

- deficiencies of, 375e-1, 2104t, 2107, 2107f, 2108f
 cartilage hair hypoplasia, 418, 2109
 with DNA repair defects, 375e-1–2, 2109.
See also Ataxia telangiectasia (AT)
 functional defects, 2109
 with hyper IgE. *See* Hyper-IgE syndrome
 in hyper-IgM syndrome, 2110
 in Omenn syndrome, 2108–2109
 in severe combined immunodeficiency. *See*
 Severe combined immunodeficiency
 (SCID)
 in thymic defects, 2108
 in Wiskott-Aldrich syndrome. *See* Wiskott-
 Aldrich syndrome
 definition of, 372e-2
 development of, 372e-16–18, 372e-17f
 differentiation of, 697–698, 699f
 hematopoietic, 89e-3f
 in primary immune deficiency diseases,
 2107, 2107f, 2108f
 effector memory, 372e-15–16
 helper. *See* CD4+ T cells
 inactivation by tumor cells, 102e-17, 102e-18f
 locations of, 372e-16
 MHC class-restricted, 372e-18, 373e-3, 373e-4
 monoclonal antibodies to, for autoimmune
 and inflammatory diseases, 372e-
 30–31
 negative selection, 372e-17
 NK. *See* Natural killer (NK) T cells
 positive selection, 372e-17
 priming against tumor-associated peptides,
 103e-20
 in psoriasis, 348
 regulatory, 1673
 in response to *S. aureus*, 956
 in sarcoidosis, 2205f
 in vasculitis, 2180–2181
 T-cell exhaustion, 372e-2, 372e-19
 T cell large granular lymphocytic leukemia,
 135e-3, 2138
 T-cell prolymphocytic leukemia, 135e-3
 T cell receptors (TCRs)
 for antigens, 372e-2, 372e-18–19
 defective rearrangements of, 2108
 diversity of, 372e-18–19
 HLA genes and, 373e-1, 373e-3
 signaling through, 372e-18f
 trimolecular complex of, 373e-2f
 T cell superantigens, 372e-19
TCIRG1 gene, 426e-4
TCL1 gene mutations, 135e-3
 Tdap vaccine. *See* Tetanus, diphtheria, acellular
 pertussis (Tdap) vaccine
TDF (testis-determining factor), 439
TDP-43 gene mutations, 444e-9, 2633
 TDP-43 protein, 172t, 2633
 Td vaccine. *See* Tetanus-diphtheria (Td) vaccine
 Teaching, physician engaged in, 7
 Teardrop cells, 81e-5f
 Teardrop fracture, 441e-34f
 Technetium-99m, 263e-3t, 270e-3, 270e-3t
 TECK (thymus expressed chemokine), 372e-12t
 Tecovirimat, 261e-6
 Tedizolid
 action of, 931t, 932, 961
 adverse effects of, 938t
 drug interactions of, 939t
 indications for, 941t, 944
 for MRSA infections, 962t
 in pregnancy and lactation, 937t
 resistance to, 931t, 934, 941t
 for staphylococcal infections, 961, 962t
 Teduglutide, 1944
 TEE. *See* Transesophageal echocardiography
 (TEE)
 Teeth. *See also* Dental entries
 age-related changes in, 242
 development of, 235–236
 discolored, 236
 diseases of, 46e-1, 235
 Hutchinson's, 237
 loss of, 236–237, 242
 in osteogenesis imperfecta, 2508
 structure of, 235–236
 tooth extraction, 242
 TEF, 401e-1, 401e-1t
 Tegaserod, 1970
 Teicoplanin, 930, 931t
 Telangiectasia(s), 356. *See also* Ataxia
 telangiectasia (AT)
 capillary, 2586
 in cardiovascular disease, 1442
 definition of, 339t, 1650
 etiology of, 356t
 hereditary hemorrhagic. *See* Osler-Weber-
 Rendu syndrome
 intestinal, 536
 linear, 356–357
 mat, 357
 periungual, 357
 in systemic sclerosis, 2160, 2160f
 treatment of, 2165
 Telaprevir
 action of, 215e-11
 adverse effects of, 381, 2046–2047
 for chronic HCV infection, 2044, 2045–2046t,
 2046–2047
 drug interactions of, 2047
 Telavancin
 action of, 930, 931t, 961
 adverse effects of, 938t, 942
 for enterococcal infections, 976
 indications for, 940t, 942
 in pregnancy and lactation, 937t
 resistance to, 931t, 933–934
 for staphylococcal infections, 961
 Telbivudine
 action of, 215e-10
 adverse effects of, 2036
 for chronic HBV infection, 215e-4t, 215e-10,
