

Subject Index to Volume 19 (2002)

- A**
- ABC transporter, 34
Absorption, 470, 868, 1091, 1180
Absorption, dermal, 292
Absorption, dissolution rate-limited, 1655
Absorption, gastrointestinal, 755, 838, 1368, 1446, 1516
Absorption, irregular, 1655
Absorption, oral, 345, 832, 838, 868, 1180, 1446, 1655
Absorption, peptide, 169
Absorption, percutaneous, 1381
Absorption, peroral, 1532
Absorption, protein, 169
Absorption chambers, 1680
Absorption enhancers, 1680
Absorption potential, 1862
ABT-431, 1009
Accumulation, 1424
Acetaminophen, 1019, 1068
N-Acetyl-L-cysteine, 615, 1648
Acid-based cyclic prodrugs, 787, 794
Acids, weak, 1554
Acid-sensitive lipids, 1292
Aconitylated human serum albumin, 676
Active transport, 299
Acyclovir, 1194
N-Acyl phosphatidylethanolamine, 1430
Acylation, 175
Acyloxyalkoxy-based cyclic prodrug, 780
Adeno-associated virus, 968
Adenocarcinoma, 1114
Adherence, microbial, 818
Adherens junction, 1170
Adhesion, 322, 1170
Adhesion molecules, 1317
Adhesions, 411
Adipic acid, 1068
Adjuvants, 715
Administration routes, 63
 β_1 -Adrenergic receptors, 1779
 β_2 -Adrenergic receptors, 1779
Adriamycin, 681
Adsorbents, 1663
Adsorption, 1105
ADT peptides, 1170
Aerosol delivery, 239
Aerosol deposition, 1130
Aerosol dispersion, 1524
Aerosol inhalation, 1009
Aerosolization, 189
Aerosols, 1274
Aerosols, powdered, 32
AERx, 1009
Affinity, 773
A549 cells, 1488
AG-045572, 202
Aggregation, 511
Agitation, 511
Albugranin, 1720
Albumin, 47, 1648, 1458
Albumin, bovine serum, 47
Albumin, human serum, 569, 676, 1458, 1702
Albumin fusion, 569
Albuterol sulfate, 322
Aldose reductase inhibitor, 278
Alinate, 755
Alkali metal salts, 649
N-Alkyl analogs, 13, 434, 1232
Allometry, 696
Allosteric binding, 1458
Aluminum sucrose octasulfate, 838
Alveolar macrophages, 825
American Association of Pharmaceutical Scientists, 1761
2,5-bis(4-Amidinophenyl) furan, 1689
Amine derivatives, 1471
Amino acids, 1704
 γ -Amino-butyric acid receptors, 104
p-Aminohippurate, 1824
4-Aminophenylalanine-derived thrombin inhibitors, 1027
Aminophylline, 1265
Amiodarone, 738
Amorphous mixtures, 1873
Amorphous salts, 649
Amorphous state, 20, 477, 484
Amoxicillin, 1400
Amphotericin B, 418
Analgesia, 858
Analytic method, 634
Anemia, acute, 1630
Angiogenesis, 1251
Angiopoietin-1, 1757
Angiotensin-converting enzyme inhibitors, 1194
Anion transporters, 147, 738
Anionic vectors, 367
Anions, 1019
Anions, organic, 34
ANN (artificial neural networks), 87, 1130
Annealing, 901
Annual reports, 217
Ant cell-penetrating peptide, 744
Antagonist G, 265
Antiangiogenic drugs, 1251
Antiapoptotic effect, 71
Antibiotics, 1801
Antibody delivery, 1803
Anticancer compounds, sulfonamide-type, 1337
Anticancer drug delivery, 681
Antidiuretic drugs, 609
Antiandrogens, 661
Antifungal agents, 270
Antigen-antibody clearance, 1753
Antigenic peptides, 926
Antigen-presenting cells, 1480
Antigens, 926, 1330
Anti-HIV (human immunodeficiency virus) agents, 1696
Anti-inflammatory action, 403
Anti-inflammatory compounds, 1236
Antimicrobial, 1689
Antiproteases, 1696, 1704
Antipyrene, 1400
Antisense oligonucleotides, 367, 676, 744, 755
Antitumor activity, 1389
Apical membranes, 1822
Apoptosis, 1323, 1773
Apparent volume of distribution, 1827
AquaSol database, 497
Aqueous solubility, 182, 497, 504, 517, 1068, 1215
Aqueous solutions, 108
Aqueous solutions, frozen, 894, 901
Aqueous two-phase system, 115
Aqueous/organic cosolvent mixtures, 538
Arginine, 825
Aromatase inhibitors, 286
Array patch technology, 63
Arsenic, 79
Arsonolipid, 79
Arsonoliposomes, 79
Arthritis, 403
Artificial neural networks (ANN), 87, 1130
Ascorbic acid, 982
Asialoglycoprotein receptor, 1736, 1808
Asparagine, 1223
Aspart human insulin derivatives, 621
Astramol, 960
Atenolol, 1400
A23187, 1381
Autoadhesion, 322
Autoimmune disease, 108, 246
Avalanche behavior, 887
AVI-4472 oligomer, 1465
Azapropazone, 1150
B
Baculovirus, 1757
Bases, 345
Beclomethasone, 322
N-4-(Benzoylaminophenylsulfonyl glycine), 278
Benzylisothiocyanate, 1509
Betamethasone sodium phosphate, 403
Bevacizumab, 1753
Bias, 470, 1835
Bidirectional transport, 27
Biguanides, 1244
Bilayer films, 947
Bile acids, 34
Bile salts, 1203
Biliary clearance, 1027
Biliary excretion, 1345
Binding, 124, 265
Binding, covalent, 1648
Binding, solute-membrane, 1611
Bioadhesion, 1185
Bioavailability, 42, 292, 868, 1091, 1354, 1368
Biocompatibility, 132
Biodegradable implants, 278
Biodegradable microspheres, 1052, 1745
Biodegradable nanoparticles, 1105
Biodegradable polymers, 175
Biodistribution, 810, 1599
Bioequivalence, 217, 227, 921
Bioerodible microparticles, 1885
Biological activity, 845, 1232
Biopharmaceutics Classification System, 921
Biorecognition, 1114
Biorelevant dissolution media, 345
Biowaiver extensions, 921
2,5-Bis(4-amidinophenyl) furan, 1689
Bitter taste, 1019
Bitterness blocking, 1019
Block copolymer micelles, 418
Blood, 551
Blood-brain barrier, 976, 1123, 1430, 1611, 1757
Body distribution, 810
Bolus infusions, 1052
Boron, 1532
Bovine serum albumin, 47
Brain, 1123, 1137
Brain delivery, 1430
Breast cancer, 286
Brush-border membrane vesicles, 154
BT-20 cells, 1061
Buccal mucosal immunization, 947
Buccal permeability enhancement, 169
Buccal transmucosal delivery, 1901
Budesonide, 7, 1564
Budesonide nanosuspension, 189
Buffer systems, 20
Buffers, 195
Bulge regions, 1170
Bupivacaine, 1745
Burst effect, 1713
C
Caco-2 cell absorption model, 1606
Caco-2 cells, 27, 162, 595, 765, 773, 787, 976, 1091, 1180, 1185, 1400, 1495, 1680, 1689, 1704
Caffeine, 1285
Calcitonin, 1901
