

# COMMUNICATIONS

The author who intended to present the work is indicated by an asterisk (\*) on the abstract

- 475P COSTALL, B., DOMENEY, A.M., GERRARD, P.A.\* & NAYLOR, R.J. A primate model for the assessment of anxiolytic drug action.
- 476P MORATALLA, R.\* & BOWERY, N.G. Autoradiographic measurement of GABA<sub>A</sub> and GABA<sub>B</sub> binding sites in rat caudate putamen after denervation of neuronal inputs.
- 477P PIERI, L. Ro 19-4603: a benzodiazepine receptor partial inverse agonist with prolonged proconvulsant action in rodents.
- 478P CROSS, A.J.\*, OSBORNE, J.M. & GREEN, A.R. Interaction of chlor-methiazole with ligand binding sites associated with the GABA<sub>A</sub> receptor complex.
- 479P BROWN, J.M.C., SIAREY, R.J., WHITTINGTON, M.A. & LITTLE, H.J. Effectiveness of concurrently administered dihydropyridines in preventing the withdrawal syndrome from barbitals.
- 480P ABILA, B.\*, FRANCIS, P. & LACHE, F. Preliminary screening of a single-dose native antiepileptic preparation used in Nigeria.
- 481P BOULTON, C.L. & O'SHAUGHNESSY, C.T.\* Effects of forskolin on epileptiform activity in rat cortical slices.
- 482P BOULTON, C.L.\*, GRIFFITHS, E.C. & O'SHAUGHNESSY, C.T. A comparison of the effects of two throtrophin-releasing hormone (TRH) analogues on epileptiform activity in vitro.
- 483P POAT, J.A.\*, CRIPPS, H.E. & IVERSEN, L.L. Solubilisation of high affinity forskolin in binding sites from rat CNS tissue.
- 484P DEAKIN, J.F.W., SIMPSON, M.D.C.\*, GILCHRIST, A.C., SKAN, W.J., ROYSTON, M.C. & SLATER, P. Changes in [<sup>3</sup>H]D-aspartate and [<sup>3</sup>H]kainate binding in schizophrenic post mortem brains.
- 485P PRICE, G.W.\*, AHMERS, R.G., MIDDLEMISS, D.N. & WONG, E.H.F. In vivo [<sup>3</sup>H]-MK-801 binding in mouse brain.
- 486P HUDSON, A.L.\* & WOODRUFF, G.N. Comparative autoradiography of [<sup>3</sup>H]-(+)-MK-801 and [<sup>3</sup>H]-glycine in the mammalian CNS.
- 487P CARR, R.D., HIGGS, L., KILLINGBACK, P.G., O'CONNOR, S.E.\*, ROBSON, A. & WELLS, E. FPL 63547 - a potent and long-acting inhibitor of angiotensin-converting enzyme.

- 488P SHAHID, M.\*, COTTNEY, J., MARSHALL, R.J., MARTORANA, M.G., RODGER, I.W., BRUIN, J.C. & McINDEWAR, I. Org 10325, a new cardiotonic agent with positive inotropic and vasodilator properties.
- 489P MARSHALL, R.J.\*, SHAHID, M., COTTNEY, J., BRUIN, J. & McINDEWAR, I. Org 10325 a new cardiotonic agent: cardiovascular effects in anaesthetised animals.
- 490P ARMAH, B.I.\*, HOFFERBER, E. & STENZEL, W. Saterinone (BDF 8634): a positive inotropic vasodilator with potent PDE type III and  $\alpha_1$ -adrenoceptor inhibitory activities.
- 491P BOHM, M., KEMKES, B., PIESKE, B., SCHNABEL, P. & ERDMANN, E. The  $\beta_2$ -adrenoceptor-mediated positive inotropic effect of dopexamine in the failing human heart.
- 492P COATES, J.\*, DREW, G.M., KELLERMAN, S. & SULLIVAN, A.T. Do cardiac  $\alpha$ -adrenoceptors play a role in the inotropic actions of (-)-dobutamine?
- 493P ELLIS, A.M., COKER, S.J., MAXWELL, M.P., FORD, A. & HUGHES, B.\* Potential role of 5-HT<sub>1</sub>-like receptors in myocardial infarction and blood flow in a beagle dog model.
- 494P DRETELER, G.H.\*, WOUTERS, W. & SAXENA, P.R. Systemic and regional haemodynamic effects of the putative 5-HT<sub>1A</sub> agonists 8-OH-DPAT and flesinoxan.
- 495P WOUTERS, W.\*, DRETELER, G.H. & BEVAN, P. Cardiovascular studies with the 5-HT<sub>1A</sub> agonist flesinoxan in rats.
- 496P LAD, N.\* & MANNING, A.S. Benoxaprofen: effect on reperfusion-induced tissue necrosis and myeloperoxidase activity in anaesthetised rats.
- 497P THIEMERMANN, C., THOMAS, G.R., WALDER, C. & VANE, J.R. Defibrotide reduces infarct size in rabbit model of acute myocardial ischaemia and reperfusion.
- 498P DOURISH, C.T.\*, HERBERT, E.N. & IVERSEN, S.D. Blockade of apomorphine-induced yawning in rats by the selective dopamine autoreceptor antagonist (+)-AJ 76.
- 499P CLARK, M.L.\*, DOURISH, C.T. & IVERSEN, S.D. Low doses of the 5-HT<sub>1</sub> agonist RU24969 induce sedation in the mouse: evidence for mediation by 5-HT<sub>1B</sub> autoreceptors.
- 500P KELLY, J.S.\*, LARKMAN, P.M. & RAINNIE, D.G. Hyperpolarising and depolarising responses to 5-hydroxytryptamine in the rat brain stem in vitro.

- 501P KALKMAN, H.O. Is the 5-HT<sub>1</sub> receptor agonist-induced rotation in rats lesioned unilaterally in the dorsal raphe mediated by 5HT<sub>1A</sub> receptors?
- 502P BORTON, M.\*, WALSH, T. & DOCHERTY, J.R. Actions of 8-hydroxy-2-(n-dipropylamino) tetralin (8-OH-DPAT) at  $\alpha_2$ -adrenoceptors.
- 503P O'CONNOR, J.J.\*, ROWAN, M.J. & ANWYL, R. Comparison of the acute and chronic effects of buspirone on synaptic transmission in the rat hippocampus.
- 504P HIGGINS, G.A.\*, KILPATRICK, G.J., BUNCE, K.T., JONES, B.J. & TYERS, M.B. 5-HT<sub>3</sub> receptors in the area postrema may mediate the anti-emetic effects of 5-HT<sub>3</sub> antagonists in the ferret.
- 505P O'NEILL, M.F.\*, DOURISH, C.T. & IVERSEN, S.D. Morphine analgesia in the rat paw pressure test is blocked by CCK but potentiated by the CCK antagonist MK 329.
- 506P COLLIE, I.T. & MCCARTHY, P.S.\* A new approach to the pharmacological evaluation of opioids in vivo.
- 507P GIBSON, A.\*, MIRZAZADEH, S., TUCKER, J.F. & WILSEY, C. The cGMP-phosphodiesterase inhibitor M&B 22948 potentiates NANC relaxations of the mouse anococcygeus.
- 508P ELLIS, J.L.\* & FARMER, S.G. Effects of VIP antagonists, and VIP and PHI antisera on non-adrenergic, non-cholinergic tracheal relaxation.
- 509P FARMER, S.G.\* & ELLIS, J.L. Effects of peptidases on non-adrenergic, non-cholinergic inhibitory responses of guinea-pig tracheal smooth muscle.
- 510P LANGLANDS, J.M.\*, KARDASZ, A.M., WATSON, J. & RODGER, I.W. Effects of histamine on cAMP, cAMP-dependent protein kinase activity, cGMP and inositol trisphosphate in airway smooth muscle.
- 511P EGLEN, R.M.\*, MICHEL, A.D., KUNYSZ, E.A., CORNETT, C.M. & WHITING, R.L. Analysis of the interaction of hexamethonium with muscarinic receptors in vivo.
- 512P MICHEL, A.D., STEFANICH, E. & WHITING, R.L. PC12 pheochromocytoma cells contain an atypical muscarinic receptor.
- 513P GIEMBYCZ, M.A.\* & DIAMOND, J. Evidence against the hypothesis that  $\beta$ -adrenoceptor agonists promote the translocation of cyclic AMP-dependent protein kinase in vivo.

- 514P KEEN, M.\*, KELLY, E., NOBBS, P. & MACDERMOT, J. Homologous desensitization of adenosine A<sub>2</sub> receptors on NG108-15 cells is not due to loss of [<sup>3</sup>H]-NECA binding sites.
- 515P KELLY, E.\*, KEEN, M., NOBBS, P. & MACDERMOT, J. Exposure of NG108-15 cells to iloprost alters responsiveness to stimulators and inhibitors of adenylate cyclase.
- 516P ANTUNES, E., LIDBURY, P.S.\*, DE NUCCI, G. & VANE, J.R. Lack of synergism of iloprost and sodium nitroprusside on rabbit vascular smooth muscle.
- 517P MCCALL, T.\*, WHITTLE, B.J.R., BOUGHTON-SMITH, N.K. & MONCADA, S. Inhibition of FMLP-induced aggregation of rabbit neutrophils by nitric oxide.
- 518P LOVEDAY, M., SMITH, D.L., FULKS, J., LEE, C.H., HEDLEY, L., VANANTWERP, D. & WILLIS, A.L.\*. Selective anti-platelet synergism between nitrodonators and the prostacyclin mimetic RS93427.
- 519P MORRISON, K.J.\* & POLLOCK, D. Effects of acetylcholine and nitric oxide on coupling mechanisms underlying contraction and relaxation in rat isolated aortic rings.
- 520P BROWN, Z.\*, NEILD, G.H., PILLING, S.A. & LEWIS, G.P. Cyclosporin mediated changes in arachidonic acid release from membrane phospholipids in human umbilical vein endothelial cells.
- 521P YAACOB, H.B.\* & PIPER, P.J. The effects of PAF-antagonist WEB 2086 on PAF-induced responses in guinea-pig isolated hearts and in cardiac anaphylaxis.
- 522P GILES, H.\*, LEFF, P., BOLOFO, M.L., KELLY, M.G. & ROBERTSON, A.D. BW A868C: a novel, highly potent and selective DP-receptor antagonist.
- 523P BOARDER, M.R.\*, MARRIOTT, D.B., OWEN, P.J. & PLEVIN, R. Prostaglandin stimulation of noradrenaline release from bovine adrenal chromaffin cells.
- 524P OWEN, P.J.\* & BOARDER, M.R. Bradykinin stimulation of catechol release from chromaffin cells is sensitive to dihydropyridine agonists but not antagonists.
- 525P KILFEATHER, S.A.\*, STEIN, M. & O'MALLEY, K. Effect of phorbol ester on human neutrophil  $\beta$ -adrenoceptor responsiveness and cell surface receptor density.

- 526P MCALPINE, L.G.,  
MCGRATH, J.C., THOMSON,  
N.C. & WILSON, E.P.\*  
Effect of activated  
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- 527P BAKER, A.J. & FULLER,  
R.W.\* Control of human  
alveolar macrophage:  
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- 528P O'NEILL, L.A.J.\* &  
LEWIS, G.P. Induction  
of PGE<sub>2</sub> formation in  
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- 529P WARD, S.G.\*, CANTRELL,  
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Inhibition by  
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- 530P WESTWICK, J. & PLEASS,  
R.\* Action of ICI  
198615, a peptide  
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on receptor-operated  
calcium mobilisation in  
U937 cells.
- 531P HELLEWELL, P.G.\*, JOSE,  
P.J. & WILLIAMS, T.J.  
Effect of anti-C5A  
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formation and PMN  
leucocyte accumulation  
in allergic  
inflammation in the  
rabbit.
- 532P SALVEMINI, D.\*,  
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J.R. Superoxide anions  
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induced platelet  
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surfaces.
- 533P ESPLUGUES, J.V.\* &  
WHITTLE, B.R. Local  
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istration of oxygen  
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gastric lesions.
- 534P OBEN, J.A.\*, WALLACE,  
G., CHAIN, B.M. &  
FOREMAN, J.C. Involve-  
ment of glutathione in  
the stimulation of  
mitogen-induced  
interleukin-2  
production by anti-  
rheumatic drugs.
- 535P GRIFFITHS, R.J.\* &  
BLACKHAM, A. The  
effects of  
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- 536P BLACKHAM, A.\*,  
GRIFFITHS, R.J.,  
NORRIS, A.A., WOOD,  
B.E., LI, S.W., HALLAM,  
C., MITCHELL, P.D. &  
MANN, J. FPL 62064:  
a novel dual inhibitor  
of arachidonic acid  
metabolism in skin.
- 537P BARNETT, K.\* The isol-  
ation of granules from  
dog mastocytoma cells.
- 538P JOHANSEN, T. Estimation  
of the ATP utilization  
of rat mast cells  
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anaphylactic histamine  
secretion.
- 539P BRYAN, L.J.\*,  
O'DONNELL, S.R. &  
WESTWOOD, N.N. The  
uptake process for  
catecholamines in  
endothelial cells in  
rat perfused lungs is  
the same as uptake<sub>1</sub> in  
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- 540P NIALS, A.T.\* & COLEMAN, R.A. The interaction between salmeterol and  $\beta$ -adrenoceptor blocking drugs on guinea-pig isolated trachea.
- 541P BLUE, D.R., BOND, R.A. & CLARKE, D.E.\* Blockade of putative adrenoceptor in guinea-pig ileum by alprenolol.
- 542P MCLAUGHLIN, D.P.\*, FULTON, J.D., MACDONALD, A., MACDONALD, E. & SCOTT, P.J.W. Effects of catecholamines on human colonic circular smooth muscle.
- 543P BROCK, J.A.\* & CUNNANE, T.C. Effects of clonidine and noradrenaline on the nerve terminal impulse in postganglionic sympathetic nerves.
- 544P CUNNANE, T.C. & EVANS, R.J. Effects of morphine on electric activity in sympathetic nerve terminals of the mouse vas deferens.
- 545P CONROY, D.M.\*, SAMHOUN, M.N. & PIPER, P.J. Action of bradykinin is inhibited by vasoactive intestinal peptide in guinea-pig lung in vitro.
- 546P D'ORELEANS-JUSTE, P.\*, DE NUCCI, G., REGOLI, D. & VANE, J.R. Characterization of kinin receptors on bovine aortic endothelial cells.
- 547P DE NUCCI, G.\*, MITCHELL, J.A., WARNER, T.D., BEARPARK, T. & VANE, J.R. Release of EDRF and PGI<sub>2</sub> from BAEC induced by infusions of ADP, bradykinin, arachidonic acid, L-arginine and alkaline buffers.
- 548P STASZEWSKA-WOOLEY, J.\*, WOOLEY, G. & REGOLI, D. Specific receptor sites for the sympathetic cardiac chemoreflex induced by bradykinin in the dog.
- 549P BAYDOUN, A.R.\*, CIRINO, G. & WOODWARD, B. Coronary effects of bradykinin before and after phospholipase C treatment in the isolated rat heart.
- 550P WHITWORTH, P.\* & KENDALL, D.A. Different effects of chronic lithium treatment on muscarinic receptor responses in rat brain.
- 551P O'REGAN, M.H., PHILLIS, J.W.\* & WALTER, G.A. Purine release from the hypoxic rat cerebral cortex: effects of the xanthine oxidase inhibitors allopurinol and oxypurinol.
- 552P ROBINSON, J.P.\* & KENDALL, D.A. Arachidonic acid metabolites are not involved in  $\alpha$ -adrenoceptor potentiated cAMP formation in rat brain.

- 553P CHALLISS, R.A.J.\*, & NICHOLSON, C.D.  
Effects of selective phosphodiesterase inhibitors on cyclic AMP hydrolysis in rat cerebral cortical slices.
- 554P DONALDSON, J.\*, BROWN, A.M. & HILL, S.J.  
Temporal changes in the calcium-dependence of the potentiation of cyclic AMP accumulation produced by histamine in guinea-pig brain.
- 555P FONE, K.C.F.\*, JOHNSON, J.V., BENNETT, G.W. & MARSDEN, C.A. Effect of repeated intrathecal thyrotrophin-releasing hormone (TRH) analogue administration on spinal motoneurons.
- 556P JOHNSON, J.V.\*, FONE, K.C.F., BENNETT, G.W. & MARSDEN, C.A. Effect of idazoxan and a TRH analogue (RX 77368) on endogenous noradrenaline release from rat spinal cord in vitro.
- 557P GRAHAM, W.C.\*, CLARKE, C.E., CROSSMAN, A.R. & WOODRUFF, G.N.  
Dopamine D<sub>2</sub> receptors and dopamine uptake sites visualized autoradiographically in hemi-parkinsonian monkeys.
- 558P JOSEPH, M.H.\*, HEDGES, H. & GRAY, J.A. In vivo voltammetric evidence that schedule controlled behaviour increases dopamine metabolism in rat caudate.
- 559P ROONEY, K.F.\*, SEWELL, R.D.E. & SPENCER, P.S.J. Differential effects of acute administration of selective opioid agonists upon dopamine binding site density in the rat.
- 560P O'BOYLE, K.M\*. & WADDINGTON, J.L.  
CY 208-243: kinetics of binding to D-1 and D-2 dopamine receptors.
- 561P CRESPI, F.\*, MARSDEN, C.A. & SANGHERA, M.K.  
In vivo voltammetric evidence that BALB/CJ mice release more striatal dopamine than CBA/J mice.
- 562P MURRAY, A.M.\* & WADDINGTON, J.L.  
Grooming behaviour induced by the new putative D-1 dopamine receptor agonist CY 208-243.
- 563P BULLOCH, J.M.\*, DALY, C.J., MACDONALD, A., MCGRATH, J.C. & WILSON, V.G. The effect of nifedipine on nerve-mediated responses of blood vessels in vivo and in vitro.
- 564P STUBBS, D.\*, SMITH, J.W., WILSON, K.A. & DOWNING, O.A. cAMP levels in the femoral vein of the rat following  $\alpha_1$ - and  $\alpha_2$ -adrenoceptor stimulation.
- 565P KAUMANN, A.J.\*, MURRAY, K.J., HALL, J.A., WELLS, F.C. & BROWN, M.J. Stimulation of cAMP-dependent protein kinase through both  $\beta_1$ - and  $\beta_2$ -adrenoceptors in human atrial myocardium.

- 566P MIR, A.K.\* & FOZARD, J.R. Characteristics of  $\alpha_1$ -adrenoceptors in vascular and non-vascular smooth muscle.
- 567P RAMAGE, A.G.\* & WILKINSON, S.J. Comparison of the effects of flesinoxan and urapidil on different regional sympathetic outflows in anaesthetised cats.
- 568P GROSS, G.\* & HANFT, G. 5-Methyl-urapidil - an antagonist which discriminates between  $\alpha_1$ -adrenoceptor subtypes.
- 569P ALLEN, J.M.\*, ARNOTT, M., CAMPBELL, C., MCCARRON, J.G. & THORNBURY, K.D. Postjunctional  $\alpha_2$ -adrenoceptors in bovine lymphatic smooth muscle.
- 570P WILSON, C. Comparative effects of cromakalim on contractions to noradrenaline and caffeine in rabbit isolated renal artery.
- 571P MESTRE, M., ESCANDE, D. & CAVERO, I. Glibenclamide blocks the transmembrane action potential shortening evoked by cromakalim in guinea pig papillary muscle.
- 572P VERBEUREN, T.J.\*, KOENIG-BÉRARD, E. & HERMAN, A.G. Contractions to the  $\alpha_2$ -adrenoceptor agonist rilmenidine in rat and rabbit aortas and in perfused rat kidney.
- 573P CAIRNS, H.S.\*, FAIRBANKS, L., NEILD, G.H. & WESTWICK, J. Cyclosporin and the vascular reactivity of isolated perfused rabbit kidneys.
- 574P MACLENNAN, S.J.\*, MARTIN, G.R. & LEFF, P. Ergometrine: a potent agonist at 5-HT<sub>1</sub> but not 5-HT<sub>2</sub>-receptors mediating vascular contraction.
- 575P PATEL, M.\* & WEETMAN, D.F. Antagonism of 5-HT by methysergide on the rat mesenteric vascular bed in vitro.
- 576P ELLIOTT, J.\* & CALLINGHAM, B.A. Amine metabolism in isolated perfused mesenteric arteries of the rat.
- 577P SPOKES, R.A.\*, LEE, Y.C. & BLOOM, S.R. Effects of neuromedin-N and neurotensin on net fluid flux across the small bowel of the anaesthetised rat.
- 578P GODSON, C.\* & RYAN, M.P. Investigation of gentamicin, verapamil and magnesium interactions on calcium transport in rat renal brush border membrane vesicles.
- 579P JOHNSTON, P.C.\*, STEVENSON, I.H. & HEWICK, D.S. The disposition of digoxin-specific antibodies/antibody fragments in the rat.



- 580P HOTCHKISS, S.A.\*, FRASER, S., MILLER, J.M. & CALDWELL, J. The percutaneous absorption of benzyl acetate through rat skin in vitro.
- 581P D'SOUZA, G.A.\*, CALDWELL, J., SMITH, R.L., HORNER, M. & MOSS, M.S. The effect of frusemide on the disposition of salicylic acid in the horse.
- 582P CARSON, R.J.\* & REYNOLDS, F. Placental transfer of meptazinol in the rabbit.
- 583P CASEY, B.A.\*, MCAULIFFE, C.A., PRATT, I., RYAN, M.P., SHARMA, H.L. & TINKER, N.D. Uptake of [<sup>195</sup>Pt] cisplatin into LLC<sub>PK</sub><sub>1</sub> and MDCK renal epithelial cell lines.
- 584P ORMOND, T.\*, PRATT, I. & RYAN, M.P. Reduced nephrotoxicity in vivo and in vitro of cisplatin-methionine complex.
- 585P MCGLYNN, H., RYAN, M.P. & STUART, E.\* Effects of streptozotocin-induced diabetes on gentamicin nephrotoxicity.
- 586P MORRIS, C.Q., CREWE, H.K., HARLOW, J., TUCKER, G.T., WOODS, H.F. & LENNARD, M.S.\* Histamine as an inhibitor of cytochrome P-450-catalysed drug metabolism - metabolic and spectral studies.
- 587P CHAN, K.\*, TEOH, R., WONG, C.L. & WOO, J. The influence of single dose rifampicin on pyrazinamide kinetics in rabbits.
- 588P WADE, R.C. The use of molecular graphics in the design of anti-influenza agents.
- 589P FRACASSO, M.F., LEONE, R., DEL SOLDATO, P., CUZZOLIN, L. & BENONI, G. Are indomethacin intestinal and hepatic side effects related to clostridium perfringens toxin in the rat?

#### P O S T E R   C O M M U N I C A T I O N S

- 590P HAN, X. & VOHRA, M.M. A sensitive electrochemical method for simultaneous determination of histamine and nor-adrenaline by HPLC (HPLC/EC).
- 591P POURGHOLAMI, M.H., AHMADI, M., NICHOLLS, P.J. & SMITH, H.J. Pharmacokinetic and metabolic evaluation in the rat of a new pyrrolidinedione armoatase inhibitor.

- 592P CARR, R.D., COOPER, A.E., HUTCHINSON, R., MANN, J., O'CONNOR, S.E. & WELLS, E. FPL 63547 - an inhibitor of antiotensin-converting enzyme which demonstrates preferential biliary excretion.
- 593P BHARDWAY, R. & MOORE, P.K. Enhanced vasodilator and vasoconstrictor effect of drugs in perfused rat kidney of streptozotocin diabetic rats.
- 594P HALL, I. & HUGHES, I.E. Effect of meptazinol on responses to sympathetic nerve stimulation in rat vas deferens.
- 595P STUBBS, D., SMITH, J.W., THOMPSON, M.G., WILSON, K.A. & DOWNING, O.A.  $\alpha_1$ - but not  $\alpha_2$ -selective agonists cause phosphoinositide hydrolysis in the femoral vein of the rat.
- 596P FORSYTH, K.M.\*, POLLOCK, D. & SHAW, A.M. Effects of drugs and field stimulation on inositol phospholipid hydrolysis in mouse vas deferens.
- 597P XIANG, J-Z., MANTZOURIDIS, T., ADAMSON, P., HAJIMOHAMMADREZA, I., BRAMMER, M.J. & CAMPBELL, I.C.  $\alpha_2$ -adrenoceptor and  $\kappa$ -opiate receptor mediated effects on intrasynaptosomal free  $[Ca^{2+}]_i$ ; involve blockade of an N-type  $Ca^{2+}$ -channel.
- 598P HALL, I.P. & HILL, S.J. Histamine and carbachol stimulate  $[^3H]$ -inositol phosphate accumulation in bovine lung parenchyma tissue.
- 599P GIBSON, A. & SHAW, C.R. The calcium pool mobilised by oxytocin in the mouse anococcygeus.
- 600P SMYTH, B.J. & DAVIS, W.G. The effects of calcium channel blockers on gentamicin induced renal damage in spontaneously hypertensive Wistar rats.
- 601P CHAKDER, S.K. & ZEITLIN, I.J. Effect of bile acid on the release of vasoactive intestinal polypeptide (VIP) from the rat gastrointestinal tract.
- 602P PEERS, S.H. & FLOWER, R.J. Time dependent inhibition of oedema formation in rabbit skin by dexamethasone.
- 603P WALSH, L.P. & ZEITLIN, I.J. Topical and systemic administration of prednisolone and 5-aminosalicylic acid in an immune-complex model of colitis.
- 604P MOORE, U., COLLINS, P., JOHNSON, A. & TOMKIN, G.\* The in vitro effects of mevinolin and metformin on cholesterologenesis in rat intestinal cells.

- 605P ALI, I.M., HILL, S.S.,  
MCCURRIE, J.R. WATKINS,  
R.J. & WOOD, D.  
Comparative effects of  
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- 606P BEUSENBERG, F.D.,  
GONZALEZ, R.,  
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ZEEGERS, A. & LEEUWIN,  
R.S. Cardiac and  
respiratory effects of  
benzodiazepine  
derivatives in rats.
- 607P VAN OEIJEN, E.,  
LEEUWIN, R.S. & VAN  
WILGENBURG, H. Effects  
of two benzodiazepines  
on neuromuscular  
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the rat phrenic nerve.
- 608P VOHRA, M.M., TAN, M.H.  
& BLACK, S.C. Experi-  
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- 609P BOLLANDS, A.D. & LOWE,  
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circulating enzyme  
concentrations.
- 610P ARMSTRONG, F.H. & LOWE,  
K.C. Effects of  
perfluorochemical  
emulsion components on  
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P-450.
- 611P AHMAD, B. & NICHOLLS,  
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sedative effect of  
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- 612P SEWELL, R.D.E.,  
GUMBLETON, M., TAYLOR,  
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- 613P LAISHLEY, R.S., CARSON,  
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- 614P BARRY, M., MULCAHY, F.,  
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Azidothymidine (AZT)  
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- 615P HAYES, R.J., MITCHELL,  
S.C. & SMITH, R.L.  
Cholinergic action of  
trimethylamine and its  
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- 616P LAMBERT, M.B., MCKENNA,  
B. & POWER, J.D. The  
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- 617P PRATT, S.K., WINN, M.J.  
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K<sub>1</sub> 2,3-epoxide in the  
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- 618P MALHI, J.S., GARD,  
P.R., HANLON, G.W. &  
MARRIOTT, C. The  
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steroid hormones on  
defence against uterine  
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- 619P BOLTON, J.B., JOHN,  
R.A. & RICHENS, A.  
Purification and some  
properties of human  
liver aminobutyrate  
aminotransferase.

- 620P KNUDSEN, T. & JOHANSEN, T. Ouabain sensitive potassium uptake by intact rat peritoneal mast cells.
- 621P WALI, F.A. & SUER, A.H. Diaphragmatic fatigue induced by prolonged intermittent electrical stimulation of rat isolated phrenic nerve-diaphragm preparation.
- 622P GREENIDGE, E. & WALI, F.A. Actions and interactions of verapamil and D-600 with potassium in the smooth muscle of rat isolated seminal vesicle.
- 623P MUIR, T.C. & STIRRAT, A.A. Smooth muscle relaxation and membrane hyperpolarisation in the guinea-pig internal anal sphincter.
- 624P BINGHAM, S. & ANDREWS, P.L.R. In vivo evidence for cholinergic and serotonergic components of the effects of cisapride on gastric motility.
- 625P MCADAMS, R.P. & RHODES, K.F. Rabbit isolated spontaneously beating atria as a preparation for the study of 5-HT<sub>3</sub> receptor mediated responses.
- 626P MARTIN, G.R., LEFF, P., MACLENNAN, S.J. & DOUGALL, I. Three types of 5-HT<sub>1</sub>-like receptor recognised by tryptamine affinity and efficacy 'fingerprints'.
- 627P MONTGOMERY, W.W., EGLIN, R.M. & WHITING, R.L. Comparison of dissociation constants estimated by  $\beta$ -adrenoceptor inactivation and desensitisation in vitro.
- 628P ADHAM, N., EGLIN, R.M. & WHITING, R.L. Desensitisation of ileal muscarinic receptors in vitro.
- 629P KUNYSZ, E.A., MICHEL, A.D. & WHITING, R.L. Interaction of tacrine with muscarinic receptors.
- 630P VAN WILGENBURG, H. & VERSLUIJS-BROERS, J.A.M. Muscarinic antagonists suppress prejunctional effects of anticholinesterase.
- 631P KERR, M.B. & SENIOR, J. Effect of time after ovariectomy on uterine responses and oestrogen receptor status in the rat.
- 632P CROSS, S.E. & NAYLOR, I.L. Human placental strips - an in vitro model for the study of myofibroblast contractility.
- 633P EBENEZER, I.S. The effect of vasopressin on the electroencephalogram of rats is mediated by the vasopressin V<sub>1</sub> receptor sub-type.
- 634P HEREPATH, M.L. & BROADLEY, K.J. Calculation of dissociation constants of agonists at cardiac  $\beta$ -adrenoceptors by use of in vitro desensitization.

- 635P URQUHART, R.A., WILSON, A.N.A. & BROADLEY, K.J. Comparative effects of adenosine, L-PIA and carbachol upon isoprenaline responses of guinea-pig left atria and papillary muscles.
- 636P MCLAUGHLIN, N.J., RASHID, S. & SWEETMAN, A.J. Characterisation of [ $^3\text{H}$ ]-ketanserin binding to human platelet membranes.
- 637P CONLON, D.B., KILFEATHER, S.A. & O'MALLEY, K.  $\beta$ -adrenoceptor desensitization in cultured fibroblasts from young and old donors.
- 638P CAHILL, P.A., FALLER, D. & KEENAN, A.K. Receptor binding and internalisation of atrial natriuretic factor in cultured vascular muscle cells.
- 639P MALLARD, N.J., MARSHALL, R.W. & SPRIGGS, T.L.B. Role of pre-synaptic  $\alpha_2$ -adrenoceptors and  $\text{P}_1$  purinoceptors in transmission in rat vas deferens.
- 640P COWLRICK, I.S., PACIOREK, P.M. & WATERFALL, J.F. Cromakalim and calcium movements in vascular smooth muscle.
- 641P WILSON, C. Influence of KCl concentration on the inhibitory activity of cromakalim against contractions to various spasmogens.
- 642P MCHARG, A.D., SOUTHERTON, J.S. & WESTON, A.H. An investigation into the inhibitory action of cromakalim in rabbit isolated mesenteric artery.
- 643P CAVERO, I., MONDOT, S., MESTRE, M. & ESCANDE, D. Haemodynamic and pharmacological mechanisms of the hypotensive effects of cromakalim in rats: blockade by glibenclamide.
- 644P GRISTWOOD, R.W., ROTHHAUL, A.L. & FRAMPTON, J.E. Effects of dopamine on human cardiac action potential characteristics.
- 645P MANTZOURIDIS, T., XIANG, J-Z., ADAMSON, P., HAJIMOHAMMADREZA, I., BRAMMER, M.J. & CAMPBELL, I.C.  $\text{P}_1$ -purinergic,  $\alpha_2$ -adrenergic and  $\kappa$ -opiate receptor agonists show a mutual antagonism on receptor mediated decreases in  $[\text{Ca}^{2+}]_i$ .
- 646P SCOTCHER, K.P., JENNER, P. & MARSDEN, C.D.  $\text{MPP}^+$  has different effects to paraquat and menadione in rat brain microsomes.
- 647P ZIDICHOUSKI, J.A., SELYANKO, A.A. & SMITH, P.A. Investigation of the transduction mechanism for muscarine-induced currents in amphibian sympathetic neurones.

- 648P SELYANKO, A.A., ZIDICHOUSKI, J.A. & SMITH, P.A. Muscarine- and adrenaline-induced currents in patch-clamped amphibian sympathetic ganglion neurones.
- 649P MAYER, A., LIMBERGER, N. & STARKE, K. Single pulse-evoked release of neurotransmitters from rabbit brain is not subject to autoinhibition.
- 650P SMITH, D.A.S. & STONE, T.W. Variations in susceptibility of spontaneous depolarisation shifts to magnesium in the mouse neocortical slice preparation.
- 651P CONNICK, J.H., CHUMBLEY, C. & STONE, T.W. Protection by purines against quinolinic acid neurotoxicity.
- 652P MCBEAN, G.J. Toxicity of DL- $\alpha$ -amino adipate to striatal cells in vitro and in vivo.
- 653P KURUMAJI, A. & MCCULLOCH, J. The effects of MK-801 upon local cerebral glucose utilisation in conscious and in halothane-anaesthetised rats.
- 654P BIGOT, D., CANTON, H. & DOBLE, A. Compounds active at PCP binding sites inhibit NMDA stimulated guanylate cyclase activity.
- 655P YAKUBU, M.A., HAMILTON, C.A. & REID, J.L. Some effects of amitriptyline and idazoxan on adrenoceptor number in rabbit brain.
- 656P MARTIN, K.F., PHILLIPS, I., HEAL, D.J. & BUCKETT, W.R. Anti-depressant drugs, including sibutramine HCl, and ECS do not alter  $\alpha_1$ -adrenoceptor binding in rat cortical membranes.
- 657P HEAL, D.J., HURST, E.M. & BUCKETT, W.R. Lesioning of central 5-HT neurones does not prevent the attenuation of clonidine sedation in mice by repeated ECS.
- 658P JACKSON, E.A., JENNER, P. & MARSDEN, C.D. GM-1 ganglioside treatment of rats with a unilateral 6-hydroxydopamine-induced nigrostriatal lesion.
- 659P STAMFORD, J.A., KRUK, Z.L., MILLAR, J. & WIECZOREK, W.J. Changes in stimulated dopamine efflux and uptake in the rat basal ganglia during senescence: in vivo voltammetric data.
- 660P NEILL, J.C. & COOPER, S.J. Effects of selective 5-HT receptor antagonists on the anorectic effect of (+)-fenfluramine.
- 661P MORINAN, A. Effects of 5-HT<sub>1A</sub> receptor ligands on exploratory behaviour in socially isolated rats.

- 662P ROWAN, M.J., O'CONNOR, J.J. & ANWYL, R. Serotonergic inhibition of auditory evoked responses recorded in the rat hippocampus.
- 663P CULLEN, W.K., ROWAN, M.J., MOULTON, B. & ANWYL, R. Buspirone reduces performance of passive avoidance and spatial learning tasks in the rat.
- 664P BECKER, D.R. & PLEECE, S.A. The effects of clomipramine and fluoxetine on the 5-HTP-induced head twitch in the mouse.
- 665P LIVINGSTON, S.J., SEWELL, R.D.E. & SMITH, H.J. The effects of the enkephalinase inhibitor acetorphan on spontaneous locomotor activity.
- 666P JACKSON, H.C. & KITCHEN, I. Differential development of opioid and non-opioid stress-induced antinociception in infant rats.
- 667P COX, A., BOYLAND, P., GENT, J.P. & FEELY, M. An investigation of anticonvulsant tolerance to zolpidem in mice.
- 668P LAURIE, D.J. & PRATT, J.A. Local cerebral glucose utilization after tolerance to the sedative and anxiolytic actions of diazepam.
- 669P COSTALL, B., COUGHLAN, J. & KELLY, M.E. Effects of training in a water maze on performance in a test box divided into black and white compartments.
- 670P COSTALL, B., DOMENEY, A.M., JONES, D.N.C. & NAYLOR, R.J. Assessment of behavioural parameters associated with anxiogenesis in the common marmoset (*callithrix jacchus*).
- 671P JUNG, M., PERIO, A., WORMS, P. & SOUBRIE, P. Characterization of the physostigmine stimulus in rats.
- 672P SHARMA, S.C. Further evidence that lipoxygenase products of arachidonic acid play an essential role in the release of histamine from mast cells.
- 673P PURCELL, W.M., HANAHOE, T.H.P. & COHEN, D.L. Histamine and 5-hydroxytryptamine content and release in rat tissue mast cells.
- 674P CAMPBELL, A.M. & ROBINSON, C. Further studies on IgE-mediated eicosanoid release from human dispersed lung cells.
- 675P JESSUP, C.L., JESSUP, R. & WAYNE, M. ICI 192,605: a potent, selective thromboxane A<sub>2</sub> receptor antagonist on smooth muscle.

- 676P JESSUP, C.L., JESSUP, R. & WAYNE, M. The effects of ICI 192,605, a selective thromboxane A<sub>2</sub> receptor antagonist, on platelets.
- 677P SCHMIDT, H.H.H.W., NIROOMAND, F. & BOHME, E. Is endothelium-dependent relaxation mediated by arginine-derived nitric oxide?
- 678P DESA, F.M. CHANDER, C.L., CORRY, D.G., DE BRITO, F.B., MOORE, A.R., BARRETT, M. & WILLOUGHBY, D.A. The effects of indomethacin on rat cartilage breakdown in vivo and in vitro: potentiation with interleukin 1 in vitro.
- 679P HOWAT, D.W., CHAND, N., MOORE, A.R., CHANDER, C.L., BRAQUET, P. & WILLOUGHBY, D.A. Platelet-activating factor: a possible mediator of experimental allergic encephalomyelitis.
- 680P LAWRENCE, R.A., JONES, R.L., WILSON, N.H. & LUMLEY, P. Thromboxane receptor agonists and antagonists: radio-ligand displacement and pharmacological activity on human platelets.
- 681P HOGAN, J.C., LEWIS, M.J. & HENDERSON, A.H. Effect of atrial natriuretic peptide (ANP) on EDRF-induced inhibition of platelet aggregation.
- 682P CHRISTIE, M.I., ANGELINI, G.D., BRYANT, A., LEWIS, M.J. Surgical preparation of human saphenous vein autografts reduces the release of endothelium derived relaxing factor (EDRF).
- 683P LANG, D. & LEWIS, M.J. Endothelium-derived relaxing factor (EDRF) inhibits inositol trisphosphate (IP<sub>3</sub>) formation in rabbit aorta.
- 684P PANKHANIA, J.J. & BAKHLE, Y.S. Treatment in vivo with Ph CL 28A alters prostaglandin metabolism in rat isolated lung.
- 685P LUMLEY, P., SEAGER, K. & WHITE, B. The TP-receptor blocking drugs GR32191 and BM13.177 have a differential profile of action on vascular smooth muscle.
- 686P GARD, P.R. & TRIGGER, D.J. The protective effect of ethamsylate against indomethacin-induced duodenal ulceration in rats.
- 687P MCGRATH, J.C., TEMPLETON, A. & WHITTLE, M.J. The lack of influence of the endothelium on responses to 5-HT and oxygen in the human umbilical cord blood vessels.
- 688P THOMAS, G.R., WALDER, C., THIEMERMANN, C. & VANE, J.R. Regional haemodynamic effects of endothelium-dependent vasodilators.



- 689P BARRETT, M.L., WILLIS, A.L. & VANE, J.R. Anti-atherosclerotic potential of nitric oxide (EDRF) via inhibition of platelet mitogen release.
- 690P JEREMY, J.Y., BARRADAS, M.A., KONTOGHIOGHES, G. & DANDONA, P. The iron chelators desferrioxamine and 1,2-dimethyl-3-hydroxypyridone inhibit human platelet cyclooxygenase and lipoxygenase activity.
- 691P BOYLE, F.C. & AL-ZADJALI, K.H. Involvement of prostaglandins in uterine inhibitory responses to adrenoceptor agonists in pregnant and post-partum rats.
- 692P AMATYA, M.P., KANE, K.A., WADSWORTH, R.M. & ZEITLIN, I.J. The role of prostacyclin in hypoxic vasoconstriction in the sheep isolated coronary artery.
- 693P DAINITY, I.A., MCGRATH, J.C., MILLER, D.J. & SPEDDING, M. Further observation on the effect of  $\text{Ca}^{2+}$  re-addition in the presence of phenylephrine and 5-HT in rat aortic rings.
- 694P BAYDOUN, A.R., MARKHAM, A., MORGAN, R.M. & SWEETMAN, A.J. Bay K8644 a modifier of respiration and total calcium uptake associated with rat heart mitochondria.
- 695P ELLIS, P., HENDERSON C.G., KIDD, T.L. & SAMUELS, G.M.R. Beneficial haemodynamic profile of UK-61,260 in an anaesthetised dog heart failure model.
- 696P SPEAKMAN, E.A. & CHAPMAN, B.J. Possible involvement of oxygen free radical reactions in the cardiovascular responses to burn injury of the anaesthetised rat.
- 697P ANDREWS, H.E., BRUCKDORFER, K.R., PLANE, F., TURNER, M. & JACOBS, M. Low-density lipoproteins attenuate the contractile response in rabbit aorta evoked by noradrenaline.
- 698P SPIERS, J.P., WILSON, R. & HARRON, D.W.G. Effects of rilmenidine on baroreflex sensitivity in conscious dogs.
- 699P DALY, C.J., DUNN, W.R., MCGRATH, J.C. & WILSON, V.G. Effect of angiotensin II on responses mediated via post-junctional  $\alpha_1$ - and  $\alpha_2$ -adrenoceptors in isolated rabbit blood vessels.
- 700P BURNS, E., BROADHEAD, T.M., HELLIWELL, P.A. & BAX, N.D.S. The effect of propranolol and salbutamol on portal venous pressure in a perfused rat liver with noradrenaline pretreatment.

- 701P AUSTIN, C.E.,  
KITTINGHAM, N.R. &  
CHESS-WILLIAMS, R.  
The effect of oestrous  
cycle on vascular  
postsynaptic  $\alpha_1$ - and  
 $\alpha_2$ -adreno-ceptor  
responsiveness in the  
pithed rat.
- 702P CONNAUGHTON, S., MOORE,  
D., SUGRUE, M. &  
DOCHERTY, J.R.  
Evidence that SK & F  
104078 does not  
differentiate between  
pre- and post-junctional  
 $\alpha_2$ -adrenoceptors.
- 703P KINGSBURY, M.P.,  
DRAPER, A.J., REDFERN,  
P.H. & TODD, M.H.  
Chronic effects of  
atenolol on mesenteric  
vascular responses in  
dogs.
- 704P PATEL, M., MUNBY, J.,  
WEETMAN, D.F. & JAHN,  
U. Sgd 1/85  
(perbufylline) is a  
competitive antagonist  
on 5-HT<sub>2</sub> and  $\alpha_1$ -adreno-  
ceptors of the rat.
- 705P ALLELY, M.C. & BROWN,  
C.M. The effects of  
POCA and TGDA on the  
ischaemia-induced  
increase in  $\alpha_1$ -adreno-  
ceptor density in the  
rat left ventricle.
- 706P HARRON, D.W.G.,  
UPRICHARD, A.C.G.,  
WILSON, R. & ALLEN,  
J.D. Effects of time  
upon stimulus-induced  
arrhythmias and infarct  
size in a chronic  
canine model.
- 707P LONGRIDGE, D.J.,  
FOLLENFANT, M.J.,  
MAXWELL, M.P., FORD,  
A.J. & HUGHES, B.  
Reduction in myocardial  
infarct size by  
coronary reperfusion  
with t-PA.
- 708P CAMBRIDGE, D., GILES,  
H., HAMID-BLOOMFIELD,  
S., BUTTERFIELD, L.J. &  
WHITTLE, B.J.R.  
Antagonism of the  
cardiovascular effects  
of PGD<sub>2</sub> by BW A868C in  
the rat in vivo.
- 709P CAMBRIDGE, D. &  
BUTTERFIELD, L.J.  
Acute antihypertensive  
effects of BW B385C in  
the conscious  
hypertensive rat.
- 710P BOYLE, S.J. & POLLOCK,  
D. Effects of sodium  
nitroprusside on  
responses of the heart  
to nerve stimulation in  
anaesthetised and  
pithed rats.
- 711P YATES, D.B. & HICKS,  
G.R. Effects of  
flosequinan on guinea-  
pig atria and on  
cardiac variables in  
the anaesthetised dog.
- 712P MCDONALD, A.,  
WADSWORTH, R.M., SCOTT,  
P.J.W., MACDONALD, E. &  
FULTON, J.D. A  
comparison of the  
responses to  
vasodilator drugs in  
human isolated  
mesenteric arteries.
- 713P DALZIEL, H.H., MACHALY,  
M. & SNEDDON, P.  
Comparison of the  
purinergic contribution  
to sympathetic vasocon-  
striction in SHR and  
WKY rat isolated tail  
arteries.

C O N T R I B U T I O N      B Y    T I T L E   O N L Y

714P DOGGRELL, S.A. ( $\pm$ )-  
and (-)-celliprolol do  
not act as competitive  
antagonists at  $\beta_1$ - or  
 $\beta_2$ -adrenoceptors.