

**Table S1** Used ICD-10 codes

Diagnosis codes	ICD-10 codes
Gastrointestinal bleeding	K228, I8501, K251, I8511, K255, K285, K255, K261, K271, K281, K275, K265, K2211, K3182, K5521, K6381, K250, K252, K254, K256, K260, K262, K264, K266, K270, K272, K274, K276, K280, K282, K284, K286, K2901, K2941, K2961, K2921, K2961, K2971, K2981, K31811, K5711, K5713, K5731, K5733, K226, K2931, K2951, K2991, K31811, K50111
SLE (systemic lupus erythematosus)	M32.x
Rheumatoid arthritis	M05.x, M06.x, M08.x
Scleroderma	M340, M341, M342, M348, M3481, M3482, M3483, M3489, M349
Sjogren syndrome	M332, M3320, M3321, M3322, M3329
Inflammatory myositis	M3500, M3501, M3502, M3503, M3504, M3509, M331, M332, M339, M3381, M3389
Mixed connective tissue disease	M351, M332, M339, M3381, M3389
Giant cell arteritis	M315, M316
Psoriasis	L40.x
Polymyalgia rheumatica	M353
Esophagogastroduodenoscopy without intervention	0DJ68ZZ, 0DJ08ZZ, 0D958ZX, 0DD58ZX, 0D998ZX, 0D968ZX, 0DD68ZX, 0DD98ZX, 0DB58ZX, 0DB68ZX, 0DB98ZX, 0D987ZX, 0DDC8ZX, 0DDB8ZX, 0DDA8ZX, 0DD88ZX, 0DBC8
Esophagogastroduodenoscopy with intervention	06L34CZ, 0D518ZZ, 0D528ZZ, 0D538ZZ, 0D548ZZ, 0D558ZZ, 0W3P8ZZ, 3E0G8TZ, 0D568ZZ, 0D578ZZ, 0D598ZZ, 0DQ98ZZ, 0DQ68ZZ, 0DQ78ZZ, 0W3P8ZZ, 0DL58ZZ, 0DL68ZZ, 0DL98ZZ, 0DLA8ZZ, 0DLB8ZZ, 0DTB8ZZ
Colonoscopy without Intervention	0DJD8ZZ, 0D9E8ZX, 0D9H8ZX, 0D9N8ZX, 0DBE8ZX, 0DBH8ZX, 0DBN8ZX, 0DDE8ZX, 0DDH8ZX, 0DDN8ZX, 0DBP8ZZ, 0DBQ8ZZ, 0DDH
Colonoscopy with Intervention	0D5E8ZZ, 0D5F8ZZ, 0D5G8ZZ, 0D5H8ZZ, 0D5K8ZZ, 0D5L8ZZ, 0D5M8ZZ, 0D5N8ZZ, 0D5P8ZZ, 0DLH8ZZ, 0D5Q8ZZ, 0DLP8ZZ, 0DLQ8ZZ, 0DQH8ZZ, 0DQQ8ZZ, 0D5Q8ZZ, 0DTH8ZZ, 0DTP8ZZ, 0DTQ8ZZ
Diabetes mellitus	E08.x, E09.x, E10.x, E11.x, E12.x, E13.x, O24.x, E0837X1, E0837X2, E0837X3, E0837X9, E1037X1, E1037X2, E1037X3, E1037X9, E1137X1, E1137X2, E1137X3, E1137X9, E1337X1, E1337X2, E1337X3, E1337X9,
Smoking	Z87891, F17200, F17201, I501, F17208, F17209, F17210, F17211, F17213, F17218, F17219, F17220, F17221, F17223, F17228, F17229, F17290, F17291, F17293, F17298, F17299, F17210, F17211, F17213, F17218, F17219, F17220, F17221, F17223, F17228, F17229, F17290, F17291, F17293, F17298, F17299
Hypertension	I15.X, I10
Myocardial infarction	I21.x, I22.x, I23.x, I252
Cerebrovascular accident	I69.x, I68.x, I67.x, I67848
Congestive heart failure	I502.x, I503.x, I504.x, I110, I130, I132, I501
Chronic obstructive pulmonary disease	J44, J440, J441, J449
Chronic kidney disease	N181, N182, N183, N184, N185, N186, N189
Liver cirrhosis	K703.x, K704.x, K74.x, K717, K720, K7210, K7211, K7290, K7291, K7681, P7881, K7460
Human immunodeficiency virus/acquired immunodeficiency syndrome	B20, B9735, Z21
Peripheral vascular disease	I73.x, I739, Z958, Z959
Dementia	F01.x, F02.x, F03.x, G310.x, F1027, F1327, F1827, F1927, G3183
Malignancy	C00.x, C26.x, C30.x, C34.x, C37.x, C41.x, C45.x, C93.x, C91.x, C85.x, C81.x, C76.x, C95.x, C96.x, C58, C60, C883, C887, C889, C900, C901, C940, C943, C945, C947