 2036, 2037t, 2038f
 pharmacology of, 215e-10
 resistance to, 215e-10, 2040t
 Teletherapy, 103e-4
 Telithromycin
 action of, 931, 931t, 943
 adverse effects of, 943
 drug interactions of, 943
 indications for, 943
 for *Legionella* infections, 1020t
 resistance to, 931t, 934
 Telmisartan, 2570
 Telogen, 331
 Telogen effluvium, 354, 355t, 379
 Telomerase, in cancer cells, 102e-3, 440
 Telomere, 83e-1, 94e-3, 102e-3, 440
 Telotristat etiprate, 566
 Temazepam
 for anxiety disorders, 2711t
 for insomnia, 191
 overdose/poisoning with, 473e-10t
 pharmacology of, 2711t
 for sleep impairment at high altitudes, 476e-4
 Temozolomide
 action of, 103e-12
 adverse effects of, 103e-9t, 574
 for astrocytoma, 600
 for glioblastoma, 600
 for malignant pheochromocytoma, 2331
 for melanoma, 499
 for oligodendroglioma, 601
 for pNETS, 574
 Temperature sense, 159, 160t
 Temporal arteritis. *See* Giant cell arteritis
 (temporal arteritis)
 Temporal bone, fracture of, 220
 Temporal lobectomy, for refractory epilepsy,
 2557
 Temporal lobe epilepsy, 2546
 Temporomandibular joint disorder, 237
 Temsirolimus
 action and targets of, 102e-5t, 103e-16f,
 103e-19, 103e-19t
 adverse effects of, 102e-5t, 103e-19, 103e-19t,
 103e-26, 1797
 for mantle cell lymphoma, 704
 for NETs, 574
 for renal cell carcinoma, 102e-5t, 579
 TEN. *See* Toxic epidermal necrolysis (TEN)
 Tenatoprazole, 1921
 Tender point assessment, in fibromyalgia, 2238,
 2238f
 Tendinitis
 bicipital, 2248
 calcific, 2248
 drug-induced, 2218t
 patellar, 2248
 rotator cuff, 2221, 2248
 Tendinous xanthomas, 436e-3f
 Tenecteplase
 action of, 759
 for acute limb ischemia, 1646
 contraindications to, 1605
 domain structure of, 759, 759f
 indications for, 759
 for myocardial infarction, 1605
 for pulmonary embolism, 1636
 Teneligliptin, 2414t
 Tennis elbow, 2249
 Tenofovir
 action of, 215e-9, 1278
 adverse effects of, 215e-9, 1274t, 1278
 for chronic HBV infection, 2037
 comparison to other antivirals, 2037t, 2038f
 dosage for, 215e-4t, 215e-9
 therapeutic monitoring of, 215e-4t, 2039,
 2074
 drug interactions of, 1278
 for HIV infection, 215e-9, 1274t, 1278
 molecular structure of, 1276f, 1278
 resistance to, 215e-9, 1279f, 2040t
 Tenosynovitis, 2248
 Tension pneumothorax, 98, 1719
 Tension-type headache, 107t, 2587t, 2593–2594
 Teratoma
 ovarian
 anti-NDMA encephalitis and, 615f, 617,
 617f
 benign, 594
 clinical features of, 594
 genetic considerations in, 439
 paraneoplastic opsoclonus-myoclonus
 syndrome and, 618
 thyrotoxicosis in, 2298
 parasellar, 2264
 pineal, 603
 testicular, 588, 591
 Terazosin
 for hypertension, 1624t
 for Raynaud's phenomenon, 1649
 for urinary dyssynergia, 2660, 2672
 Terbinafine
 adverse effects of, 215, 2218t
 for onychomycosis, 350, 1331, 1358, 1358t
 for *Sporothrix* infections, 1354t
 for tinea, 1331, 1358, 1358t
 for tinea capitis, 355t
 Terbutaline, 473e-8t
TERC gene mutations, 664–665
 Terfenadine, 42t
 Teriflunomide, 2669t, 2670, 2671
 Teriparatide, 2383, 2502–2503, 2502f, 2503f
 Terlipressin, 278, 1810
 Terminal extubation, 66–67
 Terminal hair, 331
 Terminally ill patient, 55
 advance care planning for, 58–59, 59t
 assessment of, 56–57
 with cancer, 475
 care during last hours, 68–69, 69t
 clinical courses of, 68f
 communicating bad news to, 57–58, 57t
 continuous goal assessment, 48
 delirium in, 169
 depression in, 64–65
 euthanasia and physician-assisted suicide for,
 67–68, 67t
 existential needs of, 66
 financial burdens of, 65
 futile care of, 67