

Curriculum vitae



Steven John Warrington
MA MB BChir MD FRCP FFPM QP

University	Cambridge (St John's College)		
Medical School	St Bartholomew's Hospital Medical College London		
Qualifications	BA	1968	Cambridge
	MB BChir	1971	Cambridge
	MA	1972	Cambridge
	MRCP (UK)	1974	London
	MD	1984	Cambridge
	FFPM	1990	RCP, London
	FRCP	1991	London
	QP	2004	

Accreditation by Royal College of Physicians

- 1) General (Internal) Medicine
- 2) Clinical Pharmacology and Therapeutics

Awards

St John's College Cambridge	Rolleston Entrance Exhibition	1965
	Wright Prize	1966
	Rolleston Scholarship	1967
Cambridge University	First Class Honours	1968
St Bartholomew's Hospital, London	Brackenbury Scholarship in Surgery	1971
	Roxburgh Prize in Dermatology	1971

Previous Appointments

1971 – 1972	House Officer to Surgical Professorial Unit, and in Cardiology, Nephrology and General Medicine, St Bartholomew's Hospital, London
1972 – 1974	Senior House Officer and Registrar in General Medicine Farnborough Hospital, Kent
1974 – 1975	Resident Medical Officer National Heart Hospital, London
1975 – 1977	Research Fellow in Cardiology and Clinical Pharmacology, St Bartholomew's Hospital

1977 – 1981	Lecturer in Clinical Pharmacology St Bartholomew's Hospital Medical College Honorary Senior Registrar in General Medicine and Clinical Pharmacology, St Bartholomew's Hospital
1981 – 1993	Medical Director Charterhouse Clinical Research Unit, London
1993 – 2012	Medical Director Hammersmith Medicines Research Limited, London

Present Appointments

Chief Medical Adviser
Director of the HMR Laboratory
Hammersmith Medicines Research Limited
Cumberland Avenue, London NW10 7EW

Honorary Lecturer in clinical pharmacology
St Bartholomew's Hospital Medical College

Experience in Clinical Pharmacology

Research experience

- extensive experience from 1975 onwards in Phase I of pharmaceutical development, including the assessment of tolerability, pharmacokinetics and pharmacodynamics of new and existing drugs
- design and execution of studies in Phase II and III of drug development
- assessment of drug action and handling in man, including the following range of techniques:

Cardiovascular

- Doppler aortic velography
- electrocardiography - conventional 12-lead
- high speed, high gain
- exercise testing
- forearm plethysmography
- isoprenaline sensitivity testing
- phenylephrine pressor testing
- systolic time intervals
- 24h ambulatory ECG monitoring
- tyramine pressor testing
- venous reflex response

Central Nervous System

- analgesia - dental pulp stimulation
- forearm ischaemia
- ataxiometer
- cognitive function testing

- critical flicker fusion frequency threshold
- simple and choice reaction times
- visual analogue rating scales

Dermatology

- absorption of topical preparations, including radiolabelled materials
- histamine weal generation
- irritancy and sensitisation testing
- suction blister generation and fluid sampling
- measurement of local anaesthetic effects

Endocrinology

- adrenocortical suppression testing
- calcitonin dynamics
- glucose-insulin relationships
- prolactin suppression and stimulation

Gastrointestinal

- appetite and food consumption
- gastric pH monitoring
- gastric titratable acid output
- pentagastrin stimulation test
- intragastric drug infusion
- intrajejunal catheter placement and drug injection
- rectal bioavailability
- saliva output measurement
 - dental roll method
 - Parafilm chewing method
- ⁵¹Cr-labelled red cell loss
- supervision of subjects undergoing upper GI endoscopy

Haematology

- bleeding time
- measures of coagulation
- platelet aggregometry

Ophthalmology

- accommodation near-point & visual acuity
- intra-ocular pressure measurement
 - non-contact tonometer
 - Goldmann method
- ophthalmoscopy
- pupillometry
 - pupil gauge
 - infra-red video
- slit-lamp examination

Urogenital

- renal enzyme excretion
- penile tactile sensitivity
- seminal fluid drug kinetics

