BRITISH JOURNAL OF PHARMACOLOGY

Contents

Page

Systematic Pharmacology

- 1 CLARK, ANNE and OLSON, CAMILLE B. Effects of caffeine and isoprenaline on mammalian ventricular muscle. (SP1)
- 12 PARRATT, J. R. Myocardial and circulatory effects of *E. coli* endotoxin; modification of responses to catecholamines. (SP1, AP1, AP2)
- 26 DOGGETT, N. S. and SPENCER, P. S. J. Pharmacological properties of centrally-administered agents which interfere with neurotransmitter function: a comparison with the central depressant effects of ouabain. (SP2, PP)
- 39 CHRISTIE, JANICE E. and CROW, T. J. Behavioural studies of the actions of cocaine, monoamine oxidase inhibitors and iminodibenzyl compounds on central dopamine neurones.
 (SP2, AP1, PP)

Autopharmacology

48 FERREIRA, S. H., MONCADA, S. and VANE, J. R. Some effects of inhibiting endogenous pro-

staglandin formation on the responses of the cat spleen. (AP2, SP1, DM2)
59 GUTMAN, Y., LEVY, M. and SHORR, J. Renin-like activity of the rat submaxillary gland: characterization and the effect of several drugs and stimuli. (AP3, SP1)

Pharmacokinetics

- 69 MARCHAND, C. and NADEAU, D. Effect of 2-diethylaminoethyl-2,2-diphenylvalerate hydrochloride (SKF 525-A) on sulphacetamide distribution and excretion in rats. (PK1)
- 77 FURUTA, Y., HASHIMOTO, K., IWATSUKI, K. and TAKEUCHI, O. Effects of enzyme inhibitors of catecholamine metabolism and of haloperidol on the pancreatic secretion induced by L-DOPA and by dopamine in dogs. (PK2, AP1)
- BASKIN, S. I., DUTTA, S and MARKS, B. H. The effects of diphenylhydantoin and potassium on the biological activity of ouabain in the guinea-pig heart. (PK3, SP1, DM1)
- 97 MOLENAAR, P. C., NICKOLSON, V. J. and POLAK, R. L. Preferential release of newly synthesized ³H-acetylcholine from rat cerebral cortex slices in vitro. (PK3 SP2)

Drug Mechanisms

- 109 Blaber, L. C. The prejunctional actions of some non-depolarizing blocking drugs. (DM1, AP1)
- 117 BAMGBOSE, S. O. A., MARQUIS, V. O. and SALAKO, L. A. Some pharmacological effects of the nematocide, morantel. (DM1)
- 124 Foy, J. M. and Furman, B. L. Effect of single dose administration of diuretics on the blood sugar of alloxan-diabetic mice or mice made hyperglycaemic by the acute administration of diazoxide. (DM1, TX)
- 133 Thompson, J. M. Further studies of binding bromosulphthalein sodium by human serum albumin: effects of albumin concentration and buffer composition. (DM1, PK1)
- 138 GOLDSTEIN, A., JUDSON, BARBARA A. and SHEEHAN, PATRICIA. Cellular and metabolic tolerance to an opioid narcotic in mouse brain. (DM2)
- 141 HARRIS, J. B., KARLSSON, E. and THESLEFF, S. Effects of an isolated toxin from Australian Tiger snake (*Notechis scutatus scutatus*) venom at the mammalian neuromuscular junction. (DM2, AP1, TX)
 - 147 Chang, C. C., Chen, T. F. and Chuang, Sing-Tai. N,0-di and N,N,0-tri [8H] acetyl α-bungarotoxins as specific labelling agents of cholinergic receptors. (DM2, AP1)
 - 161 Truelove, J. F., Petten, G. R. Van and Willes, R. F. Action of several β-adrenoceptor blocking drugs in the pregnant sheep and foetus. (DM2)

Contents—continued

Clinical Pharmacology

172 BANKS, W., GREENWOOD, C. T. and MUIR, D. D. The structure of hydroxyethyl starch. (CP)

SHORT COMMUNICATIONS

- 179 ALLEN, G. S., RAND, M. J. and STORY, D. F. Comparison of effects of six cholinomimetic drugs on inhibition of uptake of ⁸H-(±)-noradrenaline by guinea-pig atria. (PK3, AP1, SP1)
- 181 ÅBERG, G., ADLER, G. and ERICSSON, E. The effect of age on β-adrenoceptor activity in tracheal smooth muscle. (DM2)
- 183 Blundell, J. E. and Leshem, M. B. Dissociation of the anorexic effects of fenfluramine and amphetamine following intrahypothalmic injection. (PP, SP2)

