

## Subject Index Vol. 79, 2007

### Pharmacology

- Acetaminophen 97  
Acetylcholinesterase 17, 140  
Acetyl-11-keto- $\beta$ -boswellic acid, specific  
  5-lipoxygenase inhibitor 34  
Acid output 76  
Adenosine 12, 171  
  – receptor system 171  
  – reuptake/transport inhibitors  
    171  
Adenylate cyclase 69  
Adhesion, monocytes 154  
Aggregation, platelets 50  
Alanine aminotransferase 163  
Alzheimer's disease 17  
 $\gamma$ -Aminobutyric acid 171  
Analgesia, combination therapy 214  
Anandamide 12  
  – endogenous cannabinoid receptor  
    agonist 12  
  – endothelin-1 production inhibition  
    12  
Anesthetics, intravenous 236  
  – volatile 236  
Angiotensin II 27, 122  
Anticonvulsant(s) 250, 253, 254  
Antidepressants 1  
  –, pregnant women 1  
Antiestrogens 93  
Antinociception 214  
  –, gabapentin/metamizol 214  
Antioxidant(s) 17, 154  
  – therapy 122  
Aortic smooth muscle cells 50  
  – – – –, preparation 51  
  – vasoconstriction 50  
Apamin 140  
Apoptosis 184  
  –, melanoma xenografts 210  
Arachidonic acid 34  
Arrhythmia 250  
Aspartate aminotransferase 163  
Assay, acetylcholinesterase 19  
  –, agarose gel electrophoresis/DNA  
    fragmentation 186  
  –, antinociception 215  
  –, brain myeloperoxidase 36  
  –, carvedilol cytotoxicity 88  
  –, catalase activity 173  
  –, endothelin-1 13  
  –, enzyme-linked immunosorbent  
    155  
  –, gastric mucosal histamine 78  
  – – – lipid peroxides 78  
  – – – nitric oxide 78  
  – – – PGE<sub>2</sub> 78  
  –, gastrointestinal contractility 224  
  –, hippocampal kindled rat 252  
  –, inositol phosphates 52  
  –, lipid peroxidation 35, 173  
  –, liver enzymes 164  
  –, luciferase 115  
  –, mammalian heart QT changes 253  
  –, MAP kinase 59  
  –, mechanical strength 130  
  –, melanoma cell apoptosis 208  
  – – – growth in vitro 208  
  – – – proliferation 208  
  –, monocyte adhesion 155  
  –, motilin receptor binding 141  
  –, mRNA stability 58  
  –, mucin 78  
  –, myeloperoxidase release 87, 165  
  –, neurotransmitters 174  
  –, nitrite 19, 36  
  –, Northern blot 58  
  –, pepsin 78  
  –, PGE<sub>2</sub> formation 59  
  –, picrotoxin 252  
  –, platelet shape change/aggregation  
    51  
  –, reactive oxygen species 164  
  –, real-time PCR 204  
  –, reduced glutathione 19, 35, 173  
  –, seizure frequency/magnitude 252  
  –, superoxide dismutase 36, 87, 173  
  –, Western blot 59, 116  
  –, zebrafish anticonvulsant screening  
    251  
  – – arrhythmia 253  
Atropine 137, 225

- Autoimmune encephalomyelitis, multiple sclerosis 43  
 – neuroinflammation 42  
 – –, immunomodulating  $\alpha$ -fetoprotein 45
- Behavioral activity, assessment 1, 19  
 – investigation, mice 35  
 – test, fluoxetine, postnatal period 1
- Bifunctional molecules 42
- Blood glucose 245
- Body weight change 245
- Bombesin 140
- Bone formation 130  
 – loss 129  
 – mechanical strength 129  
 – mineral density 129
- Brain 171
- Breast cancer 93  
 – – cells 93
- $\text{Ca}^{2+}$  channel 65, 140  
 – –, store-operated 65  
