene	Digestive
553.21 Incisional_hernia_without_mention_of_obstruction_or_gangrene	Digestive
553.3 Diaphragmatic_hernia_without_mention_of_obstruction_or_gangrene	Digestive
555.9 Regional_enteritis_of_unspecified_site	Digestive
556.9 Ulcerative_colitis,_unspecified	Digestive
560.9 Unspecified_intestinal_obstruction	Digestive
562.1 Diverticulosis_of_colon_(without_mention_of_hemorrhage)	Digestive
562.11 Diverticulitis_of_colon_(without_mention_of_hemorrhage)	Digestive
564 Constipation,_unspecified	Digestive
564.09 Other_constipation	Digestive
564.1 Irritable_bowel_syndrome	Digestive
564.2 Postgastric_surgery_syndromes	Digestive
569.3 Hemorrhage_of_rectum_and_anus	Digestive
571.5 Cirrhosis_of_liver_without_mention_of_alcohol	Digestive
571.8 Other_chronic_nonalcoholic_liver_disease	Digestive

Calculus_of_gallbladder_without_mention_of_cholecystitis,_without_mention_of_	
574.2 obstruction	Digestive
577 Acute_pancreatitis	Digestive
578.9 Hemorrhage_of_gastrointestinal_tract,_unspecified	Digestive
579.3 Other_and_unspecified_postsurgical_nonabsorption	Digestive
Nephritis_and_nephropathy,_not_specified_as_acute_or_chronic,_in_diseases_clas	
583.81 sified_elsewhere	Genitourinary
584.9 Acute_kidney_failure,_unspecified	Genitourinary
585.3 Chronic_kidney_disease,_Stage_III_(moderate)	Genitourinary
585.4 Chronic_kidney_disease,_Stage_IV_(severe)	Genitourinary
585.5 Chronic_kidney_disease,_Stage_V	Genitourinary
585.6 End_stage_renal_disease	Genitourinary
585.9 Chronic_kidney_disease,_unspecified	Genitourinary
586 Renal_failure,_unspecified	Genitourinary
591 Hydronephrosis	Genitourinary
592 Calculus_of_kidney	Genitourinary
592.1 Calculus_of_ureter	Genitourinary
593.2 Cyst_of_kidney,_acquired	Genitourinary
593.9 Unspecified_disorder_of_kidney_and_ureter	Genitourinary
595 Acute_cystitis	Genitourinary
596.54 Neurogenic_bladder_NOS	Genitourinary
599 Urinary_tract_infection,_site_not_specified	Genitourinary
599.7 Hematuria	Genitourinary
599.7 Hematuria,_unspecified	Genitourinary
599.71 Gross_hematuria	Genitourinary
607.84 Impotence_of_organic_origin	Genitourinary
611.1 Hypertrophy_of_breast	Genitourinary
611.72 Lump_or_mass_in_breast	Genitourinary
618.01 Cystocele,_midline	Genitourinary

625.9 Unspecified_symptom_associated_with_female_genital_organs	Genitourinary
627.2 Symptomatic_menopausal_or_female_climacteric_states	Genitourinary
648.83 Abnormal_glucose_tolerance_of_mother,_antepartum_condition_or_complication	Pregnancy_related
682.2 Cellulitis_and_abscess_of_trunk	Skin
682.6 Cellulitis_and_abscess_of_leg,_except_foot	Skin
682.7 Cellulitis_and_abscess_of_foot,_except_toes	Skin
682.9 Cellulitis_and_abscess_of_unspecified_sites	Skin
690.1 Seborrheic_dermatitis,_unspecified	Skin
692.6 Contact_dermatitis_and_other_eczema_due_to_plants_[except_food]	Skin
692.9 Contact_dermatitis_and_other_eczema,_unspecified_cause	Skin
695.3 Rosacea	Skin
695.89 Other_specified_erythematous_conditions	Skin
696 Psoriatic_arthropathy	Skin
696.1 Other_psoriasis	Skin
698.9 Unspecified_pruritic_disorder	Skin
70.54 Chronic_hepatitis_C_without_mention_of_hepatic_coma	Infectious_Diseases
700 Corns_and_callosities	Skin
701.9 Unspecified_hypertrophic_and_atrophic_conditions_of_skin	Skin
702 Actinic_keratosis	Skin
702.11 Inflamed_seborrheic_keratosis	Skin
702.19 Other_seborrheic_keratosis	Skin
703 Ingrowing_nail	Skin
703.8 Other_specified_diseases_of_nail	Skin
704.1 Hirsutism	Skin
704.8 Other_specified_diseases_of_hair_and_hair_follicles	Skin
706.1 Other_acne	Skin
706.2 Sebaceous_cyst	Skin
707.1 Ulcer_of_lower_limb,_unspecified	Skin
707.14 Ulcer_of_heel_and_midfoot	Skin