- sperm motility
- vaginal bioavailability
- urinary flow rate

Respiratory

- exercise bronchodilatation
- computer spirometry
- histamine challenge
- citric acid aerosol induced cough model
- supervision of subjects undergoing broncho-alveolar lavage
- nasal insufflation of drugs

Metabolic

- ADME studies with ¹⁴C and ³H labelled compounds – 31 compounds in all
- interaction studies with hypoglycaemic drugs

Clinical Pharmacology experience

- management of patients with epilepsy and status epilepticus
- advising on management of patients who fail to respond to drug therapy
- interpretation of plasma concentrations of drugs including anti-convulsants, antidysrhythmics, digoxin and antidepressants
- management of drug overdose

General Medical Experience

Patient care

Care of patients in:

- General Medical Wards and Outpatients
- Nephrology Unit
- Chest Unit
- Intensive Care Unit
- Coronary Care Unit
- Mobile Coronary Care Unit
- Hypertension Clinic

Care of adults and children with heart disease, including patients undergoing open heart surgery.

Care of patients referred from Chalfont Centre for Epilepsy for control of intractable fits and for other unrelated medical and surgical problems.

Therapeutic Techniques

- peritoneal dialysis
- temporary pacemaker insertion
- permanent pacemaker implantation
- treatment of cardiac failure with intra-aortic balloon counter-pulsation
- cardiopulmonary resuscitation: completed Barts ACLS Course
- elective and emergency cardiac defibrillation

Diagnostic Techniques

- left and right heart catheterisation
- coronary angiography including Sones' technique
- central venous and pulmonary arterial pressure monitoring
- echocardiography
- phono- and apex-cardiography
- exercise ECG testing
- 24-hour dynamic ECG monitoring
- sigmoidoscopy
- liver and pleural biopsy

Teaching Experience

Lecturing to:

- Dip Pharm Med examiners
- Advanced Cardiac Life Support Course (St Bartholomew's Hospital)
- clinical and pre-clinical medical students
- MRCP, MRCPsych, and FFARCS candidates
- BPharm, MPS and MSc in Clinical Pharmacy candidates
- casualty officers & GPs
- pharmacists
- RGN candidates, ITU and CCU course nurses

Ward teaching of:

- pre-clinical clinical students
- pharmacists
- MRCP candidates

Experience as Examiner

London University	2nd MB: Pharmacology oral examinations MSc in Biopharmacy
St Bartholomew's Hospital Medical College	First Year clinical examinations
St Bartholomew's Hospital	Nurses' hospital final examinations
Faculty of Pharmaceutical Medicine	Officer of Board of Examiners Convenor of D/CHP examination panel

Computing Experience

APL programming: - label generation for study samples
 - measurement of ECG and systolic time intervals
 - simple statistical tests

Literature searching

Development of database to process results of haematology, biochemistry and urinalysis tests

Development of study costing program using Excel templates

Word processing: Microsoft Word

Spreadsheet: Microsoft Excel

PUBLICATIONS

MD thesis

Non-invasive assessment of cardiovascular function in clinical pharmacology

Cambridge University 1984

My thesis was based on work done from 1975–1981 on the utility of systolic time intervals, the high-speed high-gain surface ECG, and the normalised first derivative of the apexcardiogram in the detection of cardiovascular effects of drugs.

District Formulary, St Bartholomew's Hospital

Sections on:

- anti-inflammatory drugs
- broad-spectrum antibiotics
- diuretics
- drugs for urinary tract infections
- minor analgesics

