

Edited for the British Pharmacological Society by

J.F. Mitchell (*Chairman*)

G.M. Lees (*Secretary*)

Margaret Day (*Press Editor*)

C.V. Wedmore (*Assistant Press Editor*)

EDITORIAL BOARD

N.J.M. Birdsall
London
A.T. Birmingham
Nottingham
A.G.H. Blakeley
Leicester
N.G. Bowery
Harlow
C.M. Bradshaw
Manchester
J.B. Caldwell
London
B.A. Callingham
Cambridge
J.A.J.H. Critchley
Edinburgh
Maureen M. Dale
London
J.C. Foreman
London
M.C. Harris
Birmingham
G. Henderson
Cambridge
C.R. Hiley
Cambridge
R.G. Hill
Cambridge
J.R.S. Hoult
London
P.P.A. Humphrey
Ware
L. Iversen
Harlow
D.H. Jenkinson
London
P.G. Jenner
London
W.E. Lindup
Liverpool
R. McBurney
Newcastle
J.C. McGrath
Glasgow

D.S. McQueen
Edinburgh
C.A. Marsden
Nottingham
R.J. Marshall
Newhouse
D.A.A. Owen
Welwyn Garden City
M.E. Parsons
Welwyn Garden City
Priscilla J. Piper
London
N.L. Poyser
Edinburgh
T.W. Robbins
Cambridge
G.C.K. Roberts
London
T.L.B. Spriggs
Cardiff
T.W. Stone
London
E. Szabadi
Manchester
D.A. Terrar
Oxford
D.R. Tomlinson
Nottingham
E.M. Vaughan Williams
Oxford
R.M. Wadsworth
Glasgow
D.I. Wallis
Cardiff
D.F. Weetman
Sunderland
T.J. Williams
Harrow
G.N. Woodruff
Harlow
J.M. Young
Cambridge

CORRESPONDING EDITORS

P.R. Adams
Galveston, U.S.A.
J. Axelrod
Bethesda, U.S.A.
C. Bell
Melbourne, Australia
F.E. Bloom
La Jolla, U.S.A.
A.L.A. Boura
Clayton, Australia
P.B. Dews
Boston, U.S.A.
T. Godfraind
Brussels, Belgium
L.I. Goldberg
Chicago, U.S.A.
S.Z. Langer
Paris, France
R.A. Lewis
Harvard, U.S.A.
E. Muscholl
Mainz, Germany
M. Otsuka
Tokyo, Japan
R.H. Roth
New Haven, U.S.A.
M. Schachter
Alberta, Canada
S.H. Snyder
Baltimore, U.S.A.
L. Szekeres
Szeged, Hungary
B. Uvnas
Stockholm, Sweden
P.A. Van Zwieten
Amsterdam, Netherlands
G. Velo
Verona, Italy
M.B.H. Youdim
Haifa, Israel

Papers will be considered for publication on all aspects of pharmacology, including chemotherapy.

The British Journal of Pharmacology is published monthly by Scientific & Medical Division, The Macmillan Press Ltd, Houndmills, Basingstoke, Hampshire RG21 2XS. Telephone: Basingstoke 29242. ISSN 0007 - 1188.

Registered Office: 4 Little Essex Street, London WC2R 3LF.

Manuscripts (two copies) should be sent to Dr G. M. Lees, Editorial Office, University of Aberdeen, Marischal College, Aberdeen AB9 1AS. Authors should consult the instructions inside the back cover.

Annual subscription UK £155.00; USA & Canada, US \$390, Airmail US \$460. Rest of world, £175, Airmail £225 (or equivalent in any other currency). (Orders must be accompanied by remittance. Prices correct at time of publication.)

Cheques should be made payable to Macmillan Journals Limited. All circulation, subscription or

general enquiries should be sent to: The Macmillan Press Ltd, Farndon Road, Market Harborough, Leicestershire, LE16 9NR, UK.

Overseas subscribers may make payments into UK Post Office Giro Account No. 519 2455. Full details must accompany the payment.

Second Class postage paid at New York, NY.
US Mailing Agent: Expeditors of the Printed Word Ltd, 515 Madison Avenue, New York, NY 10022.

Enquiries concerning advertising space and rates should be addressed to: David R. Guthrie, Advertising Dept., The Macmillan Press Ltd, Brunel Road, Houndmills, Basingstoke, Hampshire, England RG21 2XS. Telephone: 0256 29242.

Publisher: Harry Holt

Production & Editorial Services: Isobel Munday
Advertising & Promotion Services: David R. Guthrie.

Circulation Services: A.L. Clark.

© Copyright: Scientific & Medical Division, The Macmillan Press Ltd, 1985. All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by The Macmillan Press Ltd for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of £1.00 per copy, plus £0.10 per page is paid directly to CCC, 21 Congress St. Salem, MA 01970, USA.

0007 - 1188/85 \$1.00 + \$0.10

INDEX TO VOLUME 84

AUTHOR INDEX

A

- ACEVES, J., MARISCAL, S., MORRISON, K.E. & YOUNG, J.M. The binding of doxepin to histamine H_1 -receptors in guinea-pig and rat brain, 417, **84**
- AHMED, F., FOSTER, R.W. & SMALL, R.C. Some effects of nifedipine in guinea-pig isolated trachealis, 861, **84**
- AKAGI, H., KONISHI, S., OTSUKA, M. & YANAGISAWA, M. The role of substance P as a neurotransmitter in reflexes of slow time courses in the neonatal rat spinal cord, 663, **84**
- AKASU, T. & KOKETSU, K. Effect of adenosine triphosphate on the sensitivity of the nicotinic acetylcholine-receptor in the bullfrog sympathetic ganglion cell, 525, **84**
- AL-HUMAYYD, M. & WHITE, T.D. 5-Hydroxytryptamine releases adenosine 5'-triphosphate from nerve varicosities isolated from the myenteric plexus of guinea-pig ileum, 27, **84**
- ANDERSON, W.G. & KAM, S.-T. Pharmacological activity of ACC-7513, a selective α -adrenoceptor and 5-hydroxytryptamine receptor blocking agent, 793, **84**
- ARMSTRONG, R.A., JONES, R.L., PEESAPATI, V., WILL, S.G. & WILSON, N.H. Competitive antagonism at thromboxane receptor in human platelets, 595, **84**
- ASHOORI, F., TAKAI, A. & TOMITA, T. The response of non-pregnant rat myometrium to oxytocin in Ca-free solution, 175, **84**

B

- BABA, K., KAWANISHI, M., SATAKE, T. & TOMITA, T. Effects of verapamil on the contractions of guinea-pig tracheal muscle induced by Ca, Sr and Ba, 203, **84**
- BAIRD, A.W. & CUTHBERT, A.W. Changed sensitivity to antigen in a gut epithelium treated with bile salts, 653, **84**
- BAKER, J.R.J., BULLOCK, G.R. & WILLIAMSON, I.H.M. Autoradiographic study of the distribution of [3H]- and [^{14}C]-hydrallazine in the rat, 107, **84**
- BARANY, E.H. Muscarinic subsensitivity without receptor change in monkey ciliary muscle, 193, **84**
- BANNERJEE, A.K., TUFFIN, D.P. & WALKER, J.L. Pharmacological effects of the (\pm)-11-deoxy, 16-phenoxy-prostaglandin E_1 derivatives in the cardiovascular system, 71, **84**
- BHARGAVA, K.P., GUPTA, G.P. & GUPTA, M.B. Central GABA-ergic mechanism in stress-induced gastric ulceration, 619, **84**
- BIEGER, D. & TRIGGLE, C. Pharmacological properties of mechanical responses of the rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
- BLABER, L.C. & FRYER, A.D. The response of cat airways to histamine *in vivo* and *in vitro*, 309, **84**

- BLACK, J.W., GERSKOWITCH, V.P., LEFF, P. & SHANKLEY, N.P. Pharmacological analysis of β -adrenoceptor-mediated agonism of the guinea-pig, isolated right atrium, 779, **84**
- BLACK, J.W., LEFF, P. & SHANKLEY, N.P. An operational model of pharmacological agonism: the effect of $E/[A]$ curve on agonist dissociation constant estimation, 561, **84**
- BOJANIC, D., JANSEN, J.D., NAHORSKI, S.R. & ZAAGSMA, J. Atypical characteristics of the β -adrenoceptor mediating cyclic AMP generation and lipolysis in the rat adipocyte, 131, **84**
- BOLD, J.M., GARDNER, C.R. & WALKER, R.J. Central effects of nicotinamide and inosine which are not mediated through benzodiazepine receptors, 689, **84**
- BOWMAN, W.C., LAM, F.Y., RODGER, I.W. & SHAHID, M. Cyclic nucleotides and contractility of isolated soleus muscle, 259, **84**
- BRADLEY, P.B., HUMPHREY, P.P.A. & WILLIAMS, R.H. Tryptamine-induced vasoconstrictor responses in rat caudal arteries are mediated predominantly via 5-hydroxytryptamine receptors, 919, **84**
- BRALET, J., DIDIER, J.-P., MOREAU, D., OPIE, L.H. & ROCHETTE, L. Effect of α -adrenoceptor antagonists (phentolamine, nicergoline and prazosin) on reperfusion arrhythmias and noradrenaline release in perfused rat heart, 9, **84**
- BRECKENRIDGE, A.M., CHOLERTON, S., HART, J.A.D., PARK, B.K. & SCOTT, A.K. A study of the relationship between the pharmacokinetics and the pharmacodynamics of the 4-hydroxycoumarin anticoagulants, warfarin, difenacoum and brodifacoum in the rabbit, 81, **84**
- BRIGHT, P.S., GAFFNEY, T.E., STREET, J.A. & WEBB, J.G. Depolarization-induced release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**
- BROADLEY, K.J., BROOME, S. & PATON, D.M. Hypothermia-induced supersensitivity to adenosine for responses mediated via A_1 -receptors but not A_2 , 407, **84**
- BROOME, S. *see* BROADLEY, K.J., 407, **84**
- BROWN, F., CAMPBELL, W., MITCHELL, P.J. & RANDALL, K. Dopamine autoreceptors and the effects of drugs on locomotion and dopamine synthesis, 853, **84**
- BULLOCK, G.R. *see* BAKER, J.R.J., 107, **84**
- BULT, H., HERMAN, A.G. & RAMPART, M. Modification of endotoxin-induced haemodynamic and haematological changes in the rabbit by methylprednisolone, $F(ab')_2$ fragments and rosmarinic acid, 317, **84**
- BULT, H., HERMAN, A.G., LAEKEMAN, G.M. & RAMPART, M. Formation of prostanoids during intravascular complement activation in the rabbit, 329, **84**

- BURNSTOCK, G. & HOYLE, C.H. Actions of adenine dinucleotides in the guinea-pig taenia coli: NAD acts indirectly on P_1 -purinoceptors: NADP acts like a P_2 -purinoceptor agonist, 825, **84**
- BURNSTOCK, G., CUSACK, N.J. & MELDRUM, L.A. Studies on the stereoselectivity of the P_2 -purinoceptor on guinea-pig vas deferens, 431, **84**

C

- CAMPBELL, W. *see* BROWN, F., 853, **84**
- CARLINI, C.R., GUIMARÃES, J.A. & RIBEIRO, J.M.C. Platelet release reaction and aggregation induced by canatoxin, a convulsant protein: evidence for the involvement of the platelet lipoxygenase pathway, 551, **84**
- CAROLDI, S., JARVIS, J. & MAGOS, L. Carbon disulphide exposure affects the response of rat adrenal medulla to hypothermia and hypoglycaemia, 347, **84**
- CEÑA, V., GARCIA, A.G., GONZALEZ-GARCIA, C. & KIRPEKAR, S.M. Ion dependence of the release of noradrenaline by tetraethylammonium and 4-aminopyridine from cat splenic slices, 299, **84**
- CHEUNG, D.W. An electrophysiological study of α -adrenoceptor mediated excitation-contraction coupling in the smooth muscle cells of rat saphenous vein, 265, **84**
- CHOLERTON, S. *see* BRECKENRIDGE, A.M., 81, **84**
- COLE, O.F. & MARQUIS, V.O. A pharmacological analysis of the responses of the gastro-intestinal smooth muscle of the bat to transmural and periaxillary nerve stimulation, 587, **84**
- COTTON, R., KOSTERLITZ, H.W., PATERSON, S.J., RANCE, M.J. & TRAYNOR, J.R. The use of [3 H]-[D-Pen 3] enkephalin as a highly selective ligand for the δ -binding site, 927, **84**
- COUTURE, R., CUELLO, A.C. & HENRY, J.L. Trigeminal antidromic vasodilatation and plasma extravasation in the rat; effect of acetylcholine antagonists and cholinesterase inhibitors, 637, **84**
- CUELLO, A.C. *see* COUTURE, R., 637, **84**
- CUSACK, N.J. *see* BURNSTOCK, G., 431, **84**
- CUTHBERT, A.W. *see* BAIRD, A.W., 653, **84**

D

- DAMERAU, B., ROESLER, J. & VOGT, W. Fast deactivation of guinea-pig isolated ileum to C5a_{desArg}: a possible cyclic AMP-dependent mechanism, 63, **84**
- , Loss and recovery of sensitivity of guinea-pig isolated ileum to the spasmogenic action of the complement peptide C5a_{desArg}, 47, **84**
- , Pharmacological characterization of slow component of deactivation of guinea-pig isolated ileum to spasmogenic action of C5a_{desArg}, 55, **84**
- DARIUS, H., LEFER, A.M., LEPRÁN, I. & SMITH, J.B. *In vivo* interaction of prostacyclin with an inhibitor of cyclonucleotide phosphodiesterase, HL 725, 735, **84**
- DEL CASTILLO, J., ESCALONA DE MOTTA, G., ETEROVIĆ, V.A. & FERCHMIN, P.A. Succinyl derivatives of N-tris (hydroxymethyl) methyl-2-aminoethane sulphonic acid: their effects on frog neuromuscular junction, 275, **84**

- DESOUKI, A., LEFORT, J. & VARGAFTIG, B.B. Histamine and leukotriene-independent guinea-pig anaphylactic shock unaccounted for by Paf-acether, 801, **84**
- DIDIER, J.-P. *see* BRALET, J., 9, **84**
- DOCHERTY, J.R. & HYLAND, L. Evidence for neuro-effector transmission through postjunctional α_2 -adrenoceptors in human saphenous vein, 573, **84**
- DUKES, I.D. & VAUGHAN WILLIAMS, E.M. Cardiovascular effects of bevantolol, a selective β_1 -adrenoceptor antagonist with a novel pharmacological profile, 365, **84**
- DUNWIDDIE, T.V., FREDHOLM, B.B., JONZON, B. & SANDBERG, G. The adenosine receptor activity of EMD 28422, a purine derivative with reported actions on benzodiazepine receptors, 625, **84**