707.15 Ulcer_of_other_part_of_foot	Skin
707.9 Chronic_ulcer_of_unspecified_site	Skin
708.9 Urticaria,_unspecified	Skin
709.2 Scar_conditions_and_fibrosis_of_skin	Skin
709.9 Unspecified_disorder_of_skin_and_subcutaneous_tissue	Skin
710 Systemic_lupus_erythematosus	Musculoskeletal
710.2 Sicca_syndrome	Musculoskeletal
714 Rheumatoid_arthritis	Musculoskeletal
715 Osteoarthritis,_generalized,_site_unspecified	Musculoskeletal
715.09 Osteoarthritis,_generalized,_multiple_sites	Musculoskeletal
715.16 Osteoarthritis,_localized,_primary,_lower_leg	Musculoskeletal
715.34 Osteoarthritis,_localized,_not_specified_whether_primary_or_secondary,_hand	Musculoskeletal
715.9 Osteoarthritis,_unspecified_whether_generalized_or_localized,_site_unspecified	Musculoskeletal
715.91 Osteoarthritis,_unspecified_whether_generalized_or_localized,_shoulder_region	Musculoskeletal
715.94 Osteoarthritis,_unspecified_whether_generalized_or_localized,_hand	Musculoskeletal
Osteoarthritis,_unspecified_whether_generalized_or_localized,_pelvic_region_and	
715.95 _thigh	Musculoskeletal
715.96 Osteoarthritis,_unspecified_whether_generalized_or_localized,_lower_leg	Musculoskeletal
Osteoarthritis,_unspecified_whether_generalized_or_localized,_other_specified_si	
715.98 tes	Musculoskeletal
716.59 Unspecified_polyarthropathy_or_polyarthritis,_multiple_sites	Musculoskeletal
716.96 Arthropathy,_unspecified,_lower_leg	Musculoskeletal
717.9 Unspecified_internal_derangement_of_knee	Musculoskeletal
719.41 Pain_in_joint,_shoulder_region	Musculoskeletal
719.43 Pain_in_joint,_forearm	Musculoskeletal
719.44 Pain_in_joint,_hand	Musculoskeletal
719.45 Pain_in_joint,_pelvic_region_and_thigh	Musculoskeletal
719.46 Pain_in_joint,_lower_leg	Musculoskeletal
719.47 Pain_in_joint,_ankle_and_foot	Musculoskeletal

719.49 Pain_in_joint,_multiple_sites	Musculoskeletal
719.7 Difficulty_in_walking	Musculoskeletal
720.2 Sacroiliitis,_not_elsewhere_classified	Musculoskeletal
721 Cervical_spondylosis_without_myelopathy	Musculoskeletal
721.3 Lumbosacral_spondylosis_without_myelopathy	Musculoskeletal
722 Displacement_of_cervical_intervertebral_disc_without_myelopathy	Musculoskeletal
722.1 Displacement_of_lumbar_intervertebral_disc_without_myelopathy	Musculoskeletal
722.4 Degeneration_of_cervical_intervertebral_disc	Musculoskeletal
722.52 Degeneration_of_lumbar_or_lumbosacral_intervertebral_disc	Musculoskeletal
722.6 Degeneration_of_intervertebral_disc,_site_unspecified	Musculoskeletal
722.83 Postlaminectomy_syndrome,_lumbar_region	Musculoskeletal
722.9 Other_and_unspecified_disc_disorder,_unspecified_region	Musculoskeletal
722.91 Other_and_unspecified_disc_disorder,_cervical_region	Musculoskeletal
722.93 Other_and_unspecified_disc_disorder,_lumbar_region	Musculoskeletal
723 Spinal_stenosis_in_cervical_region	Musculoskeletal
723.1 Cervicalgia	Musculoskeletal
723.4 Brachial_neuritis_or_radiculitis_NOS	Musculoskeletal
723.8 Other_syndromes_affecting_cervical_region	Musculoskeletal
724 Spinal_stenosis,_unspecified_region	Musculoskeletal
724.02 Spinal_stenosis,_lumbar_region,_without_neurogenic_claudication	Musculoskeletal
724.1 Pain_in_thoracic_spine	Musculoskeletal
724.2 Lumbago	Musculoskeletal
724.3 Sciatica	Musculoskeletal
724.4 Thoracic_or_lumbosacral_neuritis_or_radiculitis,_unspecified	Musculoskeletal
724.5 Backache,_unspecified	Musculoskeletal
725 Polymyalgia_rheumatica	Musculoskeletal
726 Adhesive_capsulitis_of_shoulder	Musculoskeletal
726.1 Disorders_of_bursae_and_tendons_in_shoulder_region,_unspecified	Musculoskeletal
726.2 Other_affectations_of_shoulder_region,_not_elsewhere_classified	Musculoskeletal