Calcium, 1381
Calcium-channel blockers, 477, 484
Calorimetry, differential scanning, 629, 661,
Calorimetry, isothermal titration, 1105
Calu-3 cells, 1696
Camptothecin, 1389
Camptothecin analogs, 1215
Cancer, 115, 286, 396, 588, 1114, 1251, 1509
Capsaicin, 1236
Carbamate hydrolysis, 517
Carbamazepine, 1278

- Carbonic anhydrase, 551
 Carboplatin, 1052
 Cardiovascular disease, 1779
 L-Carnosine, 1337
 Carr's index, 887
 Cascade impaction, 1274
 Caspases, 1323
 Catalase, 708, 1815, 1854
 Catechin, 1236
 Cathepsin B, 115
 Cation transporters, 1244
 Cationic cholesterol, 933
 Cationic liposomes, 377, 1144, 1599
 Cations, 1019
 Cavitation, 1160
 Cefradroxil, 1417
 Cefsulodin, 457
 Ceftazidime, 1801
 Celecoxib, 1873
 Cell adhesion molecules, 1317
 Cell culture models, 169
 Cell lines, 79
 Cell models, 976
 Cell penetration, 744
 Cell viability, 79
 Cell-cell adhesion, 1170
 Cellular uptake, 744
 Cellulose ethers, 1084
 Center for Drug Evaluation and Research, 217
 Centrifugal particle detachment, 322
 Cephalexin, 27, 1400
 Cetirizine, 1150
 Cetylpyridinium chloride, 669
 Chambers, Ussing-type, 602
 Charged groups, 1027
 Chemical enhancers, 655
 Chemical instability, 20
 Chemical modification, 1815
 Chemical stability, 794, 1232
 Chemotherapeutic molecular modeling, 1310
 Chemotherapy, 1052, 1509
 Chimeraplast, 914
 Chimeric transactivating protein, 1302
 Chitosan, 98, 169, 1488
 Chloroform, 427
 Cholera toxin, 947
 Cholesterol, 1808
 Cholesterol, cationic, 933
 Chromatography, frontal affinity, 104
 Chromatography, gas, 427
 Chromatography, inverse gas, 640, 1274
 Chromatography, liquid, 1091
 Chromatography, liquid high-performance, 124, 1907
 Chromatography, stationary phase, 104
 Chromatography, thin-layer, 427
 Cimetidine, 1400
 Cisplatin, 124
 Cis-/trans-isomers, 1034
 Citrate buffer, 195
 Citric acid-citrate buffer system, 20
 Clathrin, 1488
 Clearance, 1827
 Clinical trial simulation, 99
 Clinical trials, 270
 Clinical trials, dose-ranging, 909
 Clofibrate, 708
 Coefficients, 355, 729, 1862
 Cogrounding, 1867
 Cohesion index, 887
 COL-3, 1655
 Collapse temperature, 195
 Colloidal stability, 1144
 Colon, 832, 1114
 Colon cancer, 1114
 Colorimetric thiazoyl blue conversion assay, 669
 Combinatorial, 655
 COMET assay, 71
 Compaction, 491
 Compartmental method, 615
 Computer simulation, 99
 Computer-assisted drug development, 99
 Confocal fluorescence microscopy, 1114
 Confocal laser scanning microscopy, 140, 350, 554, 933
 Confocal living cell microscopy, 140
 Confocal Raman spectroscopy, 1577
 Conformation, 1549
 Conformational flexibility, 1611
 Conformational stability, 629
 Conjugates, 115, 396, 609, 744
 Constitutive androstane receptors, 1788
 Contact surfaces, 322
 Content uniformity testing, 359
 Controlled release, 250, 954, 1084, 1516, 1745, 1761
 Convolution-based models, 99
 Convulsants, 209
 Cooling rate, 894
 Copolymers, 115, 132, 403, 810, 832, 1114
 Corneal permeability, 1194
 Coumarin, 787, 794
 Counterions, 649
 Covalent binding, 615, 1648
 Covariate selection, 92
 CPT-11 (irinotecan), 1345
 Cracks, 7
 Creams, 270
 Critical micellization concentration, 1424
 Crystal growth inhibition, 1894
 Crystal structure, 1549
 Crystalline phase, 477, 484
 Crystallinity, 1663
 Crystallization, 195, 901, 1068
 Crystallization, controlled, 1894
 Crystallization, supercritical fluid, 640
 Crystallography, X-ray, 1549
 Crystals, needle-like, 1439
 Cyanocobalamin, 1097
 Cyclodextrin, 1215, 1867
 Cyclosporin A, 108, 1362
 CYP1A2, 1034
 CYP3A2, 1465
 CYP4A, 708
 CYP2C9, 1034
 CYP2C19, 1034
 Cystic fibrosis, 451, 457
 Cytochrome P450, 202, 708
 Cytokines, 382, 708, 1236, 1736
 Cytomegalovirus, 54
 Cytoplasmic delivery, 1292
 Cytotoxic compounds, 1236
 Cytotoxicity, 265, 960
 Cytotoxicity assays, 669
- D**
- DADLE (opioid peptide), 780, 787
 Danazol, 1278
 Darcy's law, 1636
 DAS-431, 1009
 Daunomycin, 1509
 DB-67 (silatecan 7-t-butylidimethylsilyl-10-hydroxycamptothecin), 1215
 Deamidation, 621, 1223
 Decomposition, 1265
 Degradation, 445, 1730
 Dehydration, 1854
 Delaviridine, 1038
 Delivery, *see* Drug delivery
 Denaturation enthalpy, 1847
 Dendrimers, 960, 1310
 Dendritic cells, 229, 1480
 Density, 330
 Deoxyribonucleic acid (DNA), 124, 250
 Deoxyribonucleic acid (DNA) microarrays, 1773
 Deoxyribonucleic acid (DNA) plasmids, 939, 947, 954, 1471
 Deoxyribonucleic acid (DNA) vectors, 1144
 Dependence, sodium, 299
 Depolarization currents, 1879
 Deposition, 322
 Deposition patterns, 1
 Dermal, 292, 881
 Dermatopharmacokinetics, 270
 Desipramine, 1400
 Desmopressin, 609
 Dexamethasone, 1730
 Dextran, 1847
 Dextran, rhodamine-labeled, 1061
 Diabetes, 87, 246, 278, 968
 Diabetic rats, 278
 Diamidine, 1689
 1,2-Dichloroethene/water system, 1150
 Dicloxacillin, 457
 Differential scanning calorimetry, 629, 661
 Diffraction, variable temperature, X-ray, 1564
 Diffractometry, X-ray powder, 330, 894, 901, 1259, 1265, 1549
 Diffusion, 403, 451, 669
 Diffusion coefficients, 355
 Digoxin, 738, 1581
 5,6-Dihydro-4-hydroxy-2-pyrone, 538
 Dihydropyridine calcium channel blockers, 477, 484
 Dimethyl sulfoxide, 1577
 N-Dimethylation, 1034
 Dipyrindamole, 299, 345
 Discovery, 655
 Dispersion, 1544
 Dispersion, low-frequency, 337
 Dispersion, solid, 315
 Disposition, 551
 Disposition parameters, 1827
 Dissolution, 345, 921, 1572, 1655, 1663
 Dissolution rate, 1259, 1278, 1894
 Distribution, 551
 Distribution, ocular, 108
- Disulfide, 615
 Disulfide, mixed, 1648
 Diversity, 497
 DNA (deoxyribonucleic acid), 124, 250
