BRITISH JOURNAL OF PHARMACOLOGY

The British Journal of Pharmacology welcomes contributions in all fields of experimental pharmacology including neuroscience, biochemical, cellular and molecular pharmacology. The Board of Editors represents a wide range of expertise and ensures that well-presented work is published as promptly as possible, consistent with maintaining the overall quality of the journal.

Edited for the British Pharmacological Society by

A.T. Birmingham (Chairman)

R.W. Horton W.A. Large (Secretaries)

Editorial Board

P.I. Aaronson London C.J. Bailey Birmingham L. Belardinelli Gainesville, USA Maria G. Belvisi London G.W. Bennett Nottingham T.P. Blackburn Harlow M.R. Boarder Leicester N.G. Bowery Birmingham W.C. Bowman Glasgow R. Busse Frankfurt, Germany S.P. Butcher Edinburgh K.D. Butler Horsham M. Caulfield Dundee R.A.J. Challiss Leicester R. Chess-Williams Sheffield T. Cocks Melbourne, Australia Helen M. Cox London V. Crunelli Cardiff A. Dickenson London J.R. Docherty Dublin L. Edvinsson Lund, Sweden G. Edwards Manchester R.M. Eglen Palo Alto, USA P.C. Emson Cambridge R.H. Evans Bristol A.W. Ford-Hutchinson Quebec, Canada A.C. Foster San Diego, USA J.R. Fozard Basle, Switzerland B.B. Fredholm Stockholm, Sweden Allison D. Fryer Baltimore, USA

Sheila M. Gardiner Nottingham C.J. Garland Bristol A. Gibson London M.A. Giembycz London W.R. Giles Calgary, Canada R.G. Goldie Perth, Australia R.J. Griffiths Groton, USA R.W. Gristwood Cambridge Judith M. Hall Guildford D.W.P. Hay Philadelphia, USA D.J. Heal Nottingham P.G. Hellewell London K. Hillier Southampton P. Holzer Graz, Austria S.M.O. Hourani Guildford D. Hoyer Basle, Switzerland G.W. John Castres, France E.J. Johns Birmingham R.S.G. Jones Oxford P.A.T. Kelly Edinburgh D.A. Kendall Nottingham C. Kennedy Glasgow I. Kitchen Guildford N.R. Kitteringham Liverpool R.Z. Kozlowski Oxford S. Lazareno London R.A.J. Lefebvre Ghent, Belgium J. Llenas Barcelona, Spain A.T. McKnight Cambridge C.A. Maggi Florence, Italy I.G. Marshall Glasgow Janice M. Marshall Birmingham

G. Martin Beckenham A. Mathie London P.K. Moore London H. Nilsson Aarhus, Denmark
H. Osswald Tübingen, Germany
F.L. Pearce London J.D. Pearson London U. Quast Tübingen, Germany A.G. Ramage London P.J. Roberts Bristol W.C. Sessa New Haven, USA N. Shankley London N.L. Simmons Newcastle P.G. Skett Glasgow P. Sneddon Glasgow S. Clare Stanford London K. Starke Freiburg, Germany R.J. Summers Melbourne, Australia J. Tamargo Madrid, Spain C. Thiemermann London M.D. Tricklebank Basle, Switzerland T.J. Verbeuren Suresnes, France R.R. Vollmer Pittsburgh, USA Cherry L. Wainwright Glasgow T.D. Warner London K.J. Watling Boston, USA J. Westwick Bath K.I. Williams Bath V.G. Wilson Nottingham E.H.F. Wong Milan, Italy S. Wonnacott Bath B. Woodward Bath

Corresponding Editors

P.R. Adams Stony Brook, U.S.A.
C. Bell Dublin
F.E. Bloom La Jolla, U.S.A.
A.L.A. Boura Newcastle, Australia
N.J. Dun Toledo, U.S.A.
R.F. Furchgott New York, U.S.A.
T. Godfraind Brussels, Belgium
S.Z. Langer Paris, France

J.P. Gallagher Galveston, USA

R.J. Miller Chicago, U.S.A.
R.C. Murphy Denver, U.S.A.
E. Muscholl Mainz, Germany
R.A. North Geneva, Switzerland
M. Otsuka Tokyo, Japan
M.J. Rand Melbourne, Australia
S. Rosell Södertalje, Sweden
P. Seeman Toronto, Canada

L. Szekeres Szeged, Hungary
B. Uvnas Stockholm, Sweden
P.A. Van Zwieten Amsterdam, Netherlands
V.M. Varagič Belgrade, Yugoslavia
G. Velo Verona, Italy
Wang Zhen Gang Beijing, China
M.B.H. Youdim Haifa, Israel

Submission of manuscripts: Manuscripts (two copies) should be sent to The Editorial Office, British Journal of Pharmacology, St. George's Hospital Medical School, Cranmer Terrace, London SW17 0RE.

