

# References

*Kidney International Supplements* (2012) **2**, 405–414; doi:10.1038/kisup.2012.62

- National Kidney Foundation. K/DOQI clinical practice guidelines on hypertension and antihypertensive agents in chronic kidney disease. *Am J Kidney Dis* 2004; **43**: S1–S290.
- National Kidney Foundation. K/DOQI clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. *Am J Kidney Dis* 2002; **39**: S1–S266.
- Levey AS, Atkins R, Coresh J et al. Chronic kidney disease as a global public health problem: approaches and initiatives—a position statement from Kidney Disease Improving Global Outcomes. *Kidney Int* 2007; **72**: 247–259.
- Levin NW, Kotanko P, Eckardt KU et al. Blood pressure in chronic kidney disease stage 5D-report from a Kidney Disease: Improving Global Outcomes controversies conference. *Kidney Int* 2010; **77**: 273–284.
- Agarwal R, Sinha AD. Cardiovascular protection with antihypertensive drugs in dialysis patients: systematic review and meta-analysis. *Hypertension* 2009; **53**: 860–866.
- Heerspink HJ, Ninomiya T, Zoungas S et al. Effect of lowering blood pressure on cardiovascular events and mortality in patients on dialysis: a systematic review and meta-analysis of randomised controlled trials. *Lancet* 2009; **373**: 1009–1015.
- KDIGO GN Work Group. KDIGO clinical practice guideline for glomerulonephritis. *Kidney Inter, Suppl* 2012; **2**: 139–274.
- Magee LA, Abalos E, von Dadelzen P et al. Control of hypertension in pregnancy. *Curr Hypertens Rep* 2009; **11**: 429–436.
- Chobanian AV, Bakris GL, Black HR et al. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *Hypertension* 2003; **42**: 1206–1252.
- Pickering TG, Hall JE, Appel LJ et al. Recommendations for blood pressure measurement in humans and experimental animals: part 1: blood pressure measurement in humans: a statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Circulation* 2005; **111**: 697–716.
- Agarwal R, Andersen MJ. Prognostic importance of clinic and home blood pressure recordings in patients with chronic kidney disease. *Kidney Int* 2006; **69**: 406–411.
- Andersen MJ, Khawandhi W, Agarwal R. Home blood pressure monitoring in CKD. *Am J Kidney Dis* 2005; **45**: 994–1001.
- Wuhl E, Hadtstein C, Mehls O et al. Home, clinic, and ambulatory blood pressure monitoring in children with chronic renal failure. *Pediatr Res* 2004; **55**: 492–497.
- Wuhl E, Trivelli A, Picca S et al. Strict blood-pressure control and progression of renal failure in children. *N Engl J Med* 2009; **361**: 1639–1650.
- Powers BJ, Olsen MK, Smith VA et al. Measuring blood pressure for decision making and quality reporting: where and how many measures? *Ann Intern Med* 2011; **154**: 781–788, W-289–W-790.
- Astor BC, Matsushita K, Gansevoort RT et al. Lower estimated glomerular filtration rate and higher albuminuria are associated with mortality and end-stage renal disease. A collaborative meta-analysis of kidney disease population cohorts. *Kidney Int* 2011; **79**: 1331–1340.
- Gansevoort RT, Matsushita K, van der Velde M et al. Lower estimated GFR and higher albuminuria are associated with adverse kidney outcomes. A collaborative meta-analysis of general and high-risk population cohorts. *Kidney Int* 2011; **80**: 93–104.
- Matsushita K, van der Velde M, Astor BC et al. Association of estimated glomerular filtration rate and albuminuria with all-cause and cardiovascular mortality in general population cohorts: a collaborative meta-analysis. *Lancet* 2010; **375**: 2073–2081.
- van der Velde M, Matsushita K, Coresh J et al. Lower estimated glomerular filtration rate and higher albuminuria are associated with all-cause and cardiovascular mortality. A collaborative meta-analysis of high-risk population cohorts. *Kidney Int* 2011; **79**: 1341–1352.
- Levey AS, de Jong PE, Coresh J et al. The definition, classification, and prognosis of chronic kidney disease: a KDIGO Controversies Conference report. *Kidney Int* 2011; **80**: 17–28.
- Lewington S, Clarke R, Qizilbash N et al. Age-specific relevance of usual blood pressure to vascular mortality: a meta-analysis of individual data for one million adults in 61 prospective studies. *Lancet* 2002; **360**: 1903–1913.
- Lewis JB. Blood pressure control in chronic kidney disease: is less really more? *J Am Soc Nephrol* 2010; **21**: 1086–1092.
- Ahmed AK, Kamath NS, El Kossi M et al. The impact of stopping inhibitors of the renin-angiotensin system in patients with advanced chronic kidney disease. *Nephrol Dial Transplant* 2010; **25**: 3977–3982.
- de Zeeuw D, Lambers-Heerspink H. Drug dosing for renoprotection: maybe it's time for a drug efficacy-safety score? *J Am Soc Nephrol* 2009; **20**: 688–689.
- Mason NA, Baille GR, Satyathum S et al. HMG-coenzyme a reductase inhibitor use is associated with mortality reduction in hemodialysis patients. *Am J Kidney Dis* 2005; **45**: 119–126.
- Fellstrom BC, Jardine AG, Schmieder RE et al. Rosuvastatin and cardiovascular events in patients undergoing hemodialysis. *N Engl J Med* 2009; **360**: 1395–1407.
- Wanner C, Krane V, Marz W et al. Atorvastatin in patients with type 2 diabetes mellitus undergoing hemodialysis. *N Engl J Med* 2005; **353**: 238–248.
- Muntner P, He J, Astor BC et al. Traditional and nontraditional risk factors predict coronary heart disease in chronic kidney disease: results from the atherosclerosis risk in communities study. *J Am Soc Nephrol* 2005; **16**: 529–538.
- Li Z, Lacson E, Jr., Lowrie EG et al. The epidemiology of systolic blood pressure and death risk in hemodialysis patients. *Am J Kidney Dis* 2006; **48**: 606–615.
- National Kidney Foundation. KDOQI clinical practice guidelines and clinical practice recommendations for diabetes and chronic kidney disease. *Am J Kidney Dis* 2007; **49**: S1–S179.
- Acelajado MC, Oparil S. Hypertension in the elderly. *Clin Geriatr Med* 2009; **25**: 391–412.
- Covic A, Gusbeth-Tatomir P, Goldsmith DJ. Arterial stiffness in renal patients: an update. *Am J Kidney Dis* 2005; **45**: 965–977.
- London GM, Guerin AP, Verbeke FH et al. Mineral metabolism and arterial functions in end-stage renal disease: potential role of 25-hydroxyvitamin D deficiency. *J Am Soc Nephrol* 2007; **18**: 613–620.
- Ohya Y, Iseki K, Iseki C et al. Increased pulse wave velocity is associated with low creatinine clearance and proteinuria in a screened cohort. *Am J Kidney Dis* 2006; **47**: 790–797.
