

SUBJECT INDEX VOLUME 1

Accelerated malignant hypertension	277	Atherosclerosis	91
Adrenomedullin (AM)	169	impaired vascular function in	91
circulating type	173	Bipolar illness	28
clinical application in hypertension	177	novel candidate in	28
effect on cardiac contractility	172	Blood pressure	93
in adrenal gland	173	effect of uric acid	93
in endocrine	173	Bone mass	62
in heart	172	effect of angiotensin-converting enzyme	
in kidney	173	inhibitors (ACEIs)	64
in vasculature	171	effect of angiotensin receptor antagonists	64
local action of	172	effect of β -blockers	63
metabolic clearance of	174	effect of calcium channel blockers	63
origin metabolic sites of plasma	173	effect of thiazides	62
physiological action of	171	Brachial-ankle PWV	224
pituitary function of	173	as biochemical markers of vascular damage	230
receptor of	170	as marker of cardiac load	229
role in hypertension	176	in atherosclerotic alterations	230
structure of	169	in diabetes	229
structure-activity relationship of	169	in end-stage renal disease	230
tissue distribution of	170	in hypertension	228
two molecular forms of	174	prospective study of	231
AM receptor	170	measurement of	224
characterization of	170	Brain-related genes	23
Angiotensin I receptor	117	in neuropsychiatric disorders	24
constitutive activity of	117	Ca ²⁺ _{v1} -independent transcription factor	248
pharmacotherapeutic relevance of inverse agonist		expression of Na ⁺ _{v1} -sensitive genes is	
towards	117	mediated by	248
Angiotensin II receptor blocker	115	<i>Caenorhabditis elegans</i>	268
as inverse agonist	115	SDHC mutation in	268
chemical structure for inverse agonism of	119	Calcitonin receptor-like receptor (CRLR)	170
inverse agonism against AT1 receptor-induced		discovery of	170
signaling	117	Cancers	23
Antiapoptotic genes	247	role of tumor modifier genes	23
[Na ⁺] _i elevation triggers expression of	248	Cardiotonic steroids	243
Antihypertensive agent	67, 141	actions of	245
angiotensin-converting enzyme inhibitors of	144	CTS-induced Na ⁺ _{v1} K ⁺ _{v1} -independent signaling	252
calcium channel blockers as	144	in pathogenesis of hypertension	246
combination therapies of	147	Na ⁺ _{v1} K ⁺ _{v1} -independent signaling triggered by	249
nephroprotective outcomes associated with	143	pathophysiological implications of	253
primary prevention of	144	Cardiovascular agents	208
reduction of proteinuria by inhibition of	67	and endothelial function	208
renoprotection with	67	modulating NO bioactivity by	208
thiazide-type diuretics as	143	Cardiovascular risk	89
to promote nephroprotection	141	relationship with serum uric acid	
Antihypertensive treatment	61	concentration	89
effect on bone mineral density	61	thiazide diuretic treatment in	89
effect on osteoporotic fracture	61	Carotid-femoral PWV	226
Arterial hypertension	189	Cell death	243
cardiovascular risk factors in	189	Na ⁺ _{v1} -mediated/independent signaling involved in	243
clinical studies of	192	Chronic hypertension	276
fibrinogen in	195	pathological changes of	276
organ damage in	189		
role of homocysteine	193		
role of lipoprotein	190		
Arterial stiffness	223		
novel measure of	223		
role of brachial-ankle pulse wave velocity	223		

Chronic hypoxia	72	functions of	106
pathway to ESRD	72	mediated signaling pathways	104
Chymase	159	subcellular distribution of	104
in tissue fibrosis	159	tissue distribution of	103
in vascular remodeling	159	Endothelin (ET) system	101
role in aneurysm	162	Epoxyeicosatrienoic acids	235
role in atherosclerosis	162	as therapeutic target	235
role in tissue fibrosis	162	in nephropathy	235
role in vascular proliferation in injured vessels ..	161	Essential hypertension (EH)	77
Chymase inhibitors	163	issues for isolation of susceptibility genes of ..	77,80
vs other agents	164	methodology for isolation of susceptibility	
Circulating AM	173	genes of	77
levels in hypertension	174	NPRa gene mutation in	84
origin of	173	PGIS gene mutation in	80
CKD patients	73	progress in isolation of susceptibility genes of	77
ues of ACEI	73	Established sequence tags (ESTs)	45
use of ARB	73	mutation screenings for candidate genes and	45
CTS-sensitive ion pump	243	Extracellular matrix (ECM)	51
Na ⁺ K ⁺ -ATPase as	243	changes in hypertension	53
Diabetic nephropathy	15	components of	51
angiotensin II activation of	16	degradation in hypertension	54
as therapeutic target for renal protection	19	degradation of	52
bioavailability by	18	effect of adrenergic receptor blockers	57
eNOS uncoupling by	18	effect of aldosterone antagonists	55
expression of	15	effect of antihypertensive agents on	55
gene localization of	17	effect of calcium channel blockers	56
in diabetes mellitus	18	effect of inhibitors (ACEI) angiotensin receptor	
in hypertension	16	blockers (ARB)	55
in kidney	15	effect of RAS inhibitors (angiotensin-converting	
role of NADPH oxidase in	15	enzyme	55
Dietary approaches to stop hypertension (DASH)	126	effect of diuretics	56
Endothelial dysfunction	92,203	regulation of synthesis of	52
in hypertension	203	serum markers of cardiovascular synthesis of	54
role of uric acid	92	vascular changes in	53
Endothelin (ET)	101,103	Fibrinogen	196
and high salt	110	clinical studies of	196
and NO	109	in hypertension	196
and renin-angiotensin system	110	Fractures	62
clearance <i>via</i> ET _B receptors	107	effect of angiotensin-converting enzyme	
in control mechanisms of blood pressure	109	inhibitors (ACEIs)	64
in hypertension	107	effect of β-blockers	63
in oxidative stress	110	effect of angiotensin receptor antagonists	64
in regulation of arterial pressure	107	effect of calcium channel blockers	63
in sympathetic nervous system	110	effect of thiazides	62
metabolism/clearance of	103	Functional genomics	35
plasm/tissue levels in hypertension	107	additive QTL interactions in	37
plasma level of	103	candidate gene approaches for	43
receptors of	103	clinical applications of	47
synthesis of	101	comparative genomics for	45
tissue levels of	103	epistatic QTL interactions in	39
vascular response in hypertension	108	fine congenic mapping for	43
Endothelin receptors	103	functional structuring of	37
agonists of	107	gene-targeting in	44
antagonists of	107	interference RNAs in	45
density in hypertension	108	mechanistic hierarchy in	40
		microarray technology for	43
		of blood pressure determination	35

