Supplementary Table S1. ICD-9-CM and ICD-10-CM codes of comorbidities.

Comorbidity	ICD-9-CM	ICD-10-CM			
Myocardial in- farction	"410" "412"	"I21" "I22" "I25.2"			
Congestive heart failure	"402.01" "402.11" "402.91" "404.01" "404.03" "404.11" "404.13" "404.91" "404.93" "429.3" "425" "428"	"I43" "I50" "I11.0" "I13.0" "I13.2" "I25.5" "I42.0" "I42.5" "I42.6" "I42.7" "I42.8" "I42.9" "P29.0"			
Cerebrovascular disease	"362.34" "437" "438" "437.0" "437.1"	"G45" "G46" "I60" "I61" "I62" "I63" "I64" "I65" "I66" "I67" "I68" "H34.0" "H34.1" "H34.2"			
Ankylosing spondylitis (AS)	"720.0" "720.1" "720.2" "720.8" "720.9"	"M45.0-M45.9"			
Rheumatoid ar- thritis (RA)	"714"	"M05" "M06"			
Autoimmune disease (without AS and RA)	"710.0" "710.1" "710.2 " "710.3" "710.4" "710.5" "710.8" 710.9"	"M32" "M33" "M34" "M31.5" "M35.1" "M35.3" "M36.0"			
Liver disease	"571.2" "571.5" "571.6" "571.8" "571.9" "456.0" "456.1" "456.2" "572.2" "572.3" "572.4"	"B18" "K73" "K74" "K28" "K70.0" "K70.1" "K70.2" "K70.3" "K70.9" "K71.3" "K71.4" "K71.5" "K71.7" "K76.0" "K76.2" "K76.3" "K76.4" "K76.8" "K76.9" "Z94.4" "I85.0" "I86.4" "K70.4" "K71.1" "K72.1" "K72.9" "K76.5" "K76.6" "K76.7"			
Diabetes mellitus	"250.0" "250.1" "250.2" "250.3" "250.4" "250.5" "250.6" "250.7" "250.8" "250.9"	"E08" "E09" "E10" "E11" "E13"			
Renal disease	"585" "586" "V56" "V42.0" "V45.1"	"N19" "Z49" "I12.0" "I13.2" "N18.5" "N18.6" "N25.0" "Z99.2" "I13.11"			
Hypertension	"401" "402" "403" "404" "405"	"I10" "I11" "I12" "I13" "I15"			
Hyperlipidemia	"272.0" "272.1" "272.2" "272.3" "272.4"	"E78"			

Supplementary Table S2. ICD-9-CM and ICD-10-CM codes of skin diseases.

Skin disease	ICD-9-CM	ICD-10-CM			
Psoriasis	"696.1"	"L40.0" "L40.1" "L40.2" "L40.3" L40.4" "L40.8" "L40.9"			
Vitiligo	"709.01"	"L80"			
Atopic dermatitis	"691.8"	"L20.9"			
Polyarteritis nodosa	"446.0"	"M30.0"			
Erythema nodosum	"695.2"	"L52"			
Aphthous stomatitis	"528.2"	"K12.0"			
Pyoderma gangre- nosum	"686.01"	"L88"			
Skin cancer	"173.0-173.9" "172.0-172.9"	"C43.0-C43.9" "C44.0-C44.9"			
Rosacea	"695.3"	"L71.0" "L71.1" "L71.8" "L71.9"			
Hidradenitis suppurativa	"705.83"	"L73.2"			
Cutaneous T cell "202.83"		"C84.A3"			

$\label{eq:Supplementary Table S3.} \ \ \text{Time (years) to develop skin diseases.}$

Skin disease	No.I	Mean (y)SD (y)I	Median (y)Min (y)	Max (y)
Psoriasis	20	5.05	3.68	4.34	0.25	12.72
Atopic dermatitis	24	4.77	3.26	4.93	0.36	12.87
Erythema nodosum	30	4.12	3.61	3.55	0.06	12.15
Aphthous stomatitis	198	4.62	3.36	3.90	0.03	14.30
Pyoderma gangrenosum	19	5.34	3.29	5.67	0.43	11.45
Polyarteritis nodosa	9	3.90	3.19	3.15	0.28	9.17
Rosacea	61	5.55	3.43	5.35	0.41	13.77
Hidradenitis suppurativa	9	5.59	4.08	4.89	0.64	13.86
Cutaneous T cell lymphoma		3.25	3.08	3.08	0.18	6.67

Abbreviation: SD, standard deviation; y, years; Min, minimum; Max, maximum.