- Pannier B, Guerin AP, Marchais SJ et al. Stiffness of capitative and conduit arteries: prognostic significance for end-stage renal disease patients. *Hypertension* 2005; **45**: 592–596.
- Toussaint ND, Lau KK, Strauss BJ et al. Associations between vascular calcification, arterial stiffness and bone mineral density in chronic kidney disease. *Nephrol Dial Transplant* 2008; **23**: 586–593.
- Cockcroft JR, Wilkinson IB, Evans M et al. Pulse pressure predicts cardiovascular risk in patients with type 2 diabetes mellitus. *Am J Hypertens* 2005; **18**: 1463–1467; discussion 1468–1469.
- Domanski MJ, Davis BR, Pfeffer MA et al. Isolated systolic hypertension: prognostic information provided by pulse pressure. *Hypertension* 1999; **34**: 375–380.
- Schram MT, Kostense PJ, Van Dijk RA et al. Diabetes, pulse pressure and cardiovascular mortality: the Hoorn Study. *J Hypertens* 2002; **20**: 1743–1751.
- Messerli FH, Mancia G, Conti CR et al. Dogma disputed: can aggressively lowering blood pressure in hypertensive patients with coronary artery disease be dangerous? *Ann Intern Med* 2006; **144**: 884–893.
- Somes GW, Pahor M, Shorr RI et al. The role of diastolic blood pressure when treating isolated systolic hypertension. *Arch Intern Med* 1999; **159**: 2004–2009.
- Denardo SJ, Gong Y, Nichols WW et al. Blood pressure and outcomes in very old hypertensive coronary artery disease patients: an INVEST substudy. *Am J Med* 2010; **123**: 719–726.
- Oates DJ, Berlowitz DR, Glickman ME et al. Blood pressure and survival in the oldest old. *J Am Geriatr Soc* 2007; **55**: 383–388.
- Benvenuto LJ, Krakoff LR. Morbidity and mortality of orthostatic hypotension: implications for management of cardiovascular disease. *Am J Hypertens* 2011; **24**: 135–144.

45. Wu JS, Yang YC, Lu FH et al. Population-based study on the prevalence and correlates of orthostatic hypotension/hypertension and orthostatic dizziness. *Hypertens Res* 2008; **31**: 897–904.
46. Alderman MH. Salt, blood pressure, and human health. *Hypertension* 2000; **36**: 890–893.
47. Jones DW, Kim JS, Andrew ME et al. Body mass index and blood pressure in Korean men and women: the Korean National Blood Pressure Survey. *J Hypertens* 1994; **12**: 1433–1437.
48. Whelton SP, Chin A, Xin X et al. Effect of aerobic exercise on blood pressure: a meta-analysis of randomized, controlled trials. *Ann Intern Med* 2002; **136**: 493–503.
49. Chen L, Davey Smith G, Harbord RM et al. Alcohol intake and blood pressure: a systematic review implementing a Mendelian randomization approach. *PLoS Med* 2008; **5**: e52.
50. Brown CD, Higgins M, Donato KA et al. Body mass index and the prevalence of hypertension and dyslipidemia. *Obes Res* 2000; **8**: 605–619.
51. The Obesity in Asia Collaboration. Is central obesity a better discriminator of the risk of hypertension than body mass index in ethnically diverse populations? *J Hypertens* 2008; **26**: 169–177.
52. Whitlock G, Lewington S, Sherliker P et al. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *Lancet* 2009; **373**: 1083–1096.
53. Dickinson HO, Mason JM, Nicolson DJ et al. Lifestyle interventions to reduce raised blood pressure: a systematic review of randomized controlled trials. *J Hypertens* 2006; **24**: 215–233.
54. Navaneethan SD, Yehnert H, Moustarah F et al. Weight loss interventions in chronic kidney disease: a systematic review and meta-analysis. *Clin J Am Soc Nephrol* 2009; **4**: 1565–1574.
55. Buchwald H, Estok R, Fahrbach K et al. Weight and type 2 diabetes after bariatric surgery: systematic review and meta-analysis. *Am J Med* 2009; **122**: 248–256 e245.
56. James WP, Caterson ID, Coutinho W et al. Effect of sibutramine on cardiovascular outcomes in overweight and obese subjects. *N Engl J Med* 2010; **363**: 905–917.
57. Topol EJ, Bousser MG, Fox KA et al. Rimonabant for prevention of cardiovascular events (CRESCENDO): a randomised, multicentre, placebo-controlled trial. *Lancet* 2010; **376**: 517–523.
58. Kalantar-Zadeh K, Abbott KC, Salahudeen AK et al. Survival advantages of obesity in dialysis patients. *Am J Clin Nutr* 2005; **81**: 543–554.
59. Pifer TB, McCullough KP, Port FK et al. Mortality risk in hemodialysis patients and changes in nutritional indicators: DOPPS. *Kidney Int* 2002; **62**: 2238–2245.
60. Hoogeveen EK, Halbesma N, Rothman KJ et al. Obesity and mortality risk among younger dialysis patients. *Clin J Am Soc Nephrol* 2012; **7**: 280–288.
61. World Health Organization. *Prevention of Cardiovascular Disease: Guidelines for Assessment and Management of Total Cardiovascular Risk*. 2007.
62. Hooper L, Bartlett C, Davey Smith G et al. Systematic review of long term effects of advice to reduce dietary salt in adults. *BMJ* 2002; **325**: 628.
63. Esnault VL, Ekhlas A, Delcroix C et al. Diuretic and enhanced sodium restriction results in improved antiproteinuric response to RAS blocking agents. *J Am Soc Nephrol* 2005; **16**: 474–481.
64. Phillips CO, Kashani A, Ko DK et al. Adverse effects of combination angiotensin II receptor blockers plus angiotensin-converting enzyme inhibitors for left ventricular dysfunction: a quantitative review of data from randomized clinical trials. *Arch Intern Med* 2007; **167**: 1930–1936.
65. Slagman MC, Waanders F, Hemmeler MH et al. Moderate dietary sodium restriction added to angiotensin converting enzyme inhibition compared with dual blockade in lowering proteinuria and blood pressure: randomised controlled trial. *BMJ* 2011; **343**: d4366.
66. Vogt L, Waanders F, Boomsma F et al. Effects of dietary sodium and hydrochlorothiazide on the antiproteinuric efficacy of losartan. *J Am Soc Nephrol* 2008; **19**: 999–1007.
67. Ekinci EI, Clarke S, Thomas MC et al. Dietary salt intake and mortality in patients with type 2 diabetes. *Diabetes Care* 2011; **34**: 703–709.
68. Thomas MC, Moran J, Forsblom C et al. The association between dietary sodium intake, ESRD, and all-cause mortality in patients with type 1 diabetes. *Diabetes Care* 2011; **34**: 861–866.