E

- EGLÉN, R.M. & WHITING, R.L. Determination of the muscarinic receptor subtype mediating vasodilatation, 3, **84**
- EMMS, H. & LEWIS, G.P. The effect of synthetic ovarian hormones on an *in vivo* model of thrombosis in the rat, 243, **84**
- ERNE, P. & PLETSCHER, A. Rapid intracellular release of calcium in human platelets by stimulation of 5-HT $_2$ -receptors, 545, **84**
- ESCALONA DE MOTTA, G. *see* DEL CASTILLO, J., 275, **84**
- ETEROVIĆ, V.A. *see* DEL CASTILLO, J., 275, **84**
- EVANS, M.H. Effects of some α -adrenoceptor antagonists on central cardio-decelerator mechanism in the rabbit, 645, **84**

F

- FERCHMIN, P.A. *see* DEL CASTILLO, J., 275, **84**
- FERGUSON, D.R., JOHNSON, B.I. & PRICE, N. Responses of the pig isolated renal artery to transmural electrical stimulation and drugs, 879, **84**
- FERRY, D.R., GLOSSMANN, H. & KAUFMANN, A.J. Relationship between the stereoselective negative inotropic effects of verapamil enantiomers and their binding to putative calcium channels in human heart, 811, **84**
- FINBERG, J.P.M. & TAL, A. Reduced peripheral presynaptic adrenoceptor sensitivity following chronic antidepressant treatment in rats, 609, **84**
- FOSTER, R.W. *see* AHMED, F., 861, **84**
- FREDHOLM, B.B. *see* DUNWIDDIE, T.V., 625, **84**
- FRYER, A.D. *see* BLABER, L.C., 309, **84**
- FUCHS, P. & FUDER, H. The determination of presynaptic K_A values of methacholine and pilocarpine and of a presynaptic receptor reserve in rat perfused heart, 35, **84**
- FUDER, H. *see* FUCHS, P., 35, **84**
- FUDER, H. & JUNG, B. Affinity and efficacy of racemic, (+)-, and (–)-methacholine in muscarinic inhibition of [3 H]-noradrenaline release, 477, **84**
- FUJIOKA, M. & SUZUKI, H. Effects of amosulalol on the electrical responses of guinea-pig vascular smooth muscle to adrenoceptor activation, 489, **84**
- FUJII, K., MIYAHARA, H. & SUZUKI, H. Comparison of the effects of caffeine and procaine on noradrenergic transmission in the guinea-pig mesenteric artery, 675, **84**

G

- GAFFNEY, T.E. *see* BRIGHT, P.S., 499, **84**
 GARCIA, A.G. *see* CEÑA, V., 299, **84**
 GARDNER, C.R. *see* BOLD, J.M., 689, **84**
 GARNIER, D. & ROULET, M.J. Vasoactivity of trimetazidine on guinea-pig isolated ductus arteriosus, 517, **84**
 GERSKOWITCH, V.P. *see* BLACK, J.W., 779, **84**
 GIOTTI, A., LUZZI, S., MAGGI, C.A., SPAGNESI, S. & ZILLETI, L. Modulatory activity of GABA_B receptors on cholinergic tone in guinea-pig distal colon, 883, **84**
 GLOSSMANN, H. *see* FERRY, D.R., 811, **84**
 GONZALEZ-GARCIA, C. *see* CEÑA, A.G., 299, **84**
 GOODWIN, G.M. & GREEN, A.R. A behavioural and biochemical study in mice and rats of putative selective agonists and antagonists for 5-HT₁ and 5-HT₂-receptors, 743, **84**
 GREEN, A.R. *see* GOODWIN, G.M., 743, **84**
 GREEN, A.R., JOHNSON, P., MOUNTFORD, J.A. & NIMGAONKAR, V.L. Some anticonvulsant drugs alter monoamine-mediated behaviour in mice in ways similar to electroconvulsive shock; implications for antipressant therapy, 337, **84**
 GREEN, P.G. & KITCHEN, I. Different effects of diisopropylfluorophosphate on the entry of opioids into mouse brain, 657, **84**
 GRIFFITHS, N.M., HEWICK, D.S., LAMB, J.F. & STEVENSON, I.H. The influence of digoxin antibodies on digoxin disposition and effect: studies in guinea-pigs and He La cells, 157, **84**
 GUIMARAES, J.A. *see* CARLINI, C.R., 551, **84**
 GUPTA, G.P. *see* BHARGAVA, K.P., 619, **84**
 GUPTA, M.B. *see* BHARGAVA, K.P., 619, **84**

H

- HARRIS, J.B. & POLLARD, S.L. Reversal of paralysis in nerve muscle preparations isolated from animals with hereditary motor endplate disease, 6, **84**
 HARRISON, N.L. & SIMMONDS, M.A. Quantitative studies on some antagonists of N-methyl-D-aspartate in slices of rat cerebral cortex, 381, **84**
 HART, J.A.D. *see* BRECKENRIDGE, A.M., 81, **84**
 HARTLEY, M.L. & PENNEFATHER, J.N. The costouterine muscle of the rat contains a homogeneous population of β -adrenoceptors, 463, **84**
 HAYASHI, E., MAEDA, T. & SHINOZUKA, K. Adenosine and dipyrindamole: actions and interactions on the contractile response of guinea-pig ileum to high frequency electrical field stimulation, 765, **84**
 HEEPE, P. & STARKE, K. α -Adrenoceptor antagonists and the release of noradrenaline in rabbit cerebral cortex slices: support for the α -autoreceptor hypothesis, 147, **84**
 HENRY, J.L. *see* COUTURE, R., 637, **84**
 HERMAN, A.G. *see* BULT, H., 317, **84**
 —, *see* BULT, H., 329, **84**
 HERZIG, S. & MOHR, K. Sodium load and high affinity ouabain binding in rat and guinea-pig cardiac tissue, 685, **84**
 HESSE, I.F.A. & JOHNS, E.J. The role of α -adrenoceptors in the regulation of renal tubular sodium reabsorption and renin secretion in the rabbit, 715, **84**

- HEWICK, D.S. *see* GRIFFITHS, N.M., 157, **84**
 HILL, D.R. GABA_B receptor modulation of adenylate cyclase activity in rat brain slices, 249, **84**
 HOSOKAWA, T., HOWARD, R.B. & MAGUIRE, M.H. Conversion of angiotensin I to angiotensin II in the human foetoplacental vascular bed, 237, **84**
 HOWARD, R.B. *see* HOSOKAWA, T., 237, **84**
 HOYLE, C.H. *see* BURNSTOCK, G., 825, **84**
 HUGLI, T.E. & MARCEAU, F. Effects of C5a anaphylatoxin and its relationship to cyclo-oxygenase metabolites in rabbit vascular strips, 725, **84**
 HUIDOBRO-TORO, J. & KULLAK, A. Excitatory neurotensin receptors on the smooth muscle of the rat fundus: possible implications in gastric motility, 897, **84**
 HUMPHREY, P.P.A. *see* BRADLEY, P.B., 919, **84**
 HYLAND, L. *see* DOCHERTY, J.R., 573, **84**

I

- INOUE, T. & ITO, Y. Pre- and post-junctional actions of prostaglandin I₂, carbocyclic thromboxane A₂ and leukotriene C₄ in dog tracheal tissue, 289, **84**
 INOUE, M., MATSUO, T. & OGATA, N. Baclofen activates voltage-dependent and 4-aminopyridine sensitive K⁺ conductance in guinea-pig hippocampal cells maintained *in vitro*, 833, **84**
 —, Characterization of pre- and postsynaptic actions of (–)-baclofen in guinea-pig hippocampus, 843, **84**
 ISHII, K., TAIRA, N. & YANAGISAWA, T. Differential antagonism by Bay k 8644, a dihydropyridine calcium agonist, of the negative inotropic effects of nifedipine, verapamil, diltiazem and manganese ions in canine ventricular muscle, 577, **84**
 ITO, Y. *see* INOUE, T., 289, **84**
 ITOH, T., KANMURA, Y., KURIYAMA, H. & SASAGURI, T. Nitroglycerine- and isoprenaline-induced vasodilatation: assessment from the actions of cyclic nucleotides, 393, **84**

J

- JANSEN, J.D. *see* BOJANIC, D., 131, **84**
 JARVIS, J. *see* CAROLDI, S., 347, **84**
 JOHNS, E.J. The influence of diltiazem and nifedipine on renal function in the rat, 707, **84**
 —, *see* HESSE, I.F.A., 715, **84**
 JOHNSON, B.I. *see* FERGUSON, D.R., 879, **84**
 JOHNSON, P. *see* GREEN, A.R., 337, **84**
 JONES, R.L. *see* ARMSTRONG, R.A., 595, **84**
 JONZON, B. *see* DUNWIDDIE, T.V., 625, **84**
 JUNG, B. *see* FUDER, H., 477, **84**

K

- KAM, S.-T. *see* ANDERSON, W.G., 793, **84**
 KANE, K.A., MORCILLO-SANCHEZ, E.J., PARRATT, J.R., RODGER, I.W. & SHAHID, M. The relationship between coronary artery occlusion-induced arrhythmias and myocardial cyclic nucleotide levels in the anaesthetized rat, 139, **84**

- KANMURA, Y. *see* ITOH, T., 393, **84**
 KATO, E., KOKETSU, K., KUBA, K. & KUMAMOTO, E. The mechanism of the inhibitory action of adrenaline on transmitter release in bullfrog sympathetic ganglia: independence of cyclic AMP and calcium ions, 435, **84**
 KAUMANN, A.J. *see* FERRY, D.R., 811, **84**
 KAWANISHI, M. *see* BABA, K., 203, **84**
 KIRPEKAR, S.M. *see* CEÑA, A.G., 299, **84**
 KITCHEN, I. *see* GREEN, P.G., 657, **84**
 KOKETSU, K. *see* AKASU, T., 525, **84**
 —, *see* KATO, E., 435, **84**
 KONISHI, S. *see* AKAGI, H., 663, **84**
 KOSTERLITZ, H.W. *see* COTTON, R., 927, **84**
 KUBA, K. *see* KATO, E., 435, **84**
 KUHN, D.M., WOLF, W.A. & YODIM, M.B.H. 5-Hydroxytryptamine release *in vivo* from a cytoplasmic pool: studies on the 5-HT behavioural syndrome in reserpinized rats, 121, **84**
 KULLAK, A. *see* HUIDOBRO-TORO, J., 897, **84**
 KUMAMOTO, E. *see* KATO, E., 435, **84**
 KURIYAMA, H. *see* ITOH, T., 393, **84**

L

- LAEKEMAN, G.M. *see* BULT, H., 329, **84**
 LAM, F.Y. *see* BOWMAN, W.C., 259, **84**
 LAMB, J.F. *see* GRIFFITHS, N.M., 157, **84**
 LEFER, A.M. *see* DARIUS, H., 735, **84**
 LEFF, P. *see* BLACK, J.W., 561, **84**
 —, *see* BLACK, J.W., 779, **84**
 LEFORT, J. *see* DESOULI, A., 801, **84**
 LEPRÄIN, I. *see* DARIUS, H., 735, **84**
 LEWIS, G.P. *see* EMMS, H., 243, **84**
 LOIACONO, R.E., RAND, M.J. & STORY, D.F. Interaction between the inhibitory action of acetylcholine and the α -adrenoceptor autoinhibitory feedback system on release of [3 H]-noradrenaline from rat atria and rabbit ear artery, 697, **84**
 LUZZI, S. *see* GIOTTI, A., 883, **84**

M

- McGRATH, J.C., MacLENNAN, S.J. & STUART-SMITH, K. Characterization of the receptor mediating contraction of human umbilical artery by 5-hydroxytryptamine, 199, **84**
 MacLENNAN, S.J. *see* McGRATH, J.C., 199, **84**
 MAEDA, T. *see* HAYASHI, E., 765, **84**
 MAGEE, D.F., NARUSE, S. & PAP, A. Comparison of the action of cholinomimetics and pentagastrin on gastric secretion in dogs, 347, **84**
 MAGGI, C.A. *see* GIOTTI, A., 883, **84**
 MAGOS, L. *see* CAROLDI, S., 347, **84**
 MAGUIRE, M.H. *see* HOSOKAWA, T., 237, **84**
 MALLARKEY, G. & SMITH, G.M. A comparative study of the involvement of the prostaglandin H_2 /thromboxane A_2 pathway in intravascular platelet aggregation in guinea-pigs and rats, 425, **84**
 MARCEAU, F. *see* HUGLI, T.E., 725, **84**
 MARISCAL, S. *see* ACEVES, J., 417, **84**
 MARQUIS, V.O. *see* COLE, O.F., 587, **84**

- MARTIN, R.J. γ -Aminobutyric acid- and piperazine-activated single-channel from *Ascaris suum* body muscle, 445, **84**
 MATSUO, T. *see* INOUE, M., 833, **84**
 —, *see* INOUE, M., 843, **84**
 MELDRUM, L.A. *see* BURNSTOCK, G., 431, **84**
 MILLER, J.A. & RICHTER, J.A. Effects of anticonvulsants *in vivo* on high affinity choline uptake *in vitro* in mouse hippocampal synaptosomes, 19, **84**
 MISRA, A.L., PONTANI, R.B. & VADLAMANI, L. Potentiation of morphine analgesia by caffeine, 789, **84**
 MITCHELL, W. *see* BROWN, F., 853, **84**
 MIYAHARA, H. *see* FUJII, K., 675, **84**
 MOHR, K. *see* HERZIG, S., 685, **84**
 MORCILLO-SANCHEZ, E.J. *see* KANE, K.A., 139, **84**
 MOREAN, D. *see* BRALET, J., 9, **84**
 MORRISON, K.E. *see* ACEVES, J., 417, **84**
 MOUNTFORD, J.A. *see* JOHNSON, P., 337, **84**

N

- NAHORSKI, S.R. *see* BOJANIC, D., 131, **84**
 NARUSE, S. *see* MAGEE, D.F., 347, **84**
 NIMGOANKAR, V.L. *see* JOHNSON, P., 337, **84**
 NORTHOVER, B.J. A comparison of the effects of bethanidine, mebentine, and quinidine on the electrical activity of rat hearts *in vivo* and *in vitro*, 755, **84**

O

- O'DONNELL, S.R. & WANSTALL, J.C. Responses to the β_2 -selective agonist procaterol for vascular and atrial preparations with different functional β -adrenoceptor populations, 227, **84**
 OGATA, N. *see* INOUE, M., 833, **84**
 OGATA, N. *see* INOUE, M., 843, **84**
 OPIE, L.H. *see* BRALET, J., 9, **84**
 OTSUKA, M. *see* AKAGI, H., 663, **84**

