Edited for the British Pharmacological Society by

W. D. M. Paton (Chairman) H. M. Adam (Secretary)

Margaret Day (Press Editor)

J. D. Stephenson (Assistant Press Editor)

R. B. Barlow J. Maddox (co-opted) J. M. Barnes J. F. Mitchell J. W. Black P. A. Nasmyth W. C. Bowman M. W. Parkes P. B. Bradley Mary Pickford A. W. Cuthbert H. P. Rang H. O. Schild C. T. Dollery W. S. Feldberg D. F. Sharman D. F. Hawkins A. P. Silverman F. Hobbiger M. A. Simmonds Margarethe Holzbauer A. D. Smith (co-opted) F. M. Sullivan D. B. Hope H. W. Kosterlitz A. Ungar G. P. Lewis J. R. Vane

Editorial assistance is provided by the staff of Nature

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

Manuscripts (two copies) should be sent to Dr. H. M. Adam, Department of Pharmacology, University of Edinburgh Medical School, 1 George Square, Edinburgh EH8 9JZ. Authors should consult the suggestions inside the back cover.

Subscriptions. Three volumes of the journal are published annually, each volume containing four numbers. The annual subscription rate is £26.50 in the United Kingdom and the rest of the world; £32.00 U.S.A. and Canada. Subscriptions should be sent to: Subscriptions Department, Macmillan Journals Ltd., Brunel Road, Basingstoke, Hampshire, England. Alternatively, the journal can be ordered through a subscription agent or bookseller.

Advertisements: Applications for advertising space and rates should be sent to: Advertisement Department, *British Journal of Pharmacology*, Macmillan Journals Ltd., 4 Little Essex Street, London, WC2R 3LF, England. Tel: 01-836 6633.

Copyright © 1973 by the *British Journal of Pharmacology*. All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

Senior Pharmacologist for Research

Applications are invited from pharmacologists with a few years postdoctoral experience for a post in our Pharmacology Department in Welwyn Garden City. The department is responsible for carrying out research and screening work aimed at the development of new drugs and the pharmacologists participate in the research programmes of interdisciplinary groups working in specific areas.

The Senior Pharmacologist we appoint will be concerned with cardiovascular disease and experience in the biochemical pharmacology of the sympathetic nervous system would be an advantage although this is of less importance than a genuine interest in this field and proven ability to carry out original and creative research.

Our Pharmacology Department has only recently moved into new laboratories. The facilities and working conditions are excellent.

Roche Products Ltd is part of a major international pharmaceutical concern based in Switzerland and is itself one of the leaders in the industry in the U.K. Conditions of Service are good and include some valuable fringe benefits. Applications in writing should be addressed to the Senior Welwyn Personnel Officer.



Roche Products Limited Welwyn Garden City Hertfordshire AL7 3AY

BRITISH JOURNAL OF PHARMACOLOGY

Short Communications

Papers for consideration should be marked "Short Communication", and be submitted in duplicate to the Secretary of the Editorial Board. THEY MUST BE LESS THAN 1,200 WORDS IN LENGTH, including a short summary, AND MAY CONTAIN ONE FIGURE OR ONE TABLE. To reduce publication delay to a minimum (about 6 weeks), correspondence between author and editor must be avoided. Manuscripts should therefore be prepared with great care and the customary form used in the Journal strictly observed (see instructions on the inside covers of a recent issue of the Journal.) Short Communications will be accepted on the understanding that if authors' proofs are not returned before the Journal goes to press, the Communication will be published with the Press Editor's corrections only.

BRITISH JOURNAL OF PHARMACOLOGY

THE INTERNATIONAL SYSTEM OF UNITS (SI)

The British Journal of Pharmacology uses the symbols recommended in the SI (Système Internationale) (see Symbols, Signs and Abbreviations Recommended for British Scientific Publications (1969) (London: The Royal Society: price 35p.)). It is the policy of the Editorial Board to adopt SI units, although the use of certain non-SI units will for the time being be permitted. Full details of the changes involved will be published in a forthcoming "Instructions to Authors". The following is a list (a) of some of the commoner units with their recommended symbols, (b) of some non-SI units which may still be used, and (c) of units which will no longer be acceptable.

(a) SI units with recommended symbols

Unit Correct symbol kilogramme kg

second, millisecond s ms

mole, millimole, micromole, mol mmol μ mol nanomole, picomole nmol pmol metre, centimetre, millimetre, mol m cm mm

micrometre μm Hertz Hz

(b) Some permitted non-SI units

ångström $Å(=10^{-10}m=0.1 \text{ nm})$

gramme g
minute min
hour h
molarity (mol/litre) M

calorie cal (4·184 J) (Conversion factor to

be given as a footnote at first

citation or in Methods)

millimetres of mercury mmHg (1.333 mbar) (Conversion factor to be given as a footnote at

first citation or in Methods)

millibar mbar poise P

curie Ci

litre

1. (where there is danger of confusion between the numeral '1' and the letter '1', 'litre' should be written

in full, and always at the end of a sentence)

millilitre, microlitre ml μ l degree Celsius °C

(c) Units no longer acceptable

inch, foot, pound, pound per square inch, °F.

Expressions such as cycles per second (c/s) will no longer be accepted. Frequencies should be expressed in the appropriate approved symbols: thus a stimulation frequency should be given in Hz (irregular or occasional events should be given per unit time, e.g. s⁻¹, h⁻¹). When there is more than one solidus in an expression, parentheses should be used to eliminate ambiguity, e.g. (mg/kg)/day.

Instructions to Authors

- 1. Manuscripts (2 copies) should be typed in double spacing on one side of paper not larger than foolscap $(33 \times 20.5 \text{ cm})$. There should be a separate title page giving the names and addresses of the authors in alphabetical order. A short title containing not more than 40 letters should also be suggested.
- 2. A short summary of results and conclusions (arranged in numbered paragraphs), tables and legends to figures should be typed on separate sheets of paper.
- 3. References should be collected at the end of the paper. They should include the authors' names, year of publication, title of article, title of publication (abbreviated in accordance with the fourth edition of the World List of Scientific Periodicals), volume number and first and last page numbers. References to books should, in addition, include the names of editors, the edition number, where appropriate, and the town of origin and name of publisher.
- 4. Figures should NOT BE LARGER THAN FOOLSCAP $(33 \times 20.5 \text{ cm})$ and may be in the form of original drawings, recorded tracings or high quality photographic prints made from them. Negative prints of kymograph tracings (black on white) should be provided and both ordinates and abscissae should be calibrated.
- 5. Lettering on figures should be inserted in PENCIL. Symbols which are to appear in figures or legends should be chosen from the following:



- 6. **Photographs and photomicrographs** should be printed on glossy paper and should be larger than the size required for reproduction.
- 7. **Tables** ideally should not have more than 84 characters to a line (counting spaces between columns as 4 characters) and certainly not more than 130 characters to a line, unless absolutely unavoidable.
- 8. An abstract of about 100 words suitable for inclusion in *International Abstracts* of *Biological Sciences* should be typed on a separate sheet, giving the author's name and address and the title of the paper.

General remarks. A recent issue of the journal is a good guide to style. Papers are accepted only if accompanied by a statement that they have not and will not be published in whole or in part in any other Journal.

Two page proofs will be supplied, one of which may be retained by the authors. The other should be corrected immediately and returned to the Press Editor. Corrections should be kept to a minimum.

Twenty-five reprints will be supplied to the authors free of charge. Additional reprints can be purchased. A reprint order form, which should be returned promptly, will be sent out with the proofs. No reprints of abstracts are supplied.

BRITISH JOURNAL OF PHARMACOLOGY July 1973 Volume 48 Number 3

•	$oldsymbol{a}_{i} = oldsymbol{a}_{i} oldsymbol{a}_{i}$
Page	
369	Kelly, J. S. and Renaud, L. P. On the pharmacology of the γ-aminobutyric acid receptors
	on the cuneo-thalamic relay cells of the cat. (SP2, DM2)
387	KELLY, J. S. and RENAUD, L. P. On the pharmacology of the glycine receptors on the cuneo-
	thalamic relay cells in the cat. (SP2, DM2)

Kelly, J. S. and Renaud, L. P. On the pharmacology of ascending, descending and recurrent postsynaptic inhibition of the cuneo-thalamic relay cells in the cat. (SP2, DM2)

NOTT, M. W. and WINSLOW, EILEEN. Effects of quazodine (MJ 1988) on contractions of the 409 isolated hemidiaphragm of the rat and the biventer cervicis muscle of the chick.

Autopharmacology

- 418 FOLEY, D. J. and McPHILLIPS, J. J. Response of the rat ileum, uterus and vas deferens to carbachol and acetylcholine following repeated daily administration of a cholinesterase (AP1, SP3)
- EYRE, P. and Lewis, A. J. Acute systemic anaphylaxis in the horse. (AP2) ERSPAMER, V., MELCHIORRI, P. and SOPRANZI, N. The action of bombesin on the kidney of 426 the anaesthetized dog. (AP2, ŠP3)

Pharmacokinetics

456 NG, K. K. F. Fate of angiotensin I in the toad Bufo melanostictus. (PK1, AP3) BABULOVA, A., BAREGGI, S. R., BONACCORSI, A., GARATTINI, S., MORSELLI, P. L. and PANTA-ROTTO, C. Correlation between desigramine levels and (-)-noradrenaline uptake and chronotropic effect in isolated atria of rats.

Drug Mechanisms

- RANG, H. P. Fourth Gaddum Memorial Lecture, School of Pharmacy, University of London, January 1973. (DM1 DM2)
- 496 NORTHOVER, B. J. Effect of anti-inflammatory drugs on the binding of calcium to cellular membranes in various human and guinea-pig tissues. (DMI)
 KATZ, S. and TENENHOUSE, A. The relation of adenyl cyclase to the activity of other ATP
- utilizing enzymes and phosphodiesterase in preparations of rat brain; mechanism of stimulation of cyclic AMP accumulation by NaF.

 (DM1)

 516 KATZ, S. and TENENHOUSE, A. The relation of adenyl cyclase to the activity of other ATP
- utilizing enzymes and phosphodiesterase in preparations of rat brain; mechanism of stimulation of cyclic AMP accumulation by adrenaline, ouabain and Mn++. (DM1)
- FOREMAN, J. C. and MONGAR, J. L. The action of lanthanum and manganese on anaphylactic histamine secretion. (DM2, AP2, DM1)

Psycopharmacology

POOLE, T. B. Some studies on the influence of chlordiazepoxide on the social interaction of golden hamsters (Mesocricetus auratus) (PP)

SHORT COMMUNICATIONS

- 546 OSBORNE, N. N. Tryptophan metabolism in characterized neurones of *Helix*. (SP2) 550 NIADA, R. and PRINO, G. Effect of a sulphated glycopeptide on rat gastric acid secretion stimulated by histamine, bethanechol, pentagastrin and dibutyryl cyclic AMP. (DM2, AP2)

553 CHAKRABARTY, A. S., CHAKRABARTY, K., LAI, S. K. and PARVATHI, C. Effect of cyproheptadine on feeding behaviour in albino rats.

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 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