69. Chen JL, Lerner D, Ruthazer R et al. Association of physical activity with mortality in chronic kidney disease. *J Nephrol* 2008; **21**: 243–252.
70. O'Hare AM, Tawney K, Bacchetti P et al. Decreased survival among sedentary patients undergoing dialysis: results from the dialysis morbidity and mortality study wave 2. *Am J Kidney Dis* 2003; **41**: 447–454.
71. Stack AG, Molony DA, Rives T et al. Association of physical activity with mortality in the US dialysis population. *Am J Kidney Dis* 2005; **45**: 690–701.
72. World Health Organization. *International Guide for Monitoring Alcohol Consumption and Related Harm*. 2000.
73. Jee SH, Miller ER, 3rd, Guallar E et al. The effect of magnesium supplementation on blood pressure: a meta-analysis of randomized clinical trials. *Am J Hypertens* 2002; **15**: 691–696.
74. Campbell F, Dickinson HO, Critchley JA et al. A systematic review of fish-oil supplements for the prevention and treatment of hypertension. *Eur J Prev Cardiol* 2012 (in press).
75. Donadio JV, Jr., Bergstrahl EJ, Offord KP et al. A controlled trial of fish oil in IgA nephropathy. Mayo Nephrology Collaborative Group. *N Engl J Med* 1994; **331**: 1194–1199.
76. Swan SK, Olyaei A, Sica D. Clinical pharmacology for the nephrologist. *NephSap* 2010; **9**: 220–264.
77. Agarwal R, Andersen MJ. Blood pressure recordings within and outside the clinic and cardiovascular events in chronic kidney disease. *Am J Nephrol* 2006; **26**: 503–510.
78. Davidson MB, Hix JK, Vidt DG et al. Association of impaired diurnal blood pressure variation with a subsequent decline in glomerular filtration rate. *Arch Intern Med* 2006; **166**: 846–852.
79. Minutolo R, Agarwal R, Borrelli S et al. Prognostic role of ambulatory blood pressure measurement in patients with nondialysis chronic kidney disease. *Arch Intern Med* 2011; **171**: 1090–1098.
80. Hermida RC, Ayala DE, Mojón A et al. Influence of circadian time of hypertension treatment on cardiovascular risk: results of the MAPEC study. *Chronobiol Int* 2010; **27**: 1629–1651.
81. Hermida RC, Ayala DE, Mojón A et al. Decreasing sleep-time blood pressure determined by ambulatory monitoring reduces cardiovascular risk. *J Am Coll Cardiol* 2011; **58**: 1165–1173.
82. Hermida RC, Ayala DE, Mojón A et al. Bedtime dosing of antihypertensive medications reduces cardiovascular risk in CKD. *J Am Soc Nephrol* 2011; **22**: 2313–2321.
83. Gupta AK, Arshad S, Poulter NR. Compliance, safety, and effectiveness of fixed-dose combinations of antihypertensive agents: a meta-analysis. *Hypertension* 2010; **55**: 399–407.
84. US Food and Drug Administration. Public health advisory: Angiotensin-converting enzyme inhibitor (ACE inhibitor) drugs and pregnancy. <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/DrugSafetyInformationforHealthcareProfessionals/PublicHealthAdvisories/ucm053113.htm> (accessed 2 July 2012).
85. Barreras A, Gurk-Turner C. Angiotensin II receptor blockers. *Proc (Bayl Univ Med Cent)* 2003; **16**: 123–126.
86. Matchar DB, McCrory DC, Orlando LA et al. Systematic review: comparative effectiveness of angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers for treating essential hypertension. *Ann Intern Med* 2008; **148**: 16–29.
87. Holtkamp FA, de Zeeuw D, Thomas MC et al. An acute fall in estimated glomerular filtration rate during treatment with losartan predicts a slower decrease in long-term renal function. *Kidney Int* 2011; **80**: 282–287.
88. Weir MR. Acute fall in glomerular filtration rate with renin-angiotensin system inhibition: a biomarker of therapeutic success? *Kidney Int* 2011; **80**: 235–237.
89. Bomback AS, Klemmer PJ. The incidence and implications of aldosterone breakthrough. *Nat Clin Pract Nephrol* 2007; **3**: 486–492.
90. Palmer BF. Renal dysfunction complicating the treatment of hypertension. *N Engl J Med* 2002; **347**: 1256–1261.
91. Bridoux F, Hazzan M, Pallot JL et al. Acute renal failure after the use of angiotensin-converting-enzyme inhibitors in patients without renal artery stenosis. *Nephrol Dial Transplant* 1992; **7**: 100–104.
92. Kohli HS, Bhaskaran MC, Muthukumar T et al. Treatment-related acute renal failure in the elderly: a hospital-based prospective study. *Nephrol Dial Transplant* 2000; **15**: 212–217.
93. Wynckel A, Ebikili B, Melin JP et al. Long-term follow-up of acute renal failure caused by angiotensin converting enzyme inhibitors. *Am J Hypertens* 1998; **11**: 1080–1086.
94. Adhiyaman V, Asghar M, Oke A et al. Nephrotoxicity in the elderly due to co-prescription of angiotensin converting enzyme inhibitors and nonsteroidal anti-inflammatory drugs. *J R Soc Med* 2001; **94**: 512–514.
95. Loboz KK, Shenfield GM. Drug combinations and impaired renal function — the ‘triple whammy’. *Br J Clin Pharmacol* 2005; **59**: 239–243.
96. Jafar TH, Stark PC, Schmid CH et al. Progression of chronic kidney disease: the role of blood pressure control, proteinuria, and angiotensin-converting enzyme inhibition: a patient-level meta-analysis. *Ann Intern Med* 2003; **139**: 244–252.
97. Balamuthusamy S, Srinivasan L, Verma M et al. Renin angiotensin system blockade and cardiovascular outcomes in patients with chronic kidney disease and proteinuria: a meta-analysis. *Am Heart J* 2008; **155**: 791–805.
98. Oregon Health Resources Commission. *Direct Renin Inhibitors, Angiotensin Converting Enzyme Inhibitors, and Angiotensin II Receptor Blockers Draft*. January 2010.

99. Oregon Health Resources Commission. *Angiotensin-Converting Enzyme Inhibitors (ACEIs) Subcommittee Report Update*. July 2005.
100. Oregon Health Resources Commission. *Angiotensin II Receptor Antagonists (AIIRA) Subcommittee Report*. March 2006.
101. Bakris GL, Sarafidis PA, Weir MR et al. Renal outcomes with different fixed-dose combination therapies in patients with hypertension at high risk for cardiovascular events (ACCOMPLISH): a prespecified secondary analysis of a randomised controlled trial. *Lancet* 2010; **375**: 1173–1181.
102. Batterink J, Stabler SN, Tejani AM et al. Spironolactone for hypertension. *Cochrane Database Syst Rev* 2010; CD008169.
103. Becker GJ, Hewitson TD, Chrysostomou A. Aldosterone in clinical nephrology—old hormone, new questions. *Nephrol Dial Transplant* 2009; **24**: 2316–2321.
