INDEX TO VOLUME 78

AUTHOR INDEX

A

- ADVENIER, C., CERRINA, J., DUROUX, P., FLOCH, A., PRADEL, J. & RENIER, A. Sodium cromoglycate, verapamil and nicardipine antagonism to leukotriene D₄ bronchoconstriction, 301
- AFFOLTER, H., PEYER, M. & PLETSCHER, A. Storage of biogenic amines in guinea-pig brain synaptosomes: influence of proton gradient and membrane potential, 111
- ANAND, P., BLOOM, S.R. & McGREGOR, G.P. Topical capsaicin pretreatment inhibits axon reflex vasodilatation caused by somatostatin and vasoactive intestinal polypeptide in human skin, 665
- ANDERSON, W.H., O'DONNELL, M., SIMKO, B.A. & WELTON, A.F. An *in vivo* model for measuring antigen-induced SRS-A-mediated bronchoconstriction and plasma SRS-A levels in the guinea-pig, 67
- ANDEREGG, K., ANZEVENO, P., COOK, J.A., HALUSHKA, P.V., McCARTHY, J., WAGNER, E. & WISE, W. C. Effects of a pyridine derivative thromboxane synthetase inhibitor and its inactive isomer in endotoxic shock in the rat, 725
- ANZEVENO, P. see ANDEREGG, K., 725
- ALTURA, B.M., ALTURA, B.T. & CARELLA, A. Ethanol produces coronary vasospasm: evidence for a direct action of ethanol on vascular muscle, 260
- ALTURA, B.T. see ALTURA, B.M., 260
- AUCH-SCHWELK, W., STARKE, K. & STEPPELER, A. Experimental conditions required for the enhancement by α-adrenoceptor antagonists of noradrenaline release in the rabbit ear artery, 543
- AULT, B. & NADLER, J.V. Anticonvulsant-like actions of baclofen in the rat hippo-campal slice, 701

В

- BEDWANI, J.R. & BLANNING, P.E. Effects of prostaglandin E₂ on fast and slow components of the response of the rat vas deferens to field stimulation, 143
- BERMAN, J.S., HILEY, C.R. & WILSON, A.C. Comparison of the effects of the hypolipidaemic agents ICI 53072 and clofibrate with those of phenobarbitone on liver size, blood flow and DNA content in the rat, 533
- BERRIDGE, T.L., GADIE, B., ROACH, A.G. & TUL-LOCH, I.F. α₂-Adrenoceptor agonists induce mydriasis in the rat by an action within the central nervous system, 507
- BERTACCINI, G. & ZAPPIA, L. Evidence against the temperature-dependent interconversion of histamine H₁- and histamine H₂-receptors in the guinea-pig ileum, 11

- BIRDSALL, N.J.M., BURGEN, A.S.V., HULME, E.C., STOCKTON, J.M. & ZIGMOND, M.J. The effect of McN-A-343 on muscarinic receptors in the cerebral cortex and heart, 257
- BLANNING, P.E. see BEDWANI, J.R., 143
- BLOOM, P. see ANAND, P., 665
- BOLTON, T.B. & KITAMURA, K. Evidence that ionic channels associated with the muscarinic receptor of smooth muscle may admit calcium, 405
- BOWERMAN, S.P., JONES, C.A., LEAKE, A. & MOR-RIS, I.D. The biological activity of a single dose of tamoxifen in the adult ovariectomized rat, 617
- BOWERY, N.G., HILL, D.R. & HUDSON, A.L. Characteristics of GABA_B receptor binding sites on rat whole brain synaptic membranes, 191
- BROUGHTON-SMITH, N.K. & WHITTLE, B.J.R. Stimulation and inhibition of prostacyclin formation in the gastric mucosa and ileum *in vitro* by anti-inflammatory agents, 173
- BRYANT, R.M., OLLEY, J.E. & TYERS, M.B. Antinociceptive actions of morphine and buprenorphine given intrathecally in the conscious rat, 639
- BURGEN, A.S.V. see BIRDSALL, N.J.M., 257
- BURKE, S.E., LEFER, A.M., NICOLAOU, K.C., SMITH, G.M. & SMITH, J.B. Responsiveness of platelets and coronary arteries from different species to synthetic thromboxane and prostaglandin endoperoxide analogues, 287

 \mathbf{C}

- CANFIELD, S.P. & SPENCER, J.E. The inhibitory effects of 5-hydroxytryptamine on gastric acid secretion by the rat isolated stomach. 123
- CARELLA, A. see ALTURA, B.M., 260
- CARRATU, M.R., DI GIOVANNI, V. & MITOLO-CHIEPPA, D. Effects of some antiepileptic drugs on the repetitive activity of the node of Ranvier, 49
- CERRINA, J. see ADVENIER, C., 301
- CHARNOCK, J.S., DRYDEN, W.F. & MARSHALL, R.J. Seasonal variations in drug response and staircase phenomena in atrial muscle from a hibernating rodent, 151
- CHURCH, M.K. & YOUNG, K.D. The characteristics of inhibition of histamine release from human lung fragments by sodium cromoglycate, salbutamol and chlorpromazine, 671
- CLARK, A.L. & HOBBIGER, F. Twitch potentiation by organophosphate anticholinesterases in rat phrenic nerve diaphragm preparations, 239

- CLARK, S.L. & RYALL, R.W. The antinociceptive action of etorphine in the dorsal horn is due to a direct spinal action and not to activation of descending inhibition, 307
- CLARKE, P.B.S. & KUMAR, R. The effects of nicotine on locomotor activity in nontolerant and tolerant rats, 329
- COATES, J. & WEETMAN, D.F. Occurrence of α_{1S}-adrenoceptors in the mouse but not in the rabbit isolated anococcygeus preparations, 117
- COKER, S.J., HUGHES, B., PARRATT, J.R., RODGER, I.W. & ZEITLIN, I.J. The release of prostanoids during the acute pulmonary response to *E. coli* endotoxin in anaesthetized cats, 561
- COLLIS, M.G. Evidence for an A₁-adenosine receptor in the guinea-pig atrium, 207
- CONNOR, E.A. & PARSONS, R.L. Procaine alters fast excitatory postsynaptic current decay in amphibian sympathetic ganglia, 293
- COOK, J.A. see ANDEREGG, K., 725
- COWEN, P.J., FRASER, S., GRAHAME-SMITH, D.G., GREEN, A.R. & STANFORD, C. The effect of chronic antidepressant administration on α-adrenoceptor function of the rat pineal, 89
- CREMA, A., FRIGO, G.M., LECCHINI, S., MANZO, L., ONORI, L. & TONINI, M. Purine receptors in the guinea-pig internal anal sphincter, 599
- CROSSLEY, A.W.A. & GILLESPIE, J.S. The effect of an inhibitory factor from the bovine retractor penis on the gastro-intestinal tract and gall bladder of the guinea-pig, 213

D

- DAVIES, J.A. & WILLIAMS, J. A role for 5hydroxytryptamine in the GABA-mimetic potentiation of α-flupenthixol-induced catalepsy in the rat, 137
- DE JONGE, A., TIMMERMANS, P.B.M.W.M. & VAN ZWIETEN, P.A. Hypotensive and α-adrenergic activities of 2-(2,3,6-trichlorophenylimino) and 2-(2,3-dichloro-6-methylphenylimino) imidazolidine, two potent derivatives of clonidine. 479
- DI GIOVANNI, V. see CARRATU, MARIA R. 49
- DOCHERTY, J. R. An investigation of presynaptic α-adrenoceptor subtypes in the pithed rat heart, 655
- DOWNES, H. & TAYLOR, S.M. Distinctive pharmacological profile of a nonadrenergic inhibitory system in bullfrog lung, 339
- DOXEY, J.C., ROACH, A.G. & SMITH, C.F.C. Studies on RX 781094: a selective, potent and specific antagonist of α₂-adrenoceptors, 489
- DRAZEN, J.M., FANTA, C.H. & LACOUTURE, P.G. Effect of nifedipine on constriction of human tracheal strips in vitro, 687
- DRYDEN, W.F. see CHARNOCK, J.S., 151 DUROUX, P. see ADVENIER, C., 301

E

EL-FAKAHANY, E. & RICHELSON, E. Antagonism by antidepressants of muscarinic acetylcholine receptors of human brain, 97 F

- FAGBEMI, O., KANE, K.A., LEPRÁN, I., PARRATT, J.R. & SZEKERES, L. Antiarrhythmic actions of meptazinol, a partial agonist at opiate receptors, in acute myocardial ischaemia, 455
- FANTA, C.H. see DRAZEN, J.M., 687
- FENNESSY, M.R., LEWIS, S.J., TAYLOR, D.A. & VER-BERNE, A.J.M. Δ⁹-Tetrahydrocannabinol reduces brain regional histamine concentrations, 452
- FERRY, N., GOODHARDT, M., HANOUNE, J. & SEVENET, T. Binding of yohimbine stereoisomers to α-adrenoceptors in rat liver and human platelets, 359
- FLOCH, A. see ADVENIER, C., 301
- FÖRSTER, W. & PÖNICKE, K. Influence of sympathomimetic drugs (1-phenyl-2-amino-ethan-1-ol derivatives) on the biosynthesis of prostaglandins and thromboxane, 263
- FORTES, Z.B., GARCIA L.J. & SCIVOLETTO, R. Influence of diabetes on the reactivity of mesenteric microvessels to histamine, bradykinin and acetylcholine, 39
- FOSTER, P.S., GOLDIE, R.G. & PATERSON, J.W. Effect of steroids on β-adrenoceptor-mediated relaxation of pig bronchus, 441

FRASER, S. see COWEN, P.J., 89

FREYSS-BEGUIN, M., GRIFFATON, G., LECHAT, P., PICKEN, D., QUENNEDEY, M. C., ROUOT, B. & SCHWART, J. Comparison of the chronotropic effect and the cyclic AMP accumulation induced by β₂-agonists in rat heart cell culture, 717

FRIĞO, G.M. see CREMA, A., 599

G

GADIE, B. see BERRIDGE, T.L., 507

GALZIN, A-M. & LANGER, S.Z. Presynaptic α₂-adrenoceptor antagonism by verapamil but not by diltiazem in rabbit hypothalamic slices, 571

GARCIA L.J. see FORTES, Z.B., 39

GILLESPIE, J.S. see CROSSLEY, A.W.A., 213

- GINESI, L.M., MUNDAY, K.A. & NOBLE, A.R. Direct effect of lithium on active and inactive renin secretion, 3
- GIOTTI, A., LUZZI, S., SPAGNESI, S. & ZILLETTI, L. GABA_A and GABA_B receptor-mediated effects in guinea-pig ileum, 469
- GOLDIE, R.G. see FOSTER, P.S., 441
- GOLDSTEIN, D.B., HUNGUND, B.L. & LYON, R.C. Increased surface glycoconjugates of synaptic membranes in mice during chronic ethanol treatment, 8
- GOODHARDT, M. see FERRY, N., 359
- GRAHAME-SMITH, D.G. see COWEN, P.J., 89
- GRBOVIĆ, L. & RADMANOVIĆ, B.Z. The influence of substance P on the response of guinea-pig isolated ileum to periarterial nerve stimulation, 681

GREEN, A.R. see COWEN, P.J., 89

GRIFFATON, G. see FREYSS-BEGUIN, M., 717

H

HALUSHKA, P.V. see ANDEREGG, K., 725 HANOUNE, J. see FERRY, N., 359 HEDLER, L., STARKE, K. & STEPPELER, A. Release of [3H]-amezinium from cortical noradrenergic axons: a model for the study of the α-autoreceptor hypothesis, 645

HILEY, C.R. see BERMAN, J.S., 533 HILL, D.R. see BOWERY, N.G., 191

HOBBIGER, F. see CLARK, A.L., 239

HOF, R.P. Calcium antagonist and the peripheral circulation: differences and similarities between PY 108-068, nicardipine, verapamil and diltiazem, 375

HOULT, J.R.S. & ROBINSON, C. Selective inhibition of thromboxane B₂ accumulation and metabolism in perfused guinea-pig lung, 79

HUDSON, A.L. see BOWERY, N.G., 191

HUGHES, B. see COKER, S.J., 561

HULLIMAN, J.P., SPECTOR, S., TANIGUCHI, T. & WANG, J.K.T. The binding of [3H]-diazepam to guinea-pig ileal longitudinal muscle and the *in vitro* inhibition of contraction by benzodiazepines, 321

HULME, E.C. see BIRDSALL, N.J.M., 257 HUNGUND, B.L. see GOLDSTEIN, D.B., 8

I

ILLES, P. & STARKE, K. An electrophysiological study of presynaptic α-adrenoceptors in the vas deferens of the mouse, 365

J

JHAMANDAS, K. & SUTAK, M. Stereospecific enhancement of evoked release of brain acetylcholine by narcotic antagonists, 433

JOHNSTON, K.M., MACLEOD, B.A. & WALKER, M.J.A. Effects of aspirin and prostacyclin on arrhythmias resulting from coronary artery ligation and on infarct size, 29

JONES, C.A. see BOWERMAN, S.P., 617

K

KALSNER, S. The effect of magnesium deficiency and excess on bovine coronary artery tone and responses to agonists, 629

KALSNER, S. The effects of yohimbine on presynaptic and postsynaptic events during sympathetic nerve activation in cattle iris: a critique of presynaptic theory, 247

KAMIKAWA, Y. & SHIMO, Y. Indirect action of 5hydroxytryptamine on the isolated muscularis mucosae of the guinea-pig oesophagus, 103