 DNA (deoxyribonucleic acid) microarrays, 1773
 DNA (deoxyribonucleic acid) plasmids, 939, 947, 954, 1471
 DNA (deoxyribonucleic acid) vectors, 1144
 DNase (deoxyribonuclease) I, 451
 Dogs, 42, 1516
 Dopamine agonists, 1009
 Dopamine D-1, 1009
 Dosage, gastroretentive, 1516
 Dose uniformity, 359
 dose-ranging trial, 909
 Double peaks, 1368
 Double-peak phenomenon, 1655
 Doxepin, 1034
 Doxorubicin, 265, 396, 1052
 Driaze skin irritation test, 669
 Droplet size, 1, 881
 Drug absorption, *see* Absorption
 Drug clearance, 615, 696, 1027
 Drug delivery, 229, 306, 367, 391, 396, 418, 434, 661, 676, 681, 689, 744, 976, 1009, 1046, 1097, 1160, 1180, 1302, 1354, 1389, 1424, 1516, 1532
 Drug delivery, aerosol, 239
 Drug delivery, dermal, 881
 Drug delivery, intravitreal, 1636
 Drug delivery, ocular, 278
 Drug delivery, oral, 832
 Drug delivery, pulmonary, 189, 689
 Drug delivery, transdermal, 1673
 Drug delivery systems, 115, 715, 1713
 Drug deposition, 239, 1130
 Drug development, computer-assisted, 99
 Drug disposition, 463, 551, 696
 Drug disposition, receptor-mediated, 1537
 Drug interactions, 209, 738, 1362
 Drug metabolism, 588, 1907
 Drug particle size, 42
 Drug permeability, 162
 Drug release, 595, 1885
 Drug solubility, 182
 Drug transport, 595
 Dry powder inhalation, 1439
 Dry powder inhalers, 689, 1274, 1524
 Dry-film coating, 63
 Duodenum, 1400
 Dynamic light scattering, 881
- E**
- E-cadherin, 1170
 Eclipse®, 689
 Efavirenz, 517, 1038
 Efflux, 802, 1696
 Efflux transporters, 773, 780, 787
 Elastic vesicles, 991
 Elasticity, 875
 Electrode, remote, 337
 Electrophoresis, polyacrylamide gel, 914
 Electrophoretogram, 914
 Electroporation, 440

- Electrospray, 556
Elimination half-life, 696
ELISA (enzyme-linked immunosorbent assay), 832
Emulsification, 629
Emulsion solvent diffusion, 132, 403
Emulsions, 715
Enalapril, 1400
Enantiotropy, 1259
Encapsulation, 418, 1430
Endocytosis, 1061, 1114, 1185, 1488
Endothelial cell adhesion molecules, 1317
Endothelial cells, 54, 676, 1123
Endothelial cells, activated, 1730
Endothelium, 445, 838
Endotoxin, 47
Endotracheal tubes, 818
Energy density, 1841
Enhanced absorption, 1680
Enhanced peptide absorption, 169
Enhanced permeability, 1689
Enhancers, chemical, 655
Enhancers, penetration, 1577
Enhancers, permeation, 661
Enthalpy, denaturation, 1847
Enthalpy, of solution, 1259
Enthalpy relaxation, 1873
Enzymatic stability, 794
Enzyme-linked immunosorbent assay (ELISA), 832
Enzymes, drug-metabolizing, 1788
Epidermal growth factor, 845
Epithelia, mammary, 299
Epithelial cell lines, 1337
Epithelium, buccal, 169
Equilibrium conditions, 1084
Erosion, 1885
Erythrocytes, 551
Erythromycin, 802
Erythropoietin, 1630
Esterase-sensitive prodrugs, 794
Esters, 162
Estimation error, 470
Ethanol, 427
Ethyl acetate, 427
Eticlopride, 1150
Eudragit, 1901
Eutectic, 315
Ex vivo-in vivo correlation, 1091
Excipients, 1854
Excretion, biliary, 1345
Eye drops, 108
- F**
- Farnesoid X receptor, 1788
Fatty acid conjugates, 609
Fatty acids, 1458
Federal Food, Drug and Cosmetic Act, 217
Feedback control, 99
Felodipine, 42, 477, 484
Fentanyl, 440
Fexofenadine, 802
Fibroblasts, 71
Films, 411, 1901
Fine particles, 1867
First-pass effect, 868
First-pass effect, capacity-limited, 852
Fistulated dog model, 42
- FITC (fluorescein isothiocyanate)-10,000, 1680
FITC (fluorescein isothiocyanate)-Dextran, 1097
Flavonones, 286
Flavopiridol, 588
Flip-flop situation, 1655
Flow, 445
Flunisolide, 1564
Fluorescein isothiocyanate (FITC)-10,000, 1680
Fluorescein isothiocyanate (FITC)-Dextran, 1097
Fluorescence, 595, 1554
Fluorescence analysis, laser-assisted, 914
Fluorescent probes, 504
Fluorophores, 350
Fluoroquinolones, 209
5-Fluorouracil, 1052
Folate receptors, 1310, 1502
Food and Drug Administration, 1761
Formulations, 229, 1215
Formulations, ophthalmic, 108
Formulations, vaginal cream, 270
Fractal clearance, 1827
Fractal volume, 1827
Fractal volume of distribution, 696
Fraction absorbed, 470
Fragility index, 1879
Free radicals, 71
Freeze-drying, 195, 337, 901, 1854
Frozen, 894, 901
Fungal diseases, 418
Furosemide, 1400
Fusion products, 569
Fusion proteins, 1720
- G**
- Galactose, 278, 1114, 1736
Galactose valency, 1114
 β -Galactosidase, 939, 947
Galectin, 1114
Gas-filled microparticles, 250
Gastrointestinal absorption, 838
Gastrointestinal toxicity, 1345
Gastrointestinal transit, 1368
Gastroretentive dosage forms, 1516
Gelatin, 1061
Gelatin, amine derivatives of, 1471
Geldanamycin, 115
Gels, 578
Gene complexes, 451
Gene delivery, 246, 250, 377, 382, 810, 954, 960, 968, 1599
Gene expression, 451, 1400, 1471
Gene therapy, 250, 451, 1144, 1599
Gene transfection, 933
Gene transfer, 1292
Gene transfer, non-viral, 1144
Gene transfer agents, 960
GeneChip[®], 1400
Genetic algorithm, 497
Genetic engineering, 954
Genetic immunization, 939, 947
Genetic linkage, 1581
Glass transition, 1879
Glass transition temperature, 649, 901, 1873
- Glass vials, water content monitoring in, 337
Glatiramer acetate, 832
Glucocorticoids, 1730
Glucose, 1704
D-Glucose, 1400
Glucose-responsiveness, 968
Glucuronidation, hepatic, 588
Glucuronides, 1907
Glutathione, 602
Glycol-diacyl lipid micelles, 1424
p-Glycoprotein, 457, 738, 765, 794, 1038, 1123, 1323, 1509, 1696, 1704
p-Glycoprotein modulating agent, 1123
p-Glycoprotein substrates, 802
Glycosides, 1430
Glycylproline, 1194
Glycylsarcosine, 27, 1194
GnRH (gonadotropin-releasing hormone) receptor antagonists, 202
Gompertz kinetics, 463
Gonadotropin-releasing hormone (GnRH) receptor antagonists, 202
Gram-negative infections, 1801