Systematic Pharmacology

Cardiovascular system SP1 Central nervous system SP2 Other physiological systems SP3

Pharmacokinetics

Storage, distribution, fate PK1 Synthesis, metabolism PK2 Uptake, release PK3

Clinical Pharmacology, Experimental Therapy CP Chemotherapy CT Miscellaneous M

Autopharmacology

Adrenergic, cholinergic transmission AP1 Histamine, kinins, prostaglandins, etc. AP2 Hormones AP3

Drug Mechanisms

Molecular, cellular, biochemical, biophysical DM1 Receptors, antagonism, potentiation, tolerance DM2

Pharmacometrics PM Psychopharmacology PP Toxicology TX

CONTENTS

Volume 47 No. 1 January 1973

Page

Systematic Pharmacology

- 1 CLARK, ANNE and OLSON, CAMILLE B. Effects of caffeine and isoprenaline on mammalian ventricular muscle. (SP1)
- 12 PARRATT, J. R. Myocardial and circulatory effects of *E. coli* endotoxin; modification of responses to catecholamines. (SP1, AP1, AP2)
- 26 DOGGETT, N. S. and SPENCER, P. S. J. Pharmacological properties of centrally-administered agents which interfere with neurotransmitter function: a comparison with the central depressant effects of ouabain. (SP2, PP)
- 39 CHRISTIE, JANICE E. and CROW, T. J. Behavioural studies of the actions of cocaine, monoamine oxidase inhibitors and iminodibenzyl compounds on central dopamine neurones.

(SP2, AP1, PP)

Autopharmacology

- 48 FERREIRA, S. H., MONCADA, S. and VANE, J. R. Some effects of inhibiting endogenous prostaglandin formation on the responses of the cat spleen. (AP2, SP1, DM2)
- 59 GUTMAN, Y., LEVY, M. and SHORR, J. Renin-like activity of the rat submaxillary gland: characterization and the effect of several drugs and stimuli. (AP3, SP1)

Pharmacokinetics

- 69 MARCHAND, C. and NADEAU, D. Effect of 2-diethylaminoethyl-2,2-diphenylvalerate hydrochloride (SKF 525-A) on sulphacetamide distribution and excretion in rats. (PK1)
- 77 FURUTA, Y., HASHIMOTO, K., IWATSUKI, K. and TAKEUCHI, O. Effects of enzyme inhibitors of catecholamine metabolism and of haloperidol on the pancreatic secretion induced by L-DOPA and by dopamine in dogs. (PK2, AP1)
- 85 BASKIN, S. I., DUTTA, S and MARKS, B. H. The effects of diphenylhydantoin and potassium on the biological activity of ouabain in the guinea-pig heart. (PK3, SP1, DM1)
- 97 MOLENAAR, P. C., NICKOLSON, V. J. and POLAK, R. L. Preferential release of newly synthesized 3H-acetylcholine from rat cerebral cortex slices in vitro. (PK3 SP2)

Drug Mechanisms

- BLABER, L. C. The prejunctional actions of some non-depolarizing blocking drugs. (DM1, AP1)

 117 RAMGROSE S. O. A. MAROUIS, V. O. and SALAKO, I. A. Some pharmacological effects of the
- 117 BAMGBOSE, S. O. A., MARQUIS, V. O. and SALAKO, L. A. Some pharmacological effects of the nematocide, morantel. (DM1)
- 124 Foy, J. M. and Furman, B. L. Effect of single dose administration of diuretics on the blood sugar of alloxan-diabetic mice or mice made hyperglycaemic by the acute administration of diazoxide. (DM1, TX)
- 133 THOMPSON, J. M. Further studies of binding bromosulphthalein sodium by human serum albumin: effects of albumin concentration and buffer composition. (DM1, PK1)
- 138 GOLDSTEIN, A., JUDSON, BARBARA A. and SHEEHAN, PATRICIA. Cellular and metabolic tolerance to an opioid narcotic in mouse brain. (DM2)
- 141 HARRIS, J. B., KARLSSON, E. and THESLEFF, S. Effects of an isolated toxin from Australian Tiger snake (Notechis scutatus scutatus) venom at the mammalian neuromuscular junction. (DM2, AP1, TX)
- 147 CHANG, C. C., CHEN, T. F. and CHUANG, SING-TAI. N,O-di and N,N,O-tri [8H] acetyl α-bungarotoxins as specific labelling agents of cholinergic receptors. (DM2, AP1)
- 161 TRUELOVE, J. F., PETTEN, G. R. VAN and WILLES, R. F. Action of several β-adrenoceptor blocking drugs in the pregnant sheep and foetus. (DM2)