 –, intracellular concentration 65
- Calcitonin 140
- Cancer cells, human breast 93
- Cardiac arrhythmia 250  
 – diastolic function 184  
 – ion channel 250  
 – systolic function 184
- Carvedilol 86
- Casein 244
- CCI-779 207
- Cell(s) adhesion molecules 154  
 – culture 13, 27, 93, 115, 154  
 – death, detection *in situ* 186  
 –, melanoma 207  
 – movement 93  
 – proliferation, melanoma xenografts 210  
 – transfection 115
- Cellulose 244
- Central nervous system, inflammation 42
- Charybdotoxin 140
- Chemoresistance, human melanoma 207
- Chemotherapy, combination 207  
 –, side effects 209
- Chewing movements 171
- Cholecystokinin 140
- Cholinergic neurons, loss 17
- Cimetidine 76
- Cisplatin 207
- Clinical utility, GBR12909 250
- Clozapine 149  
 –, morphine state-dependent memory 152
- Cognitive dysfunction 17  
 – performance, assessment 18
- Colchicine, cognitive impairment/oxidative stress 17  
 –, intracerebroventricular 17
- Combination therapy 207, 214
- Congenital anomalies 1
- Constriction, aortic smooth muscle cells 50
- Contractile activity, recording 138
- Contraction 50, 104, 138
- Corn starch 244
- COX isoenzymes 57
- Culture, breast cancer cells 93  
 –, CHO cells 115  
 –, endothelial cells 13, 154  
 –, vascular smooth muscle cells 27
- Cyanopindolol 140
- Cyclic adenosine monophosphate 69  
 – guanosine monophosphate 69  
 – nucleotides 65, 69
- Cyclooxygenase 34, 57  
 – inhibitors 34  
 – upregulation 57
- CYP2D6 203  
 – polymorphism, Turkish population 203  
 – substrates, pharmacokinetics 203
- Cystine 140
- Cytochrome P<sub>450</sub> 203
- Cytokines 163
- Daidzein sulfonate 129
- Depression 1
- Diabetes, feeding 243  
 – induction 244  
 – research 244  
 – type 2 243
- Diacylglycerol 67
- Diastolic blood pressure 123
- 1,1-Dichloro-*cis*-2,3-diaryl cyclopropane 93
- Diet, experimental composition 244
- Digestion 223
- Diltiazem 140
- Dipyridamole 171
- Dipyrone 214
- DNA constructs 115
- Dopamine 149, 171, 225, 250  
 – receptor antagonists 149  
 – reuptake inhibitor 250
- Drug(s) administration, oral, local, intrathecal 214  
 –, anticancer 207  
 –, anticoagulant 154  
 –, antipsychotic 149
- , arrhythmogenic potential 250  
 –, cardiac QT action 250  
 – combination gabapentin/metimazol 214  
 – development 42  
 – –, central nervous system disorders 42
- metabolism 97, 203  
 – – mutations 203  
 –, psychoactive 149  
 – toxicity 203
- Dyskinesia 171
- Dysmotility 223
- Edaravone 122
- Electroshock 250
- Elevated plus maze 3, 173
- Encephalomyelitis, experimental autoimmune 42
- Endocannabinoids 12
- Endothelial cells 12, 154  
 – –, human umbilical vein 155
- Endothelin-1 12
- Enflurane 236
- Exoxaparin, anti-inflammatory effect 154  
 –, antioxidant potential 154
- Epidermal growth factor receptor 93
- Epilepsy, generalized 250
- Erythromycin 137, 223
- 17 $\beta$ -Estradiol 129
- Ethanol 236
- Ethnic variations, drug metabolism 203
- Excitotoxicity, kainic acid 34
- Expression, cell adhesion 154
- Extracellular signal-regulated kinase 57
- Facial jerking 171
- Feeding, diabetes 243
- Femoral bone, osteoporosis 129
- $\alpha$ -Fetoprotein 42
- Fluoxetine 1  
 –, birth weight 4  
 –, delay in motor development 1  
 –, offspring weight changes 4  
 –, postnatal behavioral effects 1  
 –, selective serotonin reuptake inhibitor 1  
 –, teratogenic effect 1
- Food intake 245
- Force transducer, chronically implanted 223
- Formalin test 214
- N-formyl-methionyl-leucyl-phenylalanine 86

- Free radical generation 17  
– – scavenging 76  
Functional dyspepsia 223
- Gabapentin 214  
Gastric juice 76  
– –, collection/analysis 78  
– lesions, assessment 78  
– –, experimentally induced 76  
– mucosal lipid peroxides 76  
– nitrite levels 76  
– ulcer 76  
Gastrointestinal motility 223  
Gastroparesis 223  
Gastroprotection 76  
GBR12909, anticonvulsant activity 250  
Gene coding, CYP2D6 203  
– polymorphism 203  
Geotaxis 1  
Glibenclamide 76, 140  
Glucuronidation 97  
Glutathione 163  
GM-611, motilin antagonist 137  
Guanylyl cyclase 69  
Guinea pig isolated ileum 104
- Haloperidol, chronic administration 171  
– orofacial dyskinesia 171  
Halothane 236  
Heart rate 184  
Hemodynamic monitoring 185  
Heparin 154  
Hepatic glucuronidation 97  
– ischemia-reperfusion injury protection 163  
Hexamethonium 137, 225  
High-fat diet 243  
Hippocampal kindling model 250  
Histamine 76, 104  
– H<sub>1</sub> receptor agonists, structures 105  
– – – antagonism 104  
Histaprodifen derivates 104  
Histology, heart examination 186  
Hormone replacement therapy 129  
Hydrogen peroxide 154  
Hydroxyl radicals 122  
Hypertension 65, 122  
–, pulmonary artery 65  
Hypocretins 236  
Hypotension 12  
Hypothalamic-pituitary-adrenal axis 236  
Hypothalamus 236
- Ileum, guinea pig 104  
–, mechanical activity measurement 105  
–, tissue preparation 105
- Image analysis, cell motility 94  
Immunophilin, FKBP12 207  
Indomethacin 34  
Inflammation 34, 154  
Inflammatory metabolites 34  
Inositol-1,4,5-triphosphate 67, 140  
Insulin 243  
– resistance 243  
Interleukin-1 $\beta$  163  
Intestine 137  
Invasiveness, estrogen-receptor-positive breast cancer cells 93  
Ischemia 163, 184  
Ischemia-reperfusion injury 163, 184  
Isobolographic analyses, nociception 214  
Isoflurane 236
- Kainic acid excitotoxicity 34  
K<sup>+</sup> channel(s) 140  
– –, voltage-gated 65  
Ketamine 236  
Ketanserin 140, 225  
Kidney disease, experimental 57
- Lactate dehydrogenase 163  
Lard 244  
Leukotrienes 34  
Levoceftirizine 104  
Lipid peroxidation 163  
Lipoic acid 163  
Lipoxygenase 34  
– inhibitors 34  
Liver glycogen 243, 246  
– injury 163  
– tissue samples 163  
– weight 246  
Locomotor activity 171  
Low-fat diet 243
- Macrophages 86  
Malondialdehyde 17, 163  
Maze acquisition test 19  
– retention test 19  
Melanoma 207  
– cells, growth inhibition in vitro 208  
– growth inhibition, xenotransplant SCID mice 209  
– human cell lines 208  
– SCID mouse model 207  
Memory 149  
Mesangial cells 57  
– –, preparation 58  
Metamizol 214  
Metastatic malignant melanoma 207  
Methylhistaprodifen 104
- 3-Methyl-1-phenyl-2-pyrazolin-5-one 122  
N-methylscopolamine 140  
Mineral premix 244  
Minimal motor impairment 252  
Mitemcinal 137, 141, 223  
–, chemical structure 138  
–, first acid-resistant non-peptide motilin receptor agonist 137  
–, receptor affinities 141  
Mitogen-activated protein kinase 27  
Monocytes 154  
Morphine 149  
– memory retrieval effect 152  
– state dependent memory 149  
Motilin 137, 223  
– antagonist, GM-109 137  
– receptor agonist mitemcinal 137, 223  
Mucin 76  
Multiple sclerosis 42  
Mutated allele, CYP2D6 gene 203  
Mutations, functionally important 203  
Myeloperoxidase 86, 163  
Myocardial apoptosis 184  
– infarction 184, 185
- Naloxone 137  
Narcolepsy 236  
Natural immunomodulating protein 42  
Necrosis 184  
Negative geotaxis 2  
Neurodegenerative disease 17  
Neuroendocrine homeostasis 236  
Neuroinflammation 42  
– treatment 43  
Neurokinin 140  
Neuroleptics 171  
Neuronal excitotoxicity 34  
Neuropathic pain 215  
Neuropeptides 236  
Neurotoxicity, kainic acid 34  
Neutrophils 86  
–, isolation 87  
Nicorandil 76  
Nicotinamide 243  
Nimesulide 34  
Nimodipine 171  
Nitric oxide 12, 69, 86, 214  
– – generation, cultured macrophages 87  
– – – synthase 86  
Nitric oxide-cyclic guanosine monophosphate pathway 214  
Nitrite 17  
Norepinephrine 171  
Nuclear transcription factors 154

- Offspring parameters 2  
 Ondansetron 225  
 Oocytes, whole-cell voltage clamp 237  
 Open-field exploration test 1  
 Opioids 149  
 Orexins 236  
 Orofacial dyskinesia, behavioural assessment 173  
 – –, induction 173  
 Osteoporosis 129  
 –, animal model 129  
 –, postmenopausal 129  
 Ovariectomy 129  
 Oxidative damage 34, 163, 171  
 – stress 17
- Pain management 214  
 Paracetamol 97  
 Passive avoidance 149  
 – – apparatus 150  
 – – test 1  
 Pentobarbital 236  
 Pentylenetetrazole 250  
 Peptic ulcer 76  
 Peroxisome 184  
 Pharmacokinetic studies, thalassemic patients 98  
 Phenotype, poor metabolizer 203  
 Phentolamine 225  
 1-Phosphatidylinsitol 3-kinase 86  
 Phospholipases 27, 86, 140  
 Pilocarpine 250  
 Pioglitazone 184  
 Platelet aggregation 50  
 – preparation 51  
 Polymorphism 97, 203  
 – analysis 98  
 Polymorphonuclear leukocytes 86  
 Poor metabolizers 203  
 Porcine motilin 137, 223  
 Potassium channels 76  
 Prazosin 140  
 Prenatal fluoxetine, developmental behavioral consequences 1  
 Preweaning test 2  
 Proliferator-activated receptor gamma agonist 184  
 Propranolol 225  
 Prostaglandin(s) 34, 57, 76, 79, 214  
 – production 57  
 – synthesis 214  
 Protein kinase C 27, 65, 67, 140  
 Psychotic disorders 171  
 Pulmonary arterial hypertension 65  
 – arteries, remodeling 65  
 – circulation 65  
 – vascular tone, cyclic nucleotide regulation 69  
 – – –, ion channel regulation 70  
 – – –, protein kinase regulation 67  
 Pyloric ligation 77  
 Pyrilamine 140  
 Quinpirole 114  
 Radioligand-binding studies 51  
 Rapamycin 207  
 Rapid metabolizers 203  
 Ras inhibitor farnesylthiosalicylic acid 27  
 Rat diabetes model 243  
 –, ovariectomized 129  
 Rauwolscine 140  
 Reactive nitrogen species 86  
 – oxygen species 86  
 Receptor(s), adenosine 140, 171  
 –, adrenergic 140  
 –, bombesin 140  
 –, calcitonin 140  
 –, CB<sub>1</sub> 12  
 –, cholecystokinin 140  
 –, dopamine 114, 140, 149  
 –, – D<sub>2</sub>/D<sub>4</sub> 149  
 –, epidermal growth factor 93  
 –, G-protein-coupled 114  
 –, inositol 1,4,5-triphosphate 140  
 –, motilin 137, 223  
 –, muscarinic 140  
 –, neuropeptide Y 140  
 –, opioid 140  
 –, orexin-1 236  
 –, reserve 104  
 –, retinoic acid 57  
 –, retinoid X 57  
 –, ryanodine 67  
 –, serotonin 140  
 –, somatostatin 140  
 –, vasoactive intestinal peptide 140  
 Red wine 17  
 Regulator, G protein signaling 114  
 Relaxation 104  
 Release, myeloperoxidase 86  
 Reperfusion injury 184  
 Respiratory burst 86  
 Resveratrol, brain acetylcholinesterase 23  
 – – lipid peroxidation 22  
 – – nitrite levels 22  
 –, gross behavioural activity 21  
 –, memory performance 20  
 –, neuroprotection 17  
 Retinoic acid 57  
 Retinoids, vitamin A metabolites 57  
 Rho kinase 65  
 Rofecoxib 34  
 Rota-rod test 1  
 Sarcoplasmic reticulum 67  
 SCID mouse 207  
 Selective serotonin reuptake inhibitor fluoxetine 1  
 Serotonin 140  
 Serum insulin 245  
 – lipid 246  
 – response element 114  
 Signaling pathway 65  
 Sleep 236  
 Sodium daidzein sulfonate 129  
 Somatostatin 140  
 Soybean oil 244  
 Spatial navigation task 18  
 Spinal surgery 215  
 Spontaneously hypertensive rats 122  
 Step-down passive avoidance test 149  
 Stereotypic behaviour 173  
 Stereotypy 171  
 Streptozotocin 243  
 Stress, hydroxyl radicals 122  
 –, water immersion-restraint 76  
 Substance P 140  
 Sucrose 244  
 Sulpiride 149  
 –, morphine-state-dependent memory 152  
 Suprathistaprodifen 104  
 Synergy, drugs 214  
 Systolic blood pressure 123  
 Tail-cuff method 123  
 Tamoxifen 93  
 Tardive dyskinesia 171  
 Teratogenicity, fluoxetine 1  
 Tetradotoxin 137  
 Thalassemia 97  
 Therapeutic window, epilepsy 250  
 Thoracic aorta 122  
 Thromboxane A<sub>2</sub> 50  
 – – receptor antagonist Z-335 50  
 Tongue protrusion 171  
 Trabecular bone 129  
 – –, scanning electron microscopy 132  
 Trachea, guinea pig 104  
 –, mechanical activity 105  
 –, tissue preparation 105  
 Transcription factors 154  
 Treatment, neuroinflammation 43  
 Tropisetron 137  
 Tumor, necrosis factor alpha 163

- Turkish population, polymorphism  
  203
- Type 2 diabetes 243
- UDP-glucuronosyltransferase 97
- Ulcer indices 76
- Umbilical vein endothelial cells 12
- Vacuous chewing movements 171
- Vanoxerine 250
- Vascular reactivity 123
  - smooth muscle cells 27
  - tone 65
- -, Ca<sup>2+</sup> homeostasis 66
- -, Ca<sup>2+</sup>-independent mechanisms  
  66
- Vasoactive intestinal peptide 140
- Vasoconstriction 50, 65
  - , pulmonary 65
- Vasodilation 12
- Vasodilator therapy 65
- Verapamil 137
- Vertebral bone, osteoporosis 129
- Videomicroscopy, MCF-7 breast cancer  
  cells 93
- Vitamin-fortified mixture 244
- Water maze 3
- Weaning 1
- Wortmannin 86
- Xenopus laevis* oocytes 236
- Xenotransplantation model 207
- Zebrafish 250
- Zymosan 87