Granulation, wet, 1285
Granulocyte colony stimulating factor, recombinant, 1720
Granulocyte mobilization, 1720
Grapefruit juice, 802
Groove regions, 1170
Growth factors, 278
Growth inhibition, crystal, 1894
Guaiacol, 1013
Guidances, 217
- H**
- Haemophilus influenzae*, 1330
Hair follicles, 350
Half-life, 696, 1232
Halofantrine, 1354
Hansen solubility parameters, 640
Haplotype, 1779
HAV (His-Ala-Val) peptides, 1170
Heating rate, 1879
Hemoglobin, 1630
Hemolysis, 418
Heparin, 838, 1180
Hepatic extraction ratio, 1606
Hepatic transport, 147
Hepatic tumors, 1736
Hepatic vein sampling, 852
Hepatocytes, 147, 738, 1808
Hexetidine, 818
High throughput screening, 655
Highly-variable drugs, 227
His-Ala-Val (HAV) peptides, 1170
HIV (human immunodeficiency virus), 54
HIV (human immunodeficiency virus)-1, 1038, 1696
Hollow particles, 258
Homodispersion, 258
Homogenization, high-pressure, 189
Hormonal regulation, 202
hPepT1-mediated transport, 1337
HPMA (*N*-(2-hydroxypropyl)-methylacrylamide) copolymer, 1114
HPMC (hydroxypropyl methylcellulose), 306
Human, 154, 270, 350, 588, 669, 765, 773, 868, 991, 1130, 1185, 1223, 1244, 1337, 1400, 1446, 1537, 1577, 1648, 1907
Human immunodeficiency virus (HIV)-1, 1038, 1696
Human recombinant serum albumin, 569
Human serum albumin, 569, 676, 1458, 1702
Hyaluronan receptors, 396
Hyaluronic acid films, 411
Hydrates, 1285
Hydraulic flow, 1636
Hydrochlorothiazide, 1400
Hydrodynamics, 42
Hydrogels, 578, 954, 1713
Hydrogels, superporous, 1532
Hydrogen bonding, 477, 484, 1446, 1663
Hydrogen peroxide, 1815
Hydrogen-bonding capacity, 1622
Hydrolysis, 517, 1013, 1215, 1292
Hydrophilic matrix tablets, 306
Hydrophobic ion pairs, 1572
Hydrophobicity, 13
 $1\alpha,25$ -Di-Hydroxy vitamin D₃, 1696
Hydroxylation, 538
Hydroxypropyl methylcellulose (HPMC), 306
Hydroxypropyl- β -cyclodextrin, 629
N-(2-Hydroxypropyl)-methylacrylamide copolymers, 115, 396, 1114
Hypoglycemic agents, 87
Hypericin, 1236
Hyperthermia, 1123
Hypothesis testing, 92
- I**
- Idebenone, 71
Immediate-release products, 921
Immobilized artificial membranes, 729
Immunity, 1330
Immunization, 63
Immunization, genetic, 939, 947
Immunoconjugates, 1730
Immunoglobulin, 1801
Immunonanoparticle, 1137
Immunostimulants, 47, 715
Immunosuppressants, 47
Immunotherapy, 926
Impaction, 322
Implants, injectable, 278
Impurity incorporation, 1068
In situ, 355
In situ micronization, 1894
In vitro, 391, 423, 1034
In vitro biologic activity, 845
In vitro characterization, 546
In vitro covalent binding, 1648
In vitro delivery system, 1046
In vitro drug release, 681
In vitro dynamic models, 445
In vitro efficacy, 115
In vitro flux, 661
In vitro gene transfer, 1292
In vitro kinetic analysis, 615

- In vitro models, 169, 876
 In vitro transport studies, 991
 In vitro-in vivo correlation, 1400, 1606
 In vivo, 423
 In vivo bioequivalence, 227
 In vivo delivery, 367
 In vivo delivery rate, 99
 In vivo dermal absorption model, 292
 In vivo gene transfer, 1292
 In vivo lung deposition, 258
 In vivo studies, 976
 In vivo testosterone suppression, 546
 In vivo transdermal iontophoresis, 704
 Indexes, 315, 887
 Indices, 315, 887
 Indinavir, 1704
 Indomethacin, 649, 1879
 Induction, 1038, 1696
 Infection, 1801
 Inflammation, 1599, 1730
 Inhalation devices, 1439
 Inhalation drug products, 359
 Inhalers, 322, 689, 1274
 Inhibition, 1038
 Inhibitory effects, 147
 Injection, 1330
 Insertion, 265
 Insolubility, 382, 1389
 Insulin, 427, 445, 530, 998
 Insulin, myristoylated, 569
 Insulin aspart derivatives, 621
 Insulinitis, 246
 Intercellular junction, 1170
 Interferon-beta, 1537
 Interleukin-2, 1736
 Interleukin-4, 246
 Interleukin-11, 1223
 Internalization, 1808
 Intestinal absorption, 755, 1446, 1516
 Intestinal barrier, 976
 Intestinal efflux, 802
 Intestinal mucosa, 765, 773, 780, 794, 832
 Intestinal patches, 391
 Intestinal permeability, 1689, 1901
 Intestinal transport, 1417, 1704
 Intestine, 1417
 Intraarticular delivery system, 132
 Intraarticular injection, 403
 Intracellular delivery vehicle, 1061
 Intracellular processing, 140
 Intracellular trafficking, 377
 Intramuscular, 1144
 Intravital drug delivery, 1636
 Intrinsic dissolution rate, 1258
 Inverse gas chromatography, 640
 Iontophoresis, 162, 427, 440, 704
 Irinotecan (CPT-11), 1345
 ISIS 9125, 676
 Isoaspartate, 1223
 Isoboles, 209
 Isoforms, 845
 Isomerization, 621, 1223
 Isomers, cis/trans, 1034
 Isothermal titration calorimetry, 1105
 Isothiocyanates, organic, 1509
 Isoxicam, 1150
 Isradipine, 477, 484
J
 Jet injectors, 1673
 Jethaler®, 1439
 Juice, 802
 Jurkat T cells, 1236
K
 Ketoprofen, 1400, 1458
 Kidney, 1209
 Kidney epithelial cell line OK, 1822
 Kinetic analysis, 615, 1648
 Kinetic stability, 1259
 Kinetics, 463, 517, 1046, 1265
 Knockout mice, 708
L
 Labetalol, 1150
 Labrador retrievers, 42
 β -Lactam antibiotics, 1194
 Lactate dehydrogenase, 504
 Lactation, murine model of, 299
 Lactic acid, 154
 DL-Lactide/glycolide copolymers, 132, 403
 Lactoferrin, 54
 Lactone hydrolysis, 1215
 Lactose, 1114, 1524
 Langmuir adsorption isotherm, 1105
 Laser scanning microscopy, 350
 Laser-assisted fluorescence analysis, 914
 Lauric acid, 661
 Lauric acid hydroxylase, 708
 Lectin-mediated drug targeting, 1114
 Leukemia, 79
 Leuprolide, 546
 Ligands, 265
 Ligands, low-affinity, 1736
 Light scattering, dynamic, 881
 Limit of quantification, 1835
 Lipid bilayers, 355, 1381
 Lipid composition, 1808
 Lipid extraction, 427
 Lipid nanocarriers, 875
 Lipid solubility, 1354
 Lipids, acid-sensitive, 1292
 Lipofection, 933
