

**Supplementary Table 1. List of comorbidities**

Category	Category name	Disease
Category I	Certain infectious and parasitic diseases	Arthropod-borne viral fevers and viral hemorrhagic fevers
		Bacterial, viral and other infectious agents
		Certain zoonotic bacterial diseases
		Chronic hepatitis B
		Helminthiases
		Human immunodeficiency virus (HIV) disease
		Infections with a predominantly sexual mode of transmission
		Intestinal infectious diseases
		Mycoses
		Other bacterial diseases
		Other diseases caused by chlamydia
		Other infectious diseases
		Other spirochetal diseases
		Other viral diseases
		Pediculosis, acariasis and other infestations
		Protozoal diseases
		Rickettsioses
		Sequelae of infectious and parasitic diseases
		Tuberculosis
		Viral hepatitis
Viral infections characterized by skin and mucous membrane lesions		
Viral infections of the central nervous system		
Category II	Neoplasms	Benign neoplasms
		In situ neoplasms
		Malignant neoplasm of breast
		Malignant neoplasms of bone and articular cartilage
		Malignant neoplasms of digestive organs
		Malignant neoplasms of eye, brain and other parts of central nervous system
		Malignant neoplasms of female genital organs
		Malignant neoplasms of ill-defined, secondary and unspecified sites
		Malignant neoplasms of independent (primary) multiple sites
		Malignant neoplasms of lip, oral cavity and pharynx
		Malignant neoplasms of male genital organs
		Malignant neoplasms of mesothelial and soft tissue
		Malignant neoplasms of respiratory and intrathoracic organs
		Malignant neoplasms of thyroid and other endocrine glands
		Malignant neoplasms of urinary tract
		Malignant neoplasms, stated or presumed to be primary, of lymphoid, hematopoietic and related tissue
		Melanoma and other malignant neoplasms of skin
		Neoplasms of uncertain or unknown behavior

**Supplementary Table 1. Continued**

Category	Category name	Disease
Category III	Disease of the blood and blood-forming organs and certain disorders involving the immune mechanism	<ul style="list-style-type: none"> <li>Aplastic and other anemias</li> <li>Certain disorders involving the immune mechanism</li> <li>Coagulation defects, purpura and other hemorrhagic conditions</li> <li>Hemolytic anemias</li> <li>Nutritional anemias</li> <li>Other diseases of blood and blood-forming organs</li> </ul>
Category IV	Endocrine, nutritional and metabolic disease	<ul style="list-style-type: none"> <li>Diabetes mellitus</li> <li>Disorders of other endocrine glands</li> <li>Disorders of thyroid gland</li> <li>Dyslipidemia</li> <li>Malnutrition</li> <li>Metabolic disorders</li> <li>Obesity and other hyperalimentation</li> <li>Other disorders of glucose regulation and pancreatic internal secretion</li> <li>Other nutritional deficiencies</li> </ul>
Category V	Mental and behavioral disorders	<ul style="list-style-type: none"> <li>Behavioral and emotional disorders with onset usually occurring in childhood and adolescence</li> <li>Behavioral syndromes associated with physiological disturbances and physical factors</li> <li>Disorders of adult personality and behavior</li> <li>Disorders of psychological development</li> <li>Mental and behavioral disorders due to psychoactive substance use</li> <li>Mental retardation</li> <li>Mood (affective) disorders</li> <li>Neurotic, stress-related and somatoform disorders</li> <li>Organic, including symptomatic, mental disorders</li> <li>Schizophrenia, schizotypal and delusional disorders</li> <li>Unspecified mental disorder</li> </ul>
Category VI	Diseases of the nervous system	<ul style="list-style-type: none"> <li>Cerebral palsy and other paralytic syndromes</li> <li>Demyelinating diseases of the central nervous system</li> <li>Diseases of myoneural junction and muscle</li> <li>Episodic and paroxysmal disorders</li> <li>Extrapyramidal and movement disorders</li> <li>Inflammatory diseases of the central nervous system</li> <li>Nerve, nerve root and plexus disorders</li> <li>Other degenerative diseases of the nervous system</li> <li>Other disorders of the nervous system</li> <li>Polyneuropathies and other disorders of the peripheral nervous system</li> <li>Systemic atrophies primarily affecting the central nervous system</li> </ul>
Category VII	Diseases of the eye and adnexa	<ul style="list-style-type: none"> <li>Disorders of choroid and retina</li> <li>Disorders of conjunctiva</li> <li>Disorders of eyelid, lacrimal system and orbit</li> </ul>

**Supplementary Table 1. Continued**

Category	Category name	Disease
		Disorders of lens Disorders of ocular muscles, binocular movement, accommodation and refraction Disorders of optic nerve and visual pathways Disorders of sclera, cornea, iris and ciliary body Disorders of vitreous body and globe Glaucoma Other disorders of eye and adnexa Visual disturbances and blindness
Category VIII	Diseases of the ear and mastoid process	Diseases of external ear Diseases of inner ear Diseases of middle ear and mastoid Other disorders of ear
Category IX	Diseases of the circulatory system	Acute rheumatic fever Cerebrovascular diseases Chronic rheumatic heart diseases Diseases of arteries, arterioles and capillaries Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified Hypertension Hypertensive diseases Ischemic heart diseases Other and unspecified disorders of the circulatory system Other forms of heart disease Pulmonary heart disease and diseases of pulmonary circulation
Category X	Diseases of the respiratory system	Acute upper respiratory infections Chronic lower respiratory diseases Influenza and pneumonia Lung diseases due to external agents Other acute lower respiratory infections Other diseases of pleura Other diseases of the respiratory system Other respiratory diseases principally affecting the interstitial Suppurative and necrotic conditions of lower respiratory tract
Category XI	Diseases of the digestive system	Alcoholic liver disease Diseases of appendix Diseases of liver Diseases of esophagus, stomach and duodenum Diseases of oral cavity, salivary glands and jaws Diseases of peritoneum Disorders of gallbladder, biliary tract and pancreas Esophagitis or gastroesophageal

**Supplementary Table 1. Continued**

Category	Category name	Disease
		Hernia
		Noninfective enteritis and colitis
		Other diseases of intestines
		Other diseases of the digestive system
		Peptic ulcer or gastrointestinal ulcer
Category XII	Diseases of the skin and subcutaneous tissue	Bullous disorders
		Dermatitis and eczema
		Disorders of skin appendages
		Infections of the skin and subcutaneous tissue
		Other disorders of the skin and subcutaneous tissue
		Papulosquamous disorders
		Radiation-related disorders of the skin and subcutaneous tissue
		Urticaria and erythema
Category XIII	Diseases of the musculoskeletal system and connective tissue	Arthrosis
		Chondropathies
		Deforming dorsopathies
		Disorders of bone density and structure
		Disorders of muscles
		Disorders of synovium and tendon
		Infectious arthropathies
		Inflammatory polyarthropathies
		Other disorders of the musculoskeletal system and connective tissue
		Other dorsopathies
		Other joint disorders
		Other osteopathies
		Other soft tissue disorders
		Spondylopathies
		Systemic connective tissue disorders
Category XIV	Diseases of the genitourinary system	Chronic renal disease
		Diseases of male genital organs
		Disorders of breast
		Glomerular diseases
		Inflammatory diseases of female pelvic organs
		Noninflammatory disorders of female genital tract
		Other diseases of urinary system
		Other disorders of kidney and ureter
		Other disorders of the genitourinary system
		Renal failure
		Renal tubulo-interstitial diseases
		Urolithiasis