Original Papers and Review Articles

- 1 Warrington S. The emergency management of tachycardia. Hospital Update 1976; 2: 467–482
- 2 Warrington S. The emergency management of bradycardia. Hospital Update 1976; 2: 519–532 & 611–622
- 3 Davies B, Warrington SJ. Diuretic effect of a combined preparation of frusemide and slow-release potassium chloride. Current Medical Research and Opinion 1978; 5: 739–742
- 4 Oh VMS, Kaye CM, Warrington SJ, Taylor EA, Wadsworth J. Studies of cardioselectivity and partial agonism in beta-adrenoceptor blockade, comparing effects on heart rate and peak expiratory flow rate during exercise. British Journal of Clinical Pharmacology 1978; 5: 107–120
- 5 Johnston A, Burgess CD, Warrington SJ, Wadsworth J, Hamer NAJ. The effect of spontaneous changes in urinary pH on mexiletine plasma concentrations and excretion during chronic administration to healthy volunteers. British Journal of Clinical Pharmacology 1979; 8: 349–352
- 6 O'Grady J, Warrington SJ, Moti MJ, Bunting S, Flower R, Fowle AE, Higgs EA, Moncada S. Effects of intravenous prostacyclin infusions in healthy volunteers – some preliminary observations. In: Prostacyclin, eds: J R Vane and S Bergstrom; Raven Press, New York 1979 pp 409–417
- 7 Richens A, Warrington SJ. When should plasma drug levels be monitored? Drugs 1979; 17: 488–500
- 8 Ryan D, Warrington SJ. Head-nodding in arteriopathic dementia – a new kind of tic? Postgraduate Medical Journal 1979; 17: 558–559
- 9 Warrington S. Pharmacological considerations in the management of patients with a stoma. Info '79 1979; 41: 1–2
- 10 Johnston A, Henry JA, Warrington SJ, Hamer NAJ. Pharmacokinetics of oral disopyramide phosphate in patients with renal impairment. British Journal of Clinical Pharmacology 1980; 10: 245–248

- 11 O'Grady J, Warrington S, Moti MJ, Bunting S, Flower R, Fowle AE, Higgs EA, Moncada S. Effects of intravenous infusions of prostacyclin (PGI₂) in man. *Prostaglandins* 1980; 19: 319–332
- 12 Turner P, Warrington SJ. Interactions involving adrenergic neurone blocking drugs. In: *Clinically important adverse drug interactions, Vol 1, Cardiovascular and respiratory disease therapy*, ed: J C Petrie; Elsevier, North Holland, 1980; pp 107–118
- 13 Warrington S. Fatigue as an unwanted effect of drugs. Editorial; *Lancet* 1980; 1: 1285–1286
- 14 Warrington SJ, Hamer NAJ. Some cardiovascular problems with disopyramide. *Postgraduate Medical Journal* 1980; 56: 229–233
- 15 Warrington SJ, O'Grady J. Cardiovascular effects of prostacyclin in man. *Advances in prostaglandin and thromboxane research, Vol 7*, eds: B Samuelsson, PW Ramwell and R Paoletti; Raven Press, New York, 1980; pp 619–624
- 16 Warrington SJ, Smith PR, O'Grady J. Non-invasive assessment of the cardiovascular effects of prostacyclin (PGI₂) in man. *European Journal of Cardiology* 1980; 12: 73–80
- 17 Warrington SJ, Turner P, Kilborn JR, Bianchetti G, Morselli PL. Blood concentrations and pharmacodynamic effects of betaxolol (SL 75212), a new beta-adrenoceptor antagonist, after oral and intravenous administration. *British Journal of Clinical Pharmacology* 1980; 10: 449–452
- 18 Ohashi K, Warrington SJ, Kaye CM, Houghton GW, Dennis M, Templeton R, Turner P. Observations on the clinical pharmacology and plasma concentrations of diacetolol, the major human metabolite of acebutolol. *British Journal of Clinical Pharmacology* 1981; 12: 561–565
- 19 Sinclair AJ, Warrington SJ. Severe renal failure in hydralazine-induced lupus. *Human Toxicology* 1981; 1: 65–69
- 20 Taylor EA, Trembath PW, Warrington SJ. Influence of environmental temperature and humidity on bronchial responses during assessment of selectivity of beta-adrenoceptor antagonists in man. *British Journal of Clinical Pharmacology* 1981; 12: 201–209
- 21 Warrington SJ. Use of adrenergic neurone blockers should be restricted. *Mims Magazine* 1981 (1 Sept): 32–34
- 22 Warrington SJ, Burgess CD, Turner P. Cardiovascular effects of antidepressants. *Royal Society of Medicine International Congress and Symposium Series* 1981; 46: 79–86
- 23 Hassan S, Pickles H, Fish A, Burke Ch, Warrington S, O'Grady J. The cardiovascular and platelet effects of epoprostenol (Prostacyclin, PGI₂) are unaffected by beta-adrenoceptor blockade in man. *British Journal of Clinical Pharmacology* 1982; 14: 369–377
- 24 Warrington SJ. Lessons from the benoxaprofen affair. *Lancet* 1982; 2: 529–530
- 25 Warrington SJ. Clinically important drug interactions. *Update* 1982; 25: 1695–1701
- 26 Warrington SJ (1982) Noninvasive assessment of the cardiovascular effects of psychotropic drugs. *Journal of Clinical Psychiatry* 43 4–7

