

CONTENTS

I. Inhibitors, blockers and competitive antagonists of the renin-angiotensin system

- Address on the occasion of the presentation of the Merck Sharp and Dohme International Award to Dr KOZO OKAMOTO and the Franz Volhard Award to Dr JAMES O. DAVIS. FRANZ GROSS 1s
- The Second Volhard Lecture: The use of blocking agents to define the functions of the renin-angiotensin system. JAMES O. DAVIS 3s
- Inhibition of the pressor and aldosterone-releasing effects of angiotensin II. F. M. BUMPUS and M. C. KHOSLA 15s
- Comparative pharmacology of new specific angiotensin antagonists. B. A. SCHOELKENS 19s
- Angiotensin-induced variations of receptors in rat uterine membranes. E. CHEVILLOTTE, M. A. DEVYNCK, F. FYHRQUIST, P. MEYER, B. ROUZAIRE-DUBOIS and M. WORCEL 23s
- The response of the renin-angiotensin system in rats to the injection of angiotensin II antibodies. E. HACKENTHAL, H. BAUKNECHT and P. OSTER 27s
- Blockade of renin release by lanthanum. A. G. LOGAN, I. TENYI, T. QUESADA, W. S. PEART, A. S. BREATHNACH and B. G. H. MARTIN 31s
- Angiotensin blockade in studies of the feedback control of renin release in rats and rabbits. G. S. STOKES, HELEN F. OATES and M. A. WEBER 33s
- Intrarenal formation of angiotensin II in the rat: interference by Saralasin and SQ 20881. H. ZSCHIEDRICH, K. G. HOFBAUER, E. HACKENTHAL, G. D. BARON and F. GROSS 37s
- Effect of angiotensin II and of an angiotensin II analogue (Sar¹-Ile⁸-angiotensin II) on blood pressure, plasma aldosterone and plasma renin activity in the dog. R. BECKERHOFF, G. UHLSCHMID, W. VETTER, H. ARMBRUSTER, J. NUSSBERGER, G. RECK, U. SCHMIED and W. SIEGENTHALER 41s
- The pressor role of angiotensin in salt deprivation and renal hypertension in rats. T. G. COLEMAN and A. C. GUYTON 45s
- The role of the renin-angiotensin-aldosterone system in cardiovascular homeostasis in normal man. E. HABER, J. SANCHO, R. RE, J. BURTON and A. C. BARGER 49s
- Treatment of patients with severe hypertension by inhibition of angiotensin-converting enzyme. J. G. JOHNSON, W. D. BLACK, R. A. VUKOVICH, F. E. HATCH, JR, B. I. FRIEDMAN, C. F. BLACKWELL, A. N. SHENOUDA, L. SHARE, R. E. SHADE, S. R. ACCIARDO and E. E. MUIRHEAD 53s

The use of angiotensin-converting enzyme inhibitor in the diagnosis and treatment of hypertension. H. GAVRAS, H. R. BRUNNER, J. H. LARAGH, I. GAVRAS and R. A. VUKOVICH	57s
Renin-suppressive potency of various beta-adrenergic blocking agents at supine rest and during upright exercise. F. R. BÜHLER, G. MARBET, U. PATEL and F. BURKART	61s
A comparison of propranolol and compound R03-4787 in the treatment of arterial hypertension in man. C. F. GEORGE, P. J. LEWIS, J. A. STEINER and C. T. DOLLERY	65s
Effect of volume depletion and subsequent propranolol treatment on blood pressure and plasma renin activity in patients with essential and with renovascular hypertension. G. G. GEYSKES, P. BOER, F. H. H. LEENEN and E. J. DORHOUT MEES	69s
Long-term propranolol treatment of resistant arterial hypertension in haemodialysed patients. Q. MAGGIORE, M. BIAGINI, C. ZOCCALI and M. MISEFARI	73s
Blood pressure decrease and responsiveness to renin-releasing stimuli under increasing doses of propranolol in patients with essential hypertension. G. LEONETTI, G. MAYER, A. MORGANTI, L. TERZOLI, A. ZANCHETTI, P. L. MORSELLI, E. DI SALLE and C. A. CHIDSEY	77s
Changes in plasma renin activity and blood pressure after acute and chronic administration of β -adrenergic receptor-blocking drugs. T. MORGAN, S. CARNEY and R. ROBERTS	81s
Effect of oxprenolol on catecholamines and plasma renin activity: acute response to frusemide in hypertensive patients. G. MUIESAN, C. ALICANDRI, E. AGABITI ROSEI, M. MOTOLESE and C. VALORI	85s
Beta-adrenergic receptors and renin release: studies with beta-adrenoreceptor-blocking agents in the conscious rabbit. M. A. WEBER, HELEN F. OATES and G. S. STOKES	89s
Anti-hypertensive adrenergic-blocking agents: effects on sodium balance, the renin-angiotensin system and haemodynamics. M. E. SAFAR, Y. A. WEISS, P. L. CORVOL, J. E. MENARD, G. M. LONDON and P. L. MILLIEZ	93s
Some haemodynamic effects of compound AH 5158 compared with propranolol, propranolol plus hydrallazine, and diazoxide: the use of AH 5158 in the treatment of hypertension. B. N. C. PRICHARD, F. O. THOMPSON, A. J. BOAKES and A. M. JOEKES	97s
Effect of propranolol on blood pressure in normal and hypertensive rats. J. CONWAY, K. DARWIN, A. HILDITCH, B. LOVEDAY and M. REEVES	101s
Beta-blocking drugs and renin secretion in the anaesthetized dog. J. L. IMBS, J. KRAETZ, M. SCHMIDT, E. DESAULLES and J. SCHWARTZ	105s
II. Report on Round Table on renin suppression and the hypotensive action of beta-adrenergic-blocking drugs	109s

Contents

v

III. Report on Round Table on renin as a risk factor in hypertension	117s
Plasma renin, urinary sodium excretion and vascular disease. A. E. DOYLE, K. G. CHUA, S. DUFFY and W. J. LOUIS	127s
Plasma renin activity and cardiovascular disease. R. B. HICKLER, D. P. LAULER, R. E. GLEASON and R. CHRISTLIEB	131s
IV. An international collaborative study of renin assay: establishment of the international reference preparation of human renin	135s
V. New aspects of therapy	
Pathogenesis and prevention of stroke in spontaneously hypertensive rats. K. OKAMOTO, F. HAZAMA, Y. YAMORI, H. HAEBARA and A. NAGAOKA	161s
A pilot trial of treatment for mild hypertension; interim report of the Medical Research Council's trial in Britain. W. E. MIALL and P. J. BRENNAN	165s
Abnormal sodium transport in leucocytes from patients with essential hypertension and the effect of treatment. R. D. THOMAS, R. P. S. EDMONDSON, P. J. HILTON and N. F. JONES	169s
Yoga and biofeedback in the management of 'stress' in hypertensive patients. C. PATEL	171s
Effect of pyratrione (a tyrosine hydroxylase inhibitor) in essential hypertension. T. KIMURA, E. TAKAHASHI, M. OZAWA, S. UCHIYAMA, S. MAEKAWA, O. YASHIMA and M. SATO	175s
Prazosin: preliminary clinical and pharmacological observations. P. BOLLI, A. J. WOOD, E. L. PHELAN, D. R. LEE and F. O. SIMPSON	177s
Prazosin in the treatment of hypertension. M. FERNANDES, I. SANFORD SMITH, A. WEDER, K. E. KIM, ANNE B. GOULD, PATRICIA BUSBY, C. SWARTZ and G. ONESTI	181s
Technique for rapid control of hypertension with oral minoxidil. K. O'MALLEY and J. L. MCNAY	185s
The use of minoxidil, an experimental arteriolar dilator, in 510 patients with refractory hypertension. W. B. MARTIN, G. R. ZINS and W. A. FREYBURGER	189s
VI. Sympathetic nervous system and hypertension	
Central regulation of arterial blood pressure. A. PHILIPPU	191s
Central sympathetic transmitters and hypertension. M. HENNING	195s
Central neurohormonal mechanisms in spontaneously hypertensive rats compared with human essential hypertension. B. FOLKOW	205s
Neural control of renin release. A. ZANCHETTI and A. STELLA	215s

