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## Systematic Pharmacology

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35 PIXNER, D.B. Bicuculline and the frog spinal cord (SP2, DM2)

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97 SADAVONGVIVAD, C., SANVARINDA, P. & SATAYAVIVAD, JUTAMAAD. Mechanism of catecholamine antagonism in rat heart produced by pilocarpine and related drugs. (DM2, AP1)

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- 104 McNEILL, J.H. & VERMA, S.C. Stimulation of rat gastric adenylate cyclase by histamine and histamine analogues and blockade by burimamide. (AP2)
- 107P *Proceedings of the BRITISH PHARMACOLOGICAL SOCIETY*, Edinburgh, 11-12 July, 1974.

### Systematic Pharmacology

- SP1 Cardiovascular system  
 SP2 Central nervous system  
 SP3 Other physiological systems

### Pharmacokinetics

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

### CP Clinical Pharmacology, Experimental Therapy

### CT Chemotherapy

### M Miscellaneous

### Autopharmacology

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

### Drug Mechanisms

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

### PM Pharmacometrics

### PP Psychopharmacology

### TX Toxicology

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- 227 ERSPAMER, V., IMPROTA, G., MELCHIORRI, P. & SOPRANZI, N. Evidence of cholecystokinin release by bombesin in the dog. (AP3)

### Pharmacokinetics

- 233 GRAHAM, J.D.P., LEWIS, M.J. & LI, D.M.F. The effect of  $\Delta^1$ -tetrahydrocannabinol on the release of [ $^3$ H]-(-)-noradrenaline from the isolated vas deferens of the rat. (PK3, DM1)
- 237 SNEDDON, J.M. & WILLIAMS, K.I. Effect of selective proteolysis on the accumulation of 5-hydroxytryptamine by intact rat blood platelets. (PK3)



- 245 AHTEE, LISA, BOULLIN, D.J. & PAASONEN, M.K. Transport of taurine by normal human blood platelets. (PK3, PK1)

#### Drug Mechanisms

- 253 LAYCOCK, J.F., LEE, J. & LEWIS, A.F. The effect of chlorpropamide on water balance in pitressin-treated Brattleboro rats. (DM1, AP3)
- 265 BELLEMANN, P. & SCHOLZ, H. Relationship between theophylline uptake and inotropic effect in the guinea-pig heart. (DM1, PK3)
- 275 HARRY, J.D., LINDEN, R.J. & SNOW, H.M. The effects of three  $\beta$ -adrenoceptor blocking drugs on isolated preparations of skeletal and cardiac muscle. (DM1, SP1)
- 283 SCHECHTER, Yael & WEINSTOCK, MARTA.  $\beta$ -Adrenoceptor blocking agents and responses to adrenaline and 5-hydroxytryptamine in rat isolated stomach and uterus. (DM2)
- 289 HARVEY, S.C. & RANG, H.P. Failure of chronic denervation to alter the sensitivity of the rat diaphragm to local anaesthetics or quinidine. (DM2, DM1)

#### Pharmacometrics

- 295 VANE, J.R. & WILLIAMS, K.I. A sensitive method for the assay of oxytocin in the circulating blood. (PM, AP3, SP1)

#### Psychopharmacology

- 307 BREESE, G.R., COOPER, B.R. & MUELLER, R.A. Evidence for involvement of 5-hydroxytryptamine in the actions of amphetamine. (PP)

#### SHORT COMMUNICATION

- 315 JOHNS, E.J. & SINGER, BERTHA. Comparison of the effects of propranolol and ICI 66082 in blocking the renin releasing effect of renal nerve stimulation in the cat. (DM2, AP3)

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#### Systematic Pharmacology

- 323 FIELDEN, R., OWEN, D.A.A. & TAYLOR, E.M. Hypotensive and vasodilator actions of SK&F 24260, a new dihydropyridine derivative. (SP1)
- 333 FINCH, L. The cardiovascular effects of intraventricular clonidine and BAY 1470 in conscious hypertensive cats. (SP1, SP2)
- 339 BARASI, S. & ROBERTS, M.H.T. The modification of lumbar motoneurone excitability by stimulation of a putative 5-hydroxytryptamine pathway. (SP2, AP1)
- 349 BRADSHAW, C.M., ROBERTS, M.H.T. & SZABADI, E. Effects of imipramine and desipramine on responses of single cortical neurones to noradrenaline and 5-hydroxytryptamine. (SP2, DM2)
- 359 BACH, CATHERINE S. & LEWIS, G.P. Flow and composition of skin and muscle lymph of the hind limb of the rabbit after injury. (SP3, DM1)