perspectives for human research	47	centrally acting antiadrenergic drugs in	137
physical mapping of	36	changes in calcium metabolism in	62
physiological/clinical implications of	42	classification of	77
principles of identifications	35	clinical/epidemiologic evidences in	
research in gene discovery of	42	prevention of	123
transgenic essays for	44	dietary approaches to	124
G protein-coupled receptor superfamily (GPCRs)	115	drugs with NO effect on blood pressure	138
constitutive activity of	116	effect of ACEI inhibitors/angiotensin receptor	
Gene expression	243	blockers (ARB).....	55
Na ⁺ -mediated/independent signaling involved in	243	effect of adrenergic receptor blockers	57
Genomics	28	effect of aldosterone antagonists	55
for study parkinson's disease	28	effect of calcium channel blockers	56
Genomic mapping	21	effect of RAS inhibitors	55
discovering genetics of complex disorders by	21	effect of diuretics	56
Genomic studies	29	effects of ET antagonists in	108
in brain	29	extracellular matrix remodeling in	51
Glucocorticoids (GCs)	1	fracture mechanisms in	62
and endothelial nitric oxide synthase	3	hydrogen peroxide in	205
effects on BH4 biosynthesis	1	hydroxyl radical (OH) in.....	205
effects on enzymes	3	in diabetes mellitus	18
Glucocorticoid-induced hypertension	1	incidence of osteoporosis in	61
and phenylalanine hydroxylase	4	lifestyle modifications in	136
and tetrahydrobiopterin (BH4)	1	oxidative stress in	204
and tryptophan hydroxylase	4	pathophysiological basis for	68
and tyrosine hydroxylase	4	peroxynitrite in	205
Heart failure	7	pharmacological therapy of	136
and post-myocardial infarction	7	primary prevention by	147
natriuretic peptides in	7	probucol in	209
Heart rate	130	receptors to in	101
as causative factor in induction of risk	131	renal changes in	55
cardiovascular risk in	130	role of chymase in	160
gender-related issues to	130	role of lectin-like oxidized low density	
in hypertension	132	lipoprotein (LDL) receptor (LOX-1)	184
in old age	132	role of mediterranean diet	123
in women	130	role of NADPH oxidase in	15,206
normal limits resting	135	role of potassium in	183
prognostic value of	134	role of salt in	183
variability of	134	role of vascular endothelin	101
Human hypertension	97	secondary prevention by	147
genetics of	97	serum uric acid concentrations in	89
use of DAHL rat for study	97	statins in	209
Hypertension	15,51,61,67,77,89,101,123,129,	stroke related to	23
141,160,169,183,184,204		superoxide anion in	204
adrenomedullin in	169	sympathetic overactivity due to oxidative	
angiotensin converting enzyme inhibitors in.....	208	stress in	184
angiotensin receptor blockers	147	treatment of tachycardia in	129
animal models of	91	use of drugs acting on renin-angiotensin	
antioxidant effect of potassium in	185	system	138
antioxidant enzymes in.....	209	vascular changes in	53
as mediator of kidney injury	68	xanthine oxidase inhibitors in.....	209
associated organ damages	183	xanthine oxidases in	206
AT1 blockers in.....	208	Hypertension therapy	142
bata-blockers in	136,209	ACEI vs ARB in	152
blood-pressure control in	22	ACEI vs BB in	150
calcium channel blockers in	137,209	ACEI vs CCB in	150
cardiac changes in	54	ACEI+CCB vs ACEI+TTD in	153
cardiovascular risk in	89	ARB vs CCB in	151
		ARB vs TTD in	151
		CCB vs ACEI vs BB in	149
		combination ACEI plus indapamide vs ACEI	
		alone in	152
		combination ARB + ACEI or CCB vs ARB in	152

combination of ACEI and ARB	148	associated with hypertension	235
combination of ACEI and CCB in	147	inflammatory component of	237,238
comparison trials of	149	Nephroprotection	142
degree of BP control in	153	Nitric oxide	202
thiazide-type diuretics (TTD) vs indapamide in ..	149	Nitric oxide synthases	202
TTD vs ACEI vs BB in	150	Non-phagocytic nadph oxidases	15
TTD vs CCB in	149		
Hypertensive crises	277	Organ damage	192
pathophysiologic mechanisms of	277	clinical studies of	194
Hypertensive encephalopathy	277	lipoprotein in	192
Hypertensive endothelial dysfunction	201	Ouabain-treated renal epithelial	250
in nitric oxide	201	death of	250
in reactive oxygen species	201	Oxidative stress	183
Hypertensive urgencies/emergencies	275	and salt-sensitive hypertension	183
causes of blood pressure spikes in	276	insulin resistance by	183
choice of pharmacological agent	279	Oxidative stress	92
clinical significance of	276	role of uric acid	92
differential diagnosis of	278		
epidemiology of	276	Pheochromocytomas	270
laboratory evaluation of	278	Platelet activation	93
pathology of	276	role of uric acid	93
role of diuretics in	280	Polygenic trait	35
studies of	278	assembling of	35
systematic approach to	275	dissecting of	35
therapy of	278	in experimental genetics	35
Hyperuricaemia	90	transgenic essays for	44
and impaired renal function	90	Primary aldosteronism (PA)	259
animal models of	91	adrenal imaging in	260
		adrenal venous sampling (AVS) in	261
Large scale sequence-based gene identifications	45	ancillary hormonal tests of	261
Left ventricular hypertrophy	217	confirmatory test of	260
anatomic factors of	217	diagnosis of	259
coronary flow in	217	screening test of	259
endothelial function in	217	subtype differentiation of	260
factor of genetic	217	surgical outcome of	261
factor of metabolic	217	surgically-treatable forms of	259
hemodynamic of	217	Proliferation	243
hormonal factors of	217	Na ⁺ -mediated/independent signaling involved in ..	243
non-hemodynamic factors of	219	Proteinuria	71
role of extracellular matrix	218	pathway to ESRD	71
Leukocyte activation	92		
role of uric acid	92	Quantitative trait loci (QTLs)	35
		candidate gene approach for	43
Mature and glycine-extended AM	174	classifications of	39
		clinical applications of	47
NADPH oxidase	15	comparative genomics for	45
structure of	15	fine congenic mapping for	43
Natriuretic peptides (NP)	7	functional structuring of	37
cellular distribution of	8	gene-targeting in	44
myocardial distribution of	7	mapping vs other genetic approaches	46
in heart failure/ post-myocardial infarction ..	9	mechanistic hierarchy among	40
receptors for	8	microarray technology for	43
tissue distribution of	7	perspectives for human research	47
Nephropathy	142,235	physical mapping of	36
arachidonic acid metabolites in	238		
associated with diabetes	235		

physiological/clinical implications of	42	Tetrahydrobiopterin	1
principles of identifications	35	as cofactor	1
research in gene discovery of	42	degradation of	3
Receptor activity modifying protein (RAMP) system	170	dihydrofolate reductase for	2
Renal cell carcinoma.....	270	GTP cyclohydrolase for	1
Renin-angiotensin system (RAS)	67	sepiapterin reductase for	2
improvement of oxygenation <i>via</i> inhibition of	67	vasoactive molecules by	1
inhibition in diabetic nephropathy	70	Transcriptional profiling	21
inhibition of	68	discovering genetics of complex disorders by	21
inhibition in non-diabetic nephropathies	68	Transforming growth factor- β	159
<i>Saccharomyces cerevisiae</i>	267	dependent angiotensin II in vascular tissues	159
mutation in complex II gene in.....	267	Vascular endothelial cells.....	250
Salt-independent hypertension	23	death of.....	250
Salt-sensitive hypertension	22	Vascular endothelium.....	201
Schizophrenia	28	angiotensin converting enzyme inhibitors in.....	208
new genes for	28	antioxidant enzymes in.....	209
SDH genes.....	267	AT1 blockers in.....	208
in glomic tumors	267	beta-blockers in.....	209
in head/neck paragangliomas	269	calcium channel blockers in.....	209
in human diseases	268	peroxisome proliferators-activated receptors	
in Leigh syndrome	268	(PPAR) in	209
in neurodegenerative disorders	268	prevention of.....	207
in pheochromocytomas.....	267	probucol in	209
SDHD knock-out mice.....	268	reversal of.....	207
Second messenger	246	statins in	209
intracellular Na ⁺ as.....	246	xanthine oxidase inhibitors in.....	209
		Vascular wall.....	205
		in enzymatic/cellular sources	205
		in nitric oxide synthases.....	205