KAMIKAWA, Y. & SHIMO, Y. Pharmacological characterization of the opioid receptor in the submucous plexus of the guinea-pig oesophagus, 693

KANE, K.A. see FAGBEMI, O., 455

KENT, A.P. & WEBSTER, R.A. The evaluation of different types of anti-convulsant activity against leptazol-induced epileptogenic activity in anaesthetized rat, 553

KERR, D.I.B. & KRANTIS, A. Uptake and stimulusevoked release of [³H]-γ-aminobutyric acid by myenteric nerves of guinea-pig intestine, 271 KIMURA, T. & SATOH, S. Inhibition of cardiac sympathetic neurotransmission by histamine in the dog is mediated by H₁-receptors, 733

KIRPEKAR, S.M., PRAT, J.C. & SCHIAVONE, M.T. Modification of potassium-evoked release of noradrenaline by various ions and agents, 277

KITAMURA, K. see BOLTON, T.B., 405

KOO, A. In vivo characterization of histamine H₁- and H₂-receptors in the rat stomach microcirculation, 181
 KRANTIS, A. see KERR, D.I.B., 271

KUDO, Y., TANAKA, A. & YAMADA, K. Dendrobine, an antagonist of β-alanine, taurine and or presynaptic inhibition in the frog spinal cord, 709

KUMAR, R. see CLARKE, P.B.S., 329

L

LACOUTURE, P.G. see DRAZEN, J.M., 687
LANGER, S.Z. see GALZIN, A-M., 571
LEAKE, A. see BOWERMAN, S.P., 617
LEANDER, J.D. Opioid agonist and antagonist behavioural effects of buprenorphine, 607
LECCHINI, S. see CREMA, A., 599
LECHAT, P. see FREYSS-BEGUIN, M., 717
LEFER, A.M. see BURKE, S.E., 287
LEPRAN, I. see FAGBEMI, O., 455
LEWIS, S.J. see FENNESSY, M.R., 452
LIMA, J.S. see MOURA, R.S. de, 449
LUZZI, S. see GIOTTI, A., 469
LYON, R.C. see GOLDSTEIN, D.B., 8

M

McCarthy, J. see Anderegg, K., 725 McGregor, G.P. see Anand, P., 665 Macleod, B.A. see Johnston, K.M., 29

MAKITA, Y. Effects of prostaglandin I₂ and carbocyclic thromboxane A₂ on smooth muscle cells and neuromuscular transmission in the guinea-pig mesenteric artery. 517

MANZO, L. see CREMA, A., 599

MARSHALL, I. Stimulation-evoked release of [3 H]-noradrenaline by 1, 10 or 100 pulses and its modification through presynaptic α_2 -adrenoceptors, 221

MARSHALL, R.J., MUIR, A.W. & WINSLOW, E. Effects of antiarrhythmic drugs on ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165

MARSHALL, R.J. see CHARNOCK, J.S., 151

MARTIN, M.R. & PENIX, L.P. Comparison of the effects of bicuculline and strychnine on brain stem auditory evoked potentials in the cat, 75

MEDGETT, I.C. Modulation of transmission in rat sympathetic ganglia by activation of presynaptic α- and β-adrenoceptors, 17

MITOLO-CHIEPPA, D. see CARRATU, M.R., 49 MORRIS, I.D. see BOWERMAN, S.P., 617

MOURA, R.S. de & LIMA, J.S. Effect of disopyramide on isolated aortic ring of the rat, 449

MUIR, A.W. see MARSHALL, R.J., 165 MUNDAY, K.A. see GINESI, L.M., 3 N

NADLER, J. V. see AULT, B., 701 NICOLAOU, K.C. see BURKE, S.E., 287 NOBLE, A.R. see GINESI, L.M., 3

0

O'DONNELL, M. see ANDERSON, W.H., 67 O'DONNELL, S.R. & WANSTALL, J.C. Relaxation of cat trachea by β-adrenoceptor agonist can be mediated by both β_1 - and β_2 -adrenoceptors and potentiated by inhibitors of extraneuronal uptake, 417

OHIZUMI, Y. Contractions induced by grayanotoxin I in the guinea-pig vas deferens, 455

OLLEY, J.E. see BRYANT, R.M., 639 ONORI, L. see CREMA, A., 599

PARRATT, J.R. see COKER, S.J., 561 -, see FAGBEMI, O., 455 PARSONS, R.L. see CONNOR, E.A., 293 PATERSON, J.W. see FOSTER, P.S., 441 PENIX, L.P. see MARTIN, M.R., 75 PEYER, M. see AFFOLTER, H., 111 PICKEN, D. see FREYSS-BEGUIN, M., 717 PLETSCHER, A. see AFFOLTER, H., 111 PÖNICKE, K. see FÖRSTER, W., 263 PRADEL, J. see ADVENIER, C., 301 PRAT, J.C. see KIRPEKAR, S.M., 277 PUURUNEN, J. Inhibition of gastric acid secretion by intracerebroventricularly administered glandin E2 in anaesthetized rats, 131

PYCOCK, C.J. & SMITH, L.F.P. Interactions of dopamine and the release of [3H]-taurine and [3H]-glycine from the isolated retina of the rat, 395

0

QUENNEDEY, M.C. see FREYSS-BEGUIN, M., 717

R

RADMANOVIĆ, B.Z. see GRBOVIĆ, L., 681 RENIER, A. see ADVENIR, C., 301 RICCIOPPO, F.N. Effects of the venom of the Brazilian scorpion (Tityus serrulatus) on the compound action potential of the rabbit vagus nerve fibres, 529 RICHELSON, E. see EL-FAKAHANY, E., 97 ROACH, A.G. see BERRIDGE, T.L., 507

ROACH, A.G. see DOXEY, J.C., 489 ROBINSON, C. see HOULT, J.R.S., 79 RODGER, I.W. see COKER, S.J., 561 ROUOT, B. see FREYSS-BEGUIN, M., 717 RYALL, R.W. see CLARK, S.L., 307

S

SANGER, D.J. An analysis of the effects of systemically administered clonidine on the food and water intake of rats, 159

SATOH, S. see KIMURA, T., 733

SAWYNOK, J. Theophylline-induced potentiation of the antinociceptive action of baclofen, 353

SCHIAVONE, M.T. see KIRPEKAR, S.M., 277

SCHOLFIELD, C.N., Baclofen blocks postsynaptic inhibition but not the effect of muscimol in the olfactory cortex, 79

SCHWARTZ, J. see FREYSS-BEGUIN, M., 717

SCIVOLETTO, R. see FORTES, Z.B., 39

SCOTT, E. The effect of atenolol on the spontaneous and reflex activity of the sympathetic nerves in the cat: influence of cardiopulmonary receptors, 425

SEVENET, T. see FERRY, N., 359

SHIMO, Y. see KAMIKAWA, Y., 103, 693

SIMKO, B. A. see ANDERSON, W. H., 67

SMITH, C.F.C. see DOXEY, J.C., 489

SMITH, G.M. see BURKE, S.E., 287

SMITH, J.A. & SPRIGGS, T.L.B. Neostigmine augments responses of the rat anococcygeus muscle to field stimulation, 57

SMITH, J.B. see BURKE, S.E., 287

SMITH, L.F.P. see PYCOCK, C.J., 395

SPAGNESI, S. see GIOTTI, A., 469

SPECTOR, S. see HULLIMAN, J.P., 321

SPENCER, J.E. see CANFIELD, S.P., 123

SPRIGGS, T.L.B. see SMITH, J.A., 57

STANFORD, C. see COWAN, P.J., 89

STARKE, K. see AUCH-SCHWELK, W., 543

STARKE, K. see HEDLER, L., 645

STARKE, K. see ILLES, P., 365

prosta-

STEPPELER, A. see AUCH-SCHWELK, W., 543

STEPPELER, A. see HEDLER, L., 645

STOCKTON, J.M. see BIRDSALL, N.J.M., 257 SUTAK, M. see JHAMANDAS, K., 433

SUZUKI, R. Neuronal influence on the mechanical activity of the ciliary muscle, 591

SZEKERES, L. see FAGBEMI, O., 455

T

TANAKA, A. see KUDO, Y., 709

TANIGUCHI, T. see HULLIMAN, J.P., 321

TAYLOR, D.A. see FENNESSY, M.R., 452

TAYLOR, S.E. Additional evidence against universal modulation of β-adrenoceptor responses by excessive thyroxine, 629

TAYLOR, S.M. see DOWNES, H., 339

TEMPLETON, W.W. & WOODRUFF, G.N. A comparison of some of the properties the [3H]-sulpiride binding site in soluble and native membrane preparations of dog striatum, 5

TIMMERMANS, P.B.M.W.M. see DE JONGE, A., 479

TONINI, M. see CREMA, A., 599

TULLOCH, I.F. see BERRIDGE, T.L., 507

TYERS, M.B. see BRYANT, R.M., 639

v

VAN DER WEIL, H.J. see VAN HELDEN, H.P.M., 579
VAN HELDEN, H.P.M., VAN DER WIEL, H.J. &
WOLTHUIS, O.L. Therapy of organophosphate
poisoning: the marmoset as a model for man, 579
VAN ZWIETEN, P.A. see DE JONGE, A., 479
VARMA, D.R. & YUE, T-L. The influence of maternal
protein deficiency on the placental transfer of salicylate

VERBERNE, A.J.M. see FENNESSY, M.R., 452

W

WAGNER, E. see ANDEREGG, K., 725 WALKER, M.J.A. see JOHNSTON, K.M., 29 WANG, J.K.T. see HULLIMAN, J.P., 321 WANSTALL, J.C. see O'DONNELL, S.R., 417 WEBSTER, R.A. see KENT, A.P., 553 WEETMAN, D.F. see COATES, J., 117 WELTON, A.F. see ANDRESON, W.H., 67 WHITTLE, B.J.R. see BROUGHTON-SMITH, N.K., 173 WILLIAMS, J. see DAVIES, J.A., 137 WILSON, A.C. see BERMAN, J.S., 533 WINSLOW, E. see MARSHALL, R.J., 165 WISE, W.C. see ANDEREGG, K., 725 WOLTHUIS, O.L. see VAN HELDEN, H.P.M., 579 WOODRUFF, G.N. see TEMPLETON, W.W., 5

Y

YAMADA, K. see KUDO, Y., 709 YOUNG, K.D. see CHURCH, M.K., 671

Z

ZAPPIA, L. see BERTACCINI, G., 11 ZEITLIN, I.J. see COKER, S.J., 561 ZIGMOND, M.J. see BIRDSALL, N.J.M., 257 ZILLETTI, L. see GIOTTI, A., 469

SUBJECT INDEX

A

- N-acetyl-galactosamine residues, increased amounts after chronic ethanol treatment in mouse synaptic membranes. 8
- Acetylcholine, action on the isolated muscularis mucosae of the guinea-pig oesophagus, 103
- , cardiovascular responses to, effect of RX 781094 in pithed rats, 489
- —, dose-response curves, effect of grayanotoxin I in guinea-pig vas deferens, 461
- , effect of narcotic antagonists on evoked release from rat cerebral cortex, 433
- , effect of reduction on twitch height in rat phrenic nerve diaphragm preparations, 239
- , effect on noradrenaline-evoked vasoconstrictor response in mesenteric microvessels in diabetic rats, 39
- —, effect on potassium-evoked noradrenaline release from cat spleen slices, 277
- —, induction of contractions of isolated muscularis mucosae of guinea-pig oesophagus, lack of effect of dynorphin-(1-13), α-neo-endorphin and β-endorphin, 693
- , induction of gastric acid secretion in anaesthetized rats, effect of prostaglandin E₂, 131
- , induction of increased pulmonary airway resistance and decreased pulmonary dynamic compliance in guinea-pig, 301
- release from nerves, mediation of bovine ciliary contractile response, 591
- responses of bovine coronary artery to, effect of magnesium deficiency and excess, 629
- Action potentials, effect of meptazinol in rat papillary muscle, 455
- Actodigin, seasonal variations in inotropic responsiveness in atrial muscle from hibernating rodent, 151
- Adenosine, effect on carbachol-induced relaxation of bullfrog lung with or without the addition of indomethacin, 339
- , effect on the force of contraction in guinea-pig atrium, 207
- , induction of concentration-dependent, tetrodotoxininsensitive relaxation of isolated internal anal sphincter of the guinea-pig, 599
- Adenosine 3',5'-monophosphate, cyclic, effect of β_2 agonists in rat heart cell culture on accumulation, 717
- , dibutryl cyclic, gastric acid secretory responses to, effect of 5-hydroxytryptamine in rat isolated stomach, 123