#### Pharmacokinetics

- 367 HAMMARSTROM, L., SLANINA, P., TJALVE, H. & ULLBERG, S. Distribution of local anaesthetics: accumulation in some endocrine polypeptide-hormone producing cell systems. (PK1, SP3)

## Autopharmacology

- 375 JUNSTAD, M. & WENNMAALM, A. Release of prostaglandin from the rabbit isolated heart following vagal nerve stimulation or acetylcholine infusion. (AP1, AP2)
- 381 HERTTING, G. & MEYER, D.K. Effect of converting enzyme blockade on isoprenaline- and angiotensin I-induced drinking. (AP2, AP3)

## Drug Mechanisms

- 387 HEISLER, S. Calcium efflux and secretion of  $\alpha$ -amylase from rat pancreas. (DM1, AP3)
- 393 BAUDOUIN-LEGROS, MARYVONNE, MEYER, P. & WORCEL, M. Effects of prostaglandin inhibitors on angiotensin, oxytocin and prostaglandin  $F_{2\alpha}$  contractile effects on the rat uterus during the oestrous cycle. (DM1)
- 401 BUU, N.T. & VAN GELDER, N.M. Biological actions *in vivo* and *in vitro* of two  $\gamma$ -aminobutyric acid (GABA) analogues:  $\beta$ -chloro GABA and  $\beta$ -phenyl GABA. (DM1)
- 407 O'DONNELL, STELLA R. & WANSTALL, JANET C. Potency and selectivity *in vitro* of compounds related to isoprenaline and orciprenaline on  $\beta$ -adrenoceptors in the guinea-pig. (DM2)

## Psychopharmacology

419. KING, A.R., MARTIN, I.L. & MELVILLE, K. ARABELLA. Reversal learning enhanced by lysergic acid diethylamide (LSD): concomitant rise in brain 5-hydroxytryptamine levels. (PP)

## PROCEEDINGS OF THE BRITISH AND ITALIAN PHARMACOLOGICAL SOCIETY

Bristol, 11-13 September 1974

- 427P CHENEY, D.L., COSTA, E., RACAGNI, G. & TRABUCCHI, M. Dopaminergic regulation of acetylcholine turnover rate in rat striatum.
- 428P BIANCHI, S., CONSOLO, S. & LADINSKY, H. Dopaminergic-cholinergic interaction in the striatum: decrease in rat striatal acetylcholine (ACh) levels by dopaminergic and cholinergic antagonists.
- 429P LONGONI, R., MULAS, A. & PEPEU, G. Drug effect on acetylcholine level in discrete brain regions of rats killed by microwave irradiation.
- 430P KELLY, P., MILLER, R.J. & SAHAKIAN, B. (introduced by L.L. Iversen). Interaction of neuroleptic and cholinergic drugs with central dopaminergic mechanisms.
- 431P GOODLET, I. & SUGRUE, M.F. The effects of a new anti-depressant, ORG GB94, on amine uptake mechanisms.
- 432P COWAN, A. & HARRY, E.J.R. Potentiation of picrotoxin-induced convulsions in mice by antidepressants. Specificity of the effect.
- 432P BERENDSEN, H., LEONARD, B.E. & RIGTER, H. The effect of psychotropic drugs on the Dopa potentiation test in mice.
- 434P BABBINI, M., BARTOLETTI, M., DE MARCHI, F., GAIARDI, M. & TORRIELLI, M.V. Conflict behaviour in rats for the evaluation of a homogeneous series of 3-hydroxy-benzodiazepines: structure-activity relationships.
- 434P MARLEY, E. & NISTICO, G. Sleep and hypothermic effects of clonidine in fowls.
- 435P LEVI, G. & RAITERI, M. Synaptosomal exchange of  $\gamma$ -aminobutyric acid (GABA) can simulate high affinity uptake.
- 436P BOWERY, N.G. & BROWN, D.A. On the release of accumulated [ $^3$ H]- $\gamma$ -aminobutyric acid (GABA) from isolated rat superior cervical ganglia.
- 437P BENTON, D.A., RICK, J.T. & TABERNER, P.V. The effects of depleting brain amines on the behavioural actions of  $\gamma$ -hydroxybutyric acid.
- 438P NISTRI, A. (introduced by J.P. Quilliam). Effects of central nervous system depressants and stimulants on the acetylcholine concentration of leech ganglia *in vivo*.