Clinical Pharmacology

172 BANKS, W., GREENWOOD, C. T. and MUIR, D. D. The structure of hydroxyethyl starch. (CP)

SHORT COMMUNICATIONS

- 179 Allen, G. S., Rand, M. J. and Story, D. F. Comparison of effects of six cholinomimetic drugs on inhibition of uptake of ³H-(±)-noradrenaline by guinea-pig atria. (PK3, AP1, SP1)
- 181 ÅBERG, G., ADLER, G. and ERICSSON, E. The effect of age on β-adrenoceptor activity in tracheal smooth muscle. (DM2)
- 183 Blundell, J. E. and Leshem, M. B. Dissociation of the anorexic effects of fenfluramine and amphetamine following intrahypothalmic injection. (PP, SP2)

Systematic Pharmacology

- 187 POLSTER, P. and VAUGHAN WILLIAMS, E. M. The effect of prolonged treatment with oxyfedrine on intracellular potentials and on other features of cardiac function in rabbits and guinea-pigs.
- LANG, W. J. and RUSH, M. L. Cardiovascular responses to injections of cholinomimetic drugs 196 into the cerebral ventricles of unanaesthetized dogs. (SP1, SP2)
- DOLLERY, C. T. and REID, J. L. Central noradrenergic neurones and the cardiovascular actions of clonidine in the rabbit. (SP1, SP2)
- FINCH, L. and HAEUSLER, G. Further evidence for a central hypotensive action of α-methyldopa 217 in both the rat and cat. (SP1, SP2, AP1)
- HARRIS, M., HOPKIN, JUDY M. and NEAL, M. J. Effect of centrally acting drugs on the uptake 229 of γ-aminobutyric acid (GABA) by slices of rat cerebral cortex. (SP2, PK3, DM1)
- 240 GUPTA, N. and LEVY, L. Delayed manifestation of ultraviolet reaction in the guinea-pig caused by anti-inflammatory drugs. (SP3, DM2)

Autopharmacology

- FINCH, L., HAEUSLER, G. and THOENEN, H. A comparison of the effects of chemical sym-(AP1, SP1, SP2) pathectomy by 6-hydroxydopamine in newborn and adult rats.
- 261 GIBSON, A. and GILLESPIE, J. S. The effect of immunosympathectomy and of 6-hydroxydopamine on the responses of the rat anococcygeus to nerve stimulation and to some drugs (AP1, PK3, DM2)
- GAITONDE, B. B. and NIMBKAR, A. Y. Interaction of bretylium and guanethidine on the relaxations of the rat isolated fundal strip preparation, evoked by indirect stimulation. (AP1)
- 272 EISEN, V. and LOVEDAY, C. Effects of salicylates on blood changes in mycoplasma arthritis in rats.
- 282 GREENWAY, C. V. and OSHIRO, G. Effects of histamine on hepatic volume (outflow block) in anaesthetized dogs. (AP2, SP1)
- 291 PIPER, PRISCILLA J. and WALKER, JOYCE L. The release of spasmogenic substances from human chopped lung tissue and its inhibition. (AP2, PK3, DM2)
- 305 BOWERY, BARBARA and Lewis, G. P. Inhibition of functional vasodilatation and prostaglandin formation in rabbit adipose tissue by indomethacin and aspirin. (AP2, SP1)
- 315 COUSINEAU, D., GAGNON, D. J. and SIROIS, P. Changes in plasma levels of vasopressin and renin in response to haemorrhage in dogs. (AP3)

Pharmacokinetics

- ALABASTER, VALERIE A. and BAKHLE, Y. S. The removal of noradrenaline in the pulmonary circulation of rat isolated lungs.
- HORN, A. S. Structure-activity relations for the inhibition of catecholamine uptake into synaptosomes from noradrenaline and dopaminergic neurones in rat brain homogenates (PK3, AP1, DM1)