P

- PACIOREK, P.M., TODD, M.H. & WATERFALL, J.F. The effects of meptazinol in comparison with pentazocine, morphine and naloxone in a rat model of anaphylactic shock, 469, **84**
 PAP, A. *see* MAGEE, D.F., 347, **84**
 PARRATT, J.R. *see* KANE, K.A., 139, **84**
 PATERSON, S.J. *see* COTTON, R., 927, **84**
 PATON, D.M. *see* BROADLEY, K.J., 407, **84**
 PEESAPATI, V. *see* ARMSTRONG, R.A., 595, **84**
 PENNEFATHER, J.N. *see* HARTLEY, M.L., 463, **84**
 PLETSCHER, A. *see* ERNE, P., 545, **84**
 POLLARD, S.L. *see* HARRIS, J.B., 6, **84**
 PONTANI, R.B. *see* MISRA, A.L., 789, **84**
 POSTIUS, S., RUOFF, H.-J. & SZELENYI, I. Prostaglandin formation by isolated gastric parietal and nonparietal cells of the rat, 871, **84**
 PRICE, N. *see* FERGUSON, D.R., 879, **84**

R

- RAMPART, M. *see* BULT, H., 317, **84**
 —, *see* BULT, H., 329, **84**
 RANCE, M.J. *see* COTTON, R., 927, **84**
 RAND, M.J. *see* LOIACONO, R.E., 697, **84**
 RANDALL, K. *see* BROWN, F., 853, **84**
 RIBEIRO, J.A. & SEBASTIÃO, A.M. On the type of receptor involved in the inhibitory action of adenosine at the neuromuscular junction, 897, **84**
 RIBEIRO, J.M.C. *see* CARLINI, C.R., 551, **84**
 RICHTER, J.A. *see* MILLER, J.A., 19, **84**
 ROCHETTE, L. *see* BRALET, J., 9, **84**
 RODGER, I.W. *see* BOWMAN, W.C., 259, **84**
 —, *see* KANE, K.A., 139, **84**
 ROESLER, J. *see* DAMERAU, B., 47, **84**
 —, *see* DAMERAU, B., 55, **84**
 —, *see* DAMERAU, B., 63, **84**
 ROULER, M.J. *see* GARNIER, D., 517, **84**
 RUOFF, H.-J. *see* POSTIUS, S., 871, **84**

S

- SANDBERG, G. *see* DUNWIDDIE, T.V., 625, **84**
 SASAGURI, T. *see* ITOH, T., 393, **84**
 SATAKE, T. *see* BABA, K., 203, **84**
 SAXENA, P.R. & VERDOUW, P.D. 5-Carboxamide tryptamine, a compound with high affinity for 5-hydroxytryptamine₁ binding sites, dilates arterioles and constricts arteriovenous anastomoses, 533, **84**
 SCHWARTZ, J. & VELLY, J. Interference of sodium with [³H]-nitrendipine binding to cardiac membranes, 511, **84**
 SCOTT, A.K. *see* BRECKENRIDGE, A.M., 81, **84**
 SEBASTIÃO, A.M. *see* RIBEIRO, J.A., 897, **84**
 SHAHID, M. *see* BOWMAN, W.C., 259, **84**
 SHANKLEY, N.P. *see* BLACK, J.W., 561, **84**
 —, *see* BLACK, J.W., 779, **84**
 SHINOZUKA, K. *see* HAYASHI, E., 765, **84**
 SIMMONDS, M.A. *see* HARRISON, N.L., 381, **84**
 SIMMONDS, M.A. & TURNER, J.P. Antagonism of inhibitory amino acids by the steroid derivative RU5135, 631, **84**
 SMALL, R.C. *see* AHMED, F., 861, **84**
 SMITH, G.M. *see* MALLARKEY, G., 425, **84**
 SMITH, J.B. *see* DARIUS, H., 735, **84**
 SMITH, P.A. & ZIDICHOUSKI, J.A. Muscarine and luteinizing hormone releasing hormone attenuate adrenaline-induced hyperpolarization in amphibian sympathetic ganglia, 221, **84**
 SPAGNESI, S. *see* GIOTTI, A., 883, **84**
 STARKE, K. *see* HEEPE, P., 147, **84**
 STONE, T.W. The activity of phosphorothioate analogues of ATP in various smooth muscle systems, 165, **84**
 STORY, D.F. *see* LOIACONO, R.E., 697, **84**
 STREET, J.A. *see* BRIGHT, P.S., 499, **84**
 STUART-SMITH, K. *see* McGRATH, J.C., 199, **84**
 SUZUKI, H. *see* FUJII, K., 675, **84**
 —, *see* FUJIOKA, M., 489, **84**
 SZELÉNYI, I. *see* POSTIUS, S., 871, **84**

T

- TAIRA, N. *see* ISHII, K., 577, **84**
 TAKAI, A. *see* ASHOORI, F., 175, **84**
 TAL, A. *see* FINBERG, J.P.M., 609, **84**
 TODD, M.H. *see* PACIOREK, P.M., 469, **84**
 TOMITA, T. *see* ASHOORI, F., 175, **84**
 —, *see* BABA, K., 203, **84**
 TRAYNOR, J.R. *see* COTTON, R., 927, **84**
 TRIGGLE, C. *see* BIEGER, D., 93, **84**
 TUFFIN, D.P. *see* BANERJEE, A.K., 71, **84**
 TURNER, J.P. *see* SIMMONDS, M.A., 631, **84**

V

- VACCARI, A. Effects of neonatal antithyroid treatment on brain [³H]-imipramine binding sites, 773, **84**
 VADLAMANI, N.L. *see* MISRA, A.L., 789, **84**
 VAUGHAN WILLIAMS, E.M. *see* DUKES, I.D., 365, **84**
 VARGAFTIG, B.B. *see* DESOULI, A., 801, **84**
 VERDOUW, P.D. *see* SAXENA, P.R., 533, **84**
 VOGT, W. *see* DAMERAU, B., 47, **84**
 VOGT, W. *see* DAMERAU, B., 55, **84**
 VOGT, W. *see* DAMERAU, B., 63, **84**

W

- WALKER, J.L. *see* BANERJEE, A.K., 71, **84**
 WALKER, R.J. *see* BOLD, J.M., 689, **84**
 WAMBEBE, C. Influence of some agents that affect 5-hydroxytryptamine metabolism and receptors on nitrazepam-induced sleep in mice, 185, **84**
 WANSTALL, J.C. *see* O'DONNELL, S.R., 227, **84**
 WATERFALL, J.F. *see* PACIOREK, P.M., 469, **84**
 WEBB, J.G. *see* BRIGHT, P.S., 499, **84**
 WHITE, T.D. *see* AL-HUMAYYD, M., 27, **84**
 WHITING, R.L. *see* EGLEN, R.M., 3, **84**
 WILL, S.G. *see* ARMSTRONG, R.A., 595, **84**
 WILLIAMS, R.H. *see* BRADLEY, P.B., 919, **84**
 WILLIAMSON, I.H.M. *see* BAKER, J.R.J., 107, **84**
 WILSON, N.H. *see* ARMSTRONG, R.A., 595, **84**
 WOLF, W.A. *see* KUHN, D.M., 121, **84**
 WOOD, J. *see* BLACK, J.W., 561, **84**

Y

- YANAGISAWA, M. *see* AKAGI, H., 663, **84**
 YANAGISAWA, T. *see* ISHII, K., 577, **84**
 YODIM, M.B.H. *see* KUHN, D.M., 121, **84**
 YOUNG, J.M. *see* ACEVES, J., 417, **84**

Z

- ZAAGSMA, J. *see* BOJANIC, D., 131, **84**
 ZIDICHOUSKI, J.A. *see* SMITH, P.A., 221, **84**
 ZILLETI, L. *see* GIOTTI, A., 883, **84**

SUBJECT INDEX

A

- ACC-7513**, pharmacological activity in tissue from different species, 793, **84**
- Accommodation responses**, effect of agonists on subsensitized monkey eye, 193, **84**
- Acetylcholine**, action on frog neuromuscular junction, effect of succinyl derivatives of N-tris (hydroxymethyl)-methyl-2-aminoethane sulphonic acid, 275, **84**
- , effect of acetylcholinesterase inhibitors on release in rat, 637, **84**
- , effect on [³H]-NA release from rat atria and rabbit ear artery, 697, **84**
- , induction of contractions of guinea-pig lung parenchyma strips, 801, **84**
- , induction of contractions of smooth muscle in rat fundus, 897, **84**
- , induction of gastric ulceration, effect of GABA in rats, 618, **84**
- , induction of spasm in guinea-pig isolated trachealis, effect of nifedipine, 861, **84**
- , mechanism of adrenaline inhibition of release in bullfrog sympathetic ganglia, 435, **84**
- Acetylcholine antagonists**, effect on trigeminal antidromic vasodilatation and plasma extravasation in the rat, 637, **84**
- Acetylcholine receptor, muscarinic** *see* Muscarinic acetylcholine receptor
- Acetylcholine receptor, nicotinic** *see* Nicotinic acetylcholine receptor
- Acetylcholinesterase inhibitors**, effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
- Adenosine**, actions and interactions with diprydamole on contractile response of guinea-pig ileum to electrical field stimulation, 765, **84**
- , and its analogues, effect on evoked endplate potentials and twitch tension in frog sartorius muscle, 911, **84**
- , effect on pig renal artery, 879, **84**
- , hypothermia-induced supersensitivity to responses mediated via A₁ receptors, 407, **84**
- Adenosine diphosphate**, induction of aggregation in human platelets, effect of prostanoid analogues, 595, **84**
- Adenosine monophosphate**, effect on action of canatoxin on platelets in various species, 551, **84**
- Adenosine 3',5'-monophosphate**, cyclic, effect of EMD 28422 on accumulation in rat hippocampal slices, 625, **84**
- , cyclic, effect of GABA and baclofen on basal and stimulated levels in rat cerebral cortical slices, 249, **84**
- , cyclic, effect of isoprenaline, terbutaline and forskolin on concentrations in guinea-pig isolated soleus muscle, 259, **84**
- , cyclic, effect of prostanoid analogues on levels in human platelets, 595, **84**
- , cyclic, in relation to nitroglycerine- and isoprenaline-induced vasodilatation, 393, **84**
- , cyclic, relationship between levels and coronary artery occlusion-induced arrhythmias in anaesthetized rat, 139, **84**
- , cyclic, role of β -adrenoceptor in accumulation in rat adipocyte, 131, **84**
- , cyclic, role in fast deactivation of guinea-pig isolated ileum to C5a_{desArg}, 63, **84**
- , dibutyl cyclic in relation to nitroglycerine- and isoprenaline-induced vasodilatation, 393, **84**
- lack of involvement in mechanism of inhibitory action of adrenaline on transmitter release in bullfrog sympathetic ganglia, 435, **84**
- Adenosine receptors**, activity of EMD 28422 in rats, 625, **84**
- , identification of subtype at neuromuscular junction in innervated frog sartorius muscles, 911, **84**
- , mediation of responses to adenosine, effect of hypothermia, 407, **84**
- Adenosine 5'-triphosphate**, and its analogues, effects on guinea-pig vas deferens, 431, **84**
- , effect of phosphorothioate analogues in various smooth muscle systems, 165, **84**
- , effect on sensitivity of the nicotinic acetylcholine receptor in bullfrog sympathetic ganglion cell, 525, **84**
- , release by 5-HT from myenteric varicosities of guinea-pig ileum, 27, **84**
- Adenosine triphosphatase**, Na/K-, estimation of transport activity in rat and guinea-pig cardiac tissue, 685, **84**
- Adenylate cyclase**, examination of activity in defining characteristics of β -adrenoceptors in rat epididymal adipocytes, 131, **84**
- , modulation by GABA_B receptors of activity in rat brain slices, 249, **84**
- Adipocytes**, atypical characteristics of β -adrenoceptor mediating cyclic AMP generation in the rat, 131, **84**
- Adrenal medulla**, effect of carbon disulphide on response to hypothermia and hypoglycaemia in rat, 357, **84**
- Adrenaline**, induction of aggregation in human platelets, effect of prostanoid analogues, 595, **84**
- , induction of gastric ulceration, effect of GABA in rats, 618, **84**
- , induction of hyperpolarization in amphibian sympathetic ganglia, attenuation by muscarine and luteinizing hormone releasing hormone, 221, **84**
- , mechanism of inhibitory action on transmitter release in bullfrog sympathetic ganglia, 435, **84**
- Adrenergic transmission**, pharmacological analysis of, in bat gastrointestinal tract, 587, **84**
- Adrenoceptor agonists**, effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
- β -Adrenoceptor agonists**, pharmacological analysis of, in guinea-pig isolated right atrium, 779, **84**
- α -Adrenoceptor antagonists**, effects on central decelerator

- mechanisms in the rabbit, 645, **84**
- , effect on reperfusion arrhythmias and NA release in perfused rat heart, 9, **84**
- β -Adrenoceptor antagonists**, accumulation at nerve endings for release by membrane depolarization, 499, **84**
- , effect on response of cat airways to histamine *in vivo* and *in vitro*, 309, **84**
 - , irreversible, effect of preincubation with cholera toxin in guinea-pig isolated right atrium, 779, **84**
- Adrenoceptors**, presynaptic, reduction of sensitivity following chronic antidepressant treatment in peripheral organs, 609, **84**
- α -Adrenoceptors**, blockade by amosulalol in guinea-pig vascular smooth muscle, 489, **84**
- , blocking activity of ACC-7513 in various species, 793, **84**
 - , interactions with actions of ACh on [3 H]-NA release from rat atria and rabbit ear artery, 697, **84**
 - , lack in human umbilical artery, 199, **84**
 - , mediation of excitation-contraction coupling in smooth muscle cells of rat saphenous vein, 265, **84**
 - , postjunctional, evidence for neuro-effector transmission in human saphenous vein, 573, **84**
 - , prejunctional, interaction with muscarinic cholinergic receptors of rat atria and rabbit ear artery, 697, **84**
 - , presynaptic mediation of autoinhibition of NA release in rabbit cerebral cortex slices, 147, **84**
 - , role in the regulation of renal tubular sodium reabsorption and renin secretion in rabbit, 715, **84**
- β -Adrenoceptors**, blockade by amosulalol in guinea-pig vascular smooth muscle, 489, **84**
- , detection of subtypes in vascular and atrial preparations using procaterol in different species, 227, **84**
 - , effect of anticonvulsant drugs on numbers in comparison with electroconvulsive shock in mice, 337, **84**
 - , homogeneity of population in rat costo-uterine muscle, 463, **84**
 - , induction of changes in contractility of skeletal muscle in guinea-pigs, 259, **84**
 - , mediation of cyclic AMP generation and lipolysis in rat adipocytes, 131, **84**
- β_1 -Adrenoceptors**, blockade of effects by bevantolol in rats, 365, **84**
- Age**, effect on action of neonatal antithyroid treatment on rat brain [3 H]-imipramine binding sites, 773, **84**
- Airways**, cat, responses *in vivo* and *in vitro* to histamine, 309, **84**
- Alfentanil**, effect of di-isopropylfluorophosphate on plasma:brain ratio and antinociception, 657, **84**
- Amidephrine**, effect on human umbilical artery, 199, **84**
- Amino acid receptors**, sites in rat cerebral cortex slices, 381, **84**
- 2-Amino 7-phosphonoheptanoate**, effect on the responses of rat cerebral cortex to *N*-methyl-D-aspartate, 381, **84**
- (-)-2-Amino 5-phosphonovalerate**, effect on the responses of rat cerebral cortex to *N*-methyl-D-aspartate, 381, **84**
- γ -Aminobutyric acid**, activation of single-channel currents from *Ascaris suum* body muscle, 445, **84**
- , comparison of effects with (-)-baclofen on membrane potential levels in guinea-pig hippocampal slices *in vitro*, 833, **84**
 - , effect on basal and stimulated levels of cyclic AMP in rat cerebral cortical slices, 249, **84**
 - , effect on guinea-pig distal colon, 883, **84**
- γ -Aminobutyric acid**, effect on stress-induced gastric ulceration in rats, 618, **84**
- γ -Aminobutyric acid mechanisms**, mediation of effects of anticonvulsants on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- γ -Aminobutyric acid receptors**, antagonism by RU5135 in rats, 631, **84**
- γ -Aminobutyric acid_B receptors**, modulation of adenylate cyclase activity in rat brain slices, 249, **84**
- , modulation of cholinergic tone in guinea-pig distal colon, 883, **84**
- N-(6-aminohexyl)-5-chloro-1-naphthalene sulphonamide**, effect on Ca-induced contraction and oxytocin response in Ca-free medium in non-pregnant rat myometrium, 175, **84**
- 4-Aminopyridine**, antagonism of adrenaline-induced hyperpolarization in amphibian sympathetic ganglia, 221, **84**
- , effect on action of baclofen in guinea-pig hippocampal cells, 833, **84**
 - , release of NA from cat splenic slices, 299, **84**
 - , reversal of paralysis in nerve muscle preparations from mice with motor endplate disease, 6, **84**
- [14 C]-aminopyridine**, histamine-stimulated uptake in isolated gastric parietal and nonparietal cells of rat, 871, **84**
- 5-Aminovaleric acid**, antagonism of effects of GABA and (-)-baclofen in guinea-pig distal colon, 883, **84**
- Amosulalol**, effects on electrical responses of guinea-pig vascular smooth muscle to adrenoceptor activation, 489, **84**
- Anaesthetics**, effects on neurogenic responses in rats, 637, **84**
- Analgesia**, morphine-induced, effect of caffeine in rats, 789, **84**
- Anaphylactic shock**, comparison of effects of meptazinol, pentazocine, morphine and naloxone in rats, 469, **84**
- , histamine and leukotriene-independent in guinea-pig, 801, **84**
- Anaphylatoxins**, effects on rabbit blood vessels, 725, **84**
- Anaphylaxis**, intestinal, effect of bile salts in guinea-pig, 653, **84**
- Angiotensin**, effect on pig renal artery, 879, **84**
- Angiotensin I**, conversion to angiotensin II in human foetoplacental vascular bed, 237, **84**
- Angiotensin II**, effect on pig renal artery, 879, **84**
- , pressor effects on human foetoplacental vasculature, 237, **84**
- Angiotensin converting enzyme**, conversion of angiotensin I to angiotensin II in human foetoplacental vasculature, 237, **84**
- Angiotensin II receptors**, effect of desensitization on responses of pig renal artery to transmural stimulation, 879, **84**
- Anti-anginal drugs**, vasoactivity on guinea-pig isolated ductus arteriosus, 517, **84**
- Anticholinesterases**, effect of di-isopropylfluorophosphate on plasma:brain ratio and antinociception, 657, **84**
- Anticoagulants**, pharmacokinetics and pharmacodynamics in rabbits, 81, **84**
- Anticonvulsants**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- Antidepressant drugs**, comparison of effects on monoamine-mediated behaviours with effects of electroconvulsive shocks, 337, **84**

- Antidromic vasodilatation**, effect of acetylcholine antagonists and cholinesterase inhibitors in rats, 637, **84**
- Antinociception**, opioid-induced, effects of di-isopropyl-fluorophosphate in mice, 657, **84**
- Aorta**, rabbit, determination of muscarinic receptor subtype mediating vasodilatation, 3, **84**
- , rabbit, effect of M&B 28, 767, 71, **84**
- , rat, detection of β -adrenoceptor subtypes using procaterol, 227, **84**
- Apamin**, effect on responses of guinea-pig taenia coli to adenine dinucleotides, 825, **84**
- L-Apomorphine**, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**
- Arachidonic acid**, effect on prostaglandin formation in gastric parietal and nonparietal cells of rat, 871, **84**
- Arrhythmias**, coronary artery occlusion-induced, in relation to myocardial cyclic nucleotide levels in anaesthetized rat, 139, **84**
- , reperfusion, effect of α -adrenoceptor antagonists in perfused rat hearts, 9, **84**
- Arteriovenous anastomoses**, effect of 5-carboxamide tryptamine in pigs, 533, **84**
- Ascaris suum*, GABA- and piperazine-activated single-channel currents in body muscle, 445, **84**
- Aspartic acid**, effect on stress-induced gastric ulceration in rats, 618, **84**
- Atenolol**, depolarization-induced release from rat cortical synaptosomes, 499, **84**
- , effects on inhibitory responses to sympathomimetic amines of rat costo-uterine muscle, 463, **84**
- Atria**, rat, hypothermia-induced supersensitivity to adenosine for responses mediated via A_1 receptors, 407, **84**
- Atropine**, effect on antidromic vasodilatation and plasma extravasation in rats, 637, **84**
- , effect on electrically-induced contractions in guinea-pig ileum, 765, **84**
- , effect on responses of bat and guinea-pig gastrointestinal smooth muscle to periarterial and transmural nerve stimulation, 587, **84**
- , effect on responses of guinea-pig distal colon to GABA, 883, **84**
- Autonomic cholinergic nerves**, modulatory role for GABA in guinea-pig distal colon, 883, **84**
- Autonomic ganglia**, amphibian, neurotransmitter interactions, 221, **84**
- Autoradiography**, study of the distribution of [3 H]- and [14 C]-hydraalazine in the rat, 107, **84**

B

- B-HT 920**, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**
- , induction of depolarization and contraction in rat saphenous vein, 265, **84**
- Baclofen**, effect on basal and stimulated cyclic AMP levels in rat cerebral cortical slices, 249, **84**
- (-)-**Baclofen**, characterization of pre- and postsynaptic actions in guinea-pig hippocampus *in vitro* 843, **84**
- , effect on guinea-pig distal colon, 883, **84**
- , effect on voltage-dependent and 4-aminopyridine sensitive K^+ conductance in guinea-pig hippocampal pyramidal cells *in vitro*, 833, **84**

- Barbitone**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- Barbituric acid**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- Barium**, induction of contractions in guinea-pig tracheal muscle, effect of verapamil, 203, **84**
- Baroreceptor reflex**, effects of α -adrenoceptor antagonists in the rabbit, 645, **84**
- Bay k 8644**, effect on ionotropic effects of calcium antagonists or manganese ions in dog ventricular muscle, 577, **84**
- Benzodiazepine binding site**, low affinity binding of nicotinamide and inosine in rat cerebellum, 689, **84**
- Bethanecol**, effect on accommodation response in subsensitized eyes of monkeys, 193, **84**
- Bethanidine**, effect on electrical activity of rat hearts *in vivo* and *in vitro*, 755, **84**
- Bevantolol**, cardiovascular effects in rats, 365, **84**
- Bicuculline**, effect on electrical responses to (-)-baclofen in guinea-pig hippocampal slices, 843, **84**
- , effect on nicotinamide and inosine inhibition of Purkinje cell firing in rat cerebellum, 689, **84**
- , effect on responses of guinea-pig distal colon to GABA and (-)-baclofen, 883, **84**
- , reversal of anti-ulcerogenic effects of GABA or sodium valproate in rats, 618, **84**
- Bile salts**, effect of sensitivity to β -lactoglobulin of guinea-pig colonic epithelium, 653, **84**
- Blood pressure**, arterial, 5-carboxamide tryptamine-induced decrease in anaesthetized pigs, 533, **84**
- , arterial, comparison of effects of meptazinol, pentazocine, morphine and naloxone in rats, 469, **84**
- , arterial, effect of α -adrenoceptor antagonists in the rabbit, 645, **84**
- , effects of ACC-7513 in hypertensive rats, 793, **84**
- , effect of collagen, inhibition by prostacyclin interactions with HL 725 in rabbits, 735, **84**
- , effects of M&B 28,767 in rat and rabbit models, 71, **84**
- , effects of methylprednisolone, F(ab')₂ fragments, and rosmarinic acid in rabbit, 317, **84**
- , effects of quazodine and isobutyl methylxanthine in rats, 139, **84**
- , renal and systemic, effects of nifedipine and diltiazem in rats, 707, **84**
- Blood vessels**, isolated rabbit, effects of C5a anaphylatoxin and its relationship to cyclo-oxygenase metabolites, 725, **84**
- Body temperature**, effect of EMD 28422 in rats, 625, **84**
- , quipazine-induced changes, effect of 5-HT receptor agonists and antagonists in rats, 743, **84**
- Bradycardia**, induction by bevantolol in rat, 365, **84**
- , induction by hypothalamic stimulation, effects of α -adrenoceptor antagonists in the rabbit, 645, **84**
- Brain**, guinea-pig and rat, binding of doxepin to histamine H_1 -receptors, 417, **84**
- Bretylium**, effect on responses of bat and guinea-pig gastrointestinal tract to periarterial and transmural nerve stimulation, 587, **84**
- Brodifacoum**, pharmacokinetic and pharmacodynamics in rabbits, 81, **84**
- p-Bromophenacyl bromide**, effect on contractions induced in guinea-pig lung strips by ovalbumin and Paf-acether, 801, **84**

- Bronchoconstriction**, histamine-induced, mediation by histamine H_1 receptor in cat airways, 309, **84**
 —, induction by ovalbumin in guinea-pig, 801, **84**
BW755c, effect on contractions in guinea-pig lung strip induced by ovalbumin and Paf-acether, 801, **84**
 —, inhibition of canatoxin-induced platelet aggregation in various species, 551, **84**

C

- C3a**, induction of fast deactivation of guinea-pig isolated ileum to spasmogenic activity, 63, **84**
C5a_{desArg}, fast deactivation of guinea-pig ileum isolated to spasmogenic action, 63, **84**
 —, pharmacological characterization of slow component of deactivation of guinea-pig isolated ileum to the spasmogenic action, 55, **84**
 —, spasmogenic action, loss and recovery of sensitivity of guinea-pig isolated ileum, 47, **84**
C5a anaphylatoxin, effects in rabbit vascular strips and its relationship to cyclo-oxygenase metabolites, 725, **84**
Caesium ions, effect on release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**
Caffeine, effect on action of canatoxin on platelets in various species, 551, **84**
 —, effect on noradrenergic transmission in guinea-pig mesenteric artery, 675, **84**
Caffeine, effect on response of non-pregnant rat myometrium to oxytocin in Ca-free solution, 175, **84**
 —, potentiation of morphine analgesia in rats, 789, **84**
Calcium, effect on oxytocin response of non-pregnant rat myometrium, 175, **84**
 —, induction of contractions in guinea-pig tracheal muscle, effect of verapamil, 203, **84**
 —, lack of involvement in mechanism of inhibitory action of adrenaline on transmitter release in bullfrog sympathetic ganglia, 435, **84**
Calcium channel blockers, influence on renal function in the rat, 707, **84**
Calcium channels, binding of verapamil enantiomers in human heart, 811, **84**
Calcium ions, effect of high concentrations on inotropic effects induced by calcium antagonists or manganese ions in dog ventricular muscle, 577, **84**
 —, effect on release of NA from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299, **84**
 —, inhibition of influx by nifedipine in guinea-pig isolated trachealis, 861, **84**
 —, rapid intracellular release in human platelets by stimulation of 5-HT₂ receptors, 545, **84**
Calmodulin antagonists, effect on response of non-pregnant rat myometrium to oxytocin in Ca-free solution, 175, **84**
Canatoxin, induction of platelet release reaction and aggregation, 551, **84**
Canavalia ensiformis, source of canatoxin, for studies of platelet release reaction and aggregation in various species, 551, **84**
Capsaicin, effects in isolated spinal cord of neonatal rat, 663, **84**
Captopril, effect on pressor responses of human foetoplacental vasculature to angiotensin I and II, 237, **84**
Carbachol, effect on accommodation response in sub-sensitized eyes of monkey, 193, **84**
 —, effect on pig renal artery, 879, **84**
 —, effect on the action of verapamil on contractions induced by divalent cations in guinea-pig tracheal muscle, 203, **84**
 —, induction of cholinergic responses in rat uterus, effect of ACC-7513, 789, **84**
 —, induction of contractions in guinea-pig taenia coli, effect of adenine dinucleotides, 825, **84**
 —, induction of effects in bullfrog sympathetic ganglia, effects of ATP and related compounds, 525, **84**
Carbamazepine, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
 —, effect on monoamine-mediated behaviour in mice, 337, **84**
Carbon disulphide, effect on response of rat adrenal medulla to hypothermia and hypoglycaemia, 357, **84**
5-Carboxamide tryptamine, effect on cardiac output and common carotid blood flow in pigs, 533, **84**
Cardiac muscle, effect of ACC-7513 in various species, 793, **84**
Cardiac potential, effect of bevantolol in rats, 365, **84**
Cardiac ventricle, guinea-pig, interference of sodium with [³H]-nitrendipine binding, 511, **84**
Cardiodepression, induction by verapamil enantiomers in human heart, 811, **84**
Carotid blood flow, effect of 5-carboxamide tryptamine in pigs, 533, **84**
Catecholamines, effect of hypothermia and hypoglycaemia in rat adrenal medulla in the presence of carbon disulphide, 357, **84**
Caudal artery, rat, 5-hydroxytryptamine receptor mediated tryptamine-induced vasoconstriction, 919, **84**
Cerebral cortex, guinea-pig, effect of sodium on [³H]-nitrendipine binding, 511, **84**
 —, rat, depolarization-induced release of propranolol and atenolol from synaptosomes, 499, **84**
 —, rat, GABA_A receptor modulation of adenylate cyclase activity, 249, **84**
Cerebral cortex slices, rabbit, α -autoreceptor hypothesis, 147, **84**
Chlordiazepoxide, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
 —, effect on social interaction between male rats, 698, **84**
Chloride ions, effect on release of NA from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299, **84**
2-Chloroadenosine, effect on evoked endplate potentials and twitch tension in innervated frog sartorius muscle, 911, **84**
p-Chloroamphetamine, induction of 5-HT behavioural syndrome in rats, 121, **84**
N⁶-[2-(4-chlorophenyl)-bicyclo-2.2.2-octyl-(3)]-adenosine *see* EMD 28422
p-Chlorophenylalanine, influence on nitrazepam-induced sleep in mice, 185, **84**
 —, prevention of p-chloro-amphetamine induced behavioural syndrome in rats, 121, **84**
Chloroquine, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, **84**
Chlorpromazine, effect on Ca-induced contraction and oxytocin response in Ca-free medium of non-pregnant rat myometrium, 175, **84**

Cholecystokinin, effect on pig renal artery, 879, 84

Cholera toxin, effect on responses of guinea-pig isolated right atrium to isoprenaline and dichloroisoprenaline, 779, 84

Choline, effects of anticonvulsants on high affinity uptake in mouse hippocampal synaptosomes, 19, 84

Cholinergic neurones, modulation by anticonvulsants, 19, 84

Cholinergic tone, modulatory activity of GABA_B receptors in guinea-pig distal colon, 883, 84

Cholinergic transmission, adenosine-induced inhibition, in guinea-pig ileum, effect of hypothermia, 407, 84

—, pharmacological analysis in bat gastrointestinal tract, 587, 84

Cholinesterase inhibitors, effect on trigeminal antidromic vasodilatation and plasma extravasation in the rat, 637, 84

Cholinomimetics, effects on gastric secretion in dogs, 347, 84

Ciliary muscle, monkey, muscarinic subsensitivity without receptor change, 193, 84

Clonazepam, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, 84

Clonidine, effect on [³H]-NA release in rat atria and rabbit ear artery, 697, 84

—, effect on rat vas deferens after acute or chronic pretreatment with tricyclic or MAO inhibitor antidepressants, 609, 84

—, induction of depolarization and contraction in rat saphenous vein, 265, 84

Clorgyline, effect of acute or chronic pretreatment on responses of rat vas deferens to clonidine or NA, 609, 84

Cobra venom factor, effect on complement activation in rabbit, 317, 84

Cocaine, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84

Colchicine, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, 84

Cold, with immobilization, effects on adrenal catecholamines and dopamine-β-hydroxylase in carbon disulphide treated rats, 357, 84

Collagen, effect on platelet aggregation and arterial blood pressure in rabbits, effect of prostacyclin and HL 725 interactions, 735, 84

—, induction of intravascular platelet aggregation in guinea-pigs and rats, role of prostaglandin H₂/thromboxane A₂ pathway, 425, 84

Colonic epithelium, guinea-pig, changed sensitivity to β-lactoglobulin after treatment with bile salts, 653, 84

Complement activation, effect on prostanoid formation in rabbit, 329, 84

—, role in early phase of shock, 317, 84

Complement peptides, fast deactivation of guinea-pig isolated ileum to spasmogenic action, 55, 84

—, pharmacological characterization of slow component of deactivation of guinea-pig isolated ileum to spasmogenic action, 55, 84

—, responses of rabbit blood vessels *in vitro*, 725, 84

—, spasmogenic action, loss and recovery of sensitivity of guinea-pig isolated ileum, 47, 84

Contractile properties, effect of thromboxane A₂, prostacyclin and leukotriene C₄ in dog trachea, 289, 84

Contractile responses, effect of isoprenaline, terbutaline and forskolin in guinea-pig isolated soleus muscle, 259, 84

Contractions, adenosine-induced relaxation in guinea-pig

trachea, effect of hypothermia, 407, 84

Contractions, calcium-, strontium- and barium-induced in guinea-pig tracheal muscle, effect of verapamil, 203, 84

—, electrically-induced in guinea-pig ileum, actions and interactions of adenosine and dipyridamole, 765, 84

—, induction by Paf-acether, ovalbumin or ACh, effect of antilipoxigenase agents in guinea-pig, 801, 84

—, induction by phosphorothioate analogues of ATP in rat and guinea-pig smooth muscle, effect of 8-phenyl-theophylline, 165, 84

—, neurotensin-induced in smooth muscle of rat fundus, 897, 84

Coronary artery, dog, detection of β-adrenoceptor subtypes using procaterol, 227, 84

—, pig, assessment of nitroglycerine and isoprenaline-induced vasodilatation, 393, 84

Coronary artery occlusion, induction of ventricular tachyarrhythmias in rat hearts, effects of bethanidine, meobentine and quinidine, 755, 84

Costo-uterine muscle, rat, homogeneity of β-adrenoceptor population, 463, 84

Creatine phosphokinase creatine phosphate, effect on the action of canatoxin on platelets in various species, 551, 84

Cuneate nucleus, rat antagonism of inhibitory amino acids by the steroid derivative RU5135, 631, 84

E/[A] curve shape, effect on agonist dissociation constant estimation, 561, 84

Cyclic nucleotide phosphodiesterase, effect on inhibition of prostacyclin platelet stimulation, 725, 84

Cyclic nucleotides, actions in relation to nitroglycerine- and isoprenaline-induced vasodilatation, 393, 84

—, relationship between myocardial levels and coronary artery occlusion-induced arrhythmias in rats, 139, 84

Cyclo-oxygenase inhibitors, effect on collagen-induced platelet aggregation in guinea-pigs and rats, 425, 84

Cyclo-oxygenase metabolites, role of release of mechanical responses of rabbit blood vessels, 725, 843

Cycloheximide, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, 84

N₆-cyclohexyladenosine, effect on evoked endplate potentials and twitch tension in innervated sartorius muscle, 911, 84

Cyproheptadine, influence on nitrazepam-induced sleep in mice, 185, 84

Cytochalasin B, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, 84

D

Dazoxiben, effects on collagen-induced platelet aggregation *in vivo* in guinea-pigs and rats, 425, 84

Deactivation, guinea-pig isolated ileum to spasmogenic action of complement peptide C5a_{desArg}, 47, 84

—, pharmacological characterization of slow component of guinea-pig isolated ileum to the spasmogenic action of C5a_{desArg}, 55, 84

Deoxycholate, effect on sensitized guinea-pig colon and short circuit current responses to β-lactoglobulin, 653, 84

Depolarization, acetylcholine-induced, effect of succinyl derivatives of N-tris (hydroxymethyl) methyl-2-aminoethane sulphonic acid in frog neuromuscular junction, 275, 84

- , induction of release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**
- Deprenyl** *see* **Selegiline**
- Desmethylinipramine**, effect of acute or chronic pretreatment on responses of rat vas deferens to clonidine or NA, 609, **84**
- , effect on 5-HT-induced increase of Ca^{2+} in human blood platelets, 545, **84**
- Di-isopropylfluorophosphate**, effect on distribution of opioids in mouse brain, 657, **84**
- Diazepam**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- , effect on monoamine-mediated behaviour in mice, 337, **84**
- Diethylcarbamazepine**, effect on contractions in guinea-pig lung strip induced by ovalbumin and Paf-acether, 801, **84**
- Difenacoum**, pharmacokinetics and pharmacodynamics in rabbits, 81, **84**
- Digoxin**, effect of antibodies on disposition and effect in guinea-pigs and HeLa cells, 157, **84**
- 3,4-Dihydroxyphenylglycol**, effect of caffeine on overflow in guinea-pig mesenteric artery, 675, **84**
- 3,4-Dihydroxyphenylimino-2-imidazolidine**, effect on inhibitory action of ACh on mechanical responses of rat atria and rabbit ear artery, 697, **84**
- Diltiazem**, induction of negative inotropic effects in dog ventricular muscle, effects of Bay k 8644, 577, **84**
- , influence on renal function in the rat, 707, **84**
- N-[2-(2,6-dimethoxyphenoxy) ethyl]-2-(methoxyphenoxy) ethanaminium chloride** *see* **ACC-7513**
- (+)-1-(3,4-Dimethoxyphenylethylamino)-3-(3,4-dihydroxyphenoxy)-2-propranolol** *see* **RO 363**
- Dipyridamole**, actions and interactions with adenosine on contractile response of guinea-pig ileum to electrical field stimulation, 765, **84**
- , effect on responses to adenine dinucleotides in guinea-pig taenia coli, 825, **84**
- Dissociation constants**, estimation for agonists, effect of E/[A] curve shape, 561, **84**
- , methacholine and pilocarpine, at pre- and post-synaptic muscarinic receptors in rat perfused heart, 35, **84**
- Distal colon**, guinea-pig, effect of GABA administration *in vitro* and *in vivo*, 883, **84**
- Diuresis**, induction by diltiazem or nifedipine in rat, 707, **84**
- Dopamine**, effect of agonists on synthesis in rodents correlated with their effects on inhibition of locomotion, 853, **84**
- , effect on ACh release in bullfrog sympathetic ganglia, 435, **84**
- Dopamine agonists**, correlation of effects on locomotion with effects on dopamine synthesis in rodents, 853, **84**
- Dopamine autoreceptors**, role in effects of drugs on locomotion and dopamine synthesis in rodents, 853, **84**
- Dopamine- β -hydroxylase**, effect of hypoglycaemia and hypothermia in rat adrenal medulla in the presence of carbon disulphide, 357, **84**
- Doxepin**, binding to histamine H_1 -receptors in guinea-pig and rat brain, 417, **84**
- Ductus arteriosus**, guinea-pig, vasoactivity of trimetazidine, 517, **84**

E

- EDTA**, effect on action of canatoxin on platelets in various species, 551, **84**
- Eicosatetraynoic acid**, effect on contractions in guinea-pig lung strip induced by ovalbumin and Paf-acether, 801, **84**
- , inhibition of canatoxin-induced platelet aggregation in various species, 551, **84**
- Electrical activity**, effect of nifedipine in guinea-pig isolated trachealis, 861, **84**
- , effects of bethanidine, mebentene and quinidine in rat hearts *in vivo* and *in vitro*, 755, **84**
- Electrical field stimulation**, induction of contractions, actions and interactions of adenosine and dipyridamole in guinea-pig ileum, 765, **84**
- , pharmacological properties of mechanical responses to, of rat oesophageal muscularis mucosae, 93, **84**
- Electrical responses**, guinea-pig vascular smooth muscle to adrenoceptor activation, effects of amosulalol, 489, **84**
- Electroconvulsive shock**, comparison of effects with anticonvulsants on monoamine-mediated behaviours in mice, 337, **84**
- Electron microscopy**, study of distribution of [^3H]- and [^{14}C]-hydrallazine in rats, 107, **84**
- EMD 28422**, adenosine receptor activity in rats, 625, **84**
- Endotoxic shock**, effect of complement activation in rabbit, 317, 329, **84**
- Endplate potentials**, frog sartorius muscles, effects of adenosine and its analogues, 911, **84**
- Enkephalin**, [D-Ala 2 , MePhe 4 Gly-ol 5], displacement of [^3H]-[D-Pen 2 , D-Pen 5] enkephalin binding, 927, **84**
- , [^3H]-[D-Pen 2 , D-Pen 5], use as a highly selective ligand for the δ -binding site, 927, **84**
- EP 045**, effects on collagen-induced platelet aggregation *in vivo* in rats and guinea-pigs, 425, **84**
- , inhibitory effects on human platelet aggregation *in vitro*, 595, **84**
- EP 092**, inhibitory effects on human platelet aggregation *in vitro*, 595, **84**
- Erythro-DL-1 (7-methylindan-4-yloxy)-3-isopropyl-aminobutan-2-ol** *see* **ICI 118,551**
- Ethosuximide**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- 5'-N-ethyl-carboxamide adenosine**, effect on evoked endplate potentials and twitch tension in innervated frog sartorius muscle, 911, **84**
- Ethynyl oestradiol**, effect on an *in vivo* model of thrombosis in the rat, 243, **84**
- Excitation-contraction coupling**, α -adrenoceptor mediated in smooth muscle cells of rat saphenous vein, 265, **84**
- Excitatory junction potential**, effect of procaine and caffeine on amplitude in guinea-pig mesenteric artery, 675, **84**

F

- F(ab') $_2$ fragments**, effect on endotoxin-induced haemodynamic and haematological changes in rabbit, 317, **84**
- Fat cells**, antilipolytic effect of EMD 28422, 625, **84**
- Femoral artery**, determination of muscarinic receptor subtype mediating vasodilatation, 3, **84**

- Fenoterol**, induction of inhibitory responses in rat costovertebral muscle, effects of β -adrenoceptor antagonists, 463, **84**
- Fentanyl**, effect of di-isopropylfluorophosphate on plasma: brain ratio and antinociception, 657, **84**
- Fluoxetine**, effect on *p*-chloroamphetamine-induced behavioural syndrome in rats, 121, **84**
- Fluphenazine**, effect on Ca-induced contraction and oxytocin response in Ca-free medium in non-pregnant rat myometrium, 175, **84**
- Foetoplacental vasculature**, human, conversion of angiotensin I to angiotensin II, 237, **84**
- Forskolin**, effect on cyclic AMP levels in rat cerebral cortical slices, 249, **84**
- , effect on cyclic nucleotide concentrations and contractility of guinea-pig isolated soleus muscle, 259, **84**
- FPL 55712**, effect on contractions in guinea-pig lung parenchyma induced by ovalbumin or Paf-acether, 801, **84**
- Functional pool**, 5-HT release *in vivo* in reserpinized rats, 121, **84**
- Fundus**, rat, role for excitatory neurotensin receptors on smooth muscle in gastric motility, 897, **84**

G

- Gallbladder**, dog, effects of gastrin and methacholine, 347, **84**
- Gastric cells**, rat, prostaglandin formation, 871, **84**
- Gastric ulceration**, stress-induced, effect of administration of central amino acid neurotransmitters in rats, 619, **84**
- Gastrointestinal tract**, bat and guinea-pig, responses to transmural and periauricular nerve stimulation, 587, **84**
- GDP S** *see* **Guanosine-5'-(thiodiphosphate)trilithium salt**
- Glomerular filtration rate**, effect of nifedipine and diltiazem in rats, 707, **84**
- Glutamic acid**, effect on stress-induced gastric ulceration in rats, 618, **84**
- Glycine**, effect of RU5135 in rat optic nerve, 631, **84**
- , effect on stress-induced gastric ulceration in rats, 618, **84**
- Glycine receptors**, antagonism by RU5135 in rats, 631, **84**
- GTP S** *see* **Guanosine-5'-(thiotriphosphate) tetralithium salt**
- Guanabenz**, renal responses in rabbits, 715, **84**
- Guanethidine**, effect on responses of pig renal artery to transmural stimulation in the presence of prazosin and propranolol, 879, **84**
- Guanidine**, effect on NA release from cat splenic slices, 299, **84**
- Guanosine 3',5'-monophosphate**, 8-bromo-, in relation to nitroglycerine- and isoprenaline-induced vasodilatation, 393, **84**
- , cyclic, effect of isoprenaline, terbutaline and forskolin on concentrations in guinea-pig isolated soleus muscle, 259, **84**
- , cyclic, in relation to nitroglycerine- and isoprenaline-induced vasodilatation, 393, **84**
- , cyclic, relationship between levels and coronary artery occlusion-induced arrhythmias in anaesthetized rats, 139, **84**
- Guanosine-5'-O-(2-thiodiphosphate) trilithium salt**, effect on fast deactivation of guinea-pig isolated ileum to CS_{desArg} , 63, **84**
- Guanosine-5'-O-(3-thiotriphosphate) tetralithium salt**, effect on fast deactivation of guinea-pig isolated ileum to CS_{desArg} , 63, **84**

H

- Head-twitch behaviour**, effect of selective 5-HT receptor agonists and antagonists in mice and rats, 743, **84**
- , 5-HTP-induced, effects of anticonvulsant drugs in comparison with electroconvulsive shock in mice, 337, **84**
- Heart**, guinea-pig and rat, sodium load and high affinity ouabain binding, 685, **84**
- , human, relationship between negative inotropic effects of verapamil enantiomers and binding to putative calcium channels, 811, **84**
- , rat, effect of α -adrenoceptor antagonists on reperfusion arrhythmias and NA release, 9, **84**
- , rat isolated perfused, affinity and efficacy of methacholine stereoisomers in muscarinic inhibition of [3H]-NA release, 477, **84**
- , rat perfused, determination of presynaptic K_A values of methacholine and pilocarpine, 35, **84**
- Heart rate**, antigen-induced decrease, comparison of effects of meptazinol, pentazocine, morphine and naloxone in rats, 469, **84**
- , effect of ACC-7513 in hypertensive rats, 793, **84**
- , effect of quazodone and isobutyl methylxanthine in rats, 139, **84**
- , resting, effect of α -adrenoceptor antagonists in the rabbit, 645, **84**
- Heidenhain pouches**, gastric acid responses following meals in dogs, 347, **84**
- HeLa cells**, action of digoxin antibodies on digoxin disposition and effects, 157, **84**
- Hexamethonium**, effect on antidromic vasodilatation and plasma extravasation in rats, 637, **84**
- , effect on responses of guinea-pig distal colon to GABA or (–)-baclofen, 883, **84**
- , effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
- Hippocampus**, guinea-pig, baclofen activation of voltage-dependent and 4-aminopyridine sensitive potassium conductance in pyramidal cells, 833, **84**
- , guinea-pig, characterization of pre- and postsynaptic actions of (–)-baclofen *in vitro*, 843, **84**
- , mouse, effect of anticonvulsants on high affinity choline uptake in synaptosomes, 19, **84**
- , rat, potency of EMD 28422 at adenosine receptors, 625, **84**
- Histamine**, effect of ACC-7513 in rabbit aorta strips, 789, **84**
- , effect on pig renal artery, 879, **84**
- , *in vivo* and *in vitro* responses in cat airways, 309, **84**
- , induction of spasm in guinea-pig isolated trachealis, effect of nifedipine, 861, **84**
- Histamine H_1 receptors**, binding of doxepin in guinea-pig and rat brain, 417, **84**
- HL 725**, *in vivo* interactions with prostacyclin in platelets, 735, **84**
- [^{14}C]-hydrallazine**, autoradiographic study of distribution in the rat, 107, **84**
- [3H]-hydrallazine**, autoradiographic study of distribution in the rat, 107, **84**
- 8-Hydroxy-2-(di-*n*-propylamino)tetraline**, behavioural and biochemical study in mice and rats, 743, **84**
- n*-(3-Hydroxybenzyl)-N-methyl hydrazine dihydrogen phosphate** *see* **NSD 1034**
- 4-Hydroxycoumarin**, pharmacokinetic and pharmacodyn-

- amics in rabbit, 81, **84**
- 3-(3-Hydroxyphenyl)-N-propylpiperidine**, effect of enantiomers and analogues on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**
- 5-Hydroxytryptamine**, contraction of human umbilical artery, 199, **84**
- , effect of 5-HT receptor agonists and antagonists on synthesis in mice, 743, **84**
 - , effect of prostanoid analogues on prostaglandin-induced release in human platelets, 595, **84**
 - , effect on calcium release in human blood platelets, 545, **84**
 - , effect on pig renal artery, 879, **84**
 - , induction of contractions of smooth muscle in rat fundus, 897, **84**
 - , modification of contractions induced by field stimulation to rat oesophageal muscularis mucosae, 93, **84**
 - , release of ATP from nerve varicosities isolated from myenteric plexus of guinea-pig ileum, 27, **84**
 - , release *in vivo* from a cytoplasmic pool, behavioural syndrome in reserpinized rats, 121, **84**
 - , shape of E/[A] curves in contracting rabbit isolated aorta, 561, **84**
- 5-Hydroxytryptamine, binding sites**, activation by 5-carboxamide tryptamine in anaesthetized pigs, 533, **84**
- 5-Hydroxytryptamine receptors**, behavioural and biochemical study in rodents of putative agonists and antagonists of 5-HT₁ and 5-HT₂ subtypes, 743, **84**
- , blocking activity of ACC-7513 in tissues of various species, 793, **84**
 - , characterization in human umbilical artery, 199, **84**
 - , mediation of tryptamine-induced vasoconstrictor responses in rat caudal arteries, 919, **84**
- 5-Hydroxytryptamine₂ receptors**, effect of anti-convulsant drugs on numbers in comparison with electroconvulsive shock in mice, 377, **84**
- , stimulation, effect on intracellular release of calcium in human platelets, 545, **84**
- 5-Hydroxytryptophan**, effect on nitrazepam-induced sleep in mice, 185, **84**
- Hyperpolarization**, adrenaline-induced in amphibian sympathetic ganglia, attenuation by muscarine and luteinizing hormone releasing hormone, 221, **84**
- Hypertension**, induction by bevantolol in pithed rats, 365, **84**
- Hyoscine**, effect of pretreatment on responses of guinea-pig distal colon to GABA, 883, **84**
- , effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
- Hypoglycaemia**, effects on adrenal catecholamines and dopamine- β -hydroxylase in carbon disulphide exposed rats, 357, **84**
- Hypotension**, effect of methylprednisolone, F(ab')₂ fragments and rosmarinic acid in rabbit, 317, **84**
- Hypothermia**, effects on adrenal catecholamines and dopamine- β -hydroxylase in carbon disulphide exposed rats, 357, **84**
- , induction of supersensitivity to adenosine for responses mediated via A₁-receptors but not A₂-receptors, 407, **84**
- Hypothyroidism**, effect on binding of [³H]-imipramine in rat brain, 773, **84**
- Hypoxia**, effect on the action of trimetazidine on mechanical response of guinea-pig ductus arteriosus, 517, **84**
- I**
- ICI 118,551**, effects on inhibitory responses to sympathomimetic amines of rat costo-uterine muscle, 463, **84**
- Idazoxan**, effect on [³H]-NA release in rat atria and rabbit ear artery, 697, **84**
- , effect on stimulation-evoked NA overflow in rabbit cerebral cortex in presence and absence of cocaine, 147, **84**
- Ileum**, guinea-pig, actions and interactions of adenosine and dipyridamole on electrically-induced contractions, 765, **84**
- , guinea-pig, 5-HT release of ATP from nerve varicosities isolated from myenteric plexus, 27, **84**
 - , guinea-pig, hypothermia-induced supersensitivity to adenosine for responses mediated via A₁ receptors, 407, **84**
 - , guinea-pig isolated, fast deactivation to C5a_{desArg}, possible cyclic AMP-dependent mechanism, 63, **84**
 - , guinea-pig isolated, loss and recovery of sensitivity to spasmogenic action of the complement peptide C5a_{desArg}, 47, **84**
 - , guinea-pig isolated, pharmacological characterization of slow component of deactivation to the spasmogenic action of C5a_{desArg}, 55, **84**
- [³H]-imipramine binding sites**, effect of neonatal antithyroid treatment in rat brain, 773, **84**
- Immobilization**, with cold, effects on adrenal catecholamines and dopamine- β -hydroxylase in carbon disulphide treated rats, 357, **84**
- Indomethacin**, effect on C5a-induced relaxation of rabbit blood vessels, 725, **84**
- , effect on canatoxin-induced platelet aggregation in various species, 551, **84**
 - , effects on collagen-induced platelet aggregation *in vivo* in guinea-pigs and rats, 425, **84**
 - , effect on prostaglandin formation in gastric parietal and nonparietal cells of rat, 871, **84**
- Inosine**, effect on pig renal artery, 879, **84**
- Inotropic effects**, induced by calcium antagonists or manganese ions in dog ventricular muscle, effect of Bay k 8644, 577, **84**
- Insulin**, effects on adrenal catecholamines and dopamine- β -hydroxylase in carbon disulphide treated rats, 357, **84**
- Intestine**, guinea-pig, changed sensitivity to antigen of gut epithelium treated with bile salts, 653, **84**
- Iproniazid**, effect on vasoconstrictor responses of rat caudal arteries to tryptamine, 919, **84**
- Isobutylmethylxanthine**, effect on inhibitory action of 2-chloroadenosine at neuromuscular junction in frog sartorius muscle, 911, **84**
- , modification of coronary artery occlusion-induced arrhythmias in rats, 139, **84**
- Isoprenaline**, effect on ACh release in bullfrog sympathetic ganglia, 435, **84**
- , effect on cyclic nucleotide concentrations and contractility of guinea-pig isolated soleus muscle, 259, **84**
 - , induction of electrical responses in guinea-pig vascular smooth muscle, effect of amosulalol, 489, **84**
 - , induction of inhibitory responses in rat costo-uterine muscle, effects of β -adrenoceptor antagonists, 463, **84**
 - , induction of vasodilatation, assessment from the actions of cyclic nucleotides, 393, **84**

K

- Ketamine**, effect on the response of rat cerebral cortex to *N*-methyl-D-aspartate, 381, 84
- Ketanserin**, antagonism of responses of rat caudal arteries to 5-hydroxytryptamine, 919, 84
- Kidney**, rat, influence of diltiazem and nifedipine on function, 707, 84

L

- β -Lactoglobulin**, changed sensitivity of guinea-pig colonic epithelium after treatment with bile salts, 653, 84
- Leukotriene C₄**, pre- and post-junctional actions in dog trachea, 289, 84
- Leukotrienes**, role in contractions of sensitized lung strip, 801, 84
- Lipolysis**, examination of characteristics of rat epididymal adipocyte β -adrenoceptor, 131, 84
- Lipoxygenase pathway**, involvement in platelet release reaction and aggregation by canatoxin, 551, 84
- Locomotor activity**, apomorphine-induced, effects of anticonvulsant drugs in comparison with electroconvulsive shock in mice, 337, 84
- , correlation of inhibition by dopamine agonists and their effects on dopamine synthesis in rodents, 853, 84
- , effect of selective 5-HT receptor agonists and antagonists in mice and rats, 743, 84
- Lumicolchicine**, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, 84
- Lung strips**, guinea-pig, role for histamine or leukotrienes in contractions after sensitization by ovalbumin or Paf-acether, 801, 84
- Luteinizing hormone releasing hormone**, attenuation of adrenaline-induced hyperpolarization in amphibian sympathetic ganglia, 221, 84
- Lysergic acid diethylamide**, influence on nitrazepam-induced sleep in mice, 185, 84

M

- M-75**, effect on responses of guinea-pig isolated right atrium to isoprenaline and dichloroisoprenaline, 779, 84
- M&B 28, 767**, pharmacological effects in rat and rabbit cardiovascular systems, 71, 84
- 'M'-channels**, effect of closure on amplitude of adrenaline-induced hyperpolarization in amphibian sympathetic ganglia, 221, 84
- Magnesium ions**, effect on release of NA from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299, 84
- , effect on the responses of rat cerebral cortex to *N*-methyl-D-aspartate, 381, 84
- Manganese ions**, induction of negative inotropic effects in dog ventricular muscle, effects of Bay k 8644, 577, 84
- Membrane properties**, effect of thromboxane A₂, prostacyclin and leukotriene C₄ in dog trachea, 289, 84
- Meobentine**, effect on electrical activity of rat hearts *in vivo* and *in vitro*, 755, 84
- Meptazinol**, effect on rat model of anaphylactic shock, 469, 84

- Mepyramine**, effect on C5a-induced mechanical responses of rabbit blood vessels, 725, 84
- [³H]-mepyramine**, doxepin-inhibition of binding to guinea-pig and rat brain, 417, 84
- Mesenteric artery**, guinea-pig, effects of caffeine and procaine on noradrenergic transmission, 675, 84
- , rabbit, assessment of nitroglycerine- and isoprenaline-induced vasodilatation, 393, 84
- , rabbit, effect of M&B 28,767, 71, 84
- Metergoline**, blockade of *p*-chloroamphetamine-induced behavioural syndrome in rats, 121, 84
- , effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84
- Methacholine**, determination of presynaptic K_A values in rat perfused heart, 35, 84
- Methacholine stereoisomers**, affinity and efficacy in muscarinic inhibition of [³H]-noradrenaline release, 477, 84
- Methimazole**, effect on specific binding of [³H]-imipramine in rat brain, 773, 84
- Methoxamine**, effect on electrical and mechanical properties of rat saphenous vein, 265, 84
- , renal responses in rabbits, 715, 84
- 5-Methoxytryptamine**, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84
- α -Methyl-*p*-tyrosine**, effect on inhibitory effects of dopamine agonists on locomotor agonists in mice, 853, 84
- N⁶-methyladenosine**, effect on evoked endplate potentials and twitch tension in frog innervated sartorius muscle, 911, 84
- Methylprednisolone**, effect of endotoxin-induced haemodynamic and haematological changes in rabbit, 317, 84
- Methysergide**, antagonism of responses of rat caudal arteries to 5-HT, 919, 84
- , effect on dose response curve to 5-HT in human umbilical artery, 199, 84
- , effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84
- Metitipine**, influence on nitrazepam-induced sleep in mice, 185, 84
- Morphine**, displacement of [³H]-[D-Pen², D-Pen³] enkephalin binding, 927, 84
- , effect of di-isopropylfluorophosphate on plasma: brain ratio and antinociception, 657, 84
- , effect on electrically-induced contractions in guinea-pig ileum, 765, 84
- , effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84
- , effect on rat model of anaphylactic shock, 469, 84
- , induction of analgesia, effect of caffeine in rats, 789, 84
- Motor endplate disease**, reversal of paralysis by 4-aminopyridine in mouse, 6, 84
- Muscarine**, attenuation of adrenaline-induced hyperpolarization in amphibian sympathetic ganglia, 221, 84
- Muscarinic agonists**, effect on rat oesophageal muscularis mucosae 93, 84
- Muscarinic subsensitivity**, role of muscarinic receptors in production in monkey ciliary muscle, 193, 84
- Muscarinic acetylcholine receptors**, determination of subtype mediating vasodilatation in rabbit aorta and dog femoral artery, 3, 84

- , interactions with α -adrenoceptors in rat atria and rabbit ear artery, 697, **84**
- , presynaptic, role in inhibition of [3 H]-NA release in rat isolated perfused heart, 477, **84**
- , presynaptic reserve in rat perfused hearts, 35, **84**
- , role in the production of muscarinic subsensitivity in monkey ciliary muscle, 193, **84**
- Muscimol**, effect of RU5135 in rat optic nerve, 631, **84**
- , effect on stress-induced gastric ulceration in rats, 618, **84**
- Myometrium**, non-pregnant rat, response to oxytocin in Ca-free solution, 175, **84**

N

- Naloxone**, effect on rat model of anaphylactic shock, 469, **84**
- , reversal of caffeine-potentiated morphine analgesia, 789, **84**
- Natriuresis**, induction by nifedipine and diltiazem in rats, 707, **84**
- Neuroeffector transmission**, effect of thromboxane A_2 , prostacyclin and leukotriene C_4 in dog trachea, 289, **84**
- Neuromuscular junction**, classification of subtype of adenosine receptor in innervated frog sartorius muscles, 911, **84**
- , effect of succinyl derivatives of N-tris (hydroxymethyl)-methyl-2-aminoethane) sulphonic acid in frog, 275, **84**
- Neuromuscular transmission**, restoration by 4-aminopyridine in mice with hereditary motor endplate disease, 6, **84**
- Neurotensin receptors**, role in gastric motility in smooth muscle of rat fundus, 897, **84**
- Neurotransmitter**, role of substance P in neonatal rat spinal reflexes, 663, **84**
- Nicergoline**, effect on reperfusion arrhythmias and NA release in perfused rat heart, 9, **84**
- Nicotinamide**, actions on rat cerebellar Purkinje cells, 689, **84**
- β -Nicotinamide adenine dinucleotide**, actions on carbachol-contracted guinea-pig taenia coli, 825, **84**
- β -Nicotinamide adenine dinucleotide phosphate**, actions on carbachol-contracted guinea-pig taenia coli, 825, **84**
- Nicotinic acetylcholine receptor**, effects of ATP and related compounds on sensitivity in bullfrog sympathetic ganglion cell, 525, **84**
- Nifedipine**, effects in guinea-pig isolated trachealis, 861, **84**
- , induction of negative inotropic effects in dog ventricular muscle, effects of Bay k 8644, 577, **84**
- , influence on renal function in the rat, 707, **84**
- [3 H]-**nimodipine**, binding to high affinity binding sites in human heart, 811, **84**
- Nitrazepam**, induction of sleep, influence of agents affecting 5-HT metabolism and receptors in mice, 185, **84**
- [3 H]-**nitrendipine**, interference by sodium with binding to cardiac membranes in guinea-pigs, 511, **84**
- Nitroglycerine**, induction of vasodilatation, assessment from actions of cyclic nucleotides, 393, **84**
- Non-neurogenic relaxation**, field stimulation-induced in preparations exposed to tetrodotoxin or hyoscine, 93, **84**
- Nonparietal cells**, rat stomach, prostaglandin E_2 formation, 871, **84**
- Noradrenaline**, effect of α -adrenoceptor antagonists on release in perfused rat hearts, 9, **84**

- , effect of α -adrenoceptor antagonists on release in rabbit cerebral cortical slices, 147, **84**
- , effect of caffeine and procaine on overflow in guinea-pig mesenteric artery, 675, **84**
- , effect on cyclic AMP levels in rat cerebral cortical slices, 249, **84**
- , effect on electrically-induced contractions in guinea-pig ileum, 765, **84**
- , effect on human umbilical artery, 199, **84**
- , effect on pig renal artery, 879, **84**
- , effect on rat deferens after acute or chronic pretreatment with tricyclic or MAO inhibitor antidepressants, 609, **84**
- , induction of depolarization and contraction in rat saphenous vein, 265, **84**
- , induction of electrical responses in guinea-pig vascular smooth muscle, effect of amosulalol, 489, **84**
- , induction of inhibitory responses in rat costo-uterine muscle, effects of β -adrenoceptor antagonists, 463, **84**
- , ion dependence of release from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299, **84**
- , renal responses in rabbits, 715, **84**
- [3 H]-**noradrenaline**, measurement of overflow in electrically stimulated perfused rat hearts in the presence of cocaine, corticosterone and propranolol, 35, **84**
- , muscarinic inhibition of release, affinity and efficacy of methacholine stereo-isomers in rat hearts, 477, **84**
- Noradrenergic transmission**, effects of caffeine and procaine in guinea-pig mesenteric artery, 675, **84**
- , adenosine-induced inhibition in rat vas deferens, effect of hypothermia, 407, **84**
- Nordihydroguaiaretic acid**, inhibition of canatoxin-induced platelet aggregation in various species, 551, **84**
- , reduction of responses of guinea-pig lung parenchyma strips to ovalbumin or Paf-acether, 801, **84**
- Norethindrone**, effect on an *in vivo* model of thrombosis in the rat, 243, **84**
- NSD 1034**, influence on nitrazepam-induced sleep in mice, 185, **84**

O

- Oesophageal muscularis mucosae**, rat, pharmacological properties of mechanical responses to vagal and field stimulation, 93, **84**
- δ -Opioid binding sites**, binding of [3 H]-[D-Pen 2 , D-Pen 5] enkephalin as highly selective ligand, 927, **84**
- Optic nerve**, rat, antagonism of inhibitory amino acids by the steroid derivative RU5135, 631, **84**
- [3 H]-**ouabain**, influence of sodium load in rat and guinea-pig cardiac tissue, 685, **84**
- Ovalbumin**, induction of contractions in guinea-pig lung parenchyma strips, 801, **84**
- Ovarian hormones**, synthetic, effect on an *in vivo* model of thrombosis in the rat, 243, **84**
- Oxytocin**, effect on non-pregnant rat myometrium in calcium-free solution, 175, **84**

P

- Paralysis**, reversal by 4-aminopyridine in mice with hereditary motor endplate disease, 6, **84**

- Pargyline**, effect on *p*-chloroamphetamine-induced behavioural syndrome in rats, 121, **84**
 —, effect on vasoconstrictor responses of rat caudal arteries to tryptamine, 919, **84**
- Parietal cells**, rat stomach, prostaglandin E_2 formation, 871, **84**
- Pentagastrin**, effects of gastric secretion in dogs, 347, **84**
- Pentazocine**, effect on rat model of anaphylactic shock, 469, **84**
- Pentobarbitone**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- Perfusion pressure**, effect of angiotensin I and II in human foetoplacental vasculature, 237, **84**
- Pergolide**, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**
- Perivascular nerve stimulation**, effects in guinea-pig mesenteric artery, action of caffeine and procaine, 675, **84**
- Permeability**, intestinal, effect of bile salts in guinea-pig, 653, **84**
- Pharmacological agonism**, operational model, 561, **84**
- Phenobarbitone**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
- Phenoxybenzamine**, effect on central-decelerator mechanisms in the rabbit, 645, **84**
 —, effect on evoked [3 H]-NA release in rat perfused heart, 35, **84**
 —, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, **84**
 —, effect on inhibitory action of adrenaline on ACh release in bullfrog sympathetic ganglia, 435, **84**
 —, shape of $E/[A]$ curves in contracting rabbit isolated aorta, 561, **84**
- Phentolamine**, effect on dose-response curve to 5-HT in human umbilical cord, 199, **84**
 —, effect on [3 H]-NA release from rat atria or rabbit ear artery, 697, **84**
 —, effect on pressor action of meptazinol in rat model of anaphylactic shock, 469, **84**
 —, effect on reperfusion arrhythmias and NA release in perfused rat heart, 9, **84**
 —, effect on responses of bat and guinea-pig gastrointestinal tract to periarterial and transmural nerve stimulation, 587, **84**
 —, effect on responses of guinea-pig taenia coli to adenine dinucleotides, 825, **84**
 —, effect on stimulation-evoked NA overflow in rabbit cerebral cortex in presence and absence of cocaine, 147, **84**
- Phenylephrine**, effect on electrical and mechanical properties of rat saphenous vein, 265, **84**
 —, renal responses in rabbits, 715, **84**
- N⁶-phenylisopropyladenosine**, effect on evoked endplate potentials and twitch tension in innervated frog sartorius muscle, 911, **84**
- 8-Phenyltheophylline**, antagonism of inhibitory action of 2-chloroadenosine at neuromuscular junction in frog sartorius muscle, 911, **84**
 —, effect on contractions-induced by phosphorothioate analogues of ATP in rat and guinea-pig smooth muscle, 165, **84**
 —, effect on response curves to adenine dinucleotides in guinea-pig taenia coli, 825, **84**
- Phenytol**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
 —, effect on monoamine-mediated behaviour in mice, 337, **84**
- Phospholine**, effect on antidromic vasodilatation and plasma extravasation in rats, 637, **84**
- Physostigmine**, effect on antidromic vasodilatation and plasma extravasation in rats, 637, **84**
 —, effect on responses of bat and guinea-pig gastrointestinal tract to periarterial and transmural nerve stimulation, 587, **84**
 —, effect on responses of guinea-pig distal colon to GABA or (-)-baclofen, 883, **84**
- Picrotoxin**, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, **84**
 —, effect on nicotinamide and inosine inhibition of Purkinje cell firing in rat cerebellum, 689, **84**
 —, effect on responses of guinea-pig distal colon to GABA and (-)-baclofen, 883, **84**
 —, reversal of anti-ulcerogenic effects of GABA or sodium valproate in rats, 618, **84**
- Pilocarpine**, determination of presynaptic K_A values in rat perfused heart, 35, **84**
 —, effect on accommodation response in subsensitized eyes of monkey, 193, **84**
- Piperazine**, activation of single-channel currents from *Ascaris suum* body muscle, 445, **84**
- Pirenzepine**, use in assessment of muscarinic receptor subtype mediating vasodilatation in rabbit aorta and dog femoral artery, 3, **84**
- Plasma extravasation**, effect of acetylcholine antagonists and cholinesterase inhibitors in rats, 637, **84**
- Platelet activating factor**, induction of aggregation in human platelets, effect of prostanoid analogues, 595, **84**
 —, induction of contraction in guinea-pig lung parenchyma strips, 801, **84**
- Platelets**, effect of prostacyclin interactions with HL 725 on aggregation, 735, **84**
 —, guinea-pig and rat, involvement in collagen-induced aggregation of prostaglandin H_2 /thromboxane A_2 pathway, 425, **84**
 —, human, competitive antagonism at thromboxane receptors, 595, **84**
 —, human, induction of shape change reaction by 5-HT, 545, **84**
 —, human, intracellular release of calcium by stimulation of 5-HT $_2$ -receptors, 545, **84**
 —, induction of release reaction and aggregation by canatoxin, 551, **84**
 —, rat and human, aggregation by M&B 28, 767, 71, **84**
- Potassium chloride**, induction of spasm, effect of nifedipine in guinea-pig isolated trachealis, 861, **84**
- Potassium conductance**, effect of baclofen in guinea-pig hippocampal pyramidal cells *in vitro*, 833, **84**
- Potassium ions**, effect on release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**
- N-propyl-norapomorphine**, effect on locomotor activity and L-DOPA accumulation in rodents, 853, **84**
- Prazosin**, effect against stimulation-evoked contractions in human isolated saphenous veins, 573, **84**
 —, effect on actions of transmural stimulation in pig renal artery, 879, **84**
 —, effect on central-decelerator mechanisms in the rabbit,

- 645, 84
- , effect on reperfusion arrhythmias and NA release in perfused rat heart, 9, 84
 - , effect on responses of saphenous vein to α -adrenoceptor agonists in rat, 265, 84
- Pressor effects**, noradrenaline-induced, potentiation by bevantolol in rats, 365, 84
- Primary afferent fibres**, substance P release, action as neurotransmitter in rat spinal cord, 663, 84
- Procaine**, effects on noradrenergic transmission in guinea-pig mesenteric artery, 675, 84
- Proccaterol**, responses of vascular and atrial preparations with different functional β -adrenoceptor populations, 227, 84
- Progabide**, effect on monoamine-mediated behaviour in mice, 337, 84
- Propranolol**, depolarization-induced release from rat cortical synaptosomes, 449, 84
- , effect on inhibitory action of adrenaline on ACh release in bullfrog sympathetic ganglia, 435, 84
 - , effect on responses of bat and guinea-pig gastrointestinal tract to periarterial and transmural nerve stimulation, 587, 84
 - , effect on responses of guinea-pig taenia coli to adenine dinucleotides, 825, 84
 - , effect on responses of pig renal artery to transmural stimulation, 879, 84
- (-)-Propranolol**, behavioural and biochemical study in mice and rats, 743, 84
- Prostacyclin**, effect of methylprednisolone, F(ab')₂ fragments and rosmarinic acid on formation in rabbit, 317, 84
- , effect on action of canatoxin on platelets in various species, 551, 84
 - , *in vivo* interaction with HL 725 in platelets, 735, 84
 - , pre- and post-junctional actions in dog trachea, 289, 84
- Prostaglandin antagonists**, action at thromboxane receptors in human platelets, 595, 84
- Prostaglandin E₁**, (\pm)-11-deoxy, 16-phenoxy-derivatives, pharmacological effect in rat and rabbit cardiovascular systems, 71, 84
- Prostaglandin F_{1 α}** , 6-keto, effects of dazoxiben in rat plasma, 425, 84
- , 6-oxo-, effect of cobra venom factor on formation in rabbit, 329, 84
- Prostaglandin F_{2 α}** , effect on action of verapamil on contractions induced by divalent cations in guinea-pig tracheal muscle, 203, 84
- Prostaglandin H₂**, and its analogues, aggregation responses of human platelets, effect of prostanoid analogues, 595, 84
- Prostaglandin H₂/thromboxane A₂ pathway**, involvement in collagen-induced aggregation rat and guinea-pig platelets, 425, 84
- Prostaglandins**, effect on mechanical responses of rabbit blood vessels, 725, 84
- Prothrombin complex activity**, changes after administration of anticoagulants in rabbits, 81, 84
- Pulmonary artery**, guinea-pig, rabbit and rat, detection of β -adrenoceptor subtypes using proccaterol, 227, 84
- Purines**, effects in rat and rabbit smooth muscle systems, 165, 84
- P₂-purinoceptor**, stereoselectivity in guinea-pig vas deferens, 431, 84

Purinoceptors, effects of adenosine nucleotides in guinea-pig taenia coli, 825, 84

Purkinje cells, effect of nicotinamide and inosine on firing in rat cerebellum, 689, 84

Pylorus ligation, induction of gastric ulceration, effect of GABA in rats, 618, 84

Pyramidal cells, baclofen activation of voltage-dependent and 4-aminopyridine sensitive potassium conductance in guinea-pig hippocampus *in vitro*, 833, 84

- , effect of (-)-baclofen on evoked responses in fibre connections in guinea-pig hippocampus, 843, 84

Q

Quazodine, modification of coronary artery occlusion-induced arrhythmias in rats, 139, 84

Quin-2, measurement of concentrations of intra-cellular free Ca²⁺ in human blood platelets, 545, 84

Quinidine, effect of electrical activity of rat hearts *in vivo* and *in vitro*, 755, 84