Adrenergic mechanisms in human hypertension and in spontaneously hypertensive rats. E. D. FROHLICH and M. A. PFEFFER	225s
Plasma noradrenaline concentration and blood pressure in essential hypertension, phaeochromocytoma and depression. W. J. LOUIS, A. E. DOYLE and S. N. ANAVEKAR	239s
Role of the autonomic nervous system in mild human hypertension. S. JULIUS, M. D. ESLER and O. S. RANDALL	243s
The vasomotor centre and its afferent pathways. M. D. JOY	253s
Control of high and low blood pressure in the dog by aortic and sinus nerves. D. L. CLEMENT, L. C. PELLETIER and J. T. SHEPHERD	257s
Spinal sympathetic reflexes in the cat and the pathogenesis of arterial hypertension. A. MALLIANI, F. LOMBARDI, M. PAGANI, G. RECORDATI and P. J. SCHWARTZ	259s
Carotid baroreceptor re-setting in the hypertensive dog. P. SLEIGHT, J. L. ROBINSON, D. E. BROOKS and P. M. REES	261s
The intrinsic brain iso-renin-angiotensin system in the rat: its possible role in central mechanisms of blood pressure regulation. D. GANTEN, J. S. HUTCHINSON and P. SCHELLING	265s
The brain as a possible site for the cardiovascular effects of β -adrenoceptor blocking agents in cats. M. D. DAY and A. G. ROACH	269s
The central hypotensive action of clonidine and BAY 1470 in cats and rats. L. FINCH	273s
Localization of central noradrenergic mechanisms in cardiovascular regulation in rats. H. STRUYKER BOUDIER, G. SMEETS, G. BROUWER and J. VAN ROSSUM	277s
Central serotonergic neurons and experimental neurogenic and renal hypertension in the rabbit. J. P. CHALMERS and L. M. H. WING	279s
Postural changes of plasma renin activity after renal transplantation. A. SALVETTI, F. ARZILLI, P. SASSANO, P. GAZZETTI and P. RINDI	283s
Relationships between plasma renin activity and urinary and plasma catecholamines. U. WERNER, H. GÜNNEWIG and K. D. BOCK	287s
Electrical and dynamic responses of the human hyperkinetic heart to sympathetic stimuli. C. BARTORELLI, A. POLESE, C. FIORENTINI, F. MAGRINI, M. T. OLIVARI and M. GUAZZI	291s
Dopa, catecholamines and their metabolites in essential hypertension. W. JANUSZEWICZ and B. WOCIAL	295s
Effect of a competitive angiotensin antagonist on the renal haemodynamic changes induced by inhibition of prostaglandin synthesis in rats. A. MIMRAN, D. CASELLAS, M. DUPONT and P. BARJON	299s

Contents

vii

Renal prostaglandin synthesis in experimental renal-clip hypertension in the rat. D. PUGSLEY, L. J. BEILIN and R. PETO	303s
Effect of prostaglandins (E_2 and A_2) on the enzymatic reaction of human renin in isolated homologous system and with added normal and hypertensive plasma. R. EGGENA, J. BARRETT and M. SAMBHI	307s
Differential effect on prostaglandin A_1 in hypertensive patients with low, normal and high renin. L. R. KRAKOFF, N. VLACHAKIS, M. MENDLOWITZ and J. STRICKER	311s
Author index	315s