- 439P ADEMBRI, G., BARTOLINI, A., BARTOLINI, R., GIOTTI, A. & ZILLETTI, L. Anticonvulsive action of homotaurine and taurine.
- 440P CERLETTI, C., MANARA, L. & MENNINI, T. Brain levels of the potent analgesic etorphine in rats and their functional significance.
- 441P COCCHI, D., DI GIULIO, A., GROPPETTI, A., MANTEGAZZA, P., MULLER, E.E. & SPANO, P.F. Effect of growth hormone deficiency on brain serotonin metabolism.
- 442P ANNUNZIATO, L., DI RENZO, G.F., LOMBARDI, G., PREZIOSI, P. & SCAPAGNINI, U. Catecholaminergic control of thyroid stimulating hormone (TSH) and adrenocorticotrophic hormone (ACTH) secretion.
- 443P BIRCH, N.J., GREENFIELD, A.A. & HULLIN, R.P. A metabolic profile of patients receiving prophylactic lithium therapy.
- 444P HAAS, H.L. & RYALL, R.W. A selective excitatory effect of lithium on cholinceptive neurones in the spinal cord and brain of cats and rats: a possible significance in manic-depression.
- 445P GILBERT, J.C. & WYLLIE, M.G. The effects of phenytoin on adenosine triphosphatase activities of synaptosomes and their components.
- 446P GRAHAM, J.D.P., LEWIS, M.J. & WILLIAMS, J. The effect of  $\Delta^1$ -tetrahydrocannabinol on the noradrenaline and dopamine content of the brain and heart of the rat.
- 447P CALLENDER, S., GRAHAME-SMITH, D.G., WOODS, H.F. & YAUDIM, M.B.H. Reduction of platelet monoamine oxidase activity in iron deficiency anaemia.
- 448P ALGERI, S., BONATI, M., PONZIO, F. & TURNER, A.J. Dihydropteridine reductase: enzyme characteristics, regional distribution and ontogenetic development.
- 449P BIZZI, A., CODEGONI, A.M., LUZZANI, F., MANARA, L. & TACCONI, M.T. The disposition of L-[ $^3$ H]-noradrenaline by the isolated epididymal fat pad of the rat and the effect of antilipolytic agents.
- 450P MERGINS, ANA & STITCH, S.R. The effect of cyproterone acetate on enzymic steps in the biosynthesis of steroid hormones.
- 451P GORDON, J.L. & MACINTYRE, D.E. Inhibition of human platelet aggregation by aspirin *in vitro* and *ex vivo*.
- 452P McCALL, ELAINE & YOULTEN, L.J.F. The effect of indomethacin and depletion of complement on cell migration and prostaglandin levels in carrageenin-induced air bleb inflammation.
- 453P BRAY, M.A., GORDON, D. & MORLEY, J. Role of prostaglandins in reactions of cellular immunity.
- 454P CHURCH, M.K., JAMES, G.W.L. & MILLER, P. The inhibitory effect of insulin on pinnal anaphylaxis in the mouse.
- 454P HERBACZYNSKA-CEDRO, KRYSZYNA \* STASZEWSKA-BARCZAK, JANINA (introduced by J.R. Vane). Muscular work and prostaglandin release.
- 455P HENDERSON, G. & HUGHES, J. Modulation of frequency-dependent noradrenaline release by calcium, angiotensin and morphine.
- 456P GAY, W.S. (introduced by M.J. Rand). Acetylcholine synthesis from [ $^{14}$ C]-choline in isolated segments of guinea-pig ileum.
- 457P FANTOZZI, R., LEDDA, F., MANNAIONI, P.F., MORONI, F. & MUGELLI, A. Definition of the antagonistic action of burimamide and metiamide on the positive ionotropic effect of histamine in isolated heart preparations.
- 458P BERTI, F., FOLCO, G.C., FUMAGALLI, R. & OMINI, C. The pharmacological effects of imidazole and some of its derivatives on neuromuscular transmission.
- 459P CARPI, C. & DORIGOTTI, L. Antihypertensive activity of a new 3-hydrazinopyridazine derivative: ISF 2123.
- 460P ANSELMi, R., BUFFONI, F., CURRADI, C., DEL BIANCO, P.L. & SICUTERI, F. Monoamine oxidase defect in essential arterial hypertension: 'a single dose pargyline test'.
- 460P CLEMENTI, F. & MELDOLESI, J. Secretion of calcium in the pancreatic juice: effect of secretin and caerulein.
- 461P ANGELUCCI, L. CATALANI, A. & TAVOLONI, N. Compared actions of secretion (S), cholecystokinin (CK) and caerulein (C) on dog choleresis.

- 461P CANTALAMESSA, F., DE CARO, G. & PERFUMI, MARINA. Effects on salivary glands of the chronic administration of eledoisin and physalaemin to rats.
- 462P CURWAIN, B.P., FIELDING, L.P. & RUSSELL, C. Effects of salbutamol on gastric acid secretion and gastrin liberation after feeding in conscious Heidenhain pouch dogs.
- 463P BERTACCINI, G., DE CASTIGLIONE, R. & IMPICCIATORE, MARIANNINA. Preliminary data on the inhibition of pentagastrin stimulated gastric secretion induced by some natural and synthetic peptides.
- 464P DATURI, S., FRANCESCHINI, J., MANDELLI, V., MIZZOTTI, B. & USARDI, M.M. A proposed role for PGE<sub>2</sub> in the genesis of stress-induced gastric ulcers
- 464P DEKANSKI, J.B., MACDONALD, A. & PARKE, D.V. The effect of mucosal damage on gastric glycoprotein synthesis in the rat.
- 465P CAPRILLI, R., FRIERI, G., IMPROTA, G., MELCHIORRI, P. & VERNIA, P. Effects of bombesin and bombesin-like peptides on gastrointestinal myo-electric activity.
- 466P FRIGO, G.M., LECCHINI, S. & TONINI, M. Supersensitivity to the inhibitory effect of catecholamines on intestinal peristaltic reflex after sympathetic denervation.
- 467P IMPICCIATORE, MARIANNINA. Evidence that substances capable of increasing the duodenal content exert a spasmogenic effect on the pylorus.
- 468P BERTI, F., CLEMENTI, F., CONTI-TRONCONI, B. & OMINI, C. Pharmacological properties of a cholinergic-receptor antiserum.
- 468P BERETTA, C., FAUSTINI, R., ORMAS, P. & POMPA, G. Preliminary observations on the effects of eledoisin on ruminant's forestomach and abomasum.
- 469P CINGOLANI, M., GAMBA, G., PIGINI, P., RE, L., ROSSINI, L., GIANNELLA, M., GUALTIERI, F., MELCHIORRE, C. & PIGINI, M. Biological characterization of some cyclopentane analogues of muscarone and muscarine.
- 471P BONANOMI, L., DELLA BELLA, D. & GAZZANIGA, A. Newer developments in chloramphenicol metabolism.
- 472P BRAY, M.A. (introduced by J. Morley). Time lapse photomicrography of cell migration inhibition.
- 472P WILLIS, A.L. Some easy and rapid endoperoxide isolation procedures.
- 473P FINCH, L. An increased reactivity in hypertensive animals after prolonged anti-hypertensive therapy.
- 475P BIRTLEY, R.D.N., FISCHER, M.D., JAMES, G.W.L., JOHNS, T.G. & PIPER, D.C. A technique for the quantitative characterization of the sleep-wake cycle in the rat.
- 475P LEWIS, D.M. & WEBB, S.N. The sensitivity of motor units to neuromuscular blocking agents.
- 476P HEADLEY, P.M. & MARTIN, M. Twin-channel recording of electrophoretically-induced rhythmical activity in the inferior olivary nucleus of the rat.
- 477P KUHN, D.C., WILLIS, A.L. & ZURIER, R.B. Some unique biological properties of endoperoxide intermediates of prostaglandin biosynthesis (T).
- 477P HILL, R.G. (introduced by J.F. Mitchell). The cuneate nucleus of the rat as a suitable area for the study of the pharmacology of amino-acid neurotransmitters (T).
- 477P BHOOLA, K.D. & HEAP, P.F. Application of X-ray microanalysis technique to determine the intracellular distribution profiles of calcium in the submaxillary gland (T).
- 477P LOREZ, H.P., PIERI, L. & RICHARDS, J.G. Tracing transmitter-specific neuronal systems in the mammalian brain: Supra-ependymal, serotonergic nerve fibres (T).

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- 481 RICHARDSON, P.D.I. Drug-induced changes in capillary filtration coefficient and blood flow in the innervated small intestine of the anaesthetized cat (SP1)
- 499 RICHARDSON, I.W. & SZERB, J.C. The release of labelled acetylcholine and choline from cerebral cortical slices stimulated electrically (SP2, AP1, PK3)

- 509 BOURDOIS, P.S., MITCHELL, J.F., SOMOGYI, G.T. & SZERB, J.C. The output per stimulus of acetylcholine from cerebral cortical slices in the presence or absence of cholinesterase inhibition (SP2, AP1, PK3)
- 519 SHIOMI, H. & TAKAGI, H. Morphine analgesia and the bulbospinal noradrenergic system: increase in the concentration of normetanephrine in the spinal cord of the rat caused by analgesics (SP2, AP1)

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- 527 KEEN, P. & McLEAN, W.G. The effect of nerve stimulation on the axonal transport of noradrenaline and dopamine- $\beta$ -hydroxylase (AP1, PK1)
- 533 McCORMICK, J.T., SENIOR, JUDITH & WHALLEY, E.T. Changes in plasma kininogen levels induced by cellulose sulphate during pregnancy in the rat (AP2)
- 539 HOLLINGSWORTH, M. The innervation of the rat cervix and its pharmacology *in vitro* and *in vivo* (AP1, SP3, AP3)
- 549 FARAH, M.B. & LANGER, S.Z. Protection by phentolamine against the effects of phenoxybenzamine on transmitter release elicited by nerve stimulation in the perfused cat heart (AP1, DM2, PK3)
- 559 FARMER, J.B., FARRAR, D.G. & WILSON, J. Antagonism of tone and prostaglandin-mediated responses in a tracheal preparation by indomethacin and SC-19220 (AP2)

#### Pharmacokinetics

- 567 BARBER, H.E. & BOURNE, G.R. The pharmacokinetics of neostigmine and 3-hydroxyphenyltrimethyl-ammonium in the rat: dose-dependent effects after portal vein administration (PK1, PK2)
- 579 KHOYI, M.A., POUSTI, A. & ZARRINDAST, M.R. The effect of ethacrynic acid on the guinea-pig and rat isolated vas deferens (PK3, AP1, DM2)
- 585 GILLESPIE, J.S. & McGRATH, J.C. The effect of pithing and of nerve stimulation on the depletion of noradrenaline by reserpine in the rat anococcygeus muscle and vas deferens (PK3, AP1)

#### Drug Mechanisms

- 591 BELL, C., CONWAY, E.L. & LANG, W.J. Ergometrine and apomorphine as selective antagonists of dopamine in the canine renal vasculature (DM2, SP1)
- 597 SHOHAM, SANDRA & WEINSTOCK, MARTA. The role of supersensitivity to acetylcholine in the production of tolerance to morphine in stimulated guinea-pig ileum (DM2)
- 605 SPEISER, ZIPORA & WEINSTOCK, MARTA. Supersensitivity to isoprenaline induced in rats by prolonged isolation (DM2, SP1)

#### Miscellaneous

- 609 JINDAL, M.N., KELKAR, V.V. & VAISHNAV, U.H. Effect of drugs on rat paw oedema induced by mercury (M, AP2)

#### SHORT COMMUNICATION

- 613 DEVASANKARAIAH, G., HANIN, I., HARANATH, P.S.R.K. & RAMANAMURTHY, P.S.V. Cholinomimetic effects of aqueous extracts from *Carum copticum* seeds (AP1)