726.32 Lateral_epicondylitis	Musculoskeletal
726.33 Olecranon_bursitis	Musculoskeletal
726.5 Enthesopathy_of_hip_region	Musculoskeletal
726.6 Enthesopathy_of_knee,_unspecified	Musculoskeletal
726.71 Achilles_bursitis_or_tendinitis	Musculoskeletal
727.03 Trigger_finger_(acquired)	Musculoskeletal
727.05 Other_tenosynovitis_of_hand_and_wrist	Musculoskeletal
727.1 Bunion	Musculoskeletal
728.71 Plantar_fascial_fibromatosis	Musculoskeletal
728.85 Spasm_of_muscle	Musculoskeletal
729.1 Myalgia_and_myositis,_unspecified	Musculoskeletal
729.2 Neuralgia,_neuritis,_and_radiculitis,_unspecified	Musculoskeletal
729.3 Panniculitis,_unspecified_site	Musculoskeletal
729.5 Pain_in_limb	Musculoskeletal
729.82 Cramp_of_limb	Musculoskeletal
733 Osteoporosis,_unspecified	Musculoskeletal
733.01 Senile_osteoporosis	Musculoskeletal
733.09 Other_osteoporosis	Musculoskeletal
733.13 Pathologic_fracture_of_vertebrae	Musculoskeletal
733.9 Disorder_of_bone_and_cartilage,_unspecified	Musculoskeletal
737.3 Scoliosis_[and_kyphoscoliosis],_idiopathic	Musculoskeletal
739.1 Nonallopathic_lesions,_cervical_region	Musculoskeletal
739.2 Nonallopathic_lesions,_thoracic_region	Musculoskeletal
739.3 Nonallopathic_lesions,_lumbar_region	Musculoskeletal
745.5 Ostium_secundum_type_atrial_septal_defect	Congenital_Anomalies
756.12 Spondylolisthesis	Congenital_Anomalies
78.1 Viral_warts,_unspecified	Infectious_Diseases
78.19 Other_specified_viral_warts	Infectious_Diseases
780.2 Syncope_and_collapse	Symptoms

780.39 Other_convulsions	Symptoms
780.4 Dizziness_and_giddiness	Symptoms
780.52 Insomnia,_unspecified	Symptoms
780.53 Hypersomnia_with_sleep_apnea,_unspecified	Symptoms
780.57 Unspecified_sleep_apnea	Symptoms
780.6 Fever,_unspecified	Symptoms
780.79 Other_malaise_and_fatigue	Symptoms
780.93 Memory_loss	Symptoms
781 Abnormal_involuntary_movements	Symptoms
781.2 Abnormality_of_gait	Symptoms
782 Disturbance_of_skin_sensation	Symptoms
782.1 Rash_and_other_nonspecific_skin_eruption	Symptoms
782.3 Edema	Symptoms
783.1 Abnormal_weight_gain	Symptoms
783.21 Loss_of_weight	Symptoms
784 Headache	Symptoms
784.2 Swelling,_mass,_or_lump_in_head_and_neck	Symptoms
784.7 Epistaxis	Symptoms
785 Tachycardia,_unspecified	Symptoms
785.1 Palpitations	Symptoms
785.2 Undiagnosed_cardiac_murmurs	Symptoms
785.6 Enlargement_of_lymph_nodes	Symptoms
785.9 Other_symptoms_involving_cardiovascular_system	Symptoms
786.05 Shortness_of_breath	Symptoms
786.07 Wheezing	Symptoms
786.09 Other_respiratory_abnormalities	Symptoms
786.2 Cough	Symptoms
786.5 Chest_pain,_unspecified	Symptoms
786.59 Other_chest_pain	Symptoms