- **Adenosine A₁ receptor,** evidence for existence in guineapig atrium, 207
- Adenosine triphosphate, effect on carbachol-induced relaxation of bullfrog lung with or without the addition of indomethacin, 339
- Adenosine 5'-triphosphate, induction of concentrationdependent, tetrodotoxin-insensitive relaxation of isolated internal anal sphincter of the guinea-pig, 599
- Adrenaline, effect of 17β -oestradiol, normetanephrine or U-0531 on potency in pig isolated bronchus, 441
- —, effect on compound action potential in rat sympathetic ganglia, 17
- —, induction of slight mydriasis in pithed rats, 507
- , inhibition of electrically stimulated [3H]-noradrenaline overflow from rabbit hypothalamic slices, 571
- Adrenals, cat, effect of calcium antagonists on blood flow, 375
- α-Adrenoceptor agonists, effects on pithed rat heart, interactions with yohimbine and prazosin, 655
- α_2 -Adrenoceptor agonists, induction of mydriasis in the rat by action within the central nervous system, 507
- β₂-Adrenoceptor agonists, comparison of chronotropic effects and of cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- α-Adrenoceptor antagonists, effect on electrically evoked noradrenaline release in rabbit ear artery, 543
- , effect on sympathetic neuroeffector transmission in mouse vas deferens, 365
- β-Adrenoceptor antagonists, Schild plots, in cat trachea and atria, 417
- α -Adrenoceptor blockade, effect on responses of isolated a ortic ring of the rat to disopyramide, 449
- α-Adrenoceptors, activation by noradrenaline, inhibition of release of motor transmitter in mouse vas deferens, 365
- , binding of yohimbine stereoisomers in rat liver and human platelets, 359
- —, effect of activation on modulation of transmission in rat sympathetic ganglia, 17
- —, investigation of subtypes in pithed rat hearts, 655
- α₁₈-Adrenoceptors, occurence in the mouse but not rabbit isolated anococcygeus preparations, 117
- α_2 -Adrenoceptors, antagonism by RX 781094 in sympathetic nerve terminals of rat, mouse vas deferens and guinea-pig ileum, 489
- , antagonism by verapamil but not diltiazem in rabbit hypothalamus slices, 571

- -, low affinity of RX 781094 in vitro, 489
- -, possible role in appetite regulation in the rat, 159
- α₂-Adrenoceptors, presynaptic, modification of stimulation-evoked release of [³H]-noradrenaline in mouse vas deferens, 221
- β-Adrenoceptors, effect of activation on modulation of transmission in rat sympathetic ganglia, 17
- , effect of chronic antidepressant administration on function in rat pineal, 89
- , involvement in extraneuronal uptake in cat trachea, 417
- , mediation of relaxation of guinea-pig trachea, effect of thyroxine, 639
- , mediation of relaxation of pig bronchus, effect of steroids, 441
- **Airway smooth muscle,** effect of nifedipine on constriction in humans *in vitro*, 687
- **Airways**, cat increased resistance after administration of *E. coli* endotoxin, 561
- β-Alanine, effect on stimulus-evoked release of [3H]-γaminobutyric acid from myenteric nerves of guinea-pig intestine, 271
- , induction of depolarizations of primary afferent terminals of frog spinal cord, effect of dendrobine, 709
- **Alloyohimbine,** competition for [3H]-prazosin and [3H]-yohimbine binding sites in rat liver and human platelets, 359
- [3H]-amezinium, uptake and release by noradrenergic axons, model for α-adrenergic autoinhibition of noradrenaline. 645
- 3-Amino-l1M-(trifluoromethyl)-phenyl]-2-pyrazoline see BW 755C
- γ-Aminobutyric acid, actions in guinea-pig olfactory cortex, effect of baclofen, 79
- -, effect in guinea-pig ileum longitudinal muscle, 469
- , induction of depolarizations of primary afferent terminals of frog spinal cord, effect of dendrobine, 709
- [³H]-γ-aminobutyric acid, saturable binding to rat brain crude synaptic membranes, 191
- , uptake and stimulus-evoked release by myenteric nerves of guinea-pig intestine, 271
- γ-Aminobutyric acid-mimetic drugs, potentiation of αflupenthixol-induced catalepsy in the rat, role for 5hydroxytryptamine, 137
- γ-Aminobutyric acid _B-receptor binding sites, characteristics, on rat whole brain synaptic membranes, 191
- γ-Aminobutyric acid receptors, mediation of γaminobutyric acid effects in guinea-pig ileum, 469
- **Amitryptyline,** effect on isoprenaline-induced increase in rat pineal melatonin, 89
- , effect on muscarinic acetylcholine receptors of human brain, 97
- Amoxapine, effect on muscarinic acetylcholine receptors in human brain, 97
- Anal sphincter, interior, location of purine receptors in the guinea-pig, 599
- Analgesia, induced by morphine or buprenorphine in the conscious rat, 659
- **Angiotensin,** cardiovascular responses to, effect of RX 781094 in pithed rats, 489
- Anococcygeus muscle, mouse and rabbit, occurence of α_{1S} -adrenoceptors, 117

- , rat, effect of neostigmine on the responses to field stimulation, 57
- Antidepressants, effect on carbachol-induced cyclic guanosine 3',5'-monophosphate synthesis in murine neuroblastoma cells, 97
- Antinociception, induction in conscious rat by intrathecally or subcutaneously administered morphine or buprenorphine, 659
- **Apamin**, abolition of inhibitory responses to stimulation of non-adrenergic, non-cholinergic inhibitory nerves and adenosine triphosphatase, 213
- Aortic ring, rat isolated, effect of disopyramide, 449
- **Arachidonic acid,** effect of thromboxane synthetase inhibitors on metabolism in endotoxic shock in the rat, 725
- **Arrhythmias**, effect of meptazinol on development in rats surviving myocardial infarction, 455
- , induced by coronary artery ligation, effect of aspirin and prostacyclin in the rat, 29
- **Aspirin,** effect on arrhythmias resulting from coronary artery ligation and on infarct size, 29
- **Asthma**, exercised-induced, mechanism for the inhibitory effects of calcium channel blocking drugs, 687
- Ataxia, induction in non-tolerant rats by nicotine, 329
- **Atenolol,** effect on positive inotropic effect of D-N⁶-phenylisopropyl adenosine in guinea-pig atrium, 207
- --, effect on relaxation of cat trachea induced by βadrenoceptor agonists, 417
- , effect on spontaneous and reflex activity of sympathetic nerves in the cat, influence of cardiopulmonary receptors, 425
- —, prevention of isoprenaline-induced increase in rat pineal melatonin content, 89
- Atria, cat, Schild plots for β -adrenoceptor antagonists, 417 Atrial muscle, rodent, seasonal variations in drug response and staircase phenomena in hibernating animals, 151
- Atropine, abolition of 5-hydroxytryptamine-induced contraction of muscularis mucosae of guinea-pig oesophagus, 103
- , abolition of the effects of neostigmine on the response of rat anococcygeus muscle to field stimulation, 57
- , abolition of the influence of substance P on response of guinea-pig isolated ileum to periarterial nerve stimulation. 681
- , antagonism of the effects of physostigmine in pupil of pithed rat, 507
- , effect on contractions evoked by electrical stimulation or high potassium in bovine ciliary muscle, 591
- —, effect on grayanotoxin I-induced contractions in guinea-pig vas deferens, 461
- —, effect on guanethidine- or phentolamine-induced inhibition of responses of rat anococcygeus muscle to field stimulation, 57
- --, effect on responses of cattle iris circular muscle to noradrenaline and to field stimulation, 247
- **Auditory evoked potentials, click-evoked, effect of bicucul**line or strychnine in the cat, 75
- α-Autoreceptors, release of [³H]-amezinium from cortical noradrenergic axons as a model, 645
- Axon reflex, blockade of effect of effector side by capsaicin in human skin, 665

В

- **Baclofen,** action on guinea-pig ileum, effect of bicuculline, 469
- , blockade of postsynaptic inhibition in guinea-pig olfactory cortex, 79
- , effects on epileptiform discharge in the rat hippocampal slice, 701
- , potentiation of antinociceptive action by theophylline in the rat, 353
- [3H]-baclofen, saturable binding to rat brain crude synaptic membranes, 191
- **Benzodiazepines,** *in vitro* inhibition of contractions of guinea-pig ileal longitudinal muscle, 321
- 1-Benzyl-2-hydroxyiminomethyl-pyridinium methanesulphate, effect on organophosphate inhibited neuromuscular transmission in human intercostal and marmoset diaphragm muscles, 579
- **Bepridil**, effects of ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165
- **Bethanechol**, gastric acid secretory responses to, effect of 5-hydroxytryptamine in rat isolated stomach, 123
- **Bicuculline**, effect on γ-aminobutyric acid-induced relaxation in guinea-pig ileum, 469
- , effect on binding of [3H]-baclofen to rat brain crude synaptosomes, 191
- , effects on click-evoked brain stem auditory evoked potentials in the cat, 75
- **Bilateral occlusion,** of cat carotid artery, effect on blood pressure and heart rate, 425
- **Bile**, effect of phenobarbitone or ICI 53072 on flow in rats, 533
- **Biogenic amines**, storage in guinea-pig brain synaptosomes, effect of proton gradient and membrane potential, 111
- **Blood flow,** comparison of the effects of ICI 53072, clofibrate and phenobarbitone in the rat liver, 533
- -, effect of histamine in the dog, 733
- regional, effect of calcium antagonists in open-chest cats, 375
- **Blood pressure,** effect of atenolol or vagal cooling in the cat,
- -, effect of clonidine and its derivatives in cat and rat, 479
- -, effect of histamine in the dog, 733
- , effect of ligation with or without aspirin or prostacyclin in the rat, 29
- -, effect of meptazinol in the rat, 455
- -, effects of calcium antagonists in open-chest cat, 375
- , effects of xylazine or prazosin, interactions with yohimbine or cirazoline in pithed rat, 655
- **Body weight,** effect of tamoxifen in adult ovariectomized rat, 617
- Bombesin, effect on normal human forearm skin, 665
- **Bovine retractor penis,** effect of inhibitory factor from, on gastrointestinal tract and gall bladder of the guinea-pig, 213
- **Bradykinin**, effect on noradrenaline-evoked vasoconstrictor response in diabetic rat mesenteric microvessels, 39
- **Brain stem,** cat, effect of bicuculline or strychnine on clickevoked auditory evoked potentials, 75
- **Brazilian scorpion venom,** effect on the compound action potential of the rabbit vagus nerve fibres, 529

- **Bronchoconstriction,** antigen-induced, slow reacting substance of anaphylaxis-mediated, *in vivo* model for measurement in the guinea-pig, 67
- , leukotriene D₄-induced, effect of sodium cromoglycate, verapamil and nicardipine in guinea-pig, 301
- **Bronchus**, pig, effect of steroids on β -adrenoceptor-mediated relaxation of, 441
- **Bufrolin,** cross tolerance of lung tissue desensitized to cromoglycate in humans, 671
- **Buprenorphine**, antinociceptive action given intrathecally or subcutaneously in the conscious rat, 659
- , opiod agonist and antagonist behavioural effects in pigeons, 607
- **Bupropion**, effect on muscarinic acetylcholine receptors in human brain, 97
- **Butaclamol,** effect on dopamine blockade of spontaneous and evoked release of [³H]-taurine and [³H]-glycine from isolated rat retina, 395
- **Butoxamine,** dissociation constant values, effect of thyroxine, 639
- , effect on isoprenaline-induced increase in rat pineal melatonin content, 89
- **Butriptyline**, effect on muscarinic acetylcholine receptors of human brain, 97
- **BW 755C**, effect on prostacyclin formation in gastric mucosa and ileum *in vitro*, 173
- inhibition of bronchoconstriction after treatment with indomethacin, pyralamine or propranolol in the guinea-pig, 67

C

- Caerulein, induction of protein secretion, effect of pentamethonium in pancreas of conscious dogs, 623
- Caffeine, effect on antinoceptive effect of baclofen in tail flick and hot plate tests in the rat, 353
- Calcium, effect of altered concentrations on carbachol depolarization in smooth muscle of guinea-pig intestine, 405
- increased extracellular concentrations, effect on sensitivity of submucous plexus of guinea-pig oesaphagus to dynorphin-(1-13) or α-neoendorphin, 693
- , seasonal variation in inotropic responses to atria; muscle from hibernating rodent, 151
- Calcium channel blocking drugs, potential mechanism for the inhibitory effects in exercise-induced asthma, 687
- —, effect on binding of [3H]-γ-aminobutyric acid to rat brain crude synaptic membranes, 191
- Calcium chloride, effect on actions of carbachol on membrane potential and conductance in smooth muscle of guinea-pig intestine, 405
- Calcium ions, effect of changing concentrations in bathing solution on the action of paraoxon in rat phrenic nerve diaphragm preparations, 239
- , effect of medium concentrations on potassium-evoked noradrenaline release in cat spleen slices, 277
- —, effect on prostaglandin E₂ inhibition of 'fast component' responses of rat vas deferens to field stimulation, 143
- , effect of removal from bathing solution on the action of disopyramide on isolated aortic ring of the rat, 449