Authors should consult the Instructions to Authors and the Nomenclature Guidelines for Authors in Vol. 117, 389-399. These Instructions and Guidelines also appear with the journal Index for Volumes 114-116, 1995. A checklist of the essential requirements is summarised in each issue of the journal, or as the last page of the issue.

Whilst every effort is made by the publishers and editorial committee to see that no inaccurate or misleading data, opinion or statement appears in this Journal, they and the British Pharmacological Society wish to make it clear that the data and opinions appearing in the articles and advertisements herein are the responsibility of the contributor or advertiser concerned. Accordingly, the British Pharmacological Society, the publishers and the editorial committee and their respective employees; officers and agents accept no liability whatsoever for the consequences of any such inaccurate or misleading data, opinion or statement.

- S.I. Ramnarine, A.M. Khawaja, P.J. Barnes & D.F. Rogers Nitric oxide inhibition of basal and neurogenic mucus secretion in ferret trachea in vitro 908
- L.M. Blayney, P.W. Gapper & A.C. Newby Phospholipase C isoforms in vascular smooth muscle and their regulation by G-proteins 1003
- Gy. Losonczy, I. Mucha, V. Müller, T. Kriston, Z. Ungvári, L. Tornóci, L. Rosivall & R. Venuto The vasoconstrictor effects of L-NAME, a nitric oxide synthase inhibitor, in pregnant rabbits 1012
- M. Asano, M. Kuwako, Y. Nomura, K.M. Ito, K. Ito, Y. Uyama, Y. Imaizumi & M.Watanabe Possible mechanism of the potent vasoconstrictor actions of ryanodine on femoral arteries from spontaneously hypertensive rats
- D. Erlinge, M. Heilig & L. Edvinsson Tyrphostin inhibition of ATPstimulated DNA synthesis, cell proliferation and Fos-protein expression in vascular smooth muscle cells 1028
- D.E. Pellegrini-Giampietro, S.A. Torregrossa & F. Moroni Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus 1035

- S.-C. G. Hui, E.L. Sevilla & C.W. Ogle Prevention by the 5-HT₃ receptor antagonist, ondansetron, of morphine-dependence and tolerance in the rat 1044
- P. Bois, J. Bescond, B. Renaudon & J. Lenfant Mode of action of the bradycardic agent, S 16257, on ionic currents of rabbit sinoatrial node cells 1051
- P.G. McLean & I.M. Coupar Further investigation into the signal transduction mechanism of the 5-HT₄-like receptor in the circular smooth muscle of human colon 1058
- D.N. Criddle, R. Soares de Moura, I.A. Greenwood & W.A. Large Effect of niflumic acid on noradrenaline-induced contractions of the rat aorta 1065
- Q. Pu, J.X. Mazoit, L.S. Cao, W. Mao & K. Samii Effect of lignocaine in myocardial contusion: an experiment on rabbit isolated heart 1072
- E. Hardy, M. Faranhani & I.P. Hall Regulation of histamine H₁ receptor coupling by dexamethasone in human cultured airway smooth muscle 1079

The British Journal of Pharmacology is published by Stockton Press, a division of Macmillan Press Ltd. It is the official publication of the British Pharmacological Society.

Scope The British Journal of Pharmacology is published twice a month. It welcomes contributions in all fields of experimental pharmacology including neuroscience, biochemical, cellular and molecular pharmacology. The Board of Editors represents a wide range of expertise and ensures that well-presented work is published as promptly as possible, consistent with maintaining the overall quality of the journal.

This journal is covered by Current Contents, Excerpta Medica, BIOSIS, CABS, CINAHL and Index Medicus.

Editorial Manuscripts (plus two copies) and all editorial correspondence should be sent to: The Editorial Office, British Journal of Pharmacology, St George's Hospital Medical School, Cranmer Terrace, London SW17 0RE, UK. Tel: +44 (0)181 767 6765; Fax: +44 (0)181 767 5645.

Advertisements Enquiries concerning advertisements should be addressed to: Michael Rowley, Hasler House, High Street, Great Dunmow, Essex CM6 1AP, UK. Tel: +44 (0)1371 874613; Fax: +44 (0)1371 872273.

Publisher All business correspondence, supplement enquiries and reprint requests should be addressed to British Journal of Pharmacology, Stockton Press, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526. Publisher: Marija Vukovojac. Production Controller: Nicci Crawley. Supplement Production Controller: Simone Larché

Subscriptions – EU/Rest of World Subscription price per annum (3 volumes, 24 issues) £655, rest of world £735 (Surface mail) £880 (Airmail), or equivalent in any other currency. Orders must be accompanied by remittance. Cheques should be made payable to Macmillan Magazines and sent to: The Subscription Department, Macmillan Press Ltd, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Where appropriate, subscribers may make payments into UK Post Office Giro Account No. 519 2455. Full details must accompany the payment. Subscribers from EC territories should add sales tax at the local rate.

Subscriptions – USA USA subscribers call toll free 1-800-221-2123 or send check/money order/credit card details to: Stockton Press, 345 Park Avenue South, 10th Floor, New York, NY 10010-1707; Tel: +1 212 689 9200, Fax: +1 212 689 9711. USA annual subscription rates (institutional/corporate): \$1170 (surface) \$1400 (airmail). Individual making personal payment: \$240.

British Journal of Pharmacology (ISSN 0007-1188) is published twice a month by Macmillan Press Ltd, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001, USA. Subscription price for institutions is \$1170 per annum (surface). 2nd class postage is paid at Rahway NJ. Postmaster: send address corrections to Macmillan Press Ltd, c/o Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel NJ 07001.

Reprints of any article in this journal are available from Stockton Press, Houndmills, Basingstoke, Hampshire RG21 6XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526.

 $\begin{array}{cc} \textbf{Copyright} & \textcircled{0} \ 1996 \ Stockton \ Press \\ & ISSN \ 0007-1188 \end{array}$

All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

All material published in this journal is protected by copyright, which covers exclusive rights to reproduce and distribute the material. No material published in this journal may be reproduced or stored on microfilm or in electronic, optical or magnetic form without the written authorisation of the Publisher.

Authorisation to photocopy items for internal or personal use of specific clients, is granted by Stockton Press for libraries and other users registered with the Copyright Clearance Center (CCC) Transaction Reporting Service, provided that the base fee of \$12.00 per copy is paid directly to CCC, 21 Congress St., Salem, MA 01970, USA. 0007–1188/96 \$12.00 + \$0.00.

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patent Act 1988, this publication may be reproduced, stored or transmitted, in any form or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency.

British Journal of Pharmacology



Subscription Order Form

To: Stockton Press, Direct Marketing, Houndmills, Basingstoke, Hampshire, RG21 6XS, England Tel: +44 (0)1256 51898 Fax: +44 (0)1256 28339

*IMPORTANT NOTICE FOR EUROPEAN UNION CUSTOMERS

Customers resident in the European Union are liable to VAT/BTW/MOMS/TVA/MWST/FPA/IVA/TAV or equivalent when ordering.

a) write your VAT (or equivalent) number in the space provided or

b) add tax at your country's rate to the total value of your order

1996 Subscription Rates

ISSN 0007 1188 One Year (24 Issues)

£665 European Union* Rest of the World £735

We welcome payment in your own currency, converted at the current rate.

☐ I enclose a cheque for made payable to Macmillan Magazines VAT number (see notice above)		
Please charge to my Visa/Mastercard/Amex/Diners Credit Card Account No. Account Name Account address as opposite below OR please	Name (BLOCK CAPITALS) Position Address	
SignatureExpiry Date	Postal/Zip Code Country Tel: Fax: A Division of Macmillan Press	

British Journal of Pharmacology

Subscription Order Form

To: Stockton Press, Journals Marketing 345 Park Avenue South, 10th Floor, NY 10010-1707. USA

Tel: (212) 689 9200 Fax: (212) 689 9711

Toll Free: 800 221 2123

1996 Subscription Rates

ISSN 0007 1188 One Year (24 Issues)

European Union* £665 Rest of the World \$1170

Personal Rate \$240 (payment by personal

check or credit card only)

We welcome payment in your own currency, converted at the current rate.