- 27 Warrington SJ (1982) Sedation is a problem with many anti-emetics. *Mims Magazine* (1 Apr) 61-64
- 28 Warrington SJ (1982) Vasodilators are finding favour. *Mims Magazine* (15 May) 10–12
- 29 Warrington SJ, Halsey A, O'Donnell L (1982) A comparison of gastrointestinal bleeding in healthy volunteers treated with tiaprofenic acid, aspirin or ibuprofen. *Rheumatology* 7 107–110
- 30 Davies G, Sinclair AJ, Warrington SJ (1982) Pharmacokinetics of meptazinol in Man following repeated intramuscular administration. *Eur J Clin Pharmacol* 23: 535-538
- 31 Ankier SI, Barclay SP, Warrington SJ (1983) Loprazolam (RU31158) – lack of effect on hepatic microsomal enzyme activity in man. *British Journal of Clinical Pharmacology* 16 200–201
- 32 Giudicelli JF, Richer C, Ganansia J, Warrington S, Abriol C, Rullière R (1983) Betaxolol: Beta-adrenoceptor blocking effects and pharmacokinetics in man. *LERS Vol 1: Betaxolol and other beta-adrenoceptor antagonists*, eds: Morselli PL et al, Raven Press, New York, pp 89–99
- 33 Iliopoulou A, Turner P, Warrington SJ (1983) Acute haemodynamic effects of a new calcium antagonist, nifedipine, in man: A comparison with nifedipine. *British Journal of Clinical Pharmacology* 15 59–66
- 34 Norbury HM, Franklin RA, Marrott PK, Warrington SJ (1983) Pharmacokinetics of intravenous indoramin in middle-aged male and female volunteers. *European Journal of Clinical Pharmacology* 25 243–246
- 35 Patel LG, Warrington SJ, Pearson RM (1983) Propranolol concentrations in plasma after insertion into the vagina. *British Medical Journal* 287 1247–1248
- 36 Warrington SJ, Barclay SP (1983) Absence of liver enzyme induction by loprazolam in man. *Loprazolam Clinical Workshop*, Medicine Publishing Foundation, Oxford, p 32
- 37 Warrington SJ, Barclay SP, Brown Z, Robson PJ (1983) Reversibility of the analgesic effect of meptazinol in volunteers. *Postgraduate Medical Journal* 59 (Suppl 1) 13–18
- 38 Warrington SJ, Taylor EA, Kilborn JR (1983) Comparison of pharmacodynamic effects of betaxolol with atenolol, practolol and propranolol given intravenously. *LERS Vol 1: Betaxolol and other beta-adrenoceptor antagonists*, eds: Morselli PL et al, Raven Press, New York, pp 109–122
- 39 Mekki QA, Warrington SJ, Turner P (1984) Bromocriptine eyedrops lower intraocular pressure without affecting prolactin levels. *Lancet* 1 287–288
- 40 Van de Merwe TJ, Silverstone T, Ankier SI, Warrington SJ, Turner P (1984) A double-blind non-crossover placebo-controlled study between group comparison of trazodone and amitriptyline on cardiovascular function in major depressive disorders. *Psychopathology* 17 (Suppl 2) 64–76
- 41 Norbury HM, Franklin RA, Marrott PH, Warrington SJ (1984) Pharmacokinetics of oral indoramin in elderly and middle-aged female volunteers. *European Journal of Clinical Pharmacology* 27 247–249