Drug Mechanisms

- BALNAVE, R. J. and GAGE, P. W. The inhibitory effect of manganese on transmitter release at 339 the neuromuscular junction of the toad.
- FERRY, C. B. and MARSHALL, A. R. An anti-curare effect of hexamethonium at the mammalian 353 neuromuscular junction. (DM1, DM2)
- JENKINSON, D. H. and TERRAR, D. A. Influence of chloride ions on changes in membrane potential during prolonged application of carbachol to frog skeletal muscle. (DM1, DM2, AP1) BAUDOUIN-LEGROS, M. and MEYER, P. Effects of angiotensin, catecholamines and cyclic 363
- 377 (DM1, AP3, SP1) AMP on calcium storage in aortic microsomes.
- KALSNER, S. Mechanism of potentiation by amines of non-equilibrium blockade of the 386 (DM2) a-adrenoceptor.
- Levy, B. Selective blockade of β -adrenoceptors by 1-(p-allylphenoxy)-3-isopropylamino-2 398 propanol hydrochloride (H 64/52) in the anaesthetized dog. (DM2)
- 408 ROTH, R. H. Inhibition by γ-hydroxybutyrate of chlorpromazine-induced increase in homovanillic acid. (DM2, PP)

Clinical Pharmacology

415 HEADING, R. C., NIMMO, J., PRESCOTT, L. F. and TOTHILL, P. The dependence of paracetamol absorption on the rate of gastric emptying. (CP)

SHORT COMMUNICATIONS

- MASSINGHAM, R. and SHEVDE, S. The ionic composition of aortic smooth muscle from A.S. hypertensive rats.
- 425 TONGE, SALLY R. Permanent alterations in catecholamine concentrations in discrete areas of brain in the offspring of rats treated with methylamphetamine and chlorpromazine. (SP2, PK2)
- HUGHES, J. Differential labelling of intraneuronal noradrenaline stores with different con-(AP1, PK3) centrations of (-)-3H-noradrenaline.
- HOLMAN, MOLLIE E. and SPITZER, N. C. Action of botulinum toxin on transmission from 431 sympathetic nerves to the vas deferens. (DM1, AP1)
 Breckenridge, A., Burke, C. W., Davies, D. S. and Orme, M. L'E. Immediate decrease by
- 434 hydrocortisone of the plasma half-life of antipyrine. (CP)

Systematic Pharmacology

- DHASMANA, K. M. and SPILKER, B. A. On the mechanism of L-DOPA-induced postural hypotension in the cat. (SPI, DM2)
- 452 ABEL, E. L., McMILLAN, D. E. and HARRIS, L. S. Tolerance to the hypothermic effects of Δ⁹-tetrahydrocannabinol as a function of age in the chicken. (SP2)
- 457 KRIVOY, W., KROEGER, D. and ZIMMERMANN, E. Actions of morphine on the segmental reflex of the decerebrate-spinal cat. (SP2, DM2)
- 465 CLARKE, G. and DAVIES, J. The effects of anti-Parkinson drugs on cortical neurones.
 (SP2, DM2)
- 476 Brown, D. M., Hughes, B. O., Marsden, C. D., Meadows, J. C. and Spicer, B. Some initial animal and human pharmacological studies with benzpryzine (BRL 1288). (SP2, CP, PP)
- 487 Allen, Judith A., Jenkinson, D. J. and Roddie, I. C. The effect of β-adrenoceptor blockade on human sweating. (SP3, CP)

Autopharmacology

- 498 HÅKANSON, R., LIEDBERG, G. and OSCARSON, J. Effects of prostaglandin E₁ on acid secretion, mucosal histamine content and histidine decarboxylase activity in rat stomach. (AP2)
- 504 Eyre, P., Lewis, A. J. and Wells, P. W. Acute systemic anaphylaxis in the calf.
 517 Ribeiro, S. A. and Silva, M. Rocha E. Antinociceptive action of bradykinin and related kinins of larger molecular weights by the intraventricular route.
 (AP2)

Pharmacokinetics

- 529 GOODCHILD, MARGARET and NEAL, M. J. The uptake of ³H-γ-aminobutyric acid by the retina. (PK3)
- NEAL, M. J. and STARR, M. S. Effect of inhibitors of γ-aminobutyrate aminotransferase on the accumulation of ³H-γ-aminobutyric acid by the retina. (PK3)
- 556 GILLESPIE, J. S. and TOWART, R. Uptake kinetics and ion requirements for extraneuronal uptake of noradrenaline by arterial smooth muscle and collagen. (PK3, AP1, SP1)
- 568 Powis, G. The accumulation and metabolism of (-)-noradrenaline by cells in culture.
 (PK3, AP1)

