

- Lung disease(s) (*Continued*)  
 small cell carcinoma, 715b-718b  
 squamous cell carcinoma, 713-714, 715b-718b, 716f, 717f  
 staging of, 718, 718t  
 vascular, 697-702  
 caused by air pollutants, 688t  
 drug-induced, 692  
 due to infections, 702-711  
 abscess of, 708-709, 708b-709b, 708f  
 human immunodeficiency virus (HIV), 711  
 pneumonia as. *See* Pneumonia  
 eosinophilia of, 695  
 fibrosing, 684-693  
 complications of therapies, 692-693  
 connective tissue diseases, pulmonary involvement in, 687  
 cryptogenic organizing pneumonia, 687, 687f  
 idiopathic pulmonary fibrosis. *See* Idiopathic pulmonary fibrosis (IPF)  
 nonspecific interstitial pneumonia, 686, 686b  
 pneumoconioses. *See* Pneumoconioses  
 granulomatous as, 693-695  
 hypersensitivity pneumonitis, 694-695, 695b, 695f  
 sarcoidosis, 693-694, 693b-694b, 693f  
 neuroendocrine proliferations of, 719-720  
 obstructive, 674-684, 674t  
 of pleura, 721-724  
 effusion of, 721-722  
 malignant mesothelioma, 723-724, 723b-724b, 723f, 724f  
 pneumothorax, 722  
 solitary fibrous tumors of, 723, 723b, 723f  
 tumors of, 722-724  
 pulmonary alveolar proteinosis (PAP), 696-697, 696b, 697f  
 pulmonary Langerhans cell histiocytosis, 696  
 radiation-induced, 692-693  
 restrictive, 684  
 smoking-related, 696  
 desquamative interstitial, 695-696, 695b-696b, 695f  
 respiratory bronchiolitis-associated interstitial, 696  
 surfactant dysfunction disorders, 697, 697b  
 tumors of, 712-721  
 in vascular  
 diffuse pulmonary hemorrhage syndromes, 701-702, 701b  
 pulmonary embolism, 697-699, 698b-699b, 698f  
 pulmonary hypertension, 699-700, 700b, 700f
- Lupus anticoagulant syndrome, 124-125  
 Lupus erythematosus, 687, 1175  
 Lupus nephritis, 223f, 926  
 advanced sclerosing, 222b-225b  
 Luteal cysts, 1022b  
 Lyme arthritis, 1214  
 Lyme disease, 381-382, 382b  
 clinical stages of, 381f  
 nervous system involvement in, 1275  
 peripheral neuropathy in, 1232
- Lymph node(s), 193  
 in acute inflammation, 74-75  
 in infectious mononucleosis, 361b-362b
- Lymph node(s) (*Continued*)  
 morphology of, 193f  
 reactive proliferations of, 583-586  
 Lymph node metastases, of breast carcinoma, 1066-1067  
 Lymphadenitis, 74-75, 374b-376b, 584-586  
 morphology of, 584b-585b  
 Lymphangioliomyomatosis, 720-721  
 Lymphangitis, 74-75, 515  
 Lymphatic filariasis, 398-399, 399b  
 Lymphatic obstruction, edema due to, 114-115  
 Lymphatic spread, 273  
 Lymphatic tumors, in infants and children, 474  
 Lymphatic vessels, in acute inflammation, 74-75  
 Lymphatics, 485  
 veins and, 514-515  
 Lymphedema, 114-115, 515  
 Lymphoblastic leukemias, acute, oncogenes for, 287  
 Lymphoblasts, 590  
 Lymphocyte(s). *See also* B lymphocytes; T lymphocytes  
 activation and function, defects in, 241-242  
 in chronic inflammation, 96, 97f  
 diversity, 190  
 principal classes of, 189f  
 recirculation, 194  
 of skin, 1142  
 Lymphocyte depletion type, of Hodgkin lymphoma, 607b-610b  
 Lymphocyte maturation, defects in, 238-241  
 Lymphocyte predominance type, of Hodgkin lymphoma, 607b-610b, 610f  
 Lymphocyte-rich type, of Hodgkin lymphoma, 607b-610b  
 Lymphocytic mastopathy, 1047  
 Lymphocytosis, in inflammation, 99  
 Lymphoepithelioma-like carcinoma, 627b  
 Lymphogranuloma venereum, 384b  
 Lymphoid cells, 580-581  
 Lymphoid leukemias  
 common forms of, 598b  
 major types of, 591t  
 Lymphoid neoplasms, 315, 586, 588-611  
 immune cell antigens detected by monoclonal antibodies, 590t  
 origin of, 589f  
 uncommon, 606b  
 World Health Organization classification of, 588t  
 Lymphoid organogenesis, 96  
 Lymphoid organs, tertiary, 96  
 Lymphoid systems, radiation effects on, 430-431  
 Lymphoid tissues, 579  
 Lymphoma(s), 588  
 of breast, 1070  
 common forms of, 598b  
 gastric, 773, 773b, 774f  
 testicular, 980  
 Lymphopenia, 582  
 Lymphoplasmacytic lymphoma, 601, 602b, 602f  
 morphology of, 601b  
 Lymphopoiesis, 580f  
 Lyon hypothesis, 164  
 Lysosomal enzymes, 149  
 in inflammation, 80-81  
 in leukocyte-mediated tissue injury, 82
- Lysosomal enzymes (*Continued*)  
 synthesis and intracellular transport of, 150f  
 Lysosomal enzyme arylsulfatase A, 1302-1303  
 Lysosomal membranes, injury to, 50  
 Lysosomal storage diseases, 149-155, 150f, 151t, 155b  
 Lysosomes, 6, 13-14  
 degradation of, 13f  
 Lysozyme, in phagocytosis, 81
- M**
- M component, in myeloma, 598  
 Machado-Joseph disease, 1299  
 Macrocytic anemia, 629-630  
 $\alpha_2$ -macroglobulin, in inflammation, 81  
 Macronodular hyperplasia, 1124b  
 Macrophage(s), 187, 192  
 activated, 95f, 96, 98, 104  
 alveolar, 670  
 antitumor effect of, 312  
 in glomerular injury, 907  
 in inflammation  
 acute, 82  
 chronic, 94-96, 95f, 97f  
 in phagocytosis, 79  
 in repair, 104  
 in tuberculosis, 372  
 Macrophage activation syndrome, 585  
 Macrophage inflammatory protein-1 $\alpha$  (MIP-1 $\alpha$ ), 87  
 Macrophage-lymphocyte interactions, in chronic inflammation, 97f  
 Macrosomia, fetal, 454-455  
 Macular edema, 1336  
 in diabetes, 1117b-1119b  
 Macule, 1143t  
 Maffucci syndrome, 1201  
 Magnesium ammonium phosphate stones, 951t, 952  
 Mainstem bronchi, 719  
 Major basic protein  
 in chronic inflammation, 96-97  
 in phagocytosis, 81  
 Major histocompatibility complex (MHC) molecules, 194-196  
 in immune system, 190  
 loss or reduced expression of, in immune evasion, 313  
 Major histocompatibility complex (MHC) restriction, 190  
 Malabsorption, 781-784, 781t  
 in abetalipoproteinemia, 784  
 in autoimmune enteropathy, 784  
 in celiac disease, 782-783, 782f, 783f, 783b  
 in cystic fibrosis, 782  
 in environmental enteropathy, 783-784  
 in lactase (disaccharidase) deficiency, 784  
 Malakoplakia, cystitis with, 963, 963f  
 Malar rash, in systemic lupus erythematosus, 218t  
 Malaria, 390-392, 391b-392b  
 Male breast, 1066  
 Male genital tract, 970-990  
 penis in, 970-972  
 congenital anomalies of, 970  
 inflammation of, 970  
 tumors of, 970-972, 970f, 971f  
 prostate in, 980-990  
 benign enlargement of, 982-983, 982b-983b, 983f, 984f