- 42 Thiercelin JF, Padovani P, Thenot JP, Rowland M, Warrington SJ, Morselli PL (1984) Effect of various antiepileptic drugs on the pharmacokinetics of progabide and its acid metabolite. *Neurology* 34 (Suppl 1) 266–267
- 43 Warrington SJ (1984) Cardiovascular effects of lofepramine. *International Medicine* (Suppl 10) 23–26
- 44 Warrington SJ, Ankier SI, Turner P (1984) An evaluation of possible interactions between ethanol and trazodone or amitriptyline. *British Journal of Clinical Pharmacology* 18 549–557
(also published in *Neuropsychobiology* 1986 15 Suppl 1 31–37)
- 45 Warrington SJ, Holt D, Johnston A, Fitzsimons TJ (1984) Pharmacokinetics and pharmacodynamics of verapamil in combination with atenolol, metoprolol and propranolol. *British Journal of Clinical Pharmacology* 17 37S–44S
- 46 Warrington SJ, Turner P (1984) Clinical Pharmacology. In: *Heart Disease in the elderly*. Eds: Martin A and Camm AJ, John Wiley & Sons Ltd, Chichester, pp 203–218
- 47 Bennett PN, Bennett J, Bradbrook I, Francis J, John VA, Rogers H, Turner P, Warrington SJ (1985) Single-dose pharmacokinetic and pharmacodynamic comparison of polymer-matrix (Slow Trasicor) and Oros dosage forms of oxprenolol in healthy volunteers. *British Journal of Clinical Pharmacology* 19 (Suppl 2) 171S–175S
- 48 Johnston A, Warrington S, Turner P (1985) An attempt to estimate the absolute bioavailability of flecainide without reference to a parenteral dose. *Pharmaceutical Medicine* 1 105–109
- 49 Johnston A, Warrington S, Turner P (1985) Flecainide pharmacokinetics in healthy volunteers: the influence of urinary pH. *British Journal of Clinical Pharmacology* 20 333–338
- 50 Saunders L, Ingram D, Warrington SJ (1985) The pharmacokinetics and dynamics of oxprenolol: a simulation study with six subjects. *Journal of Pharmacy and Pharmacology* 37 802–806
- 51 Thenot JP, Bianchetti G, Abriol C, Feuerstein J, Lambert D, Thébault JJ, Warrington SJ, Rowland M (1985) Interactions between progabide and antiepileptic drugs. *LEERS Vol 3: Epilepsy and gaba receptor agonists: Basic and therapeutic research*, eds: Bartholini G et al, Raven Press, New York, pp 259–269
- 52 Warrington S (1985) Systolic time intervals – a new technique in clinical pharmacology. *Methods and Findings in Experimental and Clinical Pharmacology* 7 93–98
- 53 Warrington SJ (1985) Limitations of dose tolerance studies on predictability for Phase III. *Arzneimittel Forschung/Drug Research* 35 781–783
- 54 Warrington SJ, Barclay SP, John VA, Shotton PA, Good W (1985) Comparison of single-dose pharmacokinetic and pharmacodynamic properties of two metoprolol Oros systems with different initial zero-order release rates. *British Journal of Clinical Pharmacology* 19 (Suppl 2) 225S–230S
- 55 Warrington SJ, O'Brien C, Thiercelin JF, Orofiamma B, Morselli P (1985) Evaluation of pharmacodynamic interaction between progabide and clonazepam in healthy men. *LEERS Vol 3: Epilepsy and gaba receptor agonists: Basic and therapeutic research*, eds: Bartholini G et al, Raven Press, New York, pp 279–286