Drug Mechanisms

- 576 Loots, J. M., Meij, H. S. and Meyer, B. J. Effects of *Naja nivea* venom on nerve, cardiac and skeletal muscle activity of the frog. (DM1)
- 586 BIRCH, N. J. and JENNER, F. A. The distribution of lithium and its effects on the distribution and excretion of other ions in the rat. (DM1, PK1, PP)

Clinical Pharmacology

595 PHILLIPS, SUSAN J., RICHENS, A. and SHAND, D. G. Adrenergic control of tendon jerk reflexes in man. (CP, SP2)

SHORT COMMUNICATIONS

- WESTON, A. H. The effect of desensitization to adenosine triphosphate on the peristaltic reflex in guinea-pig ileum.

 (DM2, AP1, AP2)
- 609 BEAUGRAND, J. and St.-LAURENT, J. Effects of α-methyl-p-tyrosine and L-DOPA on brain self-stimulation and motor activity in rats. (PP)

Proceedings of the British Pharmacological Society, London, 3-5 January, 1973

Communications

- 613P CRAWLEY, F. E. H., KENNEDY, P. and SWASH, M. Effect of dimethothiazine on tonic vibration reflex in man
- 615P LATHAM, A. N. and RICHENS, A. Pheneturide, a more potent liver enzyme inducer in man than phenobarbitone?
- 616P Franklin, C. S. and Kyegombe, D. B. The distribution and induction of some drugmetabolizing enzymes in man
- 616P Breckenridge, A., Davies, D. S., Davies, L. and Orme, M. Dose-dependent enzyme induction
- 617P ADNITT, P. I., FRAYN, K. N. and TURNER, P. Effects of metformin on glucose uptake by isolated human skeletal muscle
- 618P DAVIES, D. L., LANT, A. F., MILLARD, N. R., SMITH, A. J., WARD, J. W. and WILSON, G. M. Some aspects of the clinical pharmacology of bumetanide, a new, potent oral diuretic
- 619P MARTIN, H. DE V. Atropine sulphate absorption from an intramuscular injection of a mixture of the oxime, P2S, and atropine in exercising humans
- 620P BASIL, B., COLLINS, R. F. and CUTHBERT, M. F. Pharmacokinetics of M&B 17,803A in animals and man

- 620P OHNHAUS, E. E. The pharmacokinetics of unchanged pindolol in patients with impaired renal function
- AELLIG, W. H. Isoprenaline antagonism and duration of action in exercise induced tachycardia of three β -adrenoceptor blocking drugs: pindolol, LF 17-895 and propranolol CLARK, R. A., JULIAN, D. G., NIMMO, J., PRESCOTT, L. F. and TALBOT, R. Clinical pharma-621P
- 622P cological studies of Kö 1173—a new antiarrhythmic agent
- RICHARDSON, B. P. Evidence for a physiological role of prolactin in osmoregulation in the 623P rat after its inhibition by 2-bromo-a-ergokryptine
- 624P JONDORF, W. R., MACINTYRE, D. E. and Powis, G. Induction of liver microsomal drug metabolism in newly-hatched chicks
- SALMON, G. K. and West, G. B. Variation in the response of rats to chemical and thermal 625P
- 626P LEDINGHAM, I. McA., MARSHALL, R. J. and PARRATT, J. R. Drug-induced changes in blood flow in normal and ischaemic regions of the canine myocardium
- 627P Li, D. M. F. Cardiovascular and respiratory effects of cannabis extracts and Δ^1 -tetrahydrocannabinol (Δ¹-THC)
- GARLAND, L. G. and MONGAR, J. L. Inhibition by cromoglycate of histamine release induced 627P by dextran plus phosphatidyl serine
- WILLIAMS, K. I. Prostaglandin synthesis by the pregnant rat uterus at term and its possible 628P relevance in parturition
- 629P FERREIRA, S. H., MONCADA, S. and VANE, J. R. Further experiments to establish that the analgesic action of aspirin-like drugs depends on the inhibition of prostaglandin biosynthesis
- 630P BALLANTYNE, A., JONES, R. L. and UNGAR, A. The actions of prostaglandins A₁ and A₂ on airway resistance and compliance in the cat
 CUTHBERT, A. W. and YOUNG, J. M. Determination of the number of muscarinic receptors
- 631P in chick amnion muscle
- COLQUHOUN, D., RANG, H. P. and RITCHIE, J. M. The binding of labelled tetrodotoxin and 632P cobra toxin by the rat diaphragm
- 633P SMITH, P. A. and WALKER, R. J. Studies on 5-hydroxytryptamine receptors of neurones from Hirudo medicinalis
- 634P BLAKELEY, A. G. H., Powis, G. and Summers, R. J. Some characteristics of the uptake process in the isolated blood perfused cat spleen resistant to desmethylimipramine and 17-β-oestradiol Gabella, G. and Juorio, A. V. Monoamines in the guinea-pig intestine
- 635P
- HUMPHREY, P. P. A. Depolarization and neuromuscular block in the rat 636P 637P GINSBORG, B. L., HIRST, G. D. S., MAIZELS, J. V. and WALKER, J. Specificity of adenosine
- on transmitter output at the neuromuscular junction
- PIXNER, D. B. Bicuculline and frog spinal neurones 637P
- 639P ADAMS, P. R. and Brown, D. A. Action of γ -aminobutyric acid (GABA) on rat sympathetic ganglion cells
- 640P GOTTESFELD, ZEHAVA, KELLY, J. S. and SCHON, F. Uptake of γ-aminobutyric acid (GABA) by sensory root ganglia
- Collins, G. G. S. Drug-induced changes in the electrically evoked release of ³H-\(\gamma\)-amino-641P butyric acid (8H-GABA) from spinal cord
- 642P Bradley, P. B. and Dray, A. Actions and interactions of microiontophoretically applied morphine with transmitter substances on brain stem neurones
- 642P HILL, R. G., SIMMONDS, M. A. and STRAUGHAN, D. W. Amino acid antagonists and the depression of cuneate neurones by γ -aminobutyric acid (GABA) and glycine
- 644P SUGRUE, M. F. Effects of morphine and pentazocine on the turnover of noradrenaline and dopamine in various regions of the rat brain
- 645P ANLEZARK, G. M., ARBUTHNOTT, G. W., CROW, T. J., ECCLESTON, D. and WALTER, D. S. Intracranial self-stimulation and noradrenaline metabolism in cortex
- 646P HORN, A. S. and SNODGRASS, S. R. The occurrence of tryptamine in rat brain and its pharmacological manipulation
- 647P ENDERSBY, C. A. and WILSON, CATHERINE. The effect of ovarian steroids on the uptake of ⁸H-noradrenaline, ⁸H-dopamine and ⁸H-5-hydroxytryptamine by hypothalamic tissue in vitro
- 648P BLANC, G., GLOWINSKI, J., STINUS, L. and THIERRY, A. M. Is cortical dopamine only the precursor of noradrenaline?
 648P BENTON, D., RICK, J. T. and TABERNER, P. V. Pharmacological interactions between
- y-hydroxybutyric acid and agents which modify cerebral y-aminobutyric acid (GABA) metabolism
- 649P Neal, M. J. and Starr, M. S. Effect of amino-oxyacetic acid on the accumulation of ³H-γaminobutyric acid (3H-GABA) by rat retina
- 650P NISTRI, A. and PEPEU, G. Increase in brain and spinal acetylcholine levels without anti-
- nociceptive actions following morphine administration in the frog
 652P GARDNER, C. R. and Webster, R. A. The effect of some anticonvulsant drugs on leptazol
 and bicuculline induced acetylcholine efflux from rat cerebral cortex
- 653P Bradshaw, C. M., Roberts, M. H. T. and Szabadi, E. Relationship between the kinetics of neuronal responses and the release of drugs from micropipettes: effect of retaining current 653P LOH, H. S., WATTERS, K. J. and WILSON, C. W. M. The effects of acetylsalicylic acid on the
- metabolic availability of ascorbic acid in man (T) 654P CAMPBELL, N. P. S., KELLY, J., PANTRIDGE, J. F., SHANKS, R. G. and STRONG, J. E. The
- evaluation of Kö 1173 in patients with cardiac arrhythmias (T) 654P Feinberg, H. Interaction of ADP with platelets (T)

Demonstrations

- BAKER, G. F. and ROGERS, H. J. Effect of chlorpromazine on hexose penetration in the 655P human erythrocyte
- 655P HILL, PENNY M. M. and YOUNG, MAUREEN. Use of the guinea-pig foetal placenta, perfused
- in situ, as a model to study the placental transfer of pharmacological substances Neal, M. J., Peacock, D. G. and White, R. D. Kinetic analysis of amino acid uptake by 656P the rat retina in vitro
- Bradshaw, C. M., Roberts, M. H. T. and Szabadi, E. A theoretical model of ion-movements 657P
- in micropipettes occurring during the course of microelectrophoresis experiments Cashin, C. H. and Sutton, Susan. The effect of anti-Parkinson drugs on catalepsy induced 658P by α-methyl-p-tyrosine in rats pretreated with intraventricular 6-hydroxydopamine
- 659P IRESON, J. D. and OSBORNE, H. M. A modified motor activity test to discriminate major and minor tranquillizers
- NAHORSKI, S. R., ROGERS, K. J. and SLATER, P. Analysis of labile brain constituents using 659P a technique for the instantaneous fixation of brain tissue in vivo
- GREENGRASS, PAMELA M. and TONGE, SALLY R. Some effects of the acute and chronic 660P administration of sex hormones on brain monoamine concentrations
- FOZARD, J. R. and MWALUKO, G. M. P. The uptake of 5-hydroxytryptamine by the rabbit heart in vitro
- 662P THOMAS, G. and WEST, G. B. Amino acids and inflammation
- HILL, R. G. and MILLER, A. A. A technique allowing e.e.g. and activity recording together 663P with intraventricular administration of drugs in the conscious rabbit
- HILL, R. G., SIMMONDS, M. A. and STRAUGHAN, D. W. Microiontophoretic study of depressant amino acids and the specificity of their antagonists
- CLARKE, G., HILL, R. G. and STRAUGHAN, D. W. Pharmacology of the neuronal excitation 664P and inhibition induced by an acute seizure focus in feline cortex
- GILBERT, J. N. T., MILLARD, B. J. and Powell, J. W. Gas chromatography-mass spectro-665P metry for the identification of barbiturate metabolites
- 666P MAIN, I. H. M. and WHITTLE, B. J. R. Effects of indomethacin on rat gastric acid secretion and mucosal blood flow
- HAMMOND, M. D. and SCHNEIDER, C. Behavioural changes induced in mice following termination of ethanol administration
- Brenells, Ann B. An in vivo method for studying release of putative neurotransmitter 667P from the rabbit olfactory bulbs
- 668P JONES, I. M., JORDAN, C. C., MORTON, I. K. M., STAGG, C. J. and WEBSTER, R. A. Chronic dorsal root section on free amino acid levels in the rabbit spinal cord
- GRIFFITHS, P. J., LITTLETON, J. M. and ORTIZ, A. A method for the induction of dependence 669P to ethanol in mice
- PRINCE, A. K. and TOATES, P. A stain for the detection of choline acetyltransferase 670P
- LINNOILA, M. and MATTILA, M. J. Interaction of alcohol and drugs on psychomotor skills 671P as demonstrated by a driving simulator
- ADJEPON-YAMOAH, K. K. and PRESCOTT, L. F. Lignocaine metabolism in man BOAKES, A. J. and PRICHARD, B. N. C. The effect of AH 5158, pindolol, propranolol, 673P D-propranolol on acute exercise tolerance in angina pectoris
- 674P KIDDIE, MOIRA A., ROYDS, R. B. and SHAW, T. R. D. Preliminary studies on the pharma-
- cology of an antidysrhythmic, Kö 1173, in man Allum, Wendy, Aminu, J., Bloomfield, T. H., Davies, Carol, Scales, A. H. and Vere, D. W. 675P Interaction between debrisoquine and phenylephrine in man
- HOUGHTON, JOAN and PHILLIPS, EILEEN M. The pharmacology of human isolated pulmonary 676P vascular tissue
- ARBAB, A. G., TURNER, P. and VARIAVA, DINAZ M. The α-adrenoceptor blocking activity of 677P desacetylthymoxamine on human isolated smooth muscle
- 678P TURNER, P. and VARIAVA, DINAZ M. Comparison of the potencies of edrophonium, neostigmine and eserine with a new anticholinesterase drug RX 67668 on human tissues
- CARSON, I. W., CLARKE, R. S. J. and DUNDEE, J. W. Interaction of suxamethonium with 679P intravenous induction agents
- HICKS, DEBORAH C. The buccal absorption of some β -adrenoceptor blocking drugs 680P
- BAXTER, M. G., FOWLER, L. J., MILLER, A. A. and WALKER, J. M. G. Some behavioural and anticonvulsant actions in mice of ethanolamine O-sulphate, an inhibitor of 4-aminobutyrate aminotransferase
- COURTICE, C. J. Signal conditioning modules for interfacing biological signals with a 682P
- computer (T)
 COURTICE, C. J. Modular equipment for processing and counting action potential data from 682P microelectrodes (T)
- 682P EARL, JANET and LARGE, W. A. The hermit crab inhibitory neuromuscular junction as a model for investigating GABA-mediated inhibition (T)