786.6 Swelling,_mass,_or_lump_in_chest	Symptoms
786.9 Other_symptoms_involving_respiratory_system_and_chest	Symptoms
787.01 Nausea_with_vomiting	Symptoms
787.02 Nausea_alone	Symptoms
787.1 Heartburn	Symptoms
787.2 Dysphagia	Symptoms
787.2 Dysphagia,_unspecified	Symptoms
787.91 Diarrhea	Symptoms
788.1 Dysuria	Symptoms
788.2 Retention_of_urine,_unspecified	Symptoms
788.21 Incomplete_bladder_emptying	Symptoms
788.3 Urinary_incontinence,_unspecified	Symptoms
788.31 Urge_incontinence	Symptoms
788.33 Mixed_incontinence_(male)_(female)	Symptoms
788.41 Urinary_frequency	Symptoms
788.43 Nocturia	Symptoms
788.63 Urgency_of_urination	Symptoms
789 Abdominal_pain,_unspecified_site	Symptoms
789.01 Abdominal_pain,_right_upper_quadrant	Symptoms
789.03 Abdominal_pain,_right_lower_quadrant	Symptoms
789.04 Abdominal_pain,_left_lower_quadrant	Symptoms
789.06 Abdominal_pain,_epigastric	Symptoms
789.07 Abdominal_pain,_generalized	Symptoms
789.09 Abdominal_pain,_other_specified_site	Symptoms
79.99 Unspecified_viral_infection	Infectious_Diseases
790.21 Impaired_fasting_glucose	Symptoms
790.29 Other_abnormal_glucose	Symptoms
790.4 LDH]	Symptoms

790.5 Other_nonspecific_abnormal_serum_enzyme_levels	Symptoms
790.6 Other_abnormal_blood_chemistry	Symptoms
791 Proteinuria	Symptoms
793.11 Solitary_pulmonary_nodule	Symptoms
794.31 Nonspecific_abnormal_electrocardiogram_[ECG]_[EKG]	Symptoms
794.39 Other_nonspecific_abnormal_results_of_function_study_of_cardiovascular_system	Symptoms
794.8 Nonspecific_abnormal_results_of_function_study_of_liver	Symptoms
795.79 Other_and_unspecified_nonspecific_immunological_findings	Symptoms
796.2 Elevated_blood_pressure_reading_without_diagnosis_of_hypertension	Symptoms
799.02 Hypoxemia	Symptoms
8.45 Intestinal_infection_due_to_Clostridium_difficile	Infectious_Diseases
813.42 Other_closed_fractures_of_distal_end_of_radius_(alone)	Injury_And_Poisoning
824.8 Unspecified_fracture_of_ankle,_closed	Injury_And_Poisoning
825.25 Closed_fracture_of_metatarsal_bone(s)	Injury_And_Poisoning
840.4 Rotator_cuff_(capsule)_sprain	Injury_And_Poisoning
845 Sprain_of_ankle,_unspecified_site	Injury_And_Poisoning
846 Sprain_of_lumbosacral_(joint)_(ligament)	Injury_And_Poisoning
847 Sprain_of_neck	Injury_And_Poisoning
Open_wound_of_tooth_(broken)_(fractured)_(due_to_trauma),_without_mention	
873.63 _of_complication	Injury_And_Poisoning
Open_wound_of_knee,_leg_[except_thigh],_and_ankle,_without_mention_of_com	
891 plication	Injury_And_Poisoning
995.3 Allergy,_unspecified,_not_elsewhere_classified	Injury_And_Poisoning
998.59 Other_postoperative_infection	Injury_And_Poisoning