- 56 Warrington SJ, Barclay SP, John VA, Shotton PA, Wardle HM, Good W (1985) Influence of site of drug delivery on the systemic availability of metoprolol: comparison of intragastric infusion and 14/190 Oros administration. *British Journal of Clinical Pharmacology* 19 (Suppl 2) 219S–224S
- 57 Woods KL, Jack DB, Kendall MJ, Halsey A, O'Donnell ML, Warrington SJ, John VA (1985) A multiple dose comparative study of the pharmacodynamic and pharmacokinetic behaviour of polymer-matrix and Oros dosage forms of oxprenolol in healthy volunteers. *British Journal of Clinical Pharmacology* 19 (Suppl 2) 177S–184S
- 58 Davies IB, Guinebault P, Johnson ES, Seymour D, Sinclair AJ, Warrington SJ (1986) α -adrenoceptor antagonism by alfuzosin in man: effects on phenylephrine pressor dose-responses. *British Journal of Clinical Pharmacology* 22: 231–232P
- 59 Warrington SJ, Ankier SI, Turner P (1986) Evaluation of possible interactions between ethanol and trazodone or amitriptyline. *Neuropsychobiology* 15 (Suppl 1) 31-37 (re-published from a paper of identical title in *British Journal of Clinical Pharmacology* 1984 18 549–557)
- 60 Dana-Haeri J, Warrington SJ (1987) Stemetil. *Mims Magazine* (1 Jul) 37-40
- 61 Hedges A, Warrington SJ, Turner P, Niebch G (1987) Flupirtine maleate and antipyrine half-life. *European Journal of Clinical Pharmacology* 33 437
- 62 Johnston A, Warrington SJ, Turner P, Riethmuller-Winzen H (1987) Comparison of flupirtine and indomethacin on frusemide-induced diuresis. *Postgraduate Medical Journal* 63 959–961
- 63 Abrams SL, Baker LR, Crome P, White AS, Johnston A, Ankier SI, Warrington SJ, Turner P, Niebch G (1988) Pharmacokinetics of flupirtine in elderly volunteers and in patients with moderate renal impairment. *Postgraduate Medical Journal* 64 361–363
- 64 Ankier SI, Brimelow AE, Crome P, Johnston A, Warrington SJ, Turner P, Ferber HP (1988) Chlortenoxicam pharmacokinetics in young and elderly human volunteers. *Postgraduate Medical Journal* 64 752–754
- 65 Ankier SI, Warrington SJ, Sneddon JM (1988) Recent developments in the use of nitrates for treatment of angina pectoris. *Journal of International Medical Research* 16 249–256
- 66 Harvengt C, Hulhoven R, Desager JP, Coupez JM, Guillet Ph, Fuseau E, Lambert D, Warrington SJ (1988) Drug interactions investigated with zolpidem. *LEERS Vol 6: Imidazopyridines in sleep disorders*, eds: Bartholini G et al, Raven Press, New York, pp 165–173
- 67 Johnston A, Warrington SJ, Turner P, Aurich R (1988) The effect of repeated oral doses of azelastine hydrochloride on antipyrine half-life in normal volunteers. *Journal of Pharmacy and Pharmacology* 40 225
- 68 Pierce DM, Warrington SJ, Franklin RA (1988) Pharmacokinetics of indoramin and its 6-hydroxylated metabolite after repeated oral dosing. *Biopharmaceutics and Drug Disposition* 9 147–157
- 69 Setnikar I, Chiste R, Makovec F, Rovati LC, Warrington SJ (1988) Pharmacokinetics of loxiglumide after single intravenous or oral doses in man. *Arzneimittel Forschung/Drug Research* 38 716–720
- 70 Thenot JP, Hermann P, Durand A, Burke JT, Allen J, Garrigou D, Vajta S, Albin H, Thebault JJ, Olive G, Warrington SJ (1988) Pharmacokinetics and

metabolism of Zolpidem in various animal species and in humans. LERS Vol 6: Imidazopyridines in sleep disorders, eds: Bartholini G et al, Raven Press, New York, pp 139–153