- , effect on binding of [³H]-baclofen to rat brain crude synaptic membranes, 191
- --, effect on the action of potassium ions on biogenic amine content in guinea-pig synaptosomes, 111
- , induction of contractions of longitudinal muscle of guinea-pig ileum, antagonism by diazepam, 321
- , influence on stimulus-evoked release of [3H]-γaminobutyric acid by myenteric nerves of guinea-pig intestine, 271
- Calorie intake, effect on placental transfer of salicylate in rats, 233
- Capsaicin, inhibition of flare reaction following treatment with somatostatin, vasoactive intestinal polypeptide, substance P and histamine in human skin, 665
- Carbachol, action on the membrane potential and conductance of smooth muscle of the guinea-pig intestine, 405
- , induction of contractions of longitudinal muscles of guinea-pig ileum, antagonism by diazepam, 321
- , induction of relaxation of bullfrog lung, 339
 Carbamazepine, effect on leptazol-induced epileptogenic activity in anaesthetized rat, 533
- Carbonyl-cyanide-f-trifluoro-methoxyphenyl-hydrazine, effect on biogenic amine content in guinea-pig synaptosomes. 111
- Cardioaccelerator response, inhibition by xylazine or prazosin, interaction with yohimbine or cirazoline in pithed rat, 655
- Cardiopulmonary receptors, possible influence on the effects of atenolol on the spontaneous and reflex activity of sympathetic nerves in the cat, 425
- Carotid artery, cat, effect of bilateral occlusion on blood pressure and heart rate, 425
- Catalepsy, α-flupenthixol-induced, role for 5-hydroxytryptamine in the GABA-mimetic potentiation in the rat, 137
- Catechol-O-methyl transferase, effect of inhibition on the sensitivity of pig isolated bronchus to sympathomimetic amines, 441
- Catecholamines, effect of pretreatment on carbacholinduced relaxation of bullfrog lung, 339
- Caudate nucleus, human, antagonism by antidepressants of muscarinic acetylcholine receptors in, 97
- **Cell excitability,** effect of baclofen in guinea-pig olfactory cortex, 79
- Cerebral cortex, effect of \triangle^9 -tetrahydrocannabinol on concentrations of histamine, 452
- —, effect of McN-A-343 on muscarinic receptors, 257
- Chlordiazepoxide, effect on contractions of longitudinal muscle of guinea-pig ileum, 321
- , effect on the repetitive activity of frog node of Ranvier,
 49
- **3-Chloro-2-hydroxyimipramine,** effect on muscarinic acetylcholine receptors in human brain, 97
- **2-Chloroadenosine**, effect on the force of contraction of guinea-pig atrium, 207
- p-Chlorophenylalanine, depletion of 5-hydroxytryptamine, effect on diaminobutyric acid potentiation of α-flupenthixol-induced catalepsy, 137
- **Chlorpheniramine**, effect on histamine-induced depression of cardiac nerve stimulation in the dog, 733
- —, production of rightward shift of cumulative histamine dose-response curve at 37°C and 12°C in guinea-pig ileum, 11

- **Chlorpromazine,** effect on antigen-induced histamine release from human lung fragments, 671
- **Cholinergic nerves,** stimulation, mediation of action of 5-hydroxytryptamine on muscularis mucosae of the guinea-pig oesophagus, 103
- Cholinesterase staining, in rat anococcygeus muscle, 57
- Cholinoceptors, low affinity of RX 781094 in vitro, 489
- **Chronotropic responses,** induction by intra-arterial injections of histamine in perfused dog hearts, 733
- —, to β₂-agonists in rat heart cell culture, 717
- **Ciliary muscle,** bovine, neuronal effects and pharmacological properties investigated *in vitro*, 591
- Cimetidine, blockade of vasodilator responses to 2thiazolylethylamine and impromidine in rat stomach in vivo, 181
- —, effect on histamine dose-response curve at 37°C and 12° C in guinea-pig ileum, 11
- , effect on histamine-induced depression of cardiac nerve stimulation in the dog, 733
- Cinanserin, inhibition of 5-hydroxytryptamine-induced contractions of muscularis mucosae of guinea-pig oesophagus, 103
- Cirazoline, effects at postjunctional α_1 -adrenoceptors, antagonism by RX 781094 in the rat, 489
- —, presynaptic cardio-inhibitory and postsynaptic pressor responses to, interactions with yohimbine and prazosin in pithed rat, 655
- **Clenbuterol**, effect on isoprenoline-induced increase in rat pineal melatonin, 89
- Clofibrate, effects on liver size, blood flow and DNA content in the rat, 533
- **Clomipramine,** effect on muscarinic acetylcholine receptors of human brain, 97
- —, potentiation of α-flupenthixol-induced catalepsy in the rat, 137
- Clonazepam, effect on contractions of longitudinal muscle of guinea-pig ileum, 321
- , effect on leptazol-induced epileptogenic activity in anaesthetized rat, 533
- —, potentiation of α-flupenthixol-induced catalepsy in the rat, 137
- Clonidine, effect on electrically-induced contractions of vas deferens and anococcygeus, antagonism by RX 781094, 489
- , effect on electrically-evoked noradrenaline release in rabbit ear artery, 543
- , effect on fractional release of [3H]-noradrenaline in mouse vas deferens, 221
- —, effect on stimulation-evoked overflow of [³H]amezinium from rat occipitocortical slices treated with
 α-methyltyrosine or noradrenaline, 645
- —, effect on sympathetic neuroeffector transmission in mouse vas deferens, 365
- , effects of systemic administration on food and water intake of rats, 159
- , hyperpolarizing effect and effect on compound action potential in rat sympathetic ganglia, 17
- —, hypotensive and α-adrenergic activities in the cat in vitro and in vivo, 479
- -, induction of mydriasis in the rat, 507
- , inhibition of electrically stimulated [³H]-noradrenaline overflow from rabbit hypothalamus slices, 571
- [3H]-clonidine, inhibition of specific binding to rat brain

membranes by clonidine and its derivatives, 479

Cocaine, effect on electrically evoked noradrenaline release in rabbit ear artery, 543

 , pretreatment with noradrenaline, effect on [3H]amezinium release from rat occipitocortical slices, 645

Contractions, disopyramide-induced in isolated aortic ring of the rat, 449

- —, evoked by electrical stimulation and high potassium concentrations in bovine ciliary muscle, 591
- —, grayanotoxin-induced in guinea-pig vas deferens, 455
- , noradrenaline-evoked, effect of prostacyclin and carbocyclic thromboxane A₂ in guinea-pig mesenteric artery, 517

Compound action potential, in rat sympathetic ganglia, effect of clonidine, phentolamine, adrenaline, propranolol and noradrenaline, 17

Convulsions, full body, leptazol-induced, effect of convulsant drugs in anaesthetized rat, 553

Coronary arteries, bovine, effect of magnesium deficiency and excess on tone and responses to agonists, 629

-, dog, effect of ethanol, 260

 responsiveness to synthetic thromboxane and prostaglandin endoperoxide analogues, 287

Coronary artery ligation, induction of arrhythmias and infarction, effect of aspirin and prostacyclin in the rat, 29

—, production of ventricular fibrillation thresholds in the anaesthetized rat, effects of antiarrhythmic drugs, 165

Coronary vasodilatation, histamine-induced, role of histamine H₁ and H₂-receptors in perfused dog heart, 733 Coronary vasospasm, ethanol-induced in dogs, 260

Corticosterone, effect on isoprenaline-induced bronchial relaxation in the pig, 441

, potentiation of responses of cat trachea to isoprenaline,
 417

Cortisol, effect on isoprenaline-induced bronchial relaxation in the pig, 441

Cortisone, effect on isoprenaline-induced bronchial relaxation in the pig, 441

Corynanthine, competition for [3H]-prazosin and [3H]-yohimbine binding sites in rat liver and human platelets, 359

-, effect on guanoxabenz-induced mydriasis in the rat,

 , effect on sympathetic neuroeffector transmission in mouse vas deferens, 365

Cyclo-oxygenase, effect of sympathomimetic drugs in rat organ homogenates, 263

N⁶-cyclohexyladenosine, effect on the force of contraction of guinea-pig atrium, 207

3-(m-chlorophenyl-carbamoyyloxy)-2-butynyltrimethylammonium see McN-A-343

5'-N-cyclopropylcarboxamide adenosine, effect on the force of contraction in guinea-pig atrium, 207

Cyproheptadine, inhibition of 5-hydroxytryptamine-induced contractions of muscularis mucosae of guineapig oesophagus, 103

Cytochrome c reductase, effect of phenobarbitone or ICI 53072 on activity in rat liver, 533

Cytochrome P450, effect of phenobarbitone or ICI 53072 on rat liver content, 533

D

Dendrobine, effect on electrical activity and on amino-acidinduced depolarizations of primary afferent terminals in frog spinal cord, 709

Dentate granule cells, effect of baclofen on repetitive firing in rat hippocampal slice, 701

Deoxycorticosterone, effect on isoprenaline-induced bronchial relaxation in the pig, 441

2-Deoxyglucose, production of impaired responses to histamine and bradykinin in mesenteric microvessels of diabetic and normal rats, 39

Deoxyribonucleic acid, comparison of the effects of ICI 53072, clofibrate and phenobarbitone on hepatic content in rat liver, 533

Desmethylimipramine, effect on isoprenaline-induced increase in rat pineal melatonin, 89

Demethylim, effect on muscarinic acetylcholine receptors in human brain, 97

Dexamethasone, effect on isoprenaline-induced bronchial relaxation in the pig, 441

Diabetes, influence on the reactivity of mesenteric microvessels to histamine, bradykinin and acetylcholine in rats, 39

—, influence on resting rate of isolated right atrium of rat, 39

Diaminobutyric acid, potentiation of α-flupenthixolinduced catalepsy in the rat, 137

Diaphragm muscles, marmoset, effect of various bispyridinium oximes on organophosphate-inhibited neuromuscular transmission *in vitro*, 579

Diazepam, effect on contractions of longitudinal muscle of guinea-pig ileum, 321

2-(2,3-Dichloro-6-methylphenylimino) imidazolidine, hypotensive and α-adrenergic activities in the cat in vitro and in vivo, 479

Didesmethylimipramine, effect on muscarinic acetylcholine receptors in human brain, 97

Diethyl -4-nitrophenyl-phosphate see Paraoxon

Dissoppropyl fluorophosphate, effect on twitch height in rat phrenic nerve diaphragm preparations, 239

Diltiazem, effect on electrically evoked overflow of [³H]noradrenaline from rabbit hypothalamic slices, 571

—, effect on regional blood flow in open-chest cats, 375

Dimaprit, effect on contraction induced by histamine in guinea-pig ileum, 11

1,1-Dimethyl-4-phenylpiperazinium, raised muscle tone, effect on induction of relaxation by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469

Diphenhydramine, effect on ethanol-induced contraction of canine coronary artery, 260

Diphenylhydantoin, effect on the repetitive activity of frog node of Ranvier, 49

Dipyridamole, effect on responses of guinea-pig atrium to adenosine and its analogues, 207

Disopyramide, effect on isolated aortic ring of the rat, 449 Dithiothreitol, effect on twitch height in rat phrenic nerve diaphragm preparations, 239

Dopamine, effect on spontaneous and evoked release of [³H]-taurine and [³H]-glycine from the isolated retina of the rat, 395

[3H]-dopamine, guinea-pig synaptosome content, effect of potassium ions sodium cyanide and ionophores, 111

- **Dorsal horn neurones**, inhibition of firing to noxious heat by etorphine in spinal and non-spinal cats, 307
- **Doxepin,** effect on muscarinic acetylcholine receptors of human brain, 97
- **Dynorphin-(1-13),** inhibition of twitch contractions induced electrically in submucous plexus of guinea-pig oesaphagus, 693

E

- E. coli endotoxin, production of an acute pulmonary response in anaesthetized cats, prostanoid release, 561
- Ear artery, rabbit, conditions required for the enhancement by α-adrenoceptor antagonists of noradrenaline release, 543
- Electrical activity, of frog spinal cord, comparison of effects of dendrobine, nobiline, picrotoxinin or strychinine, 709
- **Electrical stimulation**, effect of substance P on responses of guinea-pig isolated ileum, 681
- —, induction of contractions in bovine ciliary muscle, 591
- , induction of increased acetylcholine release in rat cerebral cortex, 433
- Electroconvulsive shock, effect of repeated application on isoprenaline-induced increase in rat pineal melatonin, 89
- Electroencephalographic activity, effect of ligation with or without aspirin or prostacyclin in the rat, 29
- , leptazol-induced, effect of anticonvulsant drugs in anaesthetized rat, 553
- Endogenous opioid, (-)-naloxone or naltrexone-induced blockade of inhibitory action, induction of increase of stimulated release of acetylcholine in rat brain, 433
- Endorphin, α-neo-, inhibition of electrically-induced twitch contractions in submucous plexus of guinea-pig oesophagus, 693
- α-Endorphin, inhibition of electrically-induced twitch contractions in submucous plexus of guinea-pig oesophagus, 693
- β-Endorphin, inhibition of electrically-induced twitch contractions in submucous plexus of guinea-pig oesophagus, 693
- Endotoxic shock, effect of pyridine active and pyridine inactive thromboxane synthetase inhibitors in the rat,
- Enkephalins, inhibition of electrically-induced twitch contractions in submucous plexus of guinea-pig oesophagus, 693
- **Epileptiform discharge**, in rat hippocampal slices, effect of baclofen, 701
- **Epileptogenic activity,** leptazol-induced, effect of anticonvulsant drugs in anaesthetized rat, 553
- Equilibrium dissociation constants, for antidepressant drugs and muscarinic receptors of human brain, 97
- Erythro-DL-1 (7-methylindan 4-yloxy)-3-isopropylamino-butan-2-ol see ICI 118,551
- Ethanol, action on vascular muscle in dog, 260
- , effect on chronic treatment on surface glycoconjugates of synaptic membranes in mouse, 8
- Ethosuximide, effect on leptazol-induced epileptogenic activity in anaesthetized rat, 533

- **O-Ethyl S-2-di***iso***propylaminoethyl methylphosphonothioate,** inhibition of neuromuscular transmission in human intercostal and marmoset diaphragm muscles, effect of various *bis*-pyridinium oximes, 579
- 5'-N-ethylcarboxamide adenosine, effect on the force of contraction in guinea-pig atrium, 207
- Ethylene glycol tetraacetic acid, in calcium ion free medium, effect on potassium-evoked release of noradrenaline from cat spleen slices, 277
- N-ethylmaleimide, inactivation of binding of [³H]-sulpiride binding to solubilised binding sites in dog striatum, 5
- Etorphine, antinociceptive action in dorsal horn of cats, 307 Excitatory junction potentials, effects of clonidine and α -adrenoceptor antagonists in mouse vas deferens, 365
- Excitatory postsynaptic currents, effect of procaine in bullfrog sympathetic ganglia, 293
- Extraneuronal uptake, modulation of β -adrenoceptor-mediated responses of cat trachea, 417

F

- Fasting, effect on resting rate of isolated right atrium of the rat, 39
- Fenoterol, effect of 17β -oestradiol, normetanephrine or U-0521 on potency in pig isolated bronchus, 441
- effect on chronotropic responses and on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- —, inhibition of biosysthesis of prostaglandins and thromboxane B_2 in rat organ homogenates, 263
- --, relaxation of carbachol-induced contractions of cat trachea, 417
- **Fentanyl-water discrimination,** effect of buprenorphine in pigeons, 607
- Fibrin/fibrinogen degradation products, effect of pyridine active thromboxane synthetase inhibitor on serum levels of endotoxin shocked rats, 725
- Field stimulation, effect on circular muscle of cattle iris, 247
- , inhibitory responses in guinea-pig gall bladder, effect of tetrodotoxin, 213
- responses of rat anococcygeus muscle, effect of neostimine, 57
- responses of rat vas deferens, effects of prostaglandin
 e₂ on fast and slow components, 143
- Flare reactions, effect of capsaicin, after intradermal injections of somatostatin and vasoactive intestinal polypeptide in human skin, 665
- Fluxetine, effect on isoprenaline-induced increase in rat pineal melatonin, 89
- , effect on muscarinic acetylcholine receptors in human brain, 97
- α-Flupenthixol, induction of catalepsy, role for 5hydroxytryptamine in the GABA-mimetic potentiation in the rat, 137
- Flurbiprofen, inhibition of prostacyclin formation in gastric mucosa and ileum in vitro, 173
- Follicle-stimulating hormone, effect of tamoxifen on serum concentrations in adult ovariectomized rats, 617
- Food intake, effect of systemic administration of clonidine in the rat, 159
- —, effect of tamoxifen in adult ovariectomized rat, 617

- Formoterol, chronotropic responses to and effect on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture. 717
- FPL 55712 inhibition of bronchoconstriction after administration of indomethacin, pyrilamine or propranolol in the guinea-pig, 67

G

- Galactose residues, increased amounts after chronic ethanol treatment in mouse synaptic membranes, 8
- Gall bladder, guinea-pig, effect of smooth muscle inhibitory factor from bovine retractor penis, 213
- **Gastric acid,** effect of 5-hydroxytryptamine on secretion by rat isolated stomach, 123
- , inhibition of secretion by intracerebroventricularly administered prostaglandin in anaesthetized rats, 131
- **Gastric mucosa**, dog and rat, stimulation and inhibition of prostacyclin formation *in vitro* by inflammatory agents, 173
- Gastro-intestinal tract, guinea-pig, effect of smooth muscle inhibitory factor from bovine retractor penis, 213
- Glucose, effect of a pyridine active thromboxane synthetase inhibitor on blood levels in endotoxin shocked rats, 725
- Glycine, action in guinea-pig olfactory cortex, effect of baclofen, 79
- , induction of depolarizations of primary afferent terminals of frog spinal cord, effect of dendrobine, 709
- [3H]-glycine, effect of dopamine on spontaneous and evoked release from isolated rat retina, 395
- **Glycinergic inhibitory inputs,** blockade by strychnine in cat brain stem, 75
- Glycoconjugate residues, increased amounts after ethanol treatment in mouse synaptic membranes, 8
- **Glycoside toxicity**, in tissues, seasonal variation in atrial muscle from hibernating rodents, 151
- **Granular membrane**, effect of pH gradient and potential on the storage of biogenic amines in guinea-pig brain, 111
- **Grayanotoxin I,** induction of contractions in the guinea-pig vas deferens, 455
- Guanabenz, effect on electrically-induced contractions of vas deferens and anococcygeus, antagonism by RX 781094, 489
- **Guanethidine,** inhibition of responses of rat anococcygeus muscle to field stimulation, 57
- **Guanosine** 3',5'-monophosphate, cyclic, carbacholstimulated synthesis in murine neuroblastoma cells, effect of antidepressants, 97
- Guanoxabenz, induction of mydriasis in the rat, 507

Н

- **Heart,** dog, mediation by H₁-receptors of inhibition of sympathetic neurotransmission by histamine, 733
- -- , rat, comparison of the chronotropic effect and the cyclic adenosine 3',5'-monophosphate accumulation induced by β₂-agonists in rat heart cell culture, 717
- -, rat, effect of McN-A-343 on muscarinic receptors, 257
- Heart rate, effect of atenolol or vagal cooling in the cat, 425
- —, effect of calcium antagonists in open-chest cats, 375
- -, effect of clonidine and its derivatives in cat and rat, 479

- —, effect of histamine on its own and during the infusion of noradrenaline in the dog, 733
- , effect of ligation with or without aspirin or prostacyclin in the rat, 29
- -, effect of meptazinol in the rat, 455
- Hexamethonium, effect on 5-hydroxytryptamine-induced contraction of muscularis mucosae of guinea-pig oesophagus, 103
- , effect on potassium-evoked noradrenaline release in cat spleen slices, 277
- , effect on the depressant action of nicotine on locomotor activity in rats, 329
- , inhibition of carbachol-induced relaxation of bullfrog lung, 339
- **Hexobarbitone,** induction of righting reflex, effect of clonidine and its derivatives in mice, 479
- High pressure liquid chromatography, measurement of maternal plasma salicylate concentrations in protein deficient rats, 233
- **Hippocampus**, rat, effect of baclofen on epileptiform discharge, 701
- **Histamine,** cardiovascular responses to, effect of RX 781094 in pithed rats, 489
- , characteristics of release from human lung fragments by sodium cromoglycate, salbutamol and chlorpromazine, 671
- —, effect of Δ⁹-tetrahydrocannabinol on brain regional concentrations in the rat, 452
- , effect on noradrenaline-evoked vasoconstrictor response in diabetic rat mesenteric microvessels, 39
- , gastric acid secretory responses to, effect of 5hydroxytryptamine in rat isolated stomach, 123
- , induction of contractions in guinea-pig ileum, effect of histamine H₁- and H₂-receptor antagonists in guineapig ileum, 11
- , induction of contractions of longitudinal muscle of guinea-pig ileum, antagonism by diazepam, 321
- —, production of wheal and flare reactions in normal human forearm skin, 665
- --, raised muscle tone, effect on induction of relaxation by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469
- reduction of responses of human tracheal strips in vitro by nifedipine, 687
- Histamine receptors, characterization in rat stomach microcirculation in vivo, 181
- —, evidence against the temperature-dependent interconversion in guinea-pig ileum, 11
- —, low affinity of RX 781094 in vitro, 489
- **Histamine H₁-receptors,** mediation of histamine-induced coronary vasodilatation and inhibition of cardiac sympathetic neurotransmission in the dog, 733
- **Histamine H₂-receptors**, mediation of histamine-induced coronary vasodilatation in the dog, 733
- Homotaurine, action on guinea-pig ileum, effect of bicuculline, 469
- Hot plate test, effect of buprenorphine or morphine given intrathecally or subcutaneously to the conscious rat, 659
- -- , potentiation of the antinociceptive action of baclofen by theophylline in the rat, 353
- 2-Hydroxyiminomethyl-pyridinium-1-methyl-3'carbamoyl - pyridiumium-l' -methyl ether dichloride

dihydroxate, effect on organophosphate inhibited neuromuscular transmission in human intercostal and marmoset diaphragm muscles, 579

2-Hydroxyiminomethyl-pyridinium-1 methyl - 4'carbamoyl-pyridinium-1'-methyl ether dichloride
monohydrate, effect on organophosphate inhibited
neuromuscular transmission in human intercostal and
marmoset diaphragm muscles, 579

2-Hydroxyiminomethyl-pyridinium-1-methyl-3'phenylcarbonyl-pyridinium-1'-methyl ether dichloride, effect on organophosphate inhibited neuromuscular transmission in human intercostal and marmoset diaphragm muscles, 579

- **2-Hydroxyimipramine,** effect on muscarinic acetylcholine receptors in human brain, 97
- **5-Hydroxytryptamine,** action in guinea-pig olfactory cortex, effect of baclofen, 79
- , cardiovascular responses to, effect of RX 781094 in pithed rats, 489
- , effect on carbachol-induced relaxation of bullfrog lung, 339
- , indirect action on the isolated muscularis mucosae of the guinea-pig oesophagus, 103
- , inhibitory effects on gastric acid secretion by the rat isolated stomach, 123
- responses of bovine coronary artery to, effect of magnesium deficiency and excess in bovine coronary artery, 629
- —, role in the GABA-mimetic potentiation of αflupenthixol-induced catalepsy in the rat, 137
- [³H]-5-hydroxytryptamine, guinea-pig synaptosomes content, effect of potassium ions, sodium cyanide and ionophores, 111
- 5-Hydroxytryptamine receptors, low affinity of RX 781094 in vitro, 489
- 5-Hydroxytryptophan, restoration of responses after *p*-chlorophenylalanine abolition of diaminobutyric acid potentiation of α-flupenthixol-induced catalepsy, 137
- Hyoscine, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469
- **Hypolipidaemic agents,** comparison of effects on liver size, blood flow and DNA content in the rat, 533
- **Hypophysectomy,** effect on the ability of (-)-naloxone to reverse the inhibitory actions of morphine or FK 33,824 in rat brain, 433
- --, effect on the stimulatory actions of (-)-naloxone and naltrexone on acetylcholine release in rat brain, 433
- Hypothalamic slices, rabbit, presynaptic α₂-adrenoceptor antagonism by verapamil but not by diltiazem, 571
- **Hypothalamus**, rat, effect of Δ⁹-tetrahydrocannabinol on concentrations of histamine, 452

I

- **Ibuprofen**, effect on inhibitory action of 5hydroxytryptamine on gastric acid secretion of rat isolated stomach, 123
- ICI 53072, effect on liver size, blood flow and DNA content in the rat, 533
- ICI 63197, inhibition of phosphodiesterase, effect of 5hydroxytryptamine on gastric acid secretory response to, in rat isolated stomach, 123

- **ICI 118,551**, effect on relaxation of cat trachea induced by β -adrenoceptor agonists, 417
- **Ileum**, guinea-pig, binding of [³H]-diazepam to longitudinal muscle and *in vitro* inhibition of contraction by benzodiazepines, 321
- —, guinea-pig, evidence against the temperaturedependent interionversion of histamine H₁- and H₂receptors, 11
- —, guinea-pig, mediation of effects of γ-aminobutyric acid by γ-aminobutyric acid receptors, 469
- —, guinea-pig, studies of RX 781094 an antagonist of α₂-adrenoceptors, 489
- —, guinea-pig isolated, effect of substance P on responses to periarterial nerve stimulation, 681
- , rat, stimulation and inhibition of prostacyclin formation in vitro by inflammatory agents, 173
- **Imipramine**, effect on muscarinic acetylcholine receptors of human brain, 97

Impromidine, effect on contraction induced by histamine in guinea-pig ileum, 11

production of concentration-dependent vasodilator responses in in vivo stomach submucosal arterioles, 181

Indomethacin, effect on carbachol-induced relaxation of bullfrog lung, 339

- , effect on ethanol-induced contraction of canine coronary artery, 260
- , effect on inhibitory action of 5-hydroxytryptamine on gastric acid secretion of rat isolated stomach, 123
- , inhibition of prostacyclin formation in gastric mucosa and ileum in vitro, 173
- , modulation of antigen-induced anaphylaxis in the guinea-pig, 67

Infarct size, effect of aspirin and prostacyclin in the rat, 29 Infarction, induced by coronary artery ligation, effect of aspirin and prostacyclin in the rat, 29

Inferior colliculus, effect of strychnine on brain stem auditory evoked potentials, 75

Inotropic responses, to drugs, seasonal variation in atrial muscle of hibernating rodent, 151

- **Insulin,** correction of impaired response to histamine and bradykinin in mesenteric microvessels of diabetic and normal rats, 39
- , effect on resting rate of isolated right atrium of the rat,
 30
- , induction of gastric acid secretion in anaesthetized rats, effect of prostaglandin E₂, 131

Intercostal muscles, human, effect of various bis-pyridinium oximes on organophosphate-inhibited neuromuscular transmission in vitro, 579

Intestine, guinea-pig, uptake and stimulus-evoked release of [³H]-γ-aminobutyric acid by myenteric nerves, 271

Ionic channels, admission of calcium ions after activation of muscarinic receptors on smooth muscle of guinea-pig intestine, 405

Iprindole, effect on muscarinic acetylcholine receptors in human brain, 97

Isoguvacine, effect on binding of [³H]-baclofen to rat brain crude synaptosomes, 191

Isoprenaline, cardiovascular responses to, effect of RX 781094 in pithed rats, 489

- —, effect of 17β-oestradiol, normetanephrine or U-0531 on potency in pig isolated bronchus, 441
- -, effect on chronotropic responses and on cyclic

- adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- —, gastric acid secretory responses to, effect of 5hydroxytryptamine in rat isolated stomach, 123
- production of dose related increase in rat pineal melatonin content, 89
- —, relaxation of cat trachea contracted by carbachol, 417

K

- **Ketanserin,** effect on 5-hydroxytryptamine-induced contraction of muscularis mucoasae of guinea-pig oesophagus, 103
- **Ketoprofen,** inhibition of prostacyclin formation in gastric mucosa and ileum *in vitro*, 173
- Kidney, cat, effect on calcium antagonists on blood flow, 375
- , rabbit, use of cortex to investigate the effect of lithium chloride, 3

T.

- Lactic acid dehydrogenase, effect of ionophores on release from guinea-pig synaptosomes, 111
- **Lanthanum ions,** in calcium free medium, effect on potassium-evoked release of noradrenaline from cat spleen slices, 277
- Lateral lemniscus, cat, effect of strychnine on brain stem auditory evoked potentials, 75
- **Leptazol**, induction of epileptogenic activity, effect of anticonvulsant drugs in anaesthetized rat, 553
- Leukotriene D₄, induction of increased pulmonary airway resistance and decreased pulmonary dynamic compliance in guinea-pig, 301
- **Lithium,** effect on active and inactive renin secretion in rabbit kidney cortex, 3
- Liver, cat, effect of calcium antagonists on blood flow, 375
- rat, comparison of the effects of ICI 53072, clofibrate and phenobarbitone on size, blood flow and DNA content, 533
- Liver disfunction, endotoxin-induced, effect of a pyridine active thromboxane synthetase inhibitor in the rat, 725
- Locomotor activity, effect of nicotine in non-tolerant and tolerant rats, 329
- **Longitudinal muscle,** binding of [³H]-diazepam and *in vitro* inhibition of contractions by benzodiazepines in guinea-pig ileum, 321
- **Longitudinal muscle strip,** guinea-pig ileum, evidence against the temperature-dependent interconversion of histamine H₁- and H₂-receptors, 11
- Lordosis, effect of tamoxifen in adult ovariectomized rats, 617
- Luminal fluid, uterine, effect of tamoxifen in ovariectomized adult rat, 617
- **Lung,** bullfrog, pharmacological profile of nonadrenergic inhibitory system, 339
- -, cat, effect of calcium antagonists on blood flow, 375
- -- , reduction of compliance after administration of E. coli endotoxin, 561
- , guinea-pig isolated, selective inhibition of thromboxane B₂ accumulation and metabolism, 85

- , effect of sodium cromoglycate, salbutamol or chlorpromazine on antigen-induced histamine release from fragment, 671
- Lung homogenates, rat, influence of sympathomimetic drugs on biosynthesis of prostaglandins and thromboxane B₂, 263
- **Luteinizing hormone,** effect of tamoxifen on serum concentrations in adult ovariectomized rats, 617
- Lysosomal labilization, endotoxin-induced, effect of a pyridine active thromboxane inhibitor on blood levels in the rat, 725

M

- Magnesium, effect of deficiency and excess on bovine coronary artery tone and responses to agonists, 629
- Magnesium ions, effect of changing concentrations in bathing solution on the action of paraoxon in rat phrenic nerve diaphragm preparations, 239
- , effect on binding of [³H]-baclofen to rat brain crude synaptic membranes, 191
- Magnesium sulphate, effect on the binding of [3H]-γaminobutyric acid to rat brain crude synaptosomes, 191
- Manganese ions, in calcium free medium, effect on potassium-evoked release of noradrenaline from cat spleen slices, 277
- **Maprotiline**, effect on muscarinic acetylcholine receptors in human brain, 97
- , effect on isoprenaline-induced increase in rat pineal melatonin, 89
- McN-A-343, effect on muscarinic receptors in the cerebral cortex and heart, 257
- **Mecamylamine**, effect on grayanotoxin I-induced contractions in guinea-pig vas deferens, 461
- —, effect on the depressant action of nicotine on locomotor activity in rats, 329
- Meclofenamate, inhibition of prostacyclin formation in gastric mucosa and ileum in vitro, 173
- **Melatonir**, rat pineal content, effect of chronic antidepressant administration, 89
- Melperone, effects on ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165
- Membrane conductance, effect of carbachol in smooth muscle of guinea-pig intestine, 405
- muscimol-increased, effect of baclofen in guinea-pig olfactory cortex, 79
- Membrane potential, effect of baclofen in guinea-pig olfactory cortex, 79
- , effect of carbachol in smooth muscle of guinea-pig intestine, 405
- , effect of prostacyclin and carbocyclic thromboxane A₂ in guinea-pig mesenteric artery, 517
- —, effect on storage of biogenic amines in guinea-pig brain, 111
- **Meptazinol,** antiarrhythmic action in acute myocardial ischaemia in the rat, 455
- **Mepyramine**, blockade of vasodilator responses to 2-thiazolylethylamine and impromidine in rat stomach *in vivo*, 181
- Mesenteric artery, guinea-pig, effects of prostacyclin and

carbocyclic thromboxane A_2 on smooth muscle cells and neuromuscular transmission, 517

Mesenteric microvessels, influence of diabetes on reactivity to histamine, bradykinin and acetylcholine in the rat, 39

Metanephrine, potentiation of responses of cat trachea to isoprenaline, 417

Methacholine, effect of hibernation on responses of rodent atrial muscle, 151

9,11-Methanoepoxy prostaglandin H₂, see U-46619

α-Methyltyrosine, pretreatment with noradrenaline, effect on [³H]-amezinium release from rat occipitocortical slices, 645

Methysergide, effect on ethanol-induced contraction of canine coronary artery, 260

- —, effect on 5-hydroxytryptamine-induced contraction of muscularis mucosae of guinea-pig oesophagus, 103
- prevention of inhibitory action of 5-hydroxytryptamine on gastric acid secretion of rat isolated stomach, 123
- --, reduction of clonazepam potentiation of αflupenthixol-induced catalepsy in the rat, 137

Metiamide, effect on ethanol-induced contraction of canine coronary artery, 260

 , effect on histamine-induced depression of cardiac nerve stimulation in the dog, 733

Metoprolol, effects on ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165

Mianserin, effect on guanoxabenz-induced mydriasis in the rat, 507

 , effect on muscarinic acetylcholine receptors in human brain, 97

Midbrain, rat, effect of \triangle^9 -tetrahydrocannabinol on concentrations of histamine, 452

Monensin, effect on biogenic amine content in guinea-pig synaptosomes, 111

Morphine, abolition of influence of substance P on response of guinea-pig isolated ileum to periarterial nerve stimulation, 681

- , antinociceptive action given intrathecally or subcutaneously in the conscious rat, 659
- , effect on 5-hydroxytryptamine-induced contraction of muscularis mucosae of guinea-pig oesophagus, 103
- , induction of behavioural depression, effect of buprenorphine in pigeons, 607
- , inhibition of electrically-induced twitch contractions in submucous plexus of guinea-pig oesaphagus, 693

Mortality, from coronary artery occlusion, effect of meptazinol in the rat, 455

Muscarinic receptors, admission of calcium by ionic channels, in smooth muscle of guinea-pig intestine, 405

- , acetylcholine antagonism by antidepressants in human brain, 97
- , effect of McN-A-343 in rat cerebral cortex and heart,
 257

Muscimol, actions in guinea-pig olfactory cortex, effect of baclofen, 79

- -, actions on guinea-pig ileum, effect of bicuculline, 469
- —, effect on binding of [3H]-baclofen to rat brain crude synaptosomes, 191

Muscle, cat, effect of calcium antagonists on blood flow, 375 Muscle tone, effect of histamine or prostaglandin $F_{2\alpha}$, in-

duction of relaxation by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469

Muscularis mucosa, isolated, indirect action of 5hydroxytryptamine in guinea-pig oesophagus, 103

Mydriasis, induction by α_2 -adrenoceptor agonists, by action within the central nervous system in the rat, 507

Myenteric nerves, uptake and stimulus-evoked release of [³H]-γ-aminobutyric acid by guinea-pig intestine, 271

Myocardial ischaemia, antiarrythmic actions of meptazinol in the rat, 455

 , induced by ligation of coronary artery, effect of aspirin and prostacyclin in the rat, 29

Myocardium, normal and ischaemic, effects of antiarrythmic drugs on ventricular fibrillation thresholds in the anaesthetized rat, 165

Ν

Naloxone, antagonism of etorphine effects on dorsal horn neurones in spinal and non-spinal cats, 307

- , effect on antinociceptive action of morphine or buprenorphine given intrathecally or subcutaneously to the conscious rat, 659
- , effect on clonidine-induced increase in food and water intake in the rat, 159
- plus phentolamine, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)baclofen in guinea-pig ileum, 469
- —, reversal of inhibition of electrically-induced contractions in submucous plexus of guinea-pig oesophagus induced by dynorphin-(1-13), α-neo-endorphin or βendorphin, 693

Naloxone enantiomers, effect on evoked release of acetylcholine from rat brain, 433

Naitrexone, effect on evoked release of acetylcholine from rat brain, 433

Naproxen, inhibition of prostacyclin formation in gastric mucosa and ileum *in vitro*, 173

Neostigmine, effect on responses of rat anococcygeus muscle to field stimulation, 57

Neuroblastoma cells, mouse, effect of antidepressants on receptor-mediated cyclic guanosine 3',5'-monophosphate, 97

Neuromuscular transmission, effect of prostacyclin and carbocyclic thromboxane A₂ in guinea-pig mesenteric artery, 517

 , organophosphate-inhibited, ability of various bispyridinium oximes to restoration in human intercostal and marmoset diaphragm muscles, 579

³H-neurotransmitter, increased efflux after field stimulation of circular muscle of cattle iris, 247

Nicardipine, effect on regional blood flow in open-chest cats. 375

 , effect on leukotriene D₄- and acetylcholine-induced bronchoconstriction in the guinea-pig, 301

Nicotine, effect on locomotor activity in non-tolerant and tolerant rats, 329

 , action on the isolated muscularis mucosae of the guinea-pig oesophagus, 103

Nicotinic receptors, involvement in carbachol-induced relaxation of bullfrog lung, 339

-, lack of involvement in action of 5-hydroxytryptamine

- on muscularis mucosae of the guinea-pig oesophagus, 103
- -, role in dog pancreatic exocrine secretion, 623
- Nifedipine, effect on constriction of human tracheal strips in vitro, 687
- —, effect on peripheral circulation in open-chest cat, 375
- , effects on ventricular fibrillation thresholds of normal and ischaemic rat myocardium, 165
- Nipocotic acid, effect on stimulus-evoked release of [³H]-γaminobutyric acid from myenteric nerves of guinea-pig intestine, 271
- Nisoxetine, effect on muscarinic acetylcholine receptors in human brain, 97
- Nobiline, effect on electrical activity and on amino acidinduced depolarizations of primary afferent terminals in frog spinal cord, 709
- Node of Ranvier, frog, effect of antiepileptic drugs on repetitive activity, 49
- Nomifensine, effect on muscarinic acetylcholine receptors in human brain, 97
- Nonactin, effect on biogenic amine content in guinea-pig synaptosomes, 111
- Non-adrenergic, non-cholinergic inhibitory responses, induced by electrical stimulation of guinea-pig internal anal sphincter in the presence of hyoscine and guanethidine, 599
- Non-adrenergic inhibitory system, pharmacological profile in bullfrog lung, 339
- Noradrenaline, action in guinea-pig olfactory cortex, effect of baclofen, 79
- , activation of α-adrenoceptors in mouse vas deferens,
 365
- —, conditions required for the enhancement of release in rabbit ear artery by α-adrenoceptor antagonists, 543
- —, effect of grayanotoxin I on release from guinea-pig vas deferens, 461
- —, effect of 17β-oestradiol, normetanephrine or U-0531 on potency in pig isolated bronchus, 441
- —, effect of pretreatment with or without cocaine or α-methyltryptamine on [³H]-amezinium release from rat occipitocortical slices, 645
- -, effect on circular muscle of cattle iris, 247
- , induction of contraction in anococcyeal preparation from mouse and rabbit, 117
- , induction of contraction in guinea-pig mesenteric artery, effect of prostacyclin and carbocyclic thromboxane A₂, 517
- , induction of contraction in rat vas deferens, effect of prostaglandin E₂, 143
- —, induction of increase in heart rate, effect of histamine in the dog, 733
- , induction of relaxation of guinea-pig trachea, effect of thyroxine, 639
- —, plus adrenaline in the presence of clonidine, effect on compound action potential in rat sympathetic ganglia, 17
- , potassium-evoked release, modification by various ions and agents in cat spleen slices, 277
- —, reduction of effects of Sgd 101/75 in rabbit anococcygeus muscle, 117
- , relaxation of carbachol-induced contractions of cat trachea, 417
- —, responses of bovine coronary artery to, effect of mag-

- nesium deficiency and excess, 629
- [3H]-noradrenaline, guinea-pig synaptosome content, effect of potassium ions, sodium cyanide and ionophores, 111
- —, electrically-evoked overflow in rabbit hypothalamic slices, effect of verapamil and diltiazem, 571
- —, stimulation-evoked release in mouse isolated vas deferens, modification through presynaptic α_2 -adrenoceptors, 221
- , uptake and stimulation-induced release, effect of neostigmine in rat anococygeus muscle, 57
- Noradrenergic mechanisms, effect of yohimbine in cattle iris, 247
- Noradrenergic transmission, effect of neostimine in rat anococcygeus muscle, 57
- Nordihydroiguiaretic acid, effect on prostacyclin formation in gastric mucosa and ileum *in vitro*, 173
- , inhibition of bronchoconstriction after treatment with indomethacin, pyrilamine or propranolol in the guineapig, 67
- Normetanephrine, effect on the sensitivity of pig isolated bronchus to sympathomimetic amines, 441
- Nortriptyline, effect on muscarinic acetylcholine receptors of human brain, 97
- Noxious heat, responses of dorsal horn neurones in spinal and non-spinal cats, effects of etorphine, 307

o

- **Obidoxim,** effect on organophosphate poisoning in human intercostal and marmoset diaphragm muscles, 579
- Oesophagus, guinea-pig, indirect action of 5hydroxytryptamine on the isolated muscularis mucosa, 103
- 17β-Oestradiol, effect on the sensitivity of pig isolated bronchus to sympathomimetic amines, 441
- **Oestrogen**, induction of changes in adult ovariectomized rats, effect of tamoxifen, 617
- **Oestrone**, effect on isoprenaline-induced bronchial relaxation in the pig, 441
- Opiate receptors, in submucous plexus of guinea-pig oesophagus, pharmacological characterization, 693
- -, low affinity of RX 781094 in vitro, 489
- **Orciprenaline,** inhibition of biosynthesis of prostaglandins and thromboxane B_2 in rat organ homogenates, 263
- Org 6001, effects on ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165
- **Organophosphate anticholinesterases,** effect on twitch height in rat phrenic nerve diaphragm preparations, 239
- **Organophosphate poisoning,** therapy, marmoset as a model for man, 579
- Ovariectomy, effect on action of tamoxifen in adult rats, 617
- Oxygen uptake, effect of adrenoceptor antagonists in rat organ homogenates, 263

P

Pancreas, dog, role of nicotinic receptors in exocrine secretion, 623

Paracetamol, effect on prostacyclin formation in gastric mucosa and ileum in vitro, 173

Paraoxon, effect on twitch height in rat phrenic nerve diaphragm preparations, 239

Paw pressure test, effect of buprenorphine or morphine given intrathecally or subcutaneously to the conscious rat, 659

Pentagastrin, gastric acid secretory responses to, effect of 5-hydroxytryptamine in rat isolated stomach, 123

 , induction of protein secretion, effect of pentamethonium in pancreas of conscious dogs, 623

Pentamethonium, effect on exocrine pancreatic secretion in conscious dogs treated with urecholine, caerulein or pentagastrin, 623

Periarterial nerves, influence of substance P on response of guinea-pig ileum to electrical stimulation, 681

Peripheral circulation, effects of calcium antagonists in open-chest cats, 375

Phenidone, inhibition of bronchoconstriction after treatment with indomethacin, pyrilamine or propranolol in the guinea-pig, 67

Phenobarbitone, effect on leptazol-induced epileptogenic activity in anaesthetized rat, 553

 , effect on liver size, blood flow and DNA content in the rat, 533

, effect on the repetitive activity of frog node of Ranvier,

Phenoxybenzamine, effect on oxygen uptake in rat organ homogenates, 263

 , effect on potassium-evoked noradrenaline release in cat spleen slices, 277

 , inhibition of 5-hydroxytryptamine-induced contractions of muscularis mucosae of guinea-pig oesophagus, 103

 reduction of effects of Sgd 101/75 in rabbit or mouse anococcygeus muscle, 117

Phentolamine, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum in the presence of naloxone, propranolol or theophylline, 469

 —, effect on compound action potential and on the inhibitory effects of clonidine and adrenaline in rat sympathetic ganglia, 17

 , effect on electrically evoked noradrenaline release in rabbit ear artery, 543

, effect on ethanol-induced contraction of canine coronary artery, 260

 —, effect on grayanotoxin I-induced contractions in guinea-pig vas deferens, 461

—, effect on oxygen uptake in rat organ homogenates, 263

 , inhibition of responses of rat anococcygeus muscle to field stimulation, 57

1-Phenyl-2-amino-ethan-1-ol derivatives, effect on biosynthesis of prostaglandins and thromboxane B₂, 263

Phenylephrine, effects at postjunctional α₁-adrenoceptors, antagonism by RX 781094 in the rat, 489

-N⁶-phenylisopropyl adenosine, D and L, effect on the force of contraction of guinea-pig atrium, 207

Phenytoin, effect on leptazol-induced epileptogenic activity in anaesthetized rat, 533

Phosphodiesterase, gastric acid secretory response to inhibition of, effect of 5-hydroxytryptamine in rat isolated stomach, 123

Physostigmine, constriction of undamaged eye, effect of guanoxabenz in pithed rat, 507

 —, effect on contractions evoked by electrical stimulation or potassium in bovine ciliary muscle, 591

Picrotoxin, reduction of clomipramine potentiation of α -flupenthixol-induced catalepsy in rats, 137

Picrotoxinin, effect on electrical activity and on amino-acidinduced depolarizations of primary afferent terminals in frog spinal cord, 709

Pindolol, effect on oxygen uptake in rat organ homogenates, 263

Pineal, rat, effect of chronic antidepressant administration on melatonin content, 89

Piperidine-4-sulphonic acid, effect on binding of [³H]-baclofen to rat brain crude synaptosomes, 191

Piperoxan, effect on guanoxabenz-induced mydriasis in the rat, 507

PGI₂ see Prostacyclin

Placenta, rat, effect of maternal protein deficiency on transfer of salicylate, 233

Plasma, guinea-pig, levels of slow-reacting substance of anaphylaxis after antigen challenge, 67

Plasma, human increased renin activity in patients receiving lithium therapy, 3

, rat, effect on protein deficiency on salicylate concentrations, 233

Platelets, partial models for biogenic amine storage in aminergic brain neurones, 111

 , responsiveness to synthetic thromboxane and prostaglandin endopoxeride analogues, 287

Postsynaptic inhibitory conductance, blockade by baclofen in guinea-pig olfactory cortex, 79

Potassium, activation of response in rabbit vagus nerve fibres, effects of Brazilian scorpion venom, 529

 , dose-response curves to high concentrations, effect of grayanotoxin I in guinea-pig vas deferens, 461

 induction by high external concentrations of contractions in bovine ciliary muscle, 591

responses of bovine coronary artery to, effect of magnesium deficiency and excess in bovine coronary artery, 629

 , stimulation of release of [3H]-glycine and [3H]-taurine in isolated rat retina, interactions with dopamine, 395

Potassium ions, induction of contractions of longitudinal muscle of guinea-pig ileum, antagonism by diazepam, 321

-, inducton of noradrenaline release in cat spleen slices,

, effect on biogenic amine content in guinea-pig synaptomes, 111

Practolol, dissociation constant values, effect of thryoxine,

Prazosin, effect on guanoxabenz-induced mydriasis in the rat, 507

effect on presynaptic cardio-inhibitory and postsynaptic pressor responses to vylazine and cirazoline, 655

tic pressor responses to xylazine and cirazoline, 655

—, effect on sympathetic neuroeffector transmission in mouse vas deferens, 365

[³H]-prazosin, inhibition of specific binding to rat brain membranes by clonidine and its derivatives, 479

[3H]-prazosin binding sites, competition of yohimbine isomers in rat liver membranes, 359

Prednisolone, effect on isoprenaline-induced bronchial re-

laxation in the pig, 441

Pressor responses, evoked by UK 14304, effect of RX 781094, 489

Procaine, effect on carbachol-induced relaxation of bullfrog lung, 339

-, effect on fast excitatory postsynaptic currents of bullfrog sympathetic ganglia, 293

Progesterone, effect on isoprenaline-induced bronchial relaxation in the pig, 441

Prolactin, effect of tamoxifen on serum concentrations in adult ovariectomized rats, 617

Propranolol, effect on carbachol-induced relaxation of bullfrog lung, 339

- -, effect on compound action potential and on the inhibitory effects of adrenaline in rat sympathetic ganglia, 17
- -, effect on ethanol-induced contraction of canine coronary artery, 260
- -, effect on inhibitory action of 5-hydroxytryptamine on gastric acid secretion of rat isolated stomach, 123
- —, effect on oxygen uptake in rat organ homogenates, 263
- -, modulation of antigen-induced anaphylaxis in the guinea-pig, 67
- , plus phentolamine, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)baclofen in guinea-pig ileum, 469

Prostacyclin, effect on arrhythmias resulting from coronary artery ligation and on infarct size, in the rat, 29

- -, effect on smooth muscle cells and neuromuscular transmission in guinea-pig mesenteric artery, 517
- -, influence of sympathomimetic drugs on biosynthesis in rat organ homogenates, 263
- —, stimulation and inhibition of formation in the gastric mucosa and ileum in vitro by anti-inflammatory agents,

Prostaglandin E2, effects on fast and slow components of the response of the rat vas deferens to field stimulation, 143

- -, inhibition of gastric acid secretion in anaesthetized rats,
- -, plasma concentrations during acute pulmonary response to E. coli endotoxin in anaesthetized cats, 561

Prostaglandin $F_{1\alpha}$, 6-keto-, plasma concentrations during the acute pulmonary response to E. coli endotoxin in anaesthetized cats, 561

Prostaglandin F₂, effect of U46619 in isolated perfused guinea-pig lung, 85

- -, plasma concentrations during the acute pulmonary response to E. coli endotoxin in anaesthetized cats, 561
- raised muscle tone, effect on induction of relaxation by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469

Prostaglandin H₂, 9,11-azo-, aggregation of platelet-rich plasma from different species, 287

Prostaglandin I₂ see Prostacyclin

Prostaglandins, effect on thromboxane B₂ accumulation and metabolism in isolated perfused guinea-pig lung,

—, influence of sympathomimetic drugs on biosynthesis in rat organ homogenates, 263

Protein, effect of maternal deficiency on the placental transfer of salicylate in rat, 233

Proton gradient, effect on storage of biogenic amines in guinea-pig brain, 111

Protriptyline, effect on muscarinic acetylcholine receptors of human brain, 97

Pulmonary artery, cat, increased pressure after administration of E. coli endotoxin to anaesthetized cats, 561

Purine receptors, in guinea-pig internal anal sphincter, 599 PY 108-068, effect on regional blood flow in open-chest cats, 375

Pyryilamine, modulation of antigen-induced anaphylaxis in the guinea-pig, 67

Q

(-)-[3H]-quinuclidinyl benzilate, effect of antidepressants on binding to muscarinic acetylcholine receptors in homogenates of human caudate nucleus, 97

R

Rauwolscine, competition for [3H]-prazosin and [3H]yohimbine binding sites in rat liver and human platelets, 359

-, effect on guanoxabenz-induced mydriasis in the rat,

Reactive blue 2, effect on actions of adenosine 5'triphosphate in isolated internal anal sphincter of the guinea-pig, 599

Relaxation, y-aminobutyric acid-induced in guinea-pig ileum, 469

- -, carbachol-induced in bullfrog lung, 339
- —, terbutaline-induced in guinea-pig trachea, effect of thyroxine, 639

Renin, effect of lithium on active and inactive secretion in rabbit kidney, 3

Repetitive activity, of frog node of Ranvier, effect of antiepileptic drugs, 49

Reserpine, effect of pretreatment on effects of prostaglandin E₂ on fast and slow components of the response of rat vas deferens to field stimulation, 143

- -, effect of grayanotoxin I-induced contractions in guinea-pig vas deferens, 461
- -, effect on sympathetic neuroeffector transmission in mouse vas deferens, 365

Retina, rat, interactions of dopamine and the release of [3H]-glycine and [3H]-taurine, 395

Righting reflex, hexobarbitone-induced, effect of clonidine and its derivatives in mice, 479

Ro5-4864, effect on contractions of longitudinal muscle of guinea-pig ileum, 321

Ro5-5115, effect on contractions of longitudinal muscle of guinea-pig ileum, 321

RS 21361, effect on guanoxabenz-induced mydriasis in the rat, 507

Rubidium, effect of hibernation on responses of atrial muscle from rodents, 151

- RX 781094, effect on guanoxabenz-induced mydriasis in the rat, 507
- selective, potent and specific antagonism of α_2 adrenoceptors, 489

S

- Salbutamol, chronotropic responses to and effect on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- , effect on antigen-induced histamine release from human lung fragments, 671
- Salicylate, effect of low protein diet on placental transfer in rats, 233
- Salmefamol, effect on chronotropic responses and on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- Sarin, inhibition of neuromuscular transmission in human intercostal and marmoset diaphragm muscles, effect of various bis-pyridinium oximes, 579
- Schedule-controlled responding, effect of buprenorphine in pigeons trained to discriminate between fentanyl and distilled water, 607
- Schild plots, for β -adrenoceptor antagonists in cat trachea and atria, 417
- **Seasonal variation,** effect on drug response and staircase phenomena in atrial muscle from a hibernating rodent, 151
- **Sedation,** effect of clonidine and its derivatives in cat and rat, 479
- Seminal vesicle microsomes, rat, influence of sympathomimetic drugs on biosynthesis of prostaglandins and thromboxane B₂, 263
- Sgd 101/75, induction of contraction in anococcygeal preparation from mouse and rabbit, 117
- Skin, cat, effect of calcium antagonists on blood flow, 375
- , human, effect of topical capsaicin treatment of wheal and flare reactions following intradermal injections of somatostatin and vasoactive intestinal polypeptide, 665
- Slow-reacting substance of anaphylaxis, measurement of mediation of bronchoconstriction and of plasma levels in the guinea-pig, 67
- Small intestine, cat, effect of calcium antagonists on blood flow, 375
- Smooth muscle cells, effects of prostacyclin and carbocyclic thromboxane A₂, in guinea-pig mesenteric artery, 517
- Smooth muscle inhibitory factor, from bovine retractor penis, effect on smooth muscle preparations from guinea-pig alimentary canal and gall bladder, 213
- **Sodium arachidonate**, aggregation of platelet-rich plasma from different species, 287
- **Sodium cromoglycate,** effect on antigen-induced histamine release from human lung fragments, 671
- , effects on leukotriene D₄- and acetylcholine-induced bronchoconstriction in the guinea-pig, 301
- Sodium ions, dependence of binding of [3H]-sulpiride to solubilized binding sites in dog striatum, 5
- , effect on binding of [3H]-baclofen to rat brain crude synaptic membranes, 191
- , effect on tetraethylammonium-evoked release for noradrenaline from cat adrenal gland, 277
- **Sodium valproate**, effect on leptazol-induced epileptogenic activity in anaesthetized rat, 533
- Soman, inhibition of neuromuscular transmission in human intercostal and marmoset diaphragm muscle, effect of various bis-pyridinium oximes, 579
- Somatostatin, production of wheal and flare reactions in normal human forearm skin, 665

- Sotalol, effects on ventricular fibrillation thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165
- **Soterenol**, effect on chronotropic responses and on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717
- Spinal cord, frog, action of dendrobine, nobiline, picrotoxinin or strychnine on electrical activity and on amino acid-induced depolarizations of primary afferent terminals, 709
- **Spinal subarachnidoid space,** injection of baclofen with theophylline pretreatment, antinociceptive action in the rat, 353
- **Splanchnic infarction,** effect of pyridine active thromboxane synthetase inhibitor in endotoxin shocked rats, 725
- Spleen, cat, effect of calcium antagonists on blood flow, 375 SRS-A see Slow-reacting substance of anaphylaxis
- Staircase phenomena, seasonal variations in atrial muscle from hibernating rodent, 151
- Steroids, effect on β -adrenoceptor-mediated relaxation of pig bronchus, 441
- **Stilboestrol**, effect on isoprenaline-induced bronchial relaxation in the pig, 441
- Stomach, cat, effect of calcium antagonists on blood flow, 375
- , rat, in vivo characterization of histamine receptors in microcircularion, 181
- , rat isolated, effect of 5-hydroxytryptamine on gastric acid secretion, 123
- Stomach fundus homogenates, rat, influence of sympathomimetic drugs on biosynthesis of prostaglandins and thromboxane B₂, 263
- **Striatum,** dog comparison of the properties of [³H]-sulpiride binding site in soluble and native membrane preparations, 5
- **Strychnine**, effect on click-evoked brain stem auditory evoked potentials in the cat, 75
- , effect on electrical activity and on amino-acid-induced depolarization of primary afferent terminals in frog spinal cord, 709
- Substance P, influence on the response of guinea-pig isolated ileum to periarterial nerve stimulation, 681
- , production of wheal and flare reactions in normal human forearm skin, 665
- Sucrose gap technique, investigation of actions of carbachol on membrane potential and conductance of smooth muscle of guinea-pig intestine, 405
- [3H]-sulpiride binding sites, comparison of the properties in soluble and native membrane preparations of dog striatum, 5
- Superior olive, cat, effect of strychnine on brainstem auditory evoked potentials, 75
- Sympathetic efferent discharge, effect of atenolol or vagal cooling in the cat, 425
- Sympathetic ganglia, bullfrog, effects of procaine on the fast excitatory postsynaptic currents, 293
- —, modulation of transmission by activation of presynaptic α-and β-adrenoceptors, 17
- Sympathetic nerve, effect of yohimbine on pre- and postsynaptic events during activation in cattle iris, 247
- Sympathetic nerve stimulation, effect of chlorpheniramine, cimetidine and metiamide on histamine-induced depression, in dog heart, 733
- Sympathetic neurotransmission, inhibition by histamine in

the dog heart, mediation by H₁-receptors, 733

- Synaptic membranes, increased surface glycoconjugates in mice during chronic ethanol treatment, 8
- , rat brain, characteristics of γ-aminobutyric acid_B receptor binding sites, 191

1

- **Tabum,** inhibition of neuromuscular transmission in human intercostal and marmoset diaphragm muscle, effect of various *bis*-pyridinium oximes, 579
- Tail flick test, potentiation of the antinociceptive action of baclofen by theophylline in the rat, 353
- **Tamoxifen,** peripheral and central activities in ovariectomized adult rat, 617
- **Taurine,** action in guinea-pig olfactory cortex, effect of baclofen, 79
- , induction of depolarizations of primary afferent terminals of frog spinal cord, effect of dendrobine, 709
- [3H]-taurine, effect of dopamine on spontaneous and evoked release from isolated retina of the rat, 395
- Terbutaline, effect on rat pineal melatonin content, 89
- , induction of relaxation of guinea-pig trachea, effect of thyroxine, 639
- , inhibition of biosynthesis of prostaglandins and thromboxane B₂ in rat organ homogenates, 263
- **Testosterone**, effect on isoprenaline-induced bronchial relaxation in the pig, 441
- Tetraethylammonium, effect on potassium-evoked noradrenaline release in cat spleen slices, 277
- , potentiation of electrically-induced contractions in bovine ciliary muscle, 591
- Δ°-**Tetrahydrocannabinol**, effect on brain regional histamine concentrations in the rat, 452
- **Tetrodotoxin,** abolition of 5-hydroxytryptamine-induced contraction of muscularis mucosae of guinea-pig oesophagus, 103
- —, abolition of stimulus-evoked release of [³H]-γaminobutyric acid by myenteric nerves of guinea-pig intestine, 271
- —, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)-baclofen in guinea-pig ileum, 469
- , effect on electrically evoked noradrenaline release in rabbit ear artery, 543
- —, effect on grayanotoxin I-induced contractions in guinea-pig vas deferens, 461
- —, effect on inhibitory action of 5-hydroxytryptamine on gastric acid secretion of rat isolated stomach, 123
- , effect on inhibitory responses to field stimulation in guinea-pig gall bladder, 213
- , effect on potassium-evoked noradrenaline release in cat spleen slices, 277
- , effect on tetraethylammonium potentiated electricallyinduced contractions in bovine ciliary muscle, 591
- —, effect on the prolongation of action potential duration in venom-treated B fibres, 529
- , inhibition of carbachol-induced relaxation of bullfrog lung, 339
- **Theophylline,** effect on actions of adenosine 5'-triphosphate or adenosine in isolated internal anal sphincter of the guinea-pig, 599
- , effect on responses of guinea-pig atrium to adenosine and its analogues, 207

- plus phentolamine, effect on bicuculline-insensitive relaxation induced by γ-aminobutyric acid or (-)baclofen in guinea-pig ileum, 469
- , potentiation of antinociceptive action of baclofen in the rat, 353
- **2-Thiazolylethylamine**, production of concentration-dependent vasodilator responses in *in vivo* stomach submucosal arterioles, 181
- **Thromboxane A₂**, carbocyclic, effect on smooth muscle cells and neuromuscular transmission in guinea-pig mesenteric artery, 517
- , carbocyclic, inhibition of platelet aggregation and induction of coronary artery constriction in different species, 287
- , pinane, inhibition of platelet aggregation and attenuation of vasoconstrictor responses to U-466619 in different species, 287
- possible mediator for acute pulmonary responses to E. coli endotoxin in anaesthetized cats, 561
- Thromboxane B₂, influence of sympathomimetic drugs on biosynthesis in rat organ homogenates, 263
- , inhibition by U-46619 of accumulation and metabolism in isolated perfused guinea-pig lung, 85
- , plasma concentrations during the acute pulmonary response to E. coli endotoxin in anaesthetized cats, 561
- **Thromboxane analogues,** effect on platelets and coronary arteries in different species, 287
- Thromboxane synthetase inhibitor, pyridine active and inactive isomers, effects in endotoxic shock in the rat, 725
- Thryoxine, effect on β-adrenoceptor-mediated relaxation of guinea-pig trachea, 639
- Tiotidine, effect on histamine dose-response curve at 37°C and 12°C in guinea-pig ileum, 11
- **Tolerance**, effect on the action of nicotine on locomotor activity in rats, 329
- Tone, spontaneous and carbachol-induced in guinea-pig gastro-intestinal tract, induction of relaxation by inhibitory factor from bovine retractor penis, 213
- **Trachea,** cat, relaxation to β -adrenoceptor agonists, mediation by β -adrenoceptors and potentiation by inhibitors of extraneuronal uptake, 417
- —, guinea-pig, effects of sodium cromoglycate, verapamil and nicardipine on leukotriene D₄- and acetylcholineinduced bronchoconstriction, 301
- —, guinea-pig, effect of thryoxine on β-adrenoceptormediated relaxation, 639
- , human, effect of nifedipine on constriction of strips in vitro, 687
- **Transmural stimulation**, induction of contraction in guineapig vas deferens, effect of grayanotoxin I treatment, 461
- **Trazodone**, effect on muscarinic acetylcholine receptors in human brain, 97
- 2-(2,3,6-Trichlorophenylimino) imidazolidine, hypotensive and α-adrenergic activities in the cat *in vitro* and *in vivo*, 479
- **Trimethadione,** effect on the repetitive activity of frog node of Ranvier, 49
- N,N'-trimethylene-1,3-bis (pyridinium-4-aldoxime), effect on organophosphate-induced twitch potentiation in rat phrenic nerve diaphragm preparations, 239
- **Trimipramine**, effect on muscarinic acetylcholine receptors of human brain, 97

- Triton-X-100, effect on binding of [³H]-\(\gamma\)-aminobutyric acid to rat brain crude synaptic membranes, 191
- **Tubocurarine**, effect on the action of neostigmine on the response of rat anococcygeus muscle to field stimulation, 57
- Twitch height, potentiation by organophosphate anticholinesterases in rat phrenic nerve diaphragm preparations, 239

U

- U-0521, effect on sensitivity of pig bronchus to sympathomimetic amines, 441
- U-46619, constriction of coronary arteries from different species, 287
- , inhibition of thromboxane B₂ accumulation and metabolism in isolated perfused lung of the guinea-pig, 85

UK 14,304, induction of mydriasis in the rat, 507

Urecholine, induction of protein secretion, effects of pentamethonium in pancreas of conscious dogs, 623

Uterus, rat, effect of tamoxifen in ovariectomized adult, 617

V

Vagal nerve fibres, rabbit, effect of Brazilian scorpion venom, 529

Vagal nerves, cat, effect of cooling on blood pressure, heart rate and sympathetic efferent discharge in the cat, 425

 , rats, induction of gastric acid secretion by stimulation, effect of prostaglandin E₂, 131

Vas deferens, guinea-pig, effect of grayanotoxin I, 461

- —, rat, effects of prostaglandin E₂ on fast and slow components of the response to field stimulation, 143
- —, rat and mouse, studies of RX 781094 an antagonist of α_2 -adrenoceptors, 489

Vascular permeability, effect of histamine or bradykinin, mode of antagonism of vasoconstrictor response of microvessels to noradrenaline in the rat, 39

Vascular reactivity, to histamine, bradykinin and acetylcholine, influence of diabetes in the rat, 39

Vasoactive intestinal polypeptide, effect on bullfrog lung, 339

 production of wheal and flare reactions in normal human forearm skin, 665

Ventricular extrasystoles, effect of meptazinol in the rat,

Ventricular fibrillation, effects of antiarrhythmic drugs on thresholds of normal and ischaemic myocardium in the anaesthetized rat, 165

—, effects of meptazinol in the rat, 455

Verapamil, effect of hibernation on responses of rat rodent atrial muscle, 151

- , effect on disopyramide on isolated aortic ring of the rat, 449
- , effect of electrically evoked overflow of [3H]noradrenaline from rabbit hypothalamic slices, 571
- —, effect on regional blood flow in open-chest cats, 375
- —, effect on leukotriene D₄- and acetylcholine-induced bronchoconstriction in the guinea-pig, 301

Veratridine, effect on uptake and release of [3H]-γ-amino-

butyric acid by myenteric nerves of guinea-pig intestine, 271

Video microscope system, characterization of histamine receptors in the rat stomach microcirculation, 181

Viloxazine, effect on muscarinic acetylcholine receptors in human brain, 97

W

Water intake, effect of systemic administration of clonidine in the rat, 159

Wheal reaction, effect of capsaicin, after intradermal injections of somatostatin and vasoactive intestinal polypeptide in human skin, 665

\mathbf{X}

Xylazine, presynaptic cardio-inhibitory and postsynaptic pressor responses to, interactions with yohimbine and prazosin in pithed rat, 655

Y

- Yohimbine, antagonism of the inhibitory effect of clonidone or adrenaline on [3H]-noradrenaline overflow elicited by electrical stimulation from rabbit hypothalamic slices, 571
- , effect on clonidine-induced increase in food and water intake in the rat, 159
- —, effect on disopyramide-induced contraction in isolated aortic ring of the rat, 449
- , effect on electrically evoked noradrenaline release in rabbit ear artery, 543
- , effect on fractional release of [3H]-noradrenaline in mouse vas deferens, 221
- —, effect on guanoxabenz-induced mydriasis in the rat, 507
- , effect on pre- and post-synaptic events during sympathetic nerve activiation in cattle iris, 247
- , effect on presynaptic cardio-inhibitory and postsynaptic pressor responses to xylazine and cirazoline, 655
- —, effect on stimulation-evoked overflow of [³H]amezinium from rat occipitocortical slices treated with α-methyltyrosine, 645
- , effect on sympathetic neuroeffector transmission in mouse vas deferens, 365

α-Yohimbine see Rauwolscine

(+)-Yohimbine, competition for [³H]-prazosin and [³H]-yohimbine binding sites in rat liver and human platelets, 359

[³H]-yohimbine binding sites, competition of yohimbine isomers in human platelets, 359

Yohimbine stereoisomers, binding to adrenoceptors in rat liver and human platelets, 359

Z

Zinterol, chronotropic responses to and effect on cyclic adenosine 3',5'-monophosphate accumulation in rat heart cell culture, 717