104. Epstein M. Aldosterone as a mediator of progressive renal disease: pathogenetic and clinical implications. *Am J Kidney Dis* 2001; **37**: 677–688.
105. Goodfriend TL. Treating resistant hypertension with a neglected old drug. *Hypertension* 2007; **49**: 763–764.
106. Epstein M, Williams GH, Weinberger M et al. Selective aldosterone blockade with eplerenone reduces albuminuria in patients with type 2 diabetes. *Clin J Am Soc Nephrol* 2006; **1**: 940–951.
107. Bomback AS, Kshirsagar AV, Amamoo MA et al. Change in proteinuria after adding aldosterone blockers to ACE inhibitors or angiotensin receptor blockers in CKD: a systematic review. *Am J Kidney Dis* 2008; **51**: 199–211.
108. Mehdi UF, Adams-Huet B, Raskin P et al. Addition of angiotensin receptor blockade or mineralocorticoid antagonism to maximal angiotensin-converting enzyme inhibition in diabetic nephropathy. *J Am Soc Nephrol* 2009; **20**: 2641–2650.
109. Bianchi S, Bigazzi R, Campese VM. Long-term effects of spironolactone on proteinuria and kidney function in patients with chronic kidney disease. *Kidney Int* 2006; **70**: 2116–2123.
110. Toto RD. Aldosterone blockade in chronic kidney disease: can it improve outcome? *Curr Opin Nephrol Hypertens* 2010; **19**: 444–449.
111. Rebello S, Compain S, Feng A et al. Effect of cyclosporine on the pharmacokinetics of aliskiren in healthy subjects. *J Clin Pharmacol* 2011; **51**: 1549–1560.
112. Parving HH, Persson F, Lewis JB et al. Aliskiren combined with losartan in type 2 diabetes and nephropathy. *N Engl J Med* 2008; **358**: 2433–2446.
113. Parving HH, Brenner BM, McMurray JJ et al. Aliskiren Trial in Type 2 Diabetes Using Cardio-Renal Endpoints (ALTITUDE): rationale and study design. *Nephrol Dial Transplant* 2009; **24**: 1663–1671.
114. US Food and Drug Administration. FDA drug safety communication: New warning and contraindication for blood pressure medicines containing aliskiren (Tekturna). (<http://www.fda.gov/Drugs/DrugSafety/ucm300889.htm>).
115. Ernst ME, Moser M. Use of diuretics in patients with hypertension. *N Engl J Med* 2009; **361**: 2153–2164.
116. Bakris G, Molitch M, Hewkin A et al. Differences in glucose tolerance between fixed-dose antihypertensive drug combinations in people with metabolic syndrome. *Diabetes Care* 2006; **29**: 2592–2597.
117. National Clinical Guideline Center. *Hypertension. The Clinical Management of Primary Hypertension in Adults. Clinical Guideline 127*. Commissioned by the National Institute for Health and Clinical Excellence, 2011.
118. Gallagher M, Perkovic V, Chalmers J. Diuretics: a modern day treatment option? *Nephrology (Carlton)* 2006; **11**: 419–427.
119. Duarte JD, Cooper-DeHoff RM. Mechanisms for blood pressure lowering and metabolic effects of thiazide and thiazide-like diuretics. *Expert Rev Cardiovasc Ther* 2010; **8**: 793–802.
120. Dussol B, Moussi-Frances J, Morange S et al. A randomized trial of furosemide vs hydrochlorothiazide in patients with chronic renal failure and hypertension. *Nephrol Dial Transplant* 2005; **20**: 349–353.
121. Musini VM, Wright JM, Bassett K et al. Blood pressure lowering efficacy of loop diuretics for primary hypertension. *Cochrane Database Syst Rev* 2009; CD003825.
122. Bakris G. An in-depth analysis of vasodilation in the management of hypertension: focus on adrenergic blockade. *J Cardiovasc Pharmacol* 2009; **53**: 379–387.
123. Frishman WH, Alwarshetty M. Beta-adrenergic blockers in systemic hypertension: pharmacokinetic considerations related to the current guidelines. *Clin Pharmacokinet* 2002; **41**: 505–516.
124. Ram CV. Beta-blockers in hypertension. *Am J Cardiol* 2010; **106**: 1819–1825.
125. Oregon Health Resources Commission. *Beta Adrenergic Blockers Pharmaceutical Subcommittee Report*. Update #3, March 2008.
126. Badve SV, Roberts MA, Hawley CM et al. Effects of beta-adrenergic antagonists in patients with chronic kidney disease: a systematic review and meta-analysis. *J Am Coll Cardiol* 2011; **58**: 1152–1161.
127. Chen JM, Heran BS, Perez MI et al. Blood pressure lowering efficacy of beta-blockers as second-line therapy for primary hypertension. *Cochrane Database Syst Rev* 2010; CD007185.
128. Ritz E, Rump LC. Do beta-blockers combined with RAS inhibitors make sense after all to protect against renal injury? *Curr Hypertens Rep* 2007; **9**: 409–414.
129. Sica DA, Gehr TW. Calcium-channel blockers and end-stage renal disease: pharmacokinetic and pharmacodynamic considerations. *Curr Opin Nephrol Hypertens* 2003; **12**: 123–131.
130. Bakris GL, Weir MR, Secic M et al. Differential effects of calcium antagonist subclasses on markers of nephropathy progression. *Kidney Int* 2004; **65**: 1991–2002.
131. Oregon Health Resources Commission. *Calcium Channel Blocker Subcommittee Report Update #2*. May 2005.
132. Hart P, Bakris GL. Calcium antagonists: Do they equally protect against kidney injury? *Kidney Int* 2008; **73**: 795–796.
133. Fenton C, Keating GM, Lyons-Williamson KA. Moxonidine: a review of its use in essential hypertension. *Drugs* 2006; **66**: 477–496.
134. Sica DA. Centrally acting antihypertensive agents: an update. *J Clin Hypertens (Greenwich)* 2007; **9**: 399–405.
135. Vonend O, Marsalek P, Russ H et al. Moxonidine treatment of hypertensive patients with advanced renal failure. *J Hypertens* 2003; **21**: 1709–1717.
136. Cohn JN, Pfeffer MA, Rouleau J et al. Adverse mortality effect of central sympathetic inhibition with sustained-release moxonidine in patients with heart failure (MOXCON). *Eur J Heart Fail* 2003; **5**: 659–667.
137. Keith DS, Nichols GA, Gullion CM et al. Longitudinal follow-up and outcomes among a population with chronic kidney disease in a large managed care organization. *Arch Intern Med* 2004; **164**: 659–663.
138. Menon V, Sarnak MJ. The epidemiology of chronic kidney disease stages 1 to 4 and cardiovascular disease: a high-risk combination. *Am J Kidney Dis* 2005; **45**: 223–232.