Yes, please record my subscription to British Journ I enclose a check for	
Please charge to my Visa/Mastercard/Amex/Diners Credit Card Account No.	Name (BLOCK CAPITALS) Position Address
Account Name Account address as opposite below OR please specify Signature Expiry Date	Postal/Zip Code Country Tel: Fax:STOCKTON

LIBRARY RECOMMENDATION FORM

To: Librarian/Library Acquisition Committee I have just reviewed a sample copy of the journal detailed overleaf entitled:

Please include it in your next serials review meeting with my recommendation. (Further sample copies are available from Stockton Press, Direct Marketing, Houndmills, Basingstoke

Hampshire RG21 6XS, UK) I recommend the journal for the following reasons: Position: Name: Department:

LIBRARY RECOMMENDATION FORM

To: Librarian/Library Acquisition Committee I have just reviewed a sample copy of the journal detailed overleaf entitled:

Please include it in your next serials review meeting with my recommendation. (Further sample copies are available from Stockton Press, Journals Marketing, 345 Park Avenue South, 10th Floor, NY 10010-1707. USA)

I recommend the journal for the following reasons:

Name:	Position:	
Department:		

PREPARATION OF MANUSCRIPTS

Authors are strongly recommended to read the full *Instructions to Authors* and *Nomenclature Guidelines for Authors* (Br. J. Pharmacol. 1996, 117, 389-399) before submitting a manuscript for publication in the *British Journal of Pharmacology*. The manuscript and cover letter should be checked against the following list before mailing.

The original and one copy of the manuscript must be supplied. Manuscripts must be typed in double-line spacing on one side of A4 paper, in type not smaller than 12 characters per inch or 10 point. Both copies to include Tables and a set of labelled Figures. One set of Figures without numbers or letters is also to be included. The text to be arranged in the following subsections:

- 1. Title—To have no more than 150 characters on a separate page, which should also include a Short Title (50 characters maximum) and the name and address of the author for correspondence.
- Summary To be arranged in numbered paragraphs (Full Papers) or a single paragraph (Special Reports).
 —to include aims, principal results and conclusions.
 —to include Key words (10 maximum) at end of summary.
- 3. **Introduction**—To contain concise statements of the problem and the aims of the investigation.
- 4. **Methods**—To have brief but adequate account of the procedures; full names of drugs (including those referred to by manufacturer's code), sources of drugs and statistical tests to be stated.
- Results To have no repetition of data in Figures, Tables and text.
- Discussion Findings and conclusions to be placed in context of other relevant work.
 NB Simple repetition of results and unwarranted speculation are not acceptable.
- Acknowledgements Sources of support. Sources of drugs not widely available commercially.
- 8. **References** All references in the text to be included in the Reference List and *vice versa*. References in alphabetical order with complete citations; Journals publishing 'in press' papers identified.

References to manuscripts submitted to other journals but not yet accepted are not allowed.

- 9. Tables—Each on a separate page and prepared in accordance with current requirements of the Journal.
- 10. **Figures** Both labelled and non-labelled Figures to be prepared in accordance with current requirements of the Journal (see *Instructions to Authors*, 1996, 117, 389-396) and provided with Figure Number and Authors' names on back (in pencil).
 - —each legend to be typed on a separate page and carrying keys to symbols.
 - —keys to symbols and histograms must not appear on the figures themselves, but in the respective legends.
 - —'box style' figures are not in keeping with the Journal style; line drawings etc must have only left-hand and bottom axes.
- 11. **Manuscripts**—To be accompanied by a declaration signed by each author that
 - (a) results are original
 - (b) approval of all persons concerned has been given to submit manuscripts for consideration (see also 12b)
 - (c) the same material is neither 'in press' (i.e. is in proof or has definitely been accepted for publication) nor under consideration elsewhere. Furthermore it will not be submitted or published elsewhere before a decision has been reached by the Editorial Board of the British Journal of Pharmacology and will not be submitted elsewhere if accepted by the British Journal of Pharmacology.
 - (d) Copyright assignment is included.
- 12. Cover letter—To state clearly
 - (a) Corresponding author's full postal address, telephone, telex or Fax number
 - (b) where appropriate, that *either* ethical approval has been given for investigation or Company or Institutional permission to publish work has been received.
- 13. **Reminder**—Packaging to be sufficiently robust to protect Figures and to withstand mailing.

Failure to comply with *Instructions to Authors* may lead to substantial delays in processing, review and publication and may even jeopardize acceptance of the manuscript.

NOMENCLATURE

Authors are reminded that accepted receptor and associated terminology is laid out in *Nomenclature Guidelines for Authors*, as published in the *British Journal of Pharmacology*, Br. J. Pharmacol., 1996, 117, 397-399.

