

CONTENTS

Volume 92, part 1

January 1997

Guidance for Authors 1997	i-x
Editorial	1
EDITORIAL REVIEWS	
Regulation of adipose cell number in man <i>by</i> J. B. PRINS and S. O'RAHILLY	3-11
Cardiovascular pharmacology of purines <i>by</i> G. A. RONGEN, J. S. FLORAS, J. W. M. LENDERS, T. THIEN and P. SMITS	13-24
GLAXO/MRS YOUNG INVESTIGATOR PRIZE	
Studies on the interaction of T-cells with major histocompatibility complex class II antigens <i>by</i> A. N. WARRENS	25-36
PAPERS	
Neutrophil CD11B expression and neutrophil activation in pre-eclampsia <i>by</i> A. BARDEN, D. GRAHAM, L. J. BEILIN, J. RITCHIE, R. BAKER, B. N. WALTERS and C. A. MICHAEL	37-44
Urinary albumin excretion and atherosclerosis in essential hypertension <i>by</i> R. PEDRINELLI, K. LINDPAINTNER, G. DELL'OMO, V. NAPOLI, V. DI BELLO, R. DE CATERINA and R. PETRUCCI	45-50
Renal handling of urate and sodium during acute physiological hyperinsulinaemia in healthy subjects <i>by</i> J. C. TER MAATEN, A. VOORBURG, R. J. HEINE, P. M. TER WEE, A. J. M. DONKER and R. O. B. GANS	51-58
Elevated plasma levels of human adrenomedullin in cardiovascular, respiratory, hepatic and renal disorders <i>by</i> B. CHEUNG and R. LEUNG	59-62
Effects of silicon, citrate and the fasting state on the intestinal absorption of aluminium in rats <i>by</i> T. B. DRÜEKE, P. JOUHANNEAU, H. BANIDE, B. LACOUR, F. YIOU and G. RAISBECK	63-67
Association of antral mucosal levels of interleukin 8 and reactive oxygen radicals in patients infected with <i>Helicobacter pylori</i> <i>by</i> Q. B. ZHANG, J. B. DAWODU, A. HUSAIN, G. ETOLHI, C. G. GEMMELL and R. I. RUSSELL	69-73
Brisk walking reduces calcaneal bone loss in post-menopausal women <i>by</i> K. BROOKE-WAVELL, P. R. M. JONES and A. E. HARDMAN	75-80
Assessment of postural differences in regional pulmonary perfusion in man by single-photo emission computerized tomography <i>by</i> D. J. ROSS, P. WU and Z. MOHSENIFAR	81-85

- Plasma *RRR*- α -tocopherol concentrations are lower in smokers than in non-smokers after ingestion of a similar oral load of this antioxidant vitamin by L. H. MUNRO, G. BURTON and F. J. KELLY 87–93
- Dietary fish oil reduces survival and impairs bacterial clearance in C3H/hen mice challenged with *Listeria monocytogenes* by K. L. FRITSCH, L. M. SHAHBAZIAN, C. FENG and J. N. BERG 95–101

Volume 92, part 2

February 1997

EDITORIAL REVIEW

- Pathogenesis of liver fibrosis by R. ALCOLADO, M. J. P. ARTHUR and J. P. IREDALE 103–112

GLAXO/MRS YOUNG INVESTIGATOR PRIZE

- Understanding the molecular basis of cell migration; implications for clinical therapy in multiple sclerosis by R. MILNER 113–122

PAPERS

- Role of nitric oxide towards vasodilator effects of substance P and ATP in human forearm vessels by M. SHIRAMOTO, T. IMAIZUMI, Y. HIROOKA, T. ENDO, T. NAMBA, J. OYAMA, K. HIRONAGA and A. TAKESHITA 123–131
- Comparison of forearm vasodilatation to substance P and acetylcholine: contribution of nitric oxide by D. E. NEWBY, N. A. BOON and D. J. WEBB 133–138
- Endothelial function in subcutaneous resistance arteries from elderly hypertensive and normotensive subjects by M. A. JAMES, P. A. C. WATT, J. F. POTTER, H. THURSTON and J. D. SWALES 139–145
- Insulin-induced attenuation of noradrenaline-mediated vasoconstriction in resistance arteries from Wistar rats is nitric oxide dependent by A. B. WALKER, M. W. SAVAGE, J. DORES and G. WILLIAMS 147–152
- Postural vasoconstriction and leg ulceration in homozygous sickle cell disease by J. S. MOHAN, J. M. MARSHALL, H. L. REID, P. W. THOMAS and G. R. SERJEANT 153–158
- Comparative bioactivity of atrial and brain natriuretic peptides in an ovine model of heart failure by M. T. RADEMAKER, C. J. CHARLES, E. A. ESPINER, C. M. FRAMPTON, M. G. NICHOLLS and A. M. RICHARDS 159–165
- Modulation of neurocardiac function by oesophageal stimulation in humans by G. TOUGAS, M. KAMATH, G. WATTEEL, D. FITZPATRICK, E. L. FALLEN, R. H. HUNT and A. R. M. UPTON 167–174
- Isometric contraction of arm flexor muscles as a method of evaluating cardiac vagal tone in man by M. AL-ANI, K. ROBINS, A. H. AL-KHALIDI, J. VAILE, J. TOWNEND and J. H. COOTE 175–180
- Transfection of cardiac muscle: effects of overexpression of *c-myc* and *c-fos* proto-oncogene proteins in primary cultures of neonatal rat cardiac myocytes by N. K. GREEN, J. A. FRANKLYN, V. OHANIAN, A. M. HEAGERTY and M. D. GAMMAGE 181–188
- Contraction failure of skeletal muscle of rats recovering from critical illness by O. E. ROOYACKERS, M. K. C. HESSELINK and A. J. M. WAGENMAKERS 189–195
- Phagocytic degradation of chylomicron remnants by fibroblasts from subjects with homozygous familial hypercholesterolaemia by K. C.-W. YU, D. SMITH, A. YAMAMOTO, A. KAWAGUCHI, M. HARADA-SHIBA, T. YAMAMURA and J. C. L. MAMO 197–203

- Effect of seed crystals of uric acid and monosodium urate on the crystallization of calcium oxalate in undiluted human urine *in vitro* by P. K. GROVER and R. L. RYALL 205–213
- Down-regulation of the acute-phase response in patients with pancreatic cancer cachexia receiving oral eicosapentaenoic acid is mediated via suppression of interleukin-6 by S. J. WIGMORE, K. C. H. FEARON, J. P. MAINGAY and J. A. ROSS 215–221

CORRECTION

- Visualizing signal transduction: receptors, G-proteins, and adenylate cyclases by C. W. DESSAUER, B. A. POSNER and A. G. GILMAN (*Clin Sci* 1996; **91**: 527–37) 223

SUPPLEMENT 36

- Communications for the Autumn Meeting of the Medical Research Society on 14 and 15 November 1996 in conjunction with the Science and Medicine Conference at the Royal College of Physicians, London 1P–20P

Volume 92, part 3

March 1997

EDITORIAL REVIEW

- Mitochondrial DNA defects: a widening clinical spectrum of disorders by E. J. SHERRATT, A. W. THOMAS and J. C. ALCOLADO 225–235

PAPERS

- Sodium–lithium countertransport, sodium–hydrogen exchange and membrane microviscosity in patients with hyperlipidaemia by M. J. MACLEOD, W. K. LEE, A. M. DEVLIN, M. CASLAKE, N. H. ANDERSON, C. J. PACKARD, M. H. DOMINICZAK, J. L. REID and A. F. DOMINICZAK 237–246
- Na⁺,K⁺-ATPase expression in maleic-acid-induced Fanconi syndrome in rats by E. CASTAÑO, P. MARZABAL, F. J. CASADO, A. FELIPE and M. PASTOR-ANGLADA 247–253
- Low-dose brain natriuretic peptide infusion in normal men and the influence of endopeptidase inhibition by C. M. FLORKOWSKI, A. M. RICHARDS, E. A. ESPINER, T. G. YANDLE, E. SYBERTZ and C. M. FRAMPTON 255–260
- An analysis of arterial disease mortality and BUPA health screening data in men, in relation to outdoor temperature by G. C. DONALDSON, D. ROBINSON and S. L. ALLAWAY 261–268
- Nitric oxide is involved in the inhibitory neurotransmission and endothelium-dependent relaxations of human small penile arteries by U. SIMONSEN, D. PRIETO, J. A. DELGADO, M. HERNÁNDEZ, L. RESEL, I. SAENZ DE TEJADA and A. GARCÍA-SACRISTÁN 269–275
- Evidence that nitric oxide inhibits steroidogenesis in cultured rat granulosa cells by S. DAVE, D. P. FARRANCE and S. A. WHITEHEAD 277–284
- Comparison between reproducibility and sensitivity of muscle sympathetic nerve traffic and plasma noradrenaline in man by G. GRASSI, G. BOLLA, G. SERAVALLE, C. TURRI, A. LANFRANCHI and G. MANCIA 285–289
- Fetal growth and insulin resistance in adult life: role of skeletal muscle morphology by C. H. THOMPSON, A. L. SANDERSON, D. SANDEMAN, C. STEIN, A. BORTHWICK, G. K. RADDA and D. I. W. PHILLIPS 291–296

Dietary sulphur amino acid adequacy influences glutathione synthesis and glutathione-dependent enzymes during the inflammatory response to endotoxin and tumour necrosis factor- α in rats by E. A. L. HUNTER and R. F. GRIMBLE	297–305
Differential excretion of leucocyte granule components in inflammatory bowel disease: implications for pathogenesis by A. D. DWARAKANATH, I. A. FINNIE, C. M. BEESLEY, G. M. O'DOWD, J. NASH, H. H. TSAI, N. PARKER and J. M. RHODES	307–313
Effect of two forms of granulocyte-colony-stimulating factor on hepatic regeneration after 70% partial hepatectomy in rats by S. E. THEOCHARIS, E. B. AGAPITOS, A. P. MARGELI, N. D. GOUTAS, C. N. KITTAS and P. S. DAVARIS	315–320

Volume 92, part 4

April 1997

EDITORIAL REVIEW

Gene therapy for diabetes mellitus by K. DOCHERTY	321–330
--	---------

RAPID COMMUNICATION

Could the A2A11 human leucocyte antigen locus correlate with maximal aerobic power? by G. RODAS, G. ERCILLA, C. JAVIERRE, E. GARRIDO, M. CALVO, R. SEGURA and J. LI. VENTURA	331–333
---	---------

PAPERS

Heart rate variability in patients with daytime sleepiness suspected of having sleep apnoea syndrome: a receiver-operating characteristic analysis by C. KEYL, P. LEMBERGER, M. PFEIFER, K. HOCHMUTH and P. GEISLER	335–343
Complementary and non-coincident increases in heart rate variability and irregularity during fetal development by L. A. FLEISHER, J. A. DIPIETRO, T. R. B. JOHNSON and S. PINCUS	345–349
Autonomic nervous function during haemodialysis assessed by spectral analysis of heart-rate variability by S. CAVALCANTI, S. SEVERI, L. CHIARI, G. AVANZOLINI, G. ENZMANN, F. BIANCO and G. PANZETTA	351–359
Combination oral antioxidant supplementation reduces blood pressure by H. F. GALLEY, J. THORNTON, P. D. HOWDLE, B. E. WALKER and N. R. WEBSTER	361–365
Haemodynamic and biochemical responses to L-arginine and L-lysine infusions in normal subjects: L-arginine-induced vasodilatation cannot be explained by non-specific effects of cationic amino acids by R. A. SMULDERS, M. AARSEN, T. TEERLINK, P. M. J. M. DE VRIES, G. J. VAN KAMP, A. J. M. DONKER and C. D. A. STEHOUWER	367–374
The steroid vitamin D ₃ reduces cell proliferation in human duodenal epithelium by M. G. THOMAS, R. P. STURGESS and M. LOMBARD	375–377
Intestinal absorption of trace amounts of aluminium in rats studied with ²⁶ aluminium and accelerator mass spectrometry by K. W. SCHÖNHOLZER, R. A. L. SUTTON, V. R. WALKER, V. SOSSI, M. SCHULZER, C. ORVIG, E. VENCZEL, R. R. JOHNSON, D. VEITTELLI, B. DITTRICH-HANNEN, P. KUBIK and M. SUTER	379–383
Effect of high-dose chemotherapy on intestinal permeability in humans by D. M. K. KEEFE, A. G. CUMMINS, B. M. DALE, D. KOTASEK, T. A. ROBB and R. E. SAGE	385–389
Resting membrane potential of skeletal muscle calculated from plasma and muscle electrolyte and water contents by A. M. FORSBERG, J. BERGSTRÖM, B. LINDHOLM and E. HULTMAN	391–396

Effect of urodilatin infusion on renal haemodynamics, tubular function and vasoactive hormones by J. CARSTENS, K. T. JENSEN and E. B. PEDERSEN	397-407
Comparison of the effects on urinary sodium excretion of indomethacin and of carbidopa in normal volunteers given an intravenous saline infusion by G. A. STOKES, J. C. MONAGHAN and D. N. PILLAI	409-414
Mild endotoxaemia and the inflammatory response induced by a marathon race by G. CAMUS, J. POORTMANS, M. NYS, G. DEBY-DUPONT, J. DUCHATEAU, C. DEBY and M. LAMY	415-422
Effects of ordinary meals on plasma concentrations of 3,4-dihydroxyphenylalanine, dopamine sulphate and 3,4-dihydroxyphenylacetic acid by E. ELDRUP, D. E. MØLLER, J. ANDREASEN and N. J. CHRISTENSEN	423-430

CORRESPONDENCE

Lipid-lowering strategies for the prevention of coronary heart disease by C. MORRISON and J. McMURRAY	431
Lipid-lowering strategies for the prevention of coronary heart disease: author's reply by I. H. HAO, L. E. RAMSAY, D. M. PICKIN, W. W. YEO, P. R. JACKSON and J. N. PAYNE	431-432

Volume 92, part 5

May 1997

EDITORIAL REVIEW

The hepatorenal syndrome by K. MOORE	433-443
--------------------------------------	---------

GLAXO/MRS YOUNG INVESTIGATOR PRIZE

Signalling pathways involved in the mitogenic effects of cAMP by D. J. WITHERS	445-451
--	---------

RAPID COMMUNICATION

Serum levels of vascular endothelial growth factor in patients with acute myocardial infarction undergoing reperfusion therapy by Y. SEKO, Y. IMAI, S. SUZUKI, S. KAMIJUKKOKU, K. HAYASAKI, Y. SAKOMURA, K. TOBE, T. KADOWAKI, H. MAEKAWA, N. TAKAHASHI and Y. YAZAKI	453-454
---	---------

PAPERS

Tissue expression of components of the renin-angiotensin system in experimental post-infarction heart failure in rats: effects of heart failure and angiotensin-converting enzyme inhibitor treatment by M. P. KELLY, O. KAHR, C. AALKJAER, F. CUMIN and N. J. SAMANI	455-465
Adrenomedullin: a hypotensive hormone in man by J. G. LAINCHBURY, G. J. S. COOPER, D. H. COY, N.-Y. JIANG, L. K. LEWIS, T. G. YANDLE, A. M. RICHARDS and M. G. NICHOLLS	467-472
The effects of low-density lipoprotein and high-density lipoprotein on blood viscosity correlate with their association with risk of atherosclerosis in humans by G. D. SLOOP and D. W. GARBER	473-479
Effects of hydroxyurea administration on the body weight, body composition and exercise performance of patients with sickle-cell anaemia by A. C. HACKNEY, W. HEZIER, T. P. GULLEDGE, S. JONES, D. STRAYHORN, M. BUSBY, E. HOFFMAN and E. P. ORRINGER	481-486
Female sex hormones do not influence arterial wall properties during the normal menstrual cycle by C. WILLEKES, H. J. HOOGLAND, H. A. KEIZER, A. P. HOEKS and R. S. RENEMAN	487-491

Microdialysis of human breast tissue during the menstrual cycle <i>by</i> C. DABROSIN, Å. HALLSTRÖM, U. UNGERSTEDT and M. HAMMAR	493–496
Raised affinity for extracellular sodium of the sodium–lithium countertransporter is associated with a family history of hypertension and uraemia in patients with renal disease <i>by</i> S. J. CARR, D. MOORE, K. SIKAND and R. I. NORMAN	497–503
Renal afferents responsive to chemical and mechanical pelvic stimuli in the rabbit <i>by</i> S. GENOVESI, F. PIERUZZI, P. CAMISASCA, R. GOLIN, A. ZANCHETTI and A. STELLA	505–510
HPLC glycosaminoglycan analysis in patients with Graves' disease <i>by</i> CH. HANSEN, B. FRAITURE, R. ROUHI, E. OTTO, G. FÖRSTER and G. KAHALY	511–517
Sepsis and endotoxaemia in mice stimulate the expression of interleukin-1 and interleukin-6 in the central nervous system <i>by</i> T. A. MEYER, J. J. WANG, G. M. TIAO, C. K. OGLE, J. E. FISCHER and P.-O. HASSELGREN	519–525
CORRESPONDENCE	
Impaired cytokine production by peripheral T lymphocytes in low responders to hepatitis B vaccination <i>by</i> M. YAMASHIKI, Y. KOSAKA, I. KONDO and M. NOMOTO	527–528

Volume 92, part 6

June 1997

EDITORIAL REVIEW

The antibody response in human autoimmune thyroid disease <i>by</i> R. S. MCINTOSH, M. S. ASGHAR and A. P. WEETMAN	529–541
--	---------

PAPERS

Fractal component of variability of heart rate and systolic blood pressure in congestive heart failure <i>by</i> G. C. BUTLER, S.-i. ANDO and J. S. FLORAS	543–550
Blood pressure parameters as determinants of small artery structure in human essential hypertension <i>by</i> A. COOPER and A. M. HEAGERTY	551–557
Determination of appropriate recording force by non-invasive measurement of arterial pressure pulses <i>by</i> M. D. DRISCOLL, J. M. O. ARNOLD, G. E. MARCHIORI, L. A. HARKER and M. H. SHEREBRIN	599–566
Maternal serum vascular endothelial growth factor during early pregnancy <i>by</i> P. EVANS, T. WHEELER, F. ANTHONY and C. OSMOND	567–571
Serum leptin and short-term regulation of eating in obese women <i>by</i> L. KARHUNEN, S. HAFFNER, R. LAPPALAINEN, A. TURPEINEN, H. MIETTINEN and M. UUSITUPA	573–578
Renal endothelin system in obstructive jaundice: its role in impaired renal function of bile-duct ligated rats <i>by</i> H. J. KRAMER, K. SCHWARTING, A. BÄCKER and H. MEYER-LEHNERT	579–585
Effect of temperature reduction on myotonia in rat skeletal muscles <i>in vitro</i> <i>by</i> L. FANNING and M. MACDERMOTT	587–592

Hypoxia, hypocapnia and spirometry at altitude <i>by</i> A. J. POLLARD, P. W. BARRY, N. P. MASON, D. J. COLLIER, R. C. POLLARD, P. F. A. POLLARD, I. MARTIN, R. S. FRASER, M. R. MILLER and J. S. MILLEDGE	593–598
CORRECTION	599
AUTHOR INDEX	
SUBJECT INDEX	