 Liponamers, 382
 Lipoparticles, 382
 Lipophilic drugs, 661
 Lipophilic markers, 595
 Lipophilicity, 13, 162, 609, 1150, 1502, 1622
 Lipoplexes, 451, 676
 Liposomal delivery, 1502
 Liposomes, 79, 256, 729, 1430, 1532
 Liposomes, arsenic-containing, 79
 Liposomes, cationic, 377, 933, 1144, 1599
 Liposomes, cationic, 377, 1144, 1599
 Liposomes, galactosylated, 1808
 Liquid formulations, 661
 Lisinipril, 1400
 Liver, 588
 Liver injury, 1815
 Liver microsomes, 1606
 Liver X receptor, 1788
 Living Skin Equivalent-high model, 669
 LLC-PK₁ cells, 1495
 L-595/polyethylene glycol-8-L/sulfosuccinate, 991
 LS180, 1038
 Lung, 1130
 Lung cancer, 265
 Lung delivery, 689
 Lung deposition, 239, 258
 Luteinizing hormone-releasing hormone analogues, 546
 Lyophilization, 195, 337
 Lyophilized formulations, 20
 L-Lysine monohydrochloride dihydrate, 491
 Lysosomal degradation, 1730
 Lysosomal escape, 140
 Lysozymes, 629, 1046, 1847, 1854
M
 Macroflux®, 63
 Macrophages, 132, 1480
 Macrophages, alveolar, 825
 Madin-Darby Canine Kidney (MDCK) monolayers, 27, 1170
 Madin-Darby Canine Kidney (MDCK)-wild type II cells, 765, 773, 787, 794
 Major histocompatibility complex (MHC), 926
 Maleimide, 1137
 Mammary epithelia, 299
 Mannan, 939
 Mannitol, 894, 901, 1400
 Mapping, 845
 Mass spectrometry, 530, 556, 982, 1091, 1907
 Mathematical modeling, 463, 1537, 1885
 Matrix metalloproteinase inhibitors, 1655
 MDCK cell monolayers, 1170
 MDCK1 gene, 765
 MDCK (Madin-Darby Canine Kidney) monolayers, 27, 1170
 MDCK (Madin-Darby Canine Kidney)-wild type II cells, 765, 773, 787, 794
 MDR1, 1323
 MDRI gene, 1581
 MDR (multidrug resistance), 1123
 Mechanical twinning, 491
 Mechanisms, 1160
 Media, biorelevant dissolution, 345
 Mefenamic acid-guaiacol ester, 1013
 Membrane vesicles, brush-border, 154
 Membrane-interaction quantitative structure-activity relationship (QSAR) analysis, 1611
 Mesh size, 1084
 Metabolic stability, 1606
 Metabolism, 588, 1034, 1907
 Metered dose inhalers, 258
 Metformin, 1244
 Methadone, 858
 Methanol, 427
 Methazolamide, 551
 Methotrexate, 1310
 2'-O-Methyl phosphorothioate oligonucleotides, 744
 O-Methylamidoxime prodrug, 1689
 N-Methyl-D-aspartate receptors, 104
 Methylprednisolone, 47
 Metoprolol, 1400
 Metrics, 227
 MHC (major histocompatibility complex), 926
 Mice, 246, 299, 708, 1424, 1720, 1907
 Micelles, 418, 634, 1203, 1424
 Michaelis-Menten elimination, 852
 Miconazole nitrate, 270
 Microarray, 1773
 Microbial adherence, 818
 Microcirculation, 1317
 Microdialysis sampling, 1745
 Microemulsion precursors, 939
 Microemulsions, 881
 Microencapsulation, 1713
 Microindentation, 491
 Micronization, 7, 1867, 1894
 Microparticles, 250, 322, 715, 755, 1091, 1317, 1564, 1885
 Microprojection array, 63
 Microscopy, atomic force, 933, 1524
 Microscopy, confocal fluorescence, 1114
 Microscopy, confocal laser scanning, 140, 350, 554, 933
 Microscopy, confocal living cell, 140
 Microsomes, hepatic, 588, 1606
 Microspheres, 132, 175, 391, 629, 1046, 1052, 1330, 1745
 Mitochondrial pathway, 1323
 Mixed effects modeling, 92
 Mixture model, 909
 Mixtures, 655
 Model drugs, 832
 Modeling, 306
 Modeling, mathematical, 463, 1537, 1885
 Modeling, molecular, 960, 1310, 1549
 Modeling, nonlinear mixed effects, 92, 858
 Modeling, pharmacokinetic-pharmacodynamic, 209
 Models, buccal epithelium, 169
 Models, Caco-2 cell absorption, 1606
 Models, cell culture, 169
 Models, convolution-based, 99
 Models, dynamic epithelium, 445
 Models, for aqueous solution solubility prediction, 182
 Models, human skin, 669
 Models, in vitro, 169, 876
 Models, in vivo dermal absorption, 292
 Models, intestinal mucosal, 765, 773, 787
 Models, mixture, 909
 Models, of lactation, 299
 Models, physiologically-based pharmacokinetic, 1736
 Models, QSPR, 497
 Models, sequential layer, 306
 Molecular dispersion, 1873

- Molecular factors, 729
Molecular mobility, 20, 1873, 1879
Molecular modeling, 960, 1310, 1549
Molecular recognition agents, 578
Molecular surface area, 182
Molecular weight markers, 1680
Monkeys, 868, 1606, 1720
Monoclonal antibodies, 1137, 1753
Monolayer patches, 423
Monotectic, 315
Monte Carlo simulation, 1885
mRNA (mribonucleic acid), 1236
mRNA (mribonucleic acid), 1236
MRP1 gene, 765, 794
MRP2 gene, 765
MRP1 glycoprotein, 1509
MRP (multidrug resistance-associated proteins), 34
MTT (colorimetric thiazoyl blue conversion) assay, 669
MTX-E12 cells, 1185
Mucoadhesive, 391, 1901
Mucosa, oral buccal, 947
Mucus, 451, 1185
Multidrug (MDR) resistance, 1123
Multidrug resistance-associated proteins (MRP), 34, 1509
Multiple receptors, 104
Multivalent vaccines, 1330
Multivariate statistics, 1829
Mustard oils, 1509
Mutants, site-directed, 569
Myristoylation, 569
- N**
- N α -2-Naphthylsulfonyl-glycyl-4-amidinophenylalanine-piperidide (NPAP), 1027
Nanocapsules, 71, 875
Nanonization, 1091
Nanoparticles, 595, 681, 998, 1061, 1105, 1185, 1488
Nanospheres, 132, 403, 1480
Nanosuspension, 189
Nanotechnology, 1310
NAPAP (N α -[2-naphthylsulfonyl-glycyl]-4-amidinophenylalanine-piperidide), 1027
Naphthylisothiocyanate, 1509
Naproxen, 1400
Nasal delivery, 998, 1097
Nasal drug products, 359
Nasal spray, 1
National Institute of General Medical Sciences, 1771
NEACE-T, 382
Needle-like crystals, 1439
Nelfinavir, 1704
Neotame anhydrate, 330
Neotame anhydrate polymorphisms, 1259, 1549
Neovascularization, 1251
Network parameters, 1084
Neural networks, artificial, 87, 1130
Neutralex, 367
Neutron capture therapy, 1502
Neutron scattering, small-angle, 881
Nevirapine, 1038
- New Drug Applications, 217
NF- κ B (nuclear transcription factor), 1236
Nicardipine, 477, 484
Nicotinic acid, 1381
Nicotinic receptors, 104
Nifedipine, 477, 484, 522
Nimodipine, 477, 484
Nisoldipine, 477, 484
Nitrendipine, 477, 484
Nitric oxide (NO), 825
Nitrofurantoin, 299
Nitroso pyridine derivative, 522
Nitroso radical anions, 522
NMR (nuclear magnetic resonance), 504, 556
NO (nitric oxide), 825
Noncompartmental analysis, 463
Nonlinear mixed effects modeling, 92, 858
NONMEM, 858, 1835
Non-nucleoside HIV-1 reverse transcriptase inhibitors, 1038
Nonresponder, 909
Norfloxacin, 209
Novel flow index, 887
Nuclear hormone receptors, 1788
Nuclear localization signal, 933
Nuclear magnetic resonance (NMR), 504, 556
Nuclear plasmids, 377
Nuclear transcription factor (NF- κ B), 1236
Nucleobases, 299
Nucleosides, 299
- O**
- Oatp1, 147
Oatp2, 147, 738
Occludin, 1757
Occlusion, 423
hOCT2 (human organic cation transporter), 1244
n-Octanol, 729
Octanol-buffer distribution coefficient, 1862
Octanol-water partition coefficient, 1862
Octreotide, 1532
Ocular drug delivery, 278
Oil/water microemulsions, 881
OK kidney epithelial cell line, 1822
Oligomers, 1465
Oligonucleotide, 744
Oligonucleotide degradation, 914
Oligonucleotides, 676
Oligonucleotides, antisense, 744, 755
Oligopeptide transporters, 1194
Oligopeptides, 1209
Opioid peptides, 780, 794
Oral absorption, 345, 838, 868, 1180, 1446, 1655
Oral delivery, 1354
Oral drug delivery, 391, 1180
Oral vaccines, 1185
Orange juice, 802
Organic anion transporters 147, 738
Organic anions, 34
Organic cation transporters, 1244
Organic molecules, 1611
Ovalbumin, 337
Ovarian carcinoma, 115
- Oxidation, 538
Oxidation, metal-catalyzed, 530
Oxidative stress, 71, 982
2-Oxo-histidine, 530
Oxymethyl, 794
- P**
- Paclitaxel, 411, 1680
PAGA (poly[α -4-aminobutyl]-L-glycolic acid), 246
Palmitoyl-containing liposomes, 79
N-Palmitoylphosphatidylethanolamine, 1430
Parameter estimates, 1835
Parenteral formulations, 1215
Parenterals, 1761
Particle adsorption, 1185
Particle coefficients, 729
Particle detachment, 322
Particle engineering, 258, 689
Particle interactions, 1524
Particle size, 42, 1068
Particles, aerosol, 239
Particles, micronized, 322
Partition coefficients, 355
Patches, 391, 423
Pattern recognition, 578
Payne oxidation, 538
PECA nanocapsules, 71
PEG (polyethylene glycol), 265, 315, 400, 810, 845, 1137, 1368, 1424, 1704
L-595/PEG-8-L/sulfosuccinate, 991
PEGylated gelatin nanoparticles, 1061
Pellets, 1554
Penetration, 1673
Penetration enhancers, 1577
Pentamidine/polyvinyl alcohol hydrogel, 1713
PepT1, 1337, 1417
Peptide absorption, 169
Peptide acylation, 175
Peptide drugs, 832
Peptide mapping, 845
Peptide stability, 175, 546
Peptide transport, 1209
Peptide transporters, 27
Peptide uptake, 832
Peptide-based tumor vaccines, 926
Peptide-oligonucleotide conjugates, 744
Peptides, 265, 1170
Peptides, arginine-containing, 825
Peptides, cell-penetrating, 1302
Peptides, reversibly lipidized, 609
PepT1-like transporter, 825
hPepT1-mediated transport, 1337
Percutaneous absorption, 1381
Percutaneous delivery, 13, 434
Performance, 1761
Perfused liver, 47
Pergolide, 991
Peripheral tumors, 1052
Permeability, 162, 423, 427, 655, 921, 1091, 1194, 1368, 1400, 1430, 1680, 1689, 1757, 1841
Permeability, intestinal, 1689
Permeability, silicone membrane, 1622
Permeability profiles, 162
- Permeation, 780, 787, 794, 1123, 1381
Permeation enhancement, 602
Permeation enhancers, 661, 755
Peroral drug delivery, 1185, 1532
Peroxy-carboximide acid, 538
PET (positron emission tomography), 99, 367
pH, 1862
pH, of citric acid buffer system, 20
pH, tumors, 681
pH measurement, 1554
pH-absorption profile, 1150
Phagocytosis, 132, 1480
Pharmaceutical industry, 217
Pharmacodynamics, 87, 209, 858, 909, 1537, 1544, 1630
Pharmacogenetics, 1779
Pharmacogenomics, 1773
Pharmacokinetics, 54, 87, 209, 227, 367, 551, 810, 852, 858, 868, 1362, 1537, 1544, 1581, 1736, 1753, 1815, 1835
Pharmacological sciences, training in, 1771
Pharmacoscintigraphy, 689
Phase inversion process, 875
Phenethylisothiocyanate, 1509
Phenformin, 1244
Phenol red, 1097
Phenols, 1622
Phenyl carbamic acid esters, 162
Phenylalanine, 1400
Phlebotomy, 1630
Phosphate buffers, 894
Phospholipid, 1424
Phosphorodiamidate morpholino oligomers, 1465
Photodegradation, 522
Physicochemical properties, 13, 434, 810, 818
Physiological mixtures, 1203
Phytoalexins, 1907
Pigs, 1532, 8141
Piroxicam, 1400
PLA (poly lactic acid), 1137
Placenta, 154
Plasma clearance, 868, 1027
Plasma protein, 615
Plasmid quantification, 377
Plasmids, 246, 939, 947, 954, 1292, 1471
Plastic deformation, 491
Plate morphology, 491
Plateau-peak phenomenon, 1655
Platinum-DNA binding, 124
Platinum-glutathione, 124
PLGA (poly lactic-co-glycolic acid) nanoparticles, 595
PLGA (poly lactide-co-glycolide), 629, 1713
Plume geometry, 1
Pneumonia, ventilator-associated, 818
Polyacrylamide gel electrophoresis, 914
Poly(α -4-aminobutyl)-L-glycolic acid (PAGA), 246
Polycarboxophil cysteine, 602
Polyclonal antibodies, 1801
Polyethyl-2-cyanoacrylate nanocapsules, 71
Polyethylene glycol (PEG), 265,

- 315, 400, 810, 845, 1137, 1368, 1424, 1704
- Polyethylene glycol (PEG) 400, 1368
- L-595/Polyethylene glycol-8-L/sulfosuccinate, 991
- Polyethylene glycol/ phosphatidylethanolamine (PEG-PE) conjugates, 1424
- Polyethylenimine, 810
- Polyethylenimine/ribosome complexes, 140
- Poly(lactic acid), 175, 1137
- Poly(D,L-lactic-co-glycolic acid) nanospheres, 1480
- Poly(lactide-co-glycolide), 175, 595, 629, 1713
- Poly(D,L-lactide-co-glycolide), 250
- Poly(D,L-lactide)leuprolide microspheres, 546
- Poly-L-lysine, 755
- Polymerase chain reaction, real-time, 1236
- Polymer-drug conjugates, 396
- Polymeric carriers, 246
- Polymers, 578, 810
- Polymers, biodegradable, 175
- Polymers, genetically-engineered, 954
- Polymers, silk-elastinlike, 954
- Polymers, thiolated, 602
- Polymorph, 330
- Polymorphic transformation, 1439
- Polymorphism, 640, 1259, 1564, 1581, 1779
- Polypropylenimine dendrimers, 960
- Polysorbate, 511
- Polysorbate 20, 634
- Polystyrene nanoparticles, 595
- Poly(sulfobutyl-poly vinyl alcohol-g-(lactide-co-glycolide)), 1105
- Polyvinyl alcohol hydrogel, 1713
- Polyvinyl chloride, 818
- Polyvinylpyrrolidone, 556, 894
- Population, 858, 909
- Porosity, 1170, 1841
- Porous particles, 258
- Porous pathway, 1841
- Portal vein sampling, 852
- Positron emission tomography (PET) imaging, 99, 367
- Post-insertion, 265
- Potassium citrate, 195
- Povidone, 556
- Powder, 322, 689
- Powder, X-ray diffractometry, 330, 894, 901, 1259, 1265, 1549
- Powder flow, 887
- Powder formulations, 998, 1097
- Powder inhalers, 1274
- Powder mixtures, 1524
- Pranlukast, 1867
- Prediction, 182, 315, 1130
- Pregnane X receptors, 1788
- Pressure, 258
- Principal component regression, 497
- Principle components analysis, 1285
- Probenecid, 1345
- Probucof, 1362
- Prodrugs, 780, 787, 1013, 1572, 1689, 1704
- Progenitor cells, 1630
- Progenitor mobilization, 1720
- Propranolol, 1400
- Propylene glycol, 661
- Protamine, 933
- Protease inhibitors, 1696, 1704
- Protein, 511
- Protein absorption, 169, 1105
- Protein aggregation, 511
- Protein antigens, 63
- Protein binding, 551
- Protein conformation, 1854
- Protein delivery, 1302
- Protein denaturation, 504
- Protein extraction method, 629
- Protein release, 1046
- Protein stability, 629, 1330, 1847, 1854
- Protein-surfactant interactions, 504
- Proton gradient-dependent transport, 154
- Pseudoephedrine, 1019
- (+)-Pseudoephedrine hydrochloride, 1068
- Pseudomonas aeruginosa*, 818
- Pseudopolymorphisms, 1285
- Psychophysics, 1019
- Pullulan, 939
- Pullulan acetate, 681
- Pulmonary administration, 189
- Pulmonary delivery, 1009
- PulmoSphere, 258, 689
- PVP (polyvinylpyrrolidone), 556, 894
- Pyrimidine nucleobase, 1495
- Pyrrolidinoethylesters, M-alkoxysubstituted, 162
- Q**
- QSAR (quantitative structure-activity relationship) analysis, 1446, 1611
- QSPR model, 497
- Quality assurance, 1761
- Quantification, relative, 350
- Quantitative analysis, 377, 887
- Quantitative assessment, 914
- Quantitative imaging, 367
- Quantitative structure-activity relationship (QSAR) analysis, 1446, 1611
- Quantitative structure-permeation relationship, 1622
- Quinapril, lyophilized, 20
- R**
- Rabbits, 108, 403, 947, 1194, 1636, 1901
- Raclopride, 1150
- Radiation therapy, 1317
- Ranitidine, 1019, 1368
- Rapid screening, 1606
- Rate-limited steps, 1446
- Rats, 34, 47, 132, 147, 209, 278, 615, 676, 825, 832, 838, 858, 1027, 1185, 1345, 1354, 1362, 1417, 1465, 1648, 1655, 1753, 1757, 1815, 1907
- Rats, diabetic, 278
- Reactive oxygen species, 1815
- Reactivity, 522
- Receptors, 104, 396, 676, 1537, 1544, 1788
- Recognition, molecular, 578
- Recombinant adeno-associated virus, 968
- Recombinant human DNase I, 451
- Recombinant human serum albumin, 569, 1720
- Regulatory filings, 217
- Release mechanism, 306, 1885
- Renal assimilation, 1209
- Renal clearance, 457
- Renal organic cation transporters, 1244
- Repaglinide, 87
- Resampling, 92
- Research training, 1771
- Resveratrol, 1907
- Reticulocytes, 1630
- Rhodamine123, 802
- Riboflavin, 1516
- mRibonucleic acid (mRNA), 1236
- Ribosomes, 140
- Ritonavir, 1696
- S**
- Salbutamol sulfate, 1524
- Salmeterol xinafoate, 640
- Salmon calcitonin, 1901
- Salts, 1019
- Sampling, 852, 1745
- Saquinavir, 802, 1696, 1704
- Scalp skin, 350
- Scattering, 881
- Scavenger receptors, 676
- Scintigraphy, gamma, 1368
- Screening, 182, 655, 1236
- Seizures, 209
- Selectivity, 1244
- Self-assembled hydrogel nanopeptides, 681
- Sequential layer model, 306
- Serum, 1430
- Serum resistance, 1144
- Sex difference, 858
- Sf9 cells, 34
- Sf plus insect cells, 1757
- Shake flask method, 182
- Sheep, 998
- Shelf-life, 511
- Signal transduction, 1735
- Signal transduction cascades, 1544
- Signaling, apoptotic, 1323
- Silatecan 7-t-butyl dimethylsilyl-10-hydroxycamptothecin, 1215
- Silicone membrane permeability, 1622
- Silk-elastinlike polymers, 954
- Simulation, 551, 909, 1885
- Size-dependency, 132
- Skin, 162, 270, 350, 669, 991, 1673, 1841
- Skin irritation, 669, 704
- Skin permeation, 655
- Skin stripping, 270
- Skin transport, 1622
- Slip system, 491
- Small intestine, 602
- SN-38, 1345
- Sodium citrate, 195
- Sodium dependence, 299
- Sodium malate, 195
- Sodium N-[8-(2-hydroxybenzoyl)-amino]caprylate, 1180
- Sodium tartrate, 195
- Solid dispersion, 315
- Solid dispersion granules, 1663
- Solid-state reactions, 1265
- Solubility, 13, 162, 345, 497, 921, 1354, 1389, 1446, 1572, 1862
- Solubility, aqueous, 182, 497, 504, 517, 1068, 1215
- Solubility parameters, 13
- Solubility prediction, 182
- Solubilization, 1203, 1215
- Solute transport, cutaneous, 1622
- Solute-membrane interactions, 729, 1622
- Solution stability, 517
- Solvents, 427, 661
- Sonophoresis, low-frequency, 1160
- Spectrochemical behavior, 522
- Spectrometry, mass, 530, 556, 982, 1091, 1907
- Spectroscopy, attenuated total-reflectance Fourier-transform, 423
- Spectroscopy, ¹³C solid-state nuclear magnetic, 330
- Spectroscopy, charge-coupled device Raman, 1285
- Spectroscopy, confocal Raman, 1577
- Spectroscopy, dielectric relaxation, 337
- Spectroscopy, Fourier-transform infrared, 423, 427
- Spectroscopy, infrared, 330
- Spectroscopy, near-infrared, 1285
- Spectroscopy, vibrational, 649
- Sphingosine, 1144
- Splenocytes, 947
- Spray patterns, 1
- Spray-drying, 258, 689, 1847
- Spray-freezing-into-liquid technology, 1278
- Sputum, 451
- Stability, 175, 511, 538, 629, 634, 914, 1144, 1232, 1259, 1278, 1330, 1663
- Stability, in vitro metabolic, 1606
- Stabilization, 1046
- Stabilized cationic lipoplexes, 676
- Staphylococcus aureus*, 818
- Starvation, 1417
- Statutes, 217
- Steroid KSR-592, 1439
- Steroids, 1203
- Stokes' law, 239
- Storage, 7, 1663
- Stratum corneum, 292, 355, 427, 1577
- Stratum corneum lipid models, 982
- Structurally-unrelated drugs, 1827
- Structure-activity relationships, 286, 609, 1446, 1611
- Structures, 1027
- Subcutaneous tumors, 1424
- Substrates, 802, 825
- Sucrose, 1847
- Sucrose octasulfate, 838
- Sulfamethoxazole, 457
- Sulfates, 1907

- Sulfonamide, 681
 Sulfonamide-type anticancer drugs, 1337
 Supercritical fluid crystallization, 640
 Supercritical fluids, 1564
 Superporous hydrogels, 1532
 Surface areas, 7, 182
 Surface energetics, 640
 Surface energy, 1274
 Surfactants, 504
 Surgical adhesions, 411
 Sustained release, 1052, 1761
 Swelling, 306, 1084
 Synergism, 655
 Synergy, 1801
 Synovium, 132
 Synthesis, 286
 Systemic clearance, 1027
 Systemic delivery, 1009
 Systemic vein sampling, 852
- T**
- Tablet models, 306
 Tacrine, 704
 Tape strips, 292
 Targeting, 114, 229, 265, 396, 569, 676, 744, 1137, 1194, 1251, 1310, 1317, 1465, 1502, 1730, 1736, 1808
 Taste psychophysics, 1019
 Tat peptide, 744, 1302
 T-cells, 939
 Temperature, 484
 Temperature variability, 1265
 Tenoxicam, 1150
 Terbutaline, 1400
 Ternary interactive mixtures, 1524
 Testosterone, 202
 Testosterone suppression, 546
 Tetanus toxoid, 1105
n-Tetraalkylammonium compounds, 1244
 Thalidomide, 13, 434, 1232
 Theophylline, 209, 1265, 1285
 Thermally-stimulated depolarization currents, 1879
 Thermodynamic stability, 1259
 Thermodynamics, 640
 Thermophysical properties, 195
 Thiadiazole, 1091
 Thin-film composites, 1901
 Thiobarbituric acid assay, 982
 Thiols, biological, 124
 Three-points sampling, 852
 Thrombin inhibitors, 1027
 Tight junctions, 1757
 Tissue concentration, 1745
 Tissue distribution, 838
 TNF- α . *See* Tumor necrosis factor- α
 Tolerance intervals, 359
 4-Toluenesulfonyleido-carnosine, 1337
 Topical, 292
 Toxicodynamics, 669
 Toxicogenomics, 1773
 TR146 cell culture model, 169
 Transcription factor, 1302
 Transdermal, 434, 440, 704, 1465
 Transdermal delivery, 661, 991, 1160, 1673
 Transdermal formulations, 655
 Transdermal patches, 423
 Transdermal transport, 1841
 Transepidermal water loss, 423
 Transepithelial transport, 1337, 1704
 Transfection, 377, 765, 773, 1292, 1302, 1471
 Transgenes, 382
 Transglutaminase, 1736
 Transition metal catalysts, 982
 Transport, 169, 445, 451, 802, 1013, 1160, 1185, 1209, 1471, 1495, 1696, 1822
 Transport, active, 299
 Transport, intestinal, 1704
 Transport, lymphatic, 1354
 Transport, proton gradient-dependent, 154
 Transport, transepithelial, 1337, 1794
 Transport studies, 27, 34, 147, 738, 825, 991
 Transporters, 147, 765, 1244, 1400
 Transporters, anion, 147, 738
 Transporters, cation, 1244
 Transporters, efflux, 773, 780, 787
 Transporters, oligopeptide, 1194
 Transporters, organic anion, 147, 738
 Transporters, peptide, 27
 Transporters, renal organic cation, 1244
 Trehalose, 1847
 Tricyclic antidepressants, 1034
 Triglycerides, 1354
 Trimethoprim, 457
 TSDC (thermally-stimulated depolarization currents), 1879
 Tubular peptide uptake, 1209
 Tumor cells, 1310, 1502
 Tumor drug delivery, 1424
 Tumor immunotherapy, 926
 Tumor necrosis factor, 47
 Tumor necrosis factor- α alpha, 708, 1232
 Tumor vaccines, 926
 Tumor-associated antigens, 926
 Tumors, 1052, 1251, 1424
 Tumors, pH of, 681
 Tween 80, 504
 Two-compartment models, 1835
- U**
- UDP-glucuronosyltransferase isoforms, 588
 UGT1A9, 588
 Ultrasound, 250, 1123, 1471
 Ultrasound, low-frequency, 1160, 1841
 Ultraviolet radiation, 982
 Uniformity testing, 359
 United States Pharmacopoeia, 1761
 Upregulation, 1317, 1323
 Uptake, 595, 1488
 Uptake assays, 1209
 Uracil, 1495
 Ussing-type chambers, 602
- V**
- Vaccination, 63
 Vaccine adjuvants, 715
 Vaccine delivery systems, 715
 Vaccines, 229, 715, 926, 947, 1185, 1330
 Vaginal cream formulations, 270
 Valacyclovir, 1194
 Valproic acid, 154
 L-Valyl esters, 1194
 van't Hoff equation, 315
 Vascular clearance, 1636
 Vascular endothelial growth factor, 278, 1753
 Vascular targeting, 1251
 Vasoactive compounds, 1745
 Vectors, 367, 377, 1144
 Vectors, anionic, 367
 Vegetables, cruciferous, 1509
 Velocity, 1673
 Verapamil, 802, 1400
 Vibrational spectroscopy, 477, 484
 Vinblastine, 1509
 Vinyl ether hydrolysis, 1292
 Visualization, 1209
 Voltammetry, cyclic, 522, 1150
 Volume of distribution, 696
- W**
- Wagner-Nelson estimate, 470
 Water content monitoring, 337
 Water loss, 423
 Water vapor, 330
 Water vapor permeability, 423
 Water-soluble active ingredients, 1278
 Water-soluble drugs, 1368, 1867, 1894
 Wax, 1901
 Wet granulation, 1285
 Whole body dynamic imaging, 367
- X**
- X-ray crystallography, 1549
 X-ray powder diffractometry, 330, 894, 901, 1259, 1265, 1549
 X-ray variable temperature diffraction, 1564
- Z**
- Zinc-insulin, 530
 Zonula occludens toxin (Zot), 1680
 Zot (zonula occludens toxin), 1680
 Zwitterions, 1150