SPECIAL REPORTS

The purpose of *Special Reports* is to provide rapid publication for **new** and **important** results which the Editorial Board considers are likely to be of special pharmacological significance. *Special Reports* will have publication priority over all other material and so authors are asked to consider carefully the status of their work before submission.

In order to speed publication there is normally no revision allowed beyond very minor typographical or grammatical corrections. If significant revision is required, the Board may either invite rapid re-submission or, more probably, propose that it be re-written as a Full Paper and be re-submitted for consideration. In order to reduce delays, proofs of *Special Reports* will be sent to authors but **essential corrections must reach the Production Office within 48 hours of receipt**. Authors should ensure that their submitted material conforms exactly to the following requirements.

Special Reports should normally occupy no more than two printed pages of the Journal; two illustrations (Figures or Tables, with legends) are permitted. As a guideline, with type face of 12 pitch and double-line spacing, a page of A4 paper could contain about 400 words. The absolute maximum length of the Special Report is 1700 words. For each Figure or Table, please deduct 200 words. The manuscript should comprise a Title page with key words (maximum of 10), a Summary consisting of a single short paragraph, followed by Introduction, Methods, Results, Discussion and References (maximum of 10). In all other respects, the requirements are the same as for Full Papers (see current 'Instructions to Authors').

SPECIAL REPORT

M.C. Olianas & P. Onali Antagonism of striatal muscarinic receptors inhibiting dopamine D_1 receptor-stimulated adenylyl cyclase activity by cholinoceptor antagonists used to treat Parkinson's disease 827

PAPERS

- D. Salvemini, Z.-Q. Wang, P.S. Wyatt, D.M. Bourdon, M.H. Marino,
 P.T. Manning & M.G. Currie Nitric oxide: a key mediator in the early and late phase of carrageenan-induced rat paw inflammation
- A. Concas, M.C. Mostallino, C. Perra, R. Lener, G. Roscetti, M.L. Barbaccia, R.H. Purdy & G. Biggio Functional correlation between allopregnanolone and [35S]-TBPS binding in the brain of rats exposed to isoniazid, pentylenetetrazol or stress 839
- Y. Miyagi, S. Kobayashi, J. Nishimura, M. Fukui & H. Kanaide Dual regulation of cerebrovascular tone by UTP: P_{2U} receptor-mediated contraction and endothelium-dependent relaxation 847
- F. Sekiguchi, K. Shimamura, M. Akashi & S. Sunano Effects of cyclopiazonic acid and thapsigargin on electromechanical activities and intracellular Ca²⁺ in smooth muscle of carotid artery of hypertensive rats
- M. Chen, H. Hashizume & Y. Abiko Effects of β -adrenoceptor antagonists on Ca²⁺-overload induced by lysophosphatidylcholine in rat isolated cardiomyocytes 865
- B.A. Kenny, A.M. Miller, I.J.R. Williamson, J. O'Connell, D.H. Chalmers & A.M. Naylor Evaluation of the pharmacological selectivity profile of α_1 adrenoceptor antagonists at prostatic α_1 adrenoceptors: binding, functional and *in vivo* studies 871
- F. Lovren, S.K. O'Neill, D. Bieger, N. Igbal, E.E. Knaus & C.R. Triggle Nitric oxide, a possible mediator of 1,4-dihydropyridine-induced photorelaxation of vascular smooth muscle 879
- A. Lo Russo, A.-C. Passaquin, P. André, M. Skutella & U.T. Rüegg Effect of cyclosporin A and analogues on cytosolic calcium and vasoconstriction: possible lack of relationship to immunosuppressive activity 885
- J.G. Filep, Y. Skrobik, A. Fournier & É. Földes-Filep Effects of calcium antagonists on endothelin-1-induced myocardial ischaemia and oedema in the rat 893
- M.V. Clos, A. Garcia Sanz, R. Trullas & A. Badia Effect of 1-aminocyclopropanecarboxylic acid on N-methyl-D-aspartate-stimulated [³H]-noradrenaline release in rat hippocampal synaptosomes 901
- A. Garciá-Pascual, G. Costa, A. Labadia, K. Persson & D. Triguero Characterization of nitric oxide synthase activity in sheep urinary tract: functional implications 905
- K. Miyazawa, S. Hamano & A. Ujiie Antiproliferative and c-myc mRNA suppressive effects of tranilast on newborn human vascular smooth muscle cells in culture
- M. Civelli, M. Giossi, P. Caruso, R. Razzetti, M. Bergamaschi,
 S. Bongrani & A. Gasco The involvement of the release of nitric oxide in the pharmacological activity of the new furoxan derivative CHF 2363
- C. Deng, A. Paoloni-Giacobino, F. Kuehne, O. Boss, J.-P. Revelli, M. Moinat, M.A. Cawthorne, P. Muzzin & J.-P. Giacobino Respective degree of expression of β_1 , β_2 and β_3 -adrenoceptors in human brown and white adipose tissues 929
- S.-Y. Choi & K.-T. Kim Characterization of Na⁺ influx mediated by ATP⁴⁻-activated P₂ purinoceptors in PC12 cells 935
- K. Noguchi, T. Matsuzaki, N. Shiroma, Y. Ojiri & M. Sakanashi Involvement of nitric oxide and eicosanoids in platelet-activating factorinduced haemodynamic and haematological effects in dogs 941

- S.J.Robertson, M.G.Rae, E.G.Rowan & C. Kennedy Characterization of a P_{2X} -purinoceptor in cultured neurones of the rat dorsal root ganglia 951
- M. Nishimura, Y. Taquahashi, K. Fujita, E. Satoh & Y. Shimizu Dependence on temperature of the effect of dinitrophenol on the release of transmitter quanta at neuromuscular junctions in the mouse diaphragm

 957
- C. Bon & M. Galvan Electrophysiological actions of GABA_B agonists and antagonists in rat dorso-lateral septal neurones *in vitro* 961
- J.F. Herrero & P.M. Headley Reversal by naloxone of the spinal antinociceptive actions of a systemically-administered NSAID 968
- P.J. Johnson, J.C. Bornstein, S.Y. Yuan & J.B. Furness Analysis of contributions of acetylcholine and tachykinins to neuro-neuronal transmission in motility reflexes in the guinea-pig ileum 973
- S.-C. Tsai, Y.-C. Chiao, C.-C. Lu, M.-L. Doong, Y.-H. Chen, H.-C. Shih, C. Liaw, S.-W. Wang & P.S. Wang Inhibition by amphetamine of testosterone secretion through a mechanism involving an increase of cyclic AMP production in rat testes 984
- C. Fornhem, M. Dahlbäck, M. Kumlin, J.M. Lundberg & K. Alving Effects of local and systemic budesonide on allergen-induced airway reactions in the pig 989
- S.I. Ramnarine, A.M. Khawaja, P.J. Barnes & D.F. Rogers Nitric oxide inhibitiion of basal and neurogenic mucus secretion in ferret trachea *in vitro* 998
- L.M. Blayney, P.W. Gapper & A.C. Newby Phospholipase C isoforms in vascular smooth muscle and their regulation by G-proteins 1003
- Gy. Losonczy, I. Mucha, V. Müller, T. Kriston, Z. Ungvári, L. Tornóci, L. Rosivall & R. Venuto The vasoconstrictor effects of L-NAME, a nitric oxide synthase inhibitor, in pregnant rabbits 1012
- M. Asano, M. Kuwako, Y. Nomura, K.M. Ito, K. Ito, Y. Uyama, Y. Imaizumi & M.Watanabe Possible mechanism of the potent vasoconstrictor actions of ryanodine on femoral arteries from spontaneously hypertensive rats
- D. Erlinge, M. Heilig & L. Edvinsson Tyrphostin inhibition of ATPstimulated DNA synthesis, cell proliferation and Fos-protein expression in vascular smooth muscle cells 1028
- D.E. Pellegrini-Giampietro, S.A. Torregrossa & F. Moroni Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus 1035
- S.-C. G. Hui, E.L. Sevilla & C.W. Ogle Prevention by the 5-HT₃ receptor antagonist, ondansetron, of morphine-dependence and tolerance in the rat 1044
- P. Bois, J. Bescond, B. Renaudon & J. Lenfant Mode of action of the bradycardic agent, S 16257, on ionic currents of rabbit sinoatrial node cells 1051
- P.G. McLean & I.M. Coupar Further investigation into the signal transduction mechanism of the 5-HT₄-like receptor in the circular smooth muscle of human colon 1058
- D.N. Criddle, R. Soares de Moura, I.A. Greenwood & W.A. Large Effect of niflumic acid on noradrenaline-induced contractions of the rat aorta 1065
- Q. Pu, J.X. Mazoit, L.S. Cao, W. Mao & K. Samii Effect of lignocaine in myocardial contusion: an experiment on rabbit isolated heart 1072
- E. Hardy, M. Faranhani & I.P. Hall Regulation of histamine H_1 receptor coupling by dexamethasone in human cultured airway smooth muscle 1079

