System	Pathological Processes	Common Diseases & Disorders
General Pathology	- Inflammation (acute vs. chronic) - Cell injury and death (necrosis, apoptosis) - Tissue repair, regeneration, fibrosis - Neoplasia and tumor classification - Cellular adaptations (hypertrophy, hyperplasia, atrophy, metaplasia) - Genetic and molecular pathology - Environmental and toxicologic pathology	- Autoimmune diseases - Multisystem inflammatory disorders - Genetic syndromes - Paraneoplastic syndromes
Hematopoietic & Lymphoreticular	- Disorders of RBCs, WBCs, platelets, and clotting factors - Bone marrow failure and myeloproliferative disorders - Lymphoproliferative and immune system disorders	- Anemias (iron deficiency, megaloblastic, hemolytic) - Leukemias (AML, CML, ALL, CLL) - Lymphomas (Hodgkin's, Non- Hodgkin's) - Multiple myeloma - Hemophilia, thrombocytopenia
Central & Peripheral Nervous	- Neurodegeneration and demyelination - CNS tumors (primary vs. metastatic) - Inflammatory and infectious CNS pathology - Trauma-related brain pathology	- Stroke (ischemic, hemorrhagic) - Alzheimer's, Parkinson's, Huntington's - Multiple sclerosis, Guillain-Barré - Brain tumors (glioblastoma, meningioma) - Spinal cord injuries
Skin & Connective Tissue	- Dermatopathology (infections, inflammatory, autoimmune, neoplastic) - Connective tissue diseases	- Psoriasis, eczema, urticaria - Melanoma, basal cell carcinoma, squamous cell carcinoma - Lupus erythematosus, scleroderma - Ehlers- Danlos, Marfan syndrome
Musculoskeletal	- Bone remodeling and metabolic disorders - Muscle degeneration and inflammatory myopathies	- Osteoporosis, osteomalacia - Osteoarthritis, rheumatoid arthritis - Osteosarcoma, Ewing sarcoma - Muscular dystrophies, myositis
Respiratory	- Obstructive vs. restrictive lung diseases - Pulmonary infections and inflammatory conditions - Neoplastic lung pathology	- COPD (emphysema, chronic bronchitis) - Asthma, interstitial lung disease - Pneumonia, tuberculosis - Lung cancer (small cell, non-small cell) - Pulmonary embolism
Cardiovascular	- Vascular pathology (atherosclerosis, vasculitis) - Cardiac pathology (hypertrophy, myocardial infarction) - Congenital and acquired heart disease	- Myocardial infarction, ischemic heart disease - Hypertension, aortic aneurysms - Heart failure (systolic vs. diastolic) - Endocarditis, myocarditis - Congenital heart defects
Gastrointestinal	- Inflammatory and infectious GI pathology - Neoplasia of the GI tract - Liver pathology (hepatitis, cirrhosis)	- GERD, peptic ulcer disease - Inflammatory bowel disease (Crohn's, ulcerative colitis) - Colorectal cancer - Liver cirrhosis, hepatitis (viral, alcoholic, autoimmune) - Pancreatitis
Renal/Urinary	- Glomerular and tubular pathology - Renal neoplasia - Vascular pathology of the kidney	- Acute and chronic kidney disease - Nephrotic and nephritic syndromes -

Pathology

System	Pathological Processes	Common Diseases & Disorders
		Renal cell carcinoma - Polycystic kidney disease - Urinary tract infections
Reproductive	- Male and female reproductive pathology - Hormonal and structural disorders - Neoplasia of reproductive organs	- Polycystic ovary syndrome (PCOS) - Cervical, ovarian, uterine cancers - Prostate cancer, testicular tumors - Infertility-related pathologies
Endocrine	- Pituitary, thyroid, adrenal, pancreatic disorders - Hormonal dysregulation and neoplasia	- Diabetes mellitus (Type 1 and 2) - Hyperthyroidism (Graves disease), hypothyroidism (Hashimoto's) - Cushing's syndrome, Addison's disease - Pheochromocytoma