- 71 Warrington SJ (1988) The cardiovascular toxicity of antidepressants. *International Clinical Psychopharmacology* 3 (Suppl 2) 63–70
- 72 Warrington SJ, Dana-Haeri J, Horton MA, Thornton EJ (1988) Comparison of gastrointestinal blood loss in healthy male volunteers during repeated administration of standard and sustained action tiaprofenic acid and sustained release indomethacin. *Drugs* 35 (Suppl 1) 90–94
- 73 Warrington SJ, Weerasuriya K, Burgess CD (1988) Correction of systolic time intervals for heart rate: A comparison of individual with population derived regression equations. *British Journal of Clinical Pharmacology* 26 155–165
- 74 Ankier SI, Fay L, Warrington SJ, Woodings DF (1989) A multicentre open comparison of isosorbide-5-mononitrate and nifedipine given prophylactically to general practice patients with chronic stable angina pectoris. *Journal of International Medical Research* 17 172–178
- 75 Ankier SI, Warrington SJ (1989) Research and development of new medicines. *Journal of International Medical Research* 17 407–416
- 76 Ankier SI, Warrington SJ (1989) A double-blind placebo-controlled study of the efficacy and tolerability of ebastine against hayfever in general practice patients. *Journal of Internal Medicine* 226 453–58
- 77 Carmichael NG, Nolan RJ, Perkins JM, Davies R, Warrington SJ (1989) Oral and dermal pharmacokinetics of triclopyr in human volunteers. *Human Toxicology* 8 431–437
- 78 Dana-Haeri J, Warrington SJ (1989) Cardiovascular effects of tricyclic antidepressants in elderly people. In: *Antidepressants for Elderly People*, ed: Karabi Ghose, Chapman & Hall, London, pp 163–179
- 79 Debbas NMG, Ankier SI, Warrington SJ (1989) Trazodone conventional and controlled-release formulations: pharmacodynamic effects after single and repeated administration. *Current Medical Research and Opinion* 11 501–509
- 80 Everett DW, Foley JE, Singhvi SM, Weinstein SH, Warrington SJ (1989) High performance liquid chromatographic method for the radiometric determination of [¹⁴C] bucromarone in human plasma utilizing non-radiolabelled bucromarone as an internal standard. *Journal of Chromatography* 487 365–373
- 81 Sinclair AJ, Davies IB, Warrington SJ (1989) Alfuzosin and the venous reflex response: studies in normal subjects. *British Journal of Clinical Pharmacology* 27 19–22
- 82 Sneddon JM, Ankier SI, Warrington SJ (1989) Aspects of nitrate action and tolerance. *Recent Advances in Clinical Pharmacology and Toxicology*, eds: Turner P, Volans G N, Churchill Livingstone, Edinburgh, pp 75–103
- 83 Warrington Steve J (1989) European Phase I Clinical Studies: Key to the US IND? In: *Global Drug Registration Conference: North America*, ed: J D Johnston, Excerpta Medica, Amsterdam, pp 20–21
- 84 Warrington SJ, Dana-Haeri J, Sinclair AJ (1989) Cardiovascular and psychomotor effects of repeated doses of paroxetine: a comparison with amitriptyline and placebo in healthy men. *Acta psychiatrica Scandinavica* 80 (suppl 350) 42–44

- 85 Warrington SJ, Dawnay A, Johnston A, Saul S, Turner P, Ferber HP (1989) Chlortenoxicam and renal function of normal human volunteers. *Human Toxicology* 8 53–54
- 86 Warrington SJ, Padgham C, Lader M (1989) The cardiovascular effects of antidepressants. *Psychological Medicine, Monograph Supplement* 16, 1–40
- 87 Warrington SJ, Turner P, Skrumsager BK (1989) Cardiovascular (ECG and systolic time intervals) and anti-cholinergic effects of repeated doses of femoxetine - a comparison with amitriptyline and placebo in healthy men. *British Journal of Clinical Pharmacology* 27 343–351
- 88 Sinclair AJ, Davies IB, Warrington SJ (1990) Betaxolol and glucose-insulin relationships: studies in normal subjects taking glibenclamide or metformin. *British Journal of Clinical Pharmacology* 30 699–702
- 89 Warrington SJ (1990) Ethical aspects of research in healthy volunteers. In: *Early Phase Drug Evaluation in Man*, eds: O'Grady J, Linet O I, Macmillan Press, London, 139–149
- 90 Warrington SJ, Ankier SI (1990) The physicians' role in the clinical development of new medicines. *Postgraduate Medical Journal* 66 34–39
- 91 Warrington SJ, Debbas NMG, Farthing M, Horton M, Johnston A, Thillainayagam A, Turner P, Ferber H (1990) Lornoxicam, indomethacin and placebo: comparison of effects on faecal blood loss and upper gastrointestinal endoscopic appearances in healthy men. *Postgraduate Medical Journal* 66 622–626
- 92 Warrington Steven J, Johnston Atholl, Lewis Yuet, Murphy Michael (1990) Bisoprolol: studies of potential interactions with theophylline and warfarin in healthy volunteers. *Journal of Cardiovascular Pharmacology* 16 (Suppl 5) S164–S168
- 93 Warrington SJ, Lewis Y, Dawnay A, Johnston A, Kovacs IB, Lamb E, Ravic M (1990) Renal and gastrointestinal tolerability of lornoxicam, and effects on haemostasis and hepatic microsomal oxidation. *Postgraduate Medical Journal* 66 (Suppl 4) S35–S40
- 94 Warrington SJ, Sinclair AJ, Johnston A (1990) Effects of single doses of a 20mg frusemide/2.5mg amiloride combination, 20mg frusemide and placebo on plasma and urine electrolytes in healthy men. *Journal of International Medical Research* 18 (Suppl 2) 3B–9B
- 95 Le Mignon M-M, Chambon C, Warrington S, Davies R, Bonnemain B (1990) Gd-DOTA. Pharmacokinetics and tolerability after intravenous injection into healthy volunteers. *Investigative Radiology* 25 933–937
- 96 Ankier SI, Warrington SJ, Sneddon JM (1991) A pharmacokinetic and dynamic study of single nightly doses of conventional and controlled release formulations of trazodone. *Methods and Findings in Experimental and Clinical Pharmacology* 13 121–127
- 97 Volans G, Blain P, Bennett P, Berry C, Sims J, Warrington S (1991) Toxicity data derived from man, in: *Animals and Alternatives in Toxicology*, eds: M Balls, J Bridges and J Southee, Macmillan, Basingstoke, pp 201–221
- 98 Warrington SJ (1991) Clinical Implications of the Pharmacology of Sertraline *International Clinical Psychopharmacology* 6 11–21

- 99 Warrington SJ (1991) Ethics of evaluation of new drugs in human volunteers. *Annals of the Academy of Medicine, Singapore*, 20 101–105
- 100 Warrington S, Debbas N, Farthing M, Horton M, Umile A (1991) Piroxicam-beta-cyclodextrin: effects on gastrointestinal blood loss and gastric mucosal appearance in healthy men. *International Journal of Tissue Reactions* XIII 243–248
(also published, with permission, in: *Side Effects of Anti-Inflammatory Drugs* 3, eds Rainsford and Velo, 1992)
- 101 Warrington SJ, Turner P, Mant TGK, Morrison P, Haywood G, Glover V, Goodwin BL, Sandler M, St John-Smith P, McClelland GR (1991) Clinical pharmacology of moclobemide, a new reversible monoamine oxidase inhibitor. *Journal of Psychopharmacology* 5 82–91
- 102 Ravic M, Warrington SJ, Turner P (1992) Effects of dobutamine and digoxin on aortic blood velocity estimated with Doppler ultrasound. *British Journal of Clinical Pharmacology* 34 451P
- 103 Warrington SJ (1992) Clinical Implications of the Pharmacology of Serotonin Uptake Inhibitors. *International Clinical Psychopharmacology* 7 13–19
- 104 Warrington SJ, Ankier SI (1992) Double-blind placebo controlled evaluation of benidipine in mild to moderate essential hypertension. *British Journal of Clinical Pharmacology* 33 529P
- 105 Warrington S, Debbas N, Farthing M, Horton M, Thillainayagam A, Umile A (1992) Comparison of effects on gastrointestinal blood loss and gastric mucosal appearance of piroxicam-beta-cyclodextrin, piroxicam and placebo, in: *Side Effects of Anti-Inflammatory Drugs* 3, Eds KD Rainsford and GP Velo. Kluwer Academic Publishers, Lancs, Great Britain, pp 89–98 (first published in *International Journal of Tissue Reactions* XIII, 1991)
- 106 Warrington S, Debbas N, Lewis Y, Johnston A (1992) Efficacy of lignocaine spray in reducing sensitivity of the penis. *British Journal of Clinical Pharmacology* 33 571P
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