

# British Journal of Pharmacology

VOLUME 116 (3) OCTOBER 1995

## SPECIAL REPORT

R.E.P. de Boer, F. Brouwer & J. Zaagsma. Noradrenaline-induced relaxation of rat oesophageal muscularis mucosae mediation solely by innervated  $\beta_3$ -adrenoceptors 1945

## PAPERS

P. Chatelain, L. Meysmans, J.R. Mattéazzi, Ph. Beaufort & M. Clinet. Interaction of the antiarrhythmic agents SR 33589 and aminodarone with the  $\beta$ -adrenoceptor and adenylate cyclase in rat heart 1949

R.A.A. Mathôt, E.M. Van der Wenden, W. Soudijn, A.P. IJzerman & M. Danhof. Deoxyribose analogues of N<sup>6</sup>-cyclopentyladenosine (CPA): partial agonists at the adenosine A<sub>1</sub> receptor *in vivo* 1957

R. Gross, M. Roye, M. Manteghetti, D. Hillaire-Buys & G. Ribes. Alterations of insulin response to different  $\beta$  cell secretagogues and pancreatic vascular resistance induced by N<sup>ω</sup>-nitro-L-arginine methyl ester 1965

C.-C. Wu, F.-N. Ko, S.-C. Kuo, F.-Y. Lee & C.-M. Teng. YC-1 inhibited human platelet aggregation through NO-independent activation of soluble guanylate cyclase 1973

C.J. Dixon, P.H. Cobbold & A.K. Green. Actions of ADP, but not ATP, on cytosolic free Ca<sup>2+</sup> in single rat hepatocytes mimicked by 2-methylthioATP 1979

A. Schmitt, R. Salvayre, J. Delchambre & A. Negre-Salvayre. Prevention by  $\alpha$ -tocopherol and rutin of glutathione and ATP depletion induced by oxidized LDL in cultured endothelial cells 1985

G. Brunn, I. Wessler & K. Racké. Mucosa-dependent muscarinic liberation of prostaglandins from rat isolated trachea 1991

M.Á. Moro, V.M. Darley-Usmar, I. Lizasoain, Y. Su, R.G. Knowles, M.W. Radomski & S. Moncada. The formation of nitric oxide donors from peroxynitrite 1999

S.M. Gardiner, P.A. Kemp, J.E. March & T. Bennett. Cardiac and regional haemodynamics, inducible nitric oxide synthase (NOS) activity, and the effects of NOS inhibitors in conscious, endotoxaemic rats 2005

R.A. Lefebvre, G.J.M. Smits & J.-P. Timmermans. Study of NO and VIP as non-adrenergic non-cholinergic neurotransmitters in the pig gastric fundus 2017

E.-B. Haddad, J. Rousell, J.C.W. Mak & P.J. Barnes. Long-term carbachol treatment-induced down-regulation of muscarinic M<sub>2</sub>-receptors but not m<sub>2</sub> receptor mRNA in a human lung cell line 2027

L.M. Hawkins, K.M. Beaver, D.E. Jane, P.M. Taylor, D.C. Sunter & P.J. Roberts. Characterization of the pharmacology and regional distribution of (S)-[<sup>3</sup>H]-5-fluorowillardiine binding in rat brain 2033

M. Kuroiwa, H. Aoki, S. Kobayashi, J. Nishimura & H. Kanaide. Mechanism of endothelium-dependent relaxation induced by substance P in the coronary artery of the pig 2040

O.L. Leños, E. Hong & J.L. Amezcua. Reflex circulatory collapse following intrapulmonary entrapment of activated platelets: mediation via 5-HT<sub>3</sub> receptor stimulation 2048

A. Pisani, A. Stefani, A. Siniscalchi, N.B. Mercuri, G. Bernardi & P. Calabresi. Electrophysiological actions of felbamate on rat striatal neurones 2053

H. Murakoshi, K. Numoki, K. Ishii & N. Taira. Determination of K<sub>A</sub> values by controlled receptor expression in *Xenopus* oocytes 2062

M. Vázquez, S. Muñoz, M. Alegret, T. Adzet, M. Merlos & J.C. Laguna. Differential effects of fibrates on the acyl composition of microsomal phospholipids in rats 2067

X.-J. Xu, Z. Wiesenfeld-Hallin, Ü. Langel, K. Bedecs & T. Bartfai. New high affinity peptide antagonists to the spinal galanin receptor 2076

W.S. Redfern & A. Williams. A re-evaluation of the role of  $\alpha_2$ -adrenoceptors in the anxiogenic effects of yohimbine, using the selective antagonist delequamine in the rat 2081

K. Mizuno, N. Nakahata & Y. Ohizumi. Mastoparan-induced phosphatidylcholine hydrolysis by phospholipase D activation in human astrocytoma cells 2090

P. Whiteaker, H.S. Garcha, S. Wonnacott & I.P. Stoleran. Locomotor activation and dopamine release produced by nicotine and isoarecolone in rats 2097

D. Pruneau, J.M. Luccarini, E. Deffrène, J.L. Paquet & P. Bélichard. Pharmacological evidence for a single bradykinin B<sub>2</sub> receptor in the guinea-pig 2106

M.D.R. Croning, T.S.C. Zetterström, D.G. Grahame-Smith & N.R. Newberry. Action of adenosine receptor antagonists on hypoxia-induced effects in the rat hippocampus *in vitro* 2113

A.M. Deveney & J.L. Waddington. Pharmacological characterization of behavioural responses to SK&F 83959 in relation to 'D<sub>1</sub>-like' dopamine receptors not linked to adenylyl cyclase 2120

N. Jain, N. Kemp, O. Adeyemo, P. Buchanan & T.W. Stone. Anxiolytic activity of adenosine receptor activation in mice 2127

**Y. Takeda, N. Tohse, H. Nakaya & M. Kanno.** Voltage-dependence of  $\text{Ca}^{2+}$  agonist effect of YC-170 on cardiac L-type  $\text{Ca}^{2+}$  channels 2134

**M. Watanabe, M. Yamada, S. Mue & K. Ohuchi.** Enhancement by cyclo-oxygenase inhibitors of platelet-activating factor production in thapsigargin-stimulated macrophages 2141

**A.D. Hughes & T.B. Bolton.** Action of angiotensin II, 5-hydroxytryptamine and adenosine triphosphate on ionic currents in single ear artery cells of the rabbit 2148

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 contribution 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 2XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526. Publisher: Marija Vukovojac. Production Controller: Nicci Crawley.

**Subscriptions – EU/Rest of World** Subscription price per annum (3 volumes, 24 issues) £620, rest of world £820 (Airmail), £685 (Surface mail) 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 2XS, 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, 49, West 24th Street, New York, NY 10010; Tel: 212 627 5757, Fax: 212 627 9256. USA annual subscription rates: \$1230 Airmail; \$1030 Surface (Institutional/Corporate); \$225 (Individual making personal payment).

*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 \$1030 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 2XS, UK. Tel: +44 (0)1256 29242; Fax: +44 (0)1256 810526.

**Copyright** © 1995 Stockton Press  
ISSN 0007-1188

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. 0007-1188/95 \$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.