

CONTENTS

Commentary on Workshop on α -Adrenoceptors. J. C. MCGRATH and J. L. REID	1s
I. How many types of α-adrenoceptor are currently required?	
Relative agonist potency as a means of differentiating α -adrenoceptors and α -adrenergic mechanisms. R. R. RUFFOLO JR	9s
What do antagonists tell us about α -adrenoceptors? G. M. DREW	15s
Studies of α_2 -adrenoceptor antagonist potency <i>in vitro</i> : comparisons in tissues from rats, rabbits, dogs and humans. J. F. WATERFALL, K. F. RHODES and N. LATTIMER	21s
Attempts to uncover subtypes of α -adrenoceptors and associated mechanisms by using sequential administration of blocking drugs. T. L. GRANT, N. A. FLAVAHAN, J. GREIG, J. C. MCGRATH, C. E. MCKEAN and J. L. REID	25s
Factors determining α -adrenoceptor-mediated responses of human digital arteries and metacarpal veins. M. J. STEVENS and R. F. W. MOULDS	31s
Direct measurement of vascular α_1 -adrenoceptors. B. B. HOFFMAN and C. TSUJIMOTO	35s
II. What are the activation steps set in motion by stimulation of α-adrenoceptors?	
α -Adrenoceptor-effector coupling: affinity states or heterogeneity of the α_2 -adrenoceptor? S. R. NAHORSKI, D. B. BARNETT and Y.-D. CHEUNG	39s
Inositol lipid breakdown as a step in α -adrenergic stimulus-response coupling. R. H. MICHELL	43s
Ca^{2+} sources mobilized by α_1 -receptor activation in vascular smooth muscle. P. LEIJTEN, C. CAUVIN, N. LODGE, K. SAIDA and C. VAN BREEMEN	47s
Electrical membrane events in response to α -adrenoceptor stimulation. G. HAEUSLER and J. E. DE PEYER	51s
α -Adrenoceptor agonists and the Ca^{2+} -dependence of smooth muscle contraction: evidence for subtypes of receptors or for agonist-dependent differences in the agonist-receptor interaction? J. C. MCGRATH	55s
Role of endothelium in the contractile response of the rat aorta to α -adrenoceptor agonists. T. GODFRAIND, C. EGLEME and A. AL OSACHIE	65s
Lack of differential inhibition by nifedipine of pressor responses induced by α_1 - and α_2 -adrenoceptor agonists and by angiotensin II in anaesthetized cats. V. A. ALABASTER and A. M. SOLCA	73s
Scope and mechanisms of control of stimulus-secretion coupling in single varicosities of sympathetic nerves. L. STJÄRNE	77s
III. What are the physiological roles of α-adrenoceptors in circulatory control?	
Role of α -adrenoceptors in vascular control. J. A. BEVAN, R. D. BEVAN and I. LAHER	83s
Evidence for ATP and noradrenaline as cotransmitters in sympathetic nerves. G. BURNSTOCK and P. SNEDDON	89s
Functional consequences of contrasting properties of α_1/α_2 systems. P. B. M. W. M. TIMMERMANS, M. J. M. C. THOOLEN, A. DE JONGE, B. WILFFERT and P. A. VAN ZWIETEN	93s
Influence of blood gases, Ca^{2+} -entry blockade and angiotensin converting enzyme inhibition on pressor responses to α -adrenoceptor agonists: evidence <i>in vivo</i> for subtypes of response independent of receptor subtype? J. W. O'BRIEN, N. A. FLAVAHAN, T. L. GRANT, J. C. MCGRATH and R. J. MARSHALL	99s

α_2 -Adrenoceptors in dog kidney: autoradiographic localization and putative functions. R. J. SUMMERS, J. A. STEPHENSON, S. LIPE and C. B. NEYLON	105s
Evidence for the involvement of α_1 -adrenoceptors in negative feedback regulation of nor-adrenergic transmitter release in rat atria. D. F. STORY, C. A. STANDFORD-STARR and M. J. RAND	111s
Vascular α_2 -adrenoceptors can mediate nerve stimulation-evoked contractions. J. R. DOCHERTY and L. HYLAND	117s
Modulation of postjunctional α -adrenergic responsiveness by local changes in temperature. P. M. VANHOUTTE, J. P. COOKE, L.-E. LINDBLAD, J. T. SHEPHERD and N. A. FLAVAHAN	121s
IV. Pathophysiological role and manipulation of α-adrenoceptors in disease	
α -Adrenoceptor regulation <i>in vivo</i> and <i>in vitro</i> in the rabbit. C. A. HAMILTON, C. R. JONES and J. L. REID	125s
Acute and chronic regulation of α_2 -adrenoceptor number and function in man. C. R. JONES, C. A. HAMILTON, K. F. WHYTE, H. L. ELLIOTT and J. L. REID	129s
Ageing and α -adrenoceptors. J. R. DOCHERTY and K. O'MALLEY	133s
Metabolic and haemodynamic effects of α_2 -adrenoceptor stimulation and antagonism in man. M. J. BROWN, A. D. STRUTHERS, L. DI SILVIO, T. YEO, M. GHATEI and J. M. BURRIN	137s
The adrenaline- α_2 -adrenoceptor-mediated vasoconstrictor axis. P. BOLLI, P. ERNE, K. KIOWSKI, F. A. AMMAN and F. R. BÜHLER	141s
Human vascular smooth muscle responses mediated by α_2 mechanisms <i>in vivo</i> and <i>in vitro</i> . S. THOM, J. CALVETE, R. HAYES, G. MARTIN and P. SEVER	147s
Vascular α -adrenoceptors in man: interactions with adrenaline and noradrenaline. P. VAN BRUMMELEN, K. JIE, P. VERMEY, P. B. M. W. M. TIMMERMANS and P. A. VAN ZWIETEN	151s
Effects of desipramine on stimulation-induced contractions of the vas deferens of rats pretreated either chronically with desipramine or acutely with idazoxan. J. C. DOXEY, A. G. ROACH and J. SAMUEL	155s