Quipazine, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, 84

R

Rauwolscine, effect on stimulation-evoked NA overflow in rabbit cerebral cortex in presence and absence of cocaine, 147, 84

Reflexes, role of substance P as a neurotransmitter in neonatal rat spinal cord, 663, 84

Renal artery, pig, responses to transmural electrical stimulation and drugs, 879, 84

Renal tubules, role of α -adrenoceptors in regulation of sodium reabsorption and renin secretion in rabbit, 715, 84

Renin, renal tubular secretion in rabbits, role of α -adrenoceptors, 715, 84

Reserpine, effect of pretreatment on restoration of blood pressure by pentazocine, morphine, meptazinol and naloxone in rats, 469, 84

- , effect on responses of bat and guinea-pig gastrointestinal tract to periarterial and transmural stimulation, 587, 84

- , reduction of 5-HT levels in rat brain, 121, 84

Ritanserine, behavioural and biochemical study in mice and rats, 743, 84

RO 15-1788, effect on nicotinamide inhibition of Purkinje cell firing in rat cerebellum, 689, 84

- , effect on nitrazepam-induced sleep in mice, 185, 84

RO 363, effects on inhibitory responses to sympathomimetic amines of rat costo-uterine muscle, 463, 84

Rosmarinic acid, effect on endotoxin-induced haemodynamic and haematological changes in rabbit, 317, 84

RU 5135, antagonism of inhibitory amino acids in rat optic nerve, 631, 84

RU 24213, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, 84

RU 24926, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, 84

RU 24969, behavioural and biochemical study in mice and rats, 743, **84**

Rubidium ions, effect on release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**

S

Saphenous vein, human, evidence for neuro-effector transmission through post junctional α -adrenoceptors, 573, **84**

—, rat, α -adrenoceptor mediated excitation-contraction coupling in smooth muscle cells, 265, **84**

Saralasin, effect on pressor responses of human foetoplacental vasculature to angiotensin I and II, 237, **84**

—, effect on responses of pig renal artery to transmural stimulation, 879, **84**

Sartorius muscles, frog, effects of adenosine and its analogues on endplate potentials and twitch responses, 911, **84**

Sedation, clonidine-induced, effect of anticonvulsant drugs in comparison with electroconvulsive shock in mice, 337, **84**

Selegiline, effect of acute or chronic pretreatment on responses of rat vas deferens to clonidine or NA, 609, **84**

Single-channel currents, activation by GABA and piperazine of *Ascaris suum* body muscle, 445, **84**

SK&F 38393, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**

Skeletal muscle, guinea-pig, effect of sodium on [3 H]-nitrendipine binding, 511, **84**

SKF 88046, effect on C5a-induced mechanical responses of rabbit blood vessels, 725, **84**

Sleep, nitrazepam-induced, influence of agents affecting 5-HT metabolism and receptors in mice, 185, **84**

Smooth muscle, effect of ACC-7513 in various species, 793, **84**
—, non-pregnant rat myometrium, response to oxytocin in Ca-free solution, 175, **84**

Smooth muscle cells, rat saphenous vein, α -adrenoceptor mediated excitation-contraction coupling, 265, **84**

Social interaction, effect of nicotinamide and inosine in rats, 689, **84**

Sodium, renal tubular reabsorption in rabbits, role of α -adrenoceptors, 715, **84**

Sodium cromoglycate, effect on contractions in guinea-pig lung parenchyma by ovalbumin or Paf-acether, 801, **84**

Sodium ions, effect of altered concentrations of [3 H]-ouabain binding in rat and guinea-pig heart, 685, **84**

—, effect on release of NA from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299, **84**

—, interference with [3 H]-nitrendipine binding to cardiac membranes, 511, **84**

Sodium valproate, effect on stress-induced gastric ulceration in rats, 618, **84**

Soleus muscle, guinea-pig, effects of cyclic nucleotides on contractility, 259, **84**

Somatic muscle, *Ascaris suum*, GABA- and piperazine-activated single-channel currents, 445, **84**

Spasmogenic activity, C5a_{desArg}, characterization of slow component of deactivation of guinea-pig isolated ileum, 55, **84**

—, complement peptide C5a_{desArg}, loss and recovery of sensitivity of guinea-pig isolated ileum, 47, **84**

—, induction by potassium chloride, tetraethyl-ammonium, ACh and histamine, effects of nifedipine, 861, **84**

Spinal cord, neonatal rats, role of substance P as a neurotransmitter in reflexes, 663, **84**

Spiroperidol, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, **84**

Stereoselectivity, studies on P₂-purinoceptors on guinea-pig vas deferens, 431, **84**

Staircase, inversion by verapamil enantiomers in human heart, 811, **84**

Stomach, dog, stimulation of gastric acid secretion by muscarinic cholinometric agents, 347, **84**

—, rat, prostaglandin formation in isolated gastric parietal and nonparietal cells, 871, **84**

Stress, induction of gastric ulceration, effect of administration of central amino acid neurotransmitters in rats, 619, **84**

Strontium, induction of contractions in guinea-pig tracheal muscle, effect of verapamil, 203, **84**

Substance P, role as neurotransmitter in reflexes of slow time courses in neonatal rat spinal cord, 663, **84**

Succinyl derivatives, N-tris (hydroxymethyl) methyl-2-aminoethane sulphonic acid, effects on frog neuromuscular junction, 275, **84**

Sympathetic ganglion, bullfrog, effect of ATP and related compounds on the sensitivity of nicotinic acetylcholine-receptor, 525, **84**

—, bullfrog, mechanism of the inhibitory action of adrenaline on transmitter release, 435, **84**

Sympathetic nervous system, facilitation of neuro-transmission, mediation of effects of opioid-mixed agonist-antagonists on cardiovascular changes in anaphylactic shock, 469, **84**

Synaptosomes, mouse hippocampal, effects of anti-convulsants on high affinity choline uptake, 19, **84**

—, rat cortex, depolarization-induced release of propranolol and atenolol, 499, **84**

T

Tachyphylaxis, induction following fade to contractile response of rat fundus smooth muscle to neurotensin, 897, **84**

Taenia coli, guinea-pig, activity of phosphorothioate analogues of ATP, 165, **84**

—, guinea-pig, carbachol contracted, actions of adenine dinucleotides, 825, **84**

Tail-withdrawal reflex, effect of caffeine in rat, 789, **84**

Tension, acetylcholine-induced, effect of succinyl derivatives of N-tris(hydroxymethyl) methyl-2-aminoethane sulphonic acid in frog neuromuscular junction, 275, **84**

—, adenosine-induced inhibition of development in rat paced left atria, effect of hypothermia, 407, **84**

Terbutaline, effect on cyclic nucleotide concentrations and contractility of guinea-pig isolated soleus muscle, 259, **84**

Tetraethylammonium, effect on stimulation-evoked NA overflow in absence of cocaine in rabbit cerebral cortex, 147, **84**

—, induction of spasm in guinea-pig isolated trachealis, effect of nifedipine, 861, **84**

- , release of NA from cat splenic slices, 299, **84**
 - Tetrodotoxin**, blockade of effects of drugs acting on renin-angiotensin system on responses to transmural stimulation of pig renal artery, 879, **84**
 - , effect on electrically-induced contractions in guinea-pig ileum, 765, **84**
 - , effect on release of NA from cat splenic slices by tetraethylammonium or 4-aminopyridine, 299 **84**
 - , effect on responses of bat and guinea-pig gastrointestinal smooth muscle to periarterial and transmural nerve stimulation, 587, **84**
 - , effect on responses of guinea-pig taenia coli to adenine dinucleotides, 825, **84**
 - , effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
 - , effect, on veratridine released propranolol and atenolol from rat cortical synaptosomes, 499, **84**
 - Theophylline**, antagonism of inhibitory action of 2-chloroadenosine at neuromuscular junction in frog sartorius muscles, 911, **84**
 - , effect on fast deactivation of guinea-pig isolated ileum to C5a_{desArg}, 63, **84**
 - Thrombocytopenia**, effect of methylprednisolone, F(ab')₂ fragments and rosmarinic acid in rabbit, 317, **84**
 - , induction by M&B 28,767 in anaesthetized rats, 71, **84**
 - Thrombosis**, effect of synthetic ovarian hormones on an *in vivo* model in the rat, 243, **84**
 - Thromboxane A₂**, aggregation responses of human platelets, effect of prostanoid analogues, 595, **84**
 - , carbocyclic, pre- and post-junctional actions in dog trachea, 289, **84**
 - , effect of methylprednisolone, F(ab')₂ fragments and rosmarinic acid on formation in rabbit, 317, **84**
 - , pinane, inhibitory effects on human platelet aggregation *in vitro*, 595, **84**
 - Thromboxane B₂**, effect of cobra venom factor on formation in rabbit, 329, **84**
 - Thromboxane receptor antagonists**, effect on collagen-induced platelet aggregation in guinea-pigs and rats, 425, **84**
 - Thromboxane A₂ receptor antagonists**, effect on C5a-induced mechanical responses of rabbit blood vessels, 725, **84**
 - Thromboxane receptors**, competitive antagonism in human platelets, 595, **84**
 - Thromboxane synthetase inhibitors**, effect on collagen-induced platelet aggregation in guinea-pigs and rats, 425, **84**
 - Thrombus**, effect of synthetic hormones on formation *in vivo* in the rat, 243, **84**
 - Thymocytes**, guinea-pig, potency of EMD 28422 at adenosine receptors, 625, **84**
 - TL-99**, effect on locomotor activity and L-DOPA accumulation in rodent brain, 853, **84**
 - TMB-8**, effect on 5-HT-induced increase of Ca²⁺ in human blood platelets, 545, **84**
 - Trachea**, dog, pre- and post-junctional actions of prostacyclin, carbocyclic thromboxane A₂ and leukotriene C₄, 289, **84**
 - , guinea-pig, effect of verapamil on smooth muscle contractions induced by calcium, strontium and barium, 203, **84**
 - , guinea-pig, hypothermia-induced supersensitivity to adenosine for responses mediated via A₁ receptors, 407, **84**
 - Trachealis muscle**, guinea-pig isolated, effect of nifedipine, 861, **84**
 - Transmitters**, mechanism of inhibition of release by adrenaline in bullfrog sympathetic ganglia, 435, **84**
 - Transmural electrical stimulation**, effect on gastrointestinal tract of bat and guinea-pig, 587, **84**
 - , responses of pig renal artery, 879, **84**
 - Tranylcypromine**, effect of acute or chronic pretreatment on response of rat vas deferens to clonidine or NA, 609, **84**
 - Trifluoperazine**, effect on Ca-induced contraction and oxytocin response in Ca-free medium in non-pregnant rat myometrium, 175, **84**
 - Trigeminal system**, effect of antidromic stimulation on vasodilatation and plasma extravasation in rats, 637, **84**
 - Trimetazidine**, vasoactivity on guinea-pig isolated ductus arteriosus, 517, **84**
 - Trimethadione**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
 - N-tris (hydroxymethyl) methyl-2-aminoethane sulphonic acid**, effect of succinyl derivatives on frog neuromuscular junction, 275, **84**
 - Triton X-100**, effects on sensitized colon and short circuit current responses to β-lactoglobulin in guinea-pig, 653, **84**
 - Tryptamine**, induction of vasoconstrictor responses in rat caudal arteries, mediation by 5-HT receptors, 919, **84**
 - (±)-Tubocurarine**, effect on 5-HT-induced release of ATP from myenteric varicosities isolated from guinea-pig ileum, 27, **84**
 - , effect on responses of rat oesophageal muscularis mucosae to vagal and field stimulation, 93, **84**
 - Twitch response**, effect of adenosine and its analogues in frog sartorius muscles, 911, **84**
 - , electrically-evoked, effect of phosphorothioate analogues of ATP in rat and guinea-pig smooth muscle systems, 165, **84**
- U**
- UK 14303**, renal responses in rabbits, 715, **84**
 - Urinary bladder**, guinea-pig, activity of phosphorothioate analogues of ATP, 165, **84**
- V**
- Vagal stimulation**, pharmacological properties of mechanical responses of rat oesophageal muscularis mucosae, 93, **84**
 - Valproate**, effect on monoamine-mediated behaviour in mice, 337, **84**
 - Valproic acid**, effect on high affinity choline uptake in mouse hippocampal synaptosomes, 19, **84**
 - Vas deferens**, guinea-pig, studies on the stereo-selectivity of P₂-purinoceptors, 431, **84**
 - , guinea-pig and rat, activity of phosphorothioate analogues of ATP, 165, **84**
 - , rat, hypothermia-induced supersensitivity to adenosine for responses mediated via A₂ receptors, 407, **84**
 - , rat, responses to clonidine or NA after acute or chronic pretreatment with tricyclic or MAO inhibitor antidepressants, 609, **84**
 - Vascular smooth muscle**, guinea-pig, effects of amosulalol on electrical responses to adrenoceptor activation, 489, **84**

- Vasoconstriction**, tryptamine-induced in rat caudal arteries, mediation by 5-HT receptors, 919, **84**
- Vasodilatation**, antidromic, effect of ACh antagonists and cholinesterase inhibitors in rats, 637, **84**
- , determination of muscarinic receptor subtype involved in mediation in rabbit aorta and dog femoral artery, 3, **84**
- , nitroglycerine- and isoprenaline-induced, assessment from the actions of cyclic nucleotides, 393, **84**
- Vasopressin**, effect on pig renal artery, 879, **84**
- Ventricular muscle**, dog, antagonism by Bay k 8644 of negative inotropic effects of calcium antagonists or manganese ions, 577, **84**
- Ventricular tachyarrhythmias**, coronary artery occlusion-induced in rats, effects of bethanidine, mebentine and quinidine, 755, **84**
- Verapamil**, effect on contractions of guinea-pig tracheal muscle induced by calcium, strontium and barium, 203, **84**
- , effect on responses of rat fundus smooth muscle to neurotensin, 897, **84**
- , induction of negative inotropic effects in dog ventricular muscle, effects of Bay k 8644, 577, **84**
- Verapamil enantiomers**, relationship between stereoselective negative inotropic effects and binding to putative calcium channels in human heart, 811, **84**
- Veratridine**, effect on release of propranolol and atenolol from rat cortical synaptosomes, 499, **84**

- Vinblastine**, effect on spasmogenic action of C5a_{desArg} in guinea-pig isolated ileum, 55, **84**

W

- Warfarin**, pharmacokinetics and pharmacodynamics in rabbits, 81, **84**

X

- Xylazine**, effect on human umbilical artery, 199, **84**

Y

- Yohimbine**, effect against stimulation-evoked contractions in human isolated saphenous veins, 573, **84**
- , effect on central-decelerator mechanisms in the rabbit, 645, **84**
- , effect on 5-HT-induced increase of Ca²⁺ in human blood platelets, 545, **84**
- , effect on [³H]-NA release in rat atria and rabbit ear artery, 697, **84**
- , effect on responses of saphenous vein to α -adrenoceptor agonists in rat, 265, **84**