139. Upadhyay A, Earley A, Haynes SM et al. Systematic review: blood pressure target in chronic kidney disease and proteinuria as an effect modifier. *Ann Intern Med* 2011; **154**: 541–548.
140. Appel LJ, Wright JT, Jr, Greene T et al. Intensive blood-pressure control in hypertensive chronic kidney disease. *N Engl J Med* 2010; **363**: 918–929.
141. Jafar TH, Schmid CH, Landa M et al. Angiotensin-converting enzyme inhibitors and progression of nondiabetic renal disease. A meta-analysis of patient-level data. *Ann Intern Med* 2001; **135**: 73–87.
142. Peterson JC, Adler S, Burkart JM et al. Blood pressure control, proteinuria, and the progression of renal disease. The Modification of Diet in Renal Disease Study. *Ann Intern Med* 1995; **123**: 754–762.
143. Chobanian AV, Bakris GL, Black HR et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. *JAMA* 2003; **289**: 2560–2572.
144. Vasan RS, Larson MG, Leip EP et al. Impact of high-normal blood pressure on the risk of cardiovascular disease. *N Engl J Med* 2001; **345**: 1291–1297.
145. Fox CS, Larson MG, Leip EP et al. Predictors of new-onset kidney disease in a community-based population. *JAMA* 2004; **291**: 844–850.
146. Hsu CY, Iribarren C, McCulloch CE et al. Risk factors for end-stage renal disease: 25-year follow-up. *Arch Intern Med* 2009; **169**: 342–350.
147. Hsu CY, McCulloch CE, Darbinian J et al. Elevated blood pressure and risk of end-stage renal disease in subjects without baseline kidney disease. *Arch Intern Med* 2005; **165**: 923–928.
148. Klag MJ, Whelton PK, Randall BL et al. Blood pressure and end-stage renal disease in men. *N Engl J Med* 1996; **334**: 13–18.
149. Beckett NS, Peters R, Fletcher AE et al. Treatment of hypertension in patients 80 years of age or older. *N Engl J Med* 2008; **358**: 1887–1898.
150. Turnbull F, Neal B, Ninomiya T et al. Effects of different regimens to lower blood pressure on major cardiovascular events in older and younger adults: meta-analysis of randomised trials. *BMJ* 2008; **336**: 1121–1123.
151. SHEP Cooperative Research Group. Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension. Final results of the Systolic Hypertension in the Elderly Program (SHEP). SHEP Cooperative Research Group. *JAMA* 1991; **265**: 3255–3264.
152. Go AS, Chertow GM, Fan D et al. Chronic kidney disease and the risks of death, cardiovascular events, and hospitalization. *N Engl J Med* 2004; **351**: 1296–1305.
153. Sarnak MJ, Levey AS, Schoolwerth AC et al. Kidney disease as a risk factor for development of cardiovascular disease: a statement from the American Heart Association Councils on Kidney in Cardiovascular Disease, High Blood Pressure Research, Clinical Cardiology, and Epidemiology and Prevention. *Circulation* 2003; **108**: 2154–2169.

154. Pfeffer MA, Burdmann EA, Chen CY et al. A trial of darbepoetin alfa in type 2 diabetes and chronic kidney disease. *N Engl J Med* 2009; **361**: 2019–2032.
155. Singh AK, Szczech L, Tang KL et al. Correction of anemia with epoetin alfa in chronic kidney disease. *N Engl J Med* 2006; **355**: 2085–2098.
156. Atkins D, Best D, Briss PA et al. Grading quality of evidence and strength of recommendations. *BMJ* 2004; **328**: 1490–1494.
157. Uhlig K, Macleod A, Craig J et al. Grading evidence and recommendations for clinical practice guidelines in nephrology. A position statement from Kidney Disease: Improving Global Outcomes (KDIGO). *Kidney Int* 2006; **70**: 2058–2065.
158. Weiner DE, Tighiouart H, Levey AS et al. Lowest systolic blood pressure is associated with stroke in stages 3 to 4 chronic kidney disease. *J Am Soc Nephrol* 2007; **18**: 960–966.
159. Cushman WC, Evans GW, Byington RP et al. Effects of intensive blood-pressure control in type 2 diabetes mellitus. *N Engl J Med* 2010; **362**: 1575–1585.
160. Pahor M, Shorr RI, Somes GW et al. Diuretic-based treatment and cardiovascular events in patients with mild renal dysfunction enrolled in the systolic hypertension in the elderly program. *Arch Intern Med* 1998; **158**: 1340–1345.
161. National Institute for Health and Clinical Excellence. *Chronic Kidney Disease: Early Identification and Management of Chronic Kidney Disease in Adults in Primary and Secondary Care*. National Institute for Health and Clinical Excellence. NICE Clinical Guideline 73. 2008.
162. Hallan SI, Ritz E, Lydersen S et al. Combining GFR and albuminuria to classify CKD improves prediction of ESRD. *J Am Soc Nephrol* 2009; **20**: 1069–1077.
163. Hemmelgarn BR, Manns BJ, Lloyd A et al. Relation between kidney function, proteinuria, and adverse outcomes. *JAMA* 2010; **303**: 423–429.
164. Hillege HL, Fidler V, Diercks GF et al. Urinary albumin excretion predicts cardiovascular and noncardiovascular mortality in general population. *Circulation* 2002; **106**: 1777–1782.
165. Wachtell K, Ibsen H, Olsen MH et al. Albuminuria and cardiovascular risk in hypertensive patients with left ventricular hypertrophy: the LIFE study. *Ann Intern Med* 2003; **139**: 901–906.
166. Sarnak MJ, Greene T, Wang X et al. The effect of a lower target blood pressure on the progression of kidney disease: long-term follow-up of the modification of diet in renal disease study. *Ann Intern Med* 2005; **142**: 342–351.
167. Ruilope LM, Salvetti A, Jamerson K et al. Renal function and intensive lowering of blood pressure in hypertensive participants of the hypertension optimal treatment (HOT) study. *J Am Soc Nephrol* 2001; **12**: 218–225.
168. Hunsicker LG, Adler S, Caggiula A et al. Predictors of the progression of renal disease in the Modification of Diet in Renal Disease Study. *Kidney Int* 1997; **51**: 1908–1919.
169. Klahr S, Levey AS, Beck GJ et al. The effects of dietary protein restriction and blood-pressure control on the progression of chronic renal disease. Modification of Diet in Renal Disease Study Group. *N Engl J Med* 1994; **330**: 877–884.
170. Ruggenenti P, Perna A, Loriga G et al. Blood-pressure control for renoprotection in patients with non-diabetic chronic renal disease (REIN-2): multicentre, randomised controlled trial. *Lancet* 2005; **365**: 939–946.
171. National Heart Lung and Blood Institute. NIH blood pressure trial expands to include more older adults. <http://public.nhlbi.nih.gov/newsroom/home/GetPressRelease.aspx?id=2737>.