Systematic Pharmacology

- 683 FIBIGER, H. C., FIBIGER, H. P. and ZIS, A. P. Attenuation of amphetamine-induced motor stimulation and stereotypy by 6-hydroxydopamine in the rat. (SP2, PP)
- 693 Wei, E. Morphine analgesia, tolerance and physical dependence in the adrenalectomized rat.
 (SP2, PP, AP3)
- 700 BHARGAVA, K. P., KULSHRESTHA, V. K., SANTHAKUMARI, G. and SRIVASTAVA, T. P. Mechanism of histamine-induced antidiuretic response. (SP2, AP2, AP3)

Autopharmacology

- 707 O'DONNELL, STELLA R. and SAAR, NILI. Histochemical localization of adrenergic nerves in the guinea-pig trachea. (AP1)
- 711 FREDHOLM, B. B. and HEDQVIST, P. Role of pre- and postjunctional inhibition by prostaglandin E₂ of lipolysis induced by sympathetic nerve stimulation in dog subcutaneous adipose tissue *in situ*. (AP1, AP2)
- 719 BLAKELEY, A. G. H., Powis, G. and Summers, R. J. The effects of pargyline on overflow of transmitter and uptake of noradrenaline in the cat spleen. (API)
- 729 GARCIA, A. G. and KIRPEKAR, S. M. Release of noradrenaline from the cat spleen by sodium deprivation. (API, PKI)
- 748 HUGHES, I. E., KIRK, JENNIFER A., KNEEN, BARBARA and LARGE, B. J. An assessment of sympathetic function in isolated tissues from mice given nerve-growth-factor antiserum and 6-hydroxydopamine. (AP1, SP3, DM2)
- 760 GALLACHER, MAUREEN, MACKENNA, B. R. and McKirdy, H. C. Effects of drugs and of electrical stimulation on the muscularis mucosae of rabbit large intestine. (AP1, SP3)
- 765 Vizi, E. S. Acetylcholine release from guinea-pig ileum by parasympathetic ganglion stimulants and gastrin-like polypeptides. (AP1, AP3)
- 778 CUTHBERT, A. W. and WONG, P. Y. D. Effect of phospholipase C on calcium release from epithelia treated with antidiuretic hormone. (AP3)

Pharmacokinetics

- 782 KAMPMANN, J., LINDAHL, F., MØLHOLM HANSEN, J. and SIERSBAEK-NIELSEN, K. Effect of probenecid on the excretion of ampicillin in human bile. (PK1, CT)
- 787 DEVASANKARAIAH, G., HARANATH, P. S. R. K. and Krishnamurty, A. Passage of intravenously administered tubocurarine into the liquor space in man and dog. PK1, SP2)
- 799 Alabaster, Valerie A. and Bakhle, Y. S. The bradykininase activities of extracts of dog lung. (PK2, AP2)
- 808 AHTEE, LIISA and SAARNIVAARA, LAILA. The effect of narcotic analgesics on the uptake of 5-hydroxytryptamine and (—)-metaraminol by blood platelets. (PK3)

Drug Mechanisms

- 819 Cull, Geraldine A. G. and Scott, N. C. Structure-activity relationships in some series of 2-alkyl-1,2,3,-benzotriazinium compounds. (DM1)
- 827 MACKENZIE, J. E. and PARRATT, J. R. Effects of oxyfedrine on isolated portal vein and other smooth muscles. (DM2, DM1, SPI)
- 838 LANCASTER, JULIE, SAWYER, P. R., SHEPHERD, D. M. and TURNBULL, M. J. Effect of chronic L-DOPA administration on catecholamine metabolism in the rat. (DM2, SP2)

SHORT COMMUNICATIONS

- 843 CAVOTO, F., KELLIHER, G. and ROBERTS, J. Simultaneous measurement of atrial and ventricular pacemaker activity. (SP1)
- 847 Perkins, W. E. and Vars, L. Effects of carbenoxolone sodium on stress-induced gastric damage in rats. (SP3)
- 850 Armstrong, J. M. and Boura, A. L. A. Effects of clonidine and guanethidine on peripheral sympathetic nerve function in the pithed rat. (AP1, SP1)