172. National Heart Lung and Blood Institute. NIH launches multicenter clinical trial to test blood pressure strategy. <http://public.nhlbi.nih.gov/newsroom/home/GetPressRelease.aspx?id=2667>.
173. Mann JF, Gerstein HC, Pogue J et al. Renal insufficiency as a predictor of cardiovascular outcomes and the impact of ramipril: the HOPE randomized trial. *Ann Intern Med* 2001; **134**: 629–636.
174. Mann JF, Gerstein HC, Yi QL et al. Development of renal disease in people at high cardiovascular risk: results of the HOPE randomized study. *J Am Soc Nephrol* 2003; **14**: 641–647.
175. Rahman M, Pressel S, Davis BR et al. Renal outcomes in high-risk hypertensive patients treated with an angiotensin-converting enzyme inhibitor or a calcium channel blocker vs a diuretic: a report from the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT). *Arch Intern Med* 2005; **165**: 936–946.
176. Rahman M, Pressel S, Davis BR et al. Cardiovascular outcomes in high-risk hypertensive patients stratified by baseline glomerular filtration rate. *Ann Intern Med* 2006; **144**: 172–180.
177. Agodoa LY, Appel L, Bakris GL et al. Effect of ramipril vs amlodipine on renal outcomes in hypertensive nephrosclerosis: a randomized controlled trial. *JAMA* 2001; **285**: 2719–2728.
178. Saruta T, Hayashi K, Ogihara T et al. Effects of candesartan and amlodipine on cardiovascular events in hypertensive patients with chronic kidney disease: subanalysis of the CASE-J Study. *Hypertens Res* 2009; **32**: 505–512.
179. Mann JF, Schmieder RE, Dyal L et al. Effect of telmisartan on renal outcomes: a randomized trial. *Ann Intern Med* 2009; **151**: 1–10, W11–W12.
180. Makino H, Haneda M, Babazono T et al. Prevention of transition from incipient to overt nephropathy with telmisartan in patients with type 2 diabetes. *Diabetes Care* 2007; **30**: 1577–1578.
181. Parving HH, Lehnert H, Brochner-Mortensen J et al. The effect of irbesartan on the development of diabetic nephropathy in patients with type 2 diabetes. *N Engl J Med* 2001; **345**: 870–878.
182. Brenner BM, Cooper ME, de Zeeuw D et al. Effects of losartan on renal and cardiovascular outcomes in patients with type 2 diabetes and nephropathy. *N Engl J Med* 2001; **345**: 861–869.
183. Estacio RO, Jeffers BW, Gifford N et al. Effect of blood pressure control on diabetic microvascular complications in patients with hypertension and type 2 diabetes. *Diabetes Care* 2000; **23** (Suppl 2): B54–B64.
184. Lewis EJ, Hunsicker LG, Clarke WR et al. Renoprotective effect of the angiotensin-receptor antagonist irbesartan in patients with nephropathy due to type 2 diabetes. *N Engl J Med* 2001; **345**: 851–860.
185. Yusuf S, Sleight P, Pogue J et al. Effects of an angiotensin-converting-enzyme inhibitor, ramipril, on cardiovascular events in high-risk patients. The Heart Outcomes Prevention Evaluation Study Investigators. *N Engl J Med* 2000; **342**: 145–153.
186. Perkovic V, Ninomiya T, Arima H et al. Chronic kidney disease, cardiovascular events, and the effects of perindopril-based blood pressure lowering: data from the PROGRESS study. *J Am Soc Nephrol* 2007; **18**: 2766–2772.
187. Solomon SD, Rice MM, K AJ et al. Renal function and effectiveness of angiotensin-converting enzyme inhibitor therapy in patients with chronic stable coronary disease in the Prevention of Events with ACE inhibition (PEACE) trial. *Circulation* 2006; **114**: 26–31.
188. Solomon SD, Lin J, Solomon CG et al. Influence of albuminuria on cardiovascular risk in patients with stable coronary artery disease. *Circulation* 2007; **116**: 2687–2693.
189. Brugts JJ, Boersma E, Chonchol M et al. The cardioprotective effects of the angiotensin-converting enzyme inhibitor perindopril in patients with stable coronary artery disease are not modified by mild to moderate renal insufficiency: insights from the EUROPAT trial. *J Am Coll Cardiol* 2007; **50**: 2148–2155.
190. Asselbergs FW, Diercks GF, Hillege HL et al. Effects of fosinopril and pravastatin on cardiovascular events in subjects with microalbuminuria. *Circulation* 2004; **110**: 2809–2816.
191. Li PK, Leung CB, Chow KM et al. Hong Kong study using valsartan in IgA nephropathy (HKVIN): a double-blind, randomized, placebo-controlled study. *Am J Kidney Dis* 2006; **47**: 751–760.
192. Hou FF, Zhang X, Zhang GH et al. Efficacy and safety of benazepril for advanced chronic renal insufficiency. *N Engl J Med* 2006; **354**: 131–140.
193. Heerspink HL, de Zeeuw D. Composite renal endpoints: was ACCOMPLISH accomplished? *Lancet* 2010; **375**: 1140–1142.
194. Caramori ML, Fioretto P, Mauer M. Low glomerular filtration rate in normoalbuminuric type 1 diabetic patients: an indicator of more advanced glomerular lesions. *Diabetes* 2003; **52**: 1036–1040.
195. Kramer HJ, Nguyen QD, Curhan G et al. Renal insufficiency in the absence of albuminuria and retinopathy among adults with type 2 diabetes mellitus. *JAMA* 2003; **289**: 3273–3277.
196. MacIsaac RJ, Panagiotopoulos S, McNeil KJ et al. Is nonalbuminuric renal insufficiency in type 2 diabetes related to an increase in intrarenal vascular disease? *Diabetes Care* 2006; **29**: 1560–1566.
197. Perkins BA, Ficociello LH, Roshan B et al. In patients with type 1 diabetes and new-onset microalbuminuria the development of advanced chronic kidney disease may not require progression to proteinuria. *Kidney Int* 2010; **77**: 57–64.
198. Law MR, Morris JK, Wald NJ. Use of blood pressure lowering drugs in the prevention of cardiovascular disease: meta-analysis of 147 randomised trials in the context of expectations from prospective epidemiological studies. *BMJ* 2009; **338**: b1665.
199. Czernichow S, Zanchetti A, Turnbull F et al. The effects of blood pressure reduction and of different blood pressure-lowering regimens on major cardiovascular events according to baseline blood pressure: meta-analysis of randomized trials. *J Hypertens* 2011; **29**: 4–16.
200. O’Seaghdha CM, Perkovic V, Lam TH et al. Blood pressure is a major risk factor for renal death: an analysis of 560 352 participants from the Asia-Pacific region. *Hypertension* 2009; **54**: 509–515.

201. Stamler J, Vaccaro O, Neaton JD et al. Diabetes, other risk factors, and 12-yr cardiovascular mortality for men screened in the Multiple Risk Factor Intervention Trial. *Diabetes Care* 1993; **16**: 434-444.
202. White SL, Chadban SJ, Jan S et al. How can we achieve global equity in provision of renal replacement therapy? *Bull World Health Organ* 2008; **86**: 229-237.
203. Adler AI, Stevens RJ, Manley SE et al. Development and progression of nephropathy in type 2 diabetes: the United Kingdom Prospective Diabetes Study (UKPDS 64). *Kidney Int* 2003; **63**: 225-232.
204. Ritz E, Dikow R. Hypertension and antihypertensive treatment of diabetic nephropathy. *Nat Clin Pract Nephrol* 2006; **2**: 562-567.
205. Janka HU, Waram JH, Rand LI et al. Risk factors for progression of background retinopathy in long-standing IDDM. *Diabetes* 1989; **38**: 460-464.
206. Klein R, Klein BE, Moss SE et al. Is blood pressure a predictor of the incidence or progression of diabetic retinopathy? *Arch Intern Med* 1989; **149**: 2427-2432.
207. Knowler WC, Bennett PH, Ballantine EJ. Increased incidence of retinopathy in diabetics with elevated blood pressure. A six-year follow-up study in Pima Indians. *N Engl J Med* 1980; **302**: 645-650.
208. Teuscher A, Schnell H, Wilson PW. Incidence of diabetic retinopathy and relationship to baseline plasma glucose and blood pressure. *Diabetes Care* 1988; **11**: 246-251.
209. Gaede P, Lund-Andersen H, Parving HH et al. Effect of a multifactorial intervention on mortality in type 2 diabetes. *N Engl J Med* 2008; **358**: 580-591.
210. Gaede P, Tarnow L, Vedel P et al. Remission to normoalbuminuria during multifactorial treatment preserves kidney function in patients with type 2 diabetes and microalbuminuria. *Nephrol Dial Transplant* 2004; **19**: 2784-2788.
211. Gaede P, Vedel P, Larsen N et al. Multifactorial intervention and cardiovascular disease in patients with type 2 diabetes. *N Engl J Med* 2003; **348**: 383-393.
212. An JH, Cho YM, Yu HG et al. The clinical characteristics of normoalbuminuric renal insufficiency in Korean type 2 diabetic patients: a possible early stage renal complication. *J Korean Med Sci* 2009; **24** (Suppl): S75-S81.
213. Bruno G, Merletti F, Bargero G et al. Estimated glomerular filtration rate, albuminuria and mortality in type 2 diabetes: the Casale Monferrato study. *Diabetologia* 2007; **50**: 941-948.
214. Ito H, Takeuchi Y, Ishida H et al. High frequencies of diabetic micro- and macroangiopathies in patients with type 2 diabetes mellitus with decreased estimated glomerular filtration rate and normoalbuminuria. *Nephrol Dial Transplant* 2010; **25**: 1161-1167.
215. MacIsaac RJ, Tsalamandris C, Panagiotopoulos S et al. Nonalbuninuric renal insufficiency in type 2 diabetes. *Diabetes Care* 2004; **27**: 195-200.
216. Thomas MC, MacIsaac RJ, Jerums G et al. Nonalbuninuric renal impairment in type 2 diabetic patients and in the general population (national evaluation of the frequency of renal impairment co-existing with NIDDM [NEFRON] 11). *Diabetes Care* 2009; **32**: 1497-1502.
217. Yokoyama H, Sone H, Oishi M et al. Prevalence of albuminuria and renal insufficiency and associated clinical factors in type 2 diabetes: the Japan Diabetes Clinical Data Management study (JDDM15). *Nephrol Dial Transplant* 2009; **24**: 1212-1219.
218. Molitch ME, Steffes M, Sun W et al. Development and progression of renal insufficiency with and without albuminuria in adults with type 1 diabetes in the diabetes control and complications trial and the epidemiology of diabetes interventions and complications study. *Diabetes Care* 2010; **33**: 1536-1543.
219. UK Prospective Diabetes Study Group. Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UKPDS 38. UK Prospective Diabetes Study Group. *BMJ* 1998; **317**: 703-713.
220. Hansson L, Zanchetti A, Carruthers SG et al. Effects of intensive blood-pressure lowering and low-dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial. HOT Study Group. *Lancet* 1998; **351**: 1755-1762.
221. Schrier RW, Estacio RO, Mehler PS et al. Appropriate blood pressure control in hypertensive and normotensive type 2 diabetes mellitus: a summary of the ABCD trial. *Nat Clin Pract Nephrol* 2007; **3**: 428-438.
222. Estacio RO, Jeffers BW, Hiatt WR et al. The effect of nisoldipine as compared with enalapril on cardiovascular outcomes in patients with non-insulin-dependent diabetes and hypertension. *N Engl J Med* 1998; **338**: 645-652.
223. Schrier RW, Estacio RO, Esler A et al. Effects of aggressive blood pressure control in normotensive type 2 diabetic patients on albuminuria, retinopathy and strokes. *Kidney Int* 2002; **61**: 1086-1097.
224. Chew EY, Ambrosius WT, Davis MD et al. Effects of medical therapies on retinopathy progression in type 2 diabetes. *N Engl J Med* 2010; **363**: 233-244.
225. Perry HM, Jr., Miller JP, Fornoff JR et al. Early predictors of 15-year end-stage renal disease in hypertensive patients. *Hypertension* 1995; **25**: 587-594.
226. Tozawa M, Iseki K, Iseki C et al. Blood pressure predicts risk of developing end-stage renal disease in men and women. *Hypertension* 2003; **41**: 1341-1345.
227. Orchard TJ, Forrest KY, Kuller LH et al. Lipid and blood pressure treatment goals for type 1 diabetes: 10-year incidence data from the Pittsburgh Epidemiology of Diabetes Complications Study. *Diabetes Care* 2001; **24**: 1053-1059.
228. Berl T, Hunsicker LG, Lewis JB et al. Impact of achieved blood pressure on cardiovascular outcomes in the Irbesartan Diabetic Nephropathy Trial. *J Am Soc Nephrol* 2005; **16**: 2170-2179.
229. Adler AI, Stratton IM, Neil HA et al. Association of systolic blood pressure with macrovascular and microvascular complications of type 2 diabetes (UKPDS 36): prospective observational study. *BMJ* 2000; **321**: 412-419.
230. Pepine CJ, Handberg EM, Cooper-DeHoff RM et al. A calcium antagonist vs a non-calcium antagonist hypertension treatment strategy for patients with coronary artery disease. The International Verapamil-Trandolapril Study (INVEST): a randomized controlled trial. *JAMA* 2003; **290**: 2805-2816.
231. Cooper-DeHoff RM, Gong Y, Handberg EM et al. Tight blood pressure control and cardiovascular outcomes among hypertensive patients with diabetes and coronary artery disease. *JAMA* 2010; **304**: 61-68.
232. Patel A, MacMahon S, Chalmers J et al. Effects of a fixed combination of perindopril and indapamide on macrovascular and microvascular outcomes in patients with type 2 diabetes mellitus (the ADVANCE trial): a randomised controlled trial. *Lancet* 2007; **370**: 829-840.
233. de Galan BE, Perkovic V, Ninomiya T et al. Lowering blood pressure reduces renal events in type 2 diabetes. *J Am Soc Nephrol* 2009; **20**: 883-892.
234. Heerspink HJ, Ninomiya T, Perkovic V et al. Effects of a fixed combination of perindopril and indapamide in patients with type 2 diabetes and chronic kidney disease. *Eur Heart J* 2010; **31**: 2888-2896.
235. Arauz-Pacheco C, Parrott MA, Raskin P. The treatment of hypertension in adult patients with diabetes. *Diabetes Care* 2002; **25**: 134-147.
236. European Society of Hypertension-European Society of Cardiology Guidelines Committee. 2003 European Society of Hypertension-European Society of Cardiology guidelines for the management of arterial hypertension. *J Hypertens* 2003; **21**: 1011-1053.
237. Australian Heart Foundation. *Guide to Management of Hypertension*. 2008.
238. Levin A, Hemmelgarn B, Culleton B et al. Guidelines for the management of chronic kidney disease. *CMAJ* 2008; **179**: 1154-1162.
239. Mancia G, De Backer G, Dominiczak A et al. 2007 Guidelines for the management of arterial hypertension: The Task Force for the Management of Arterial Hypertension of the European Society of Hypertension (ESH) and of the European Society of Cardiology (ESC). *Eur Heart J* 2007; **28**: 1462-1536.
240. Joint British Societies 2 Working Party. JBS 2: Joint British Societies' guidelines on prevention of cardiovascular disease in clinical practice. *Heart* 2005; **91** (Suppl 5): v1-v52.
241. World Health Organization-International Society of Hypertension (WHO-ISH) Guidelines Subcommittee. 1999 World Health Organization-International Society of Hypertension Guidelines for the Management of Hypertension. Guidelines Subcommittee. *J Hypertens* 1999; **17**: 151-183.
242. JNC VI. The sixth report of the Joint National Committee on prevention, detection, evaluation, and treatment of high blood pressure. *Arch Intern Med* 1997; **157**: 2413-2446.
243. Whithworth JA. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH) statement on management of hypertension. *J Hypertens* 2003; **21**: 1983-1992.
244. Williams B, Poulter NR, Brown MJ et al. Guidelines for management of hypertension: report of the fourth working party of the British Hypertension Society, 2004-BHS IV. *J Hum Hypertens* 2004; **18**: 139-185.
245. Arauz-Pacheco C, Parrott MA, Raskin P. Treatment of hypertension in adults with diabetes. *Diabetes Care* 2003; **26** (Suppl 1): S80-S82.
246. American Diabetes Association. Standards of medical care in diabetes-2010. *Diabetes Care* 2010; **33** (Suppl 1): S11-S61.
247. Buse JB, Ginsberg HN, Bakris GL et al. Primary prevention of cardiovascular diseases in people with diabetes mellitus: a scientific statement from the American Heart Association and the American Diabetes Association. *Circulation* 2007; **115**: 114-126.

248. Staessen JA, Fagard R, Thijs L et al. Randomised double-blind comparison of placebo and active treatment for older patients with isolated systolic hypertension. The Systolic Hypertension in Europe (Syst-Eur) Trial Investigators. *Lancet* 1997; **350**: 757–764.
249. Nishimura R, LaPorte RE, Dorman JS et al. Mortality trends in type 1 diabetes. The Allegheny County (Pennsylvania) Registry 1965–1999. *Diabetes Care* 2001; **24**: 823–827.
250. Ibsen H, Olsen MH, Wachtell K et al. Does albuminuria predict cardiovascular outcomes on treatment with losartan versus atenolol in patients with diabetes, hypertension, and left ventricular hypertrophy? The LIFE study. *Diabetes Care* 2006; **29**: 595–600.
251. Ruggenenti P, Fassi A, Ilieva AP et al. Preventing microalbuminuria in type 2 diabetes. *N Engl J Med* 2004; **351**: 1941–1951.
252. Ruggenenti P, Perna A, Ganeva M et al. Impact of blood pressure control and angiotensin-converting enzyme inhibitor therapy on new-onset microalbuminuria in type 2 diabetes: a *post hoc* analysis of the BENEDICT trial. *J Am Soc Nephrol* 2006; **17**: 3472–3481.
253. Gaede P, Vedel P, Parving HH et al. Intensified multifactorial intervention in patients with type 2 diabetes mellitus and microalbuminuria: the Steno type 2 randomised study. *Lancet* 1999; **353**: 617–622.
254. Bakris GL, Weir MR, Shanifar S et al. Effects of blood pressure level on progression of diabetic nephropathy: results from the RENAAL study. *Arch Intern Med* 2003; **163**: 1555–1565.
255. Bakris GL, Williams M, Dworkin L et al. Preserving renal function in adults with hypertension and diabetes: a consensus approach. National Kidney Foundation Hypertension and Diabetes Executive Committees Working Group. *Am J Kidney Dis* 2000; **36**: 646–661.
256. Dinneen SF, Gerstein HC. The association of microalbuminuria and mortality in non-insulin-dependent diabetes mellitus. A systematic overview of the literature. *Arch Intern Med* 1997; **157**: 1413–1418.
257. Gerstein HC, Mann JF, Yi Q et al. Albuminuria and risk of cardiovascular events, death, and heart failure in diabetic and nondiabetic individuals. *JAMA* 2001; **286**: 421–426.
258. Ninomiya T, Perkovic V, de Galan BE et al. Albuminuria and kidney function independently predict cardiovascular and renal outcomes in diabetes. *J Am Soc Nephrol* 2009; **20**: 1813–1821.
259. Atkins RC, Briganti EM, Lewis JB et al. Proteinuria reduction and progression to renal failure in patients with type 2 diabetes mellitus and overt nephropathy. *Am J Kidney Dis* 2005; **45**: 281–287.
260. de Zeeuw D, Remuzzi G, Parving HH et al. Proteinuria, a target for renoprotection in patients with type 2 diabetic nephropathy: lessons from RENAAL. *Kidney Int* 2004; **65**: 2309–2320.
261. de Zeeuw D, Remuzzi G, Parving HH et al. Albuminuria, a therapeutic target for cardiovascular protection in type 2 diabetic patients with nephropathy. *Circulation* 2004; **110**: 921–927.
262. Agha A, Amer W, Anwar E et al. Reduction of microalbuminuria by using losartan in normotensive patients with type 2 diabetes mellitus: A randomized controlled trial. *Saudi J Kidney Dis Transpl* 2009; **20**: 429–435.
263. ACE Inhibitors in Diabetic Nephropathy Trialist Group. Should all patients with type 1 diabetes mellitus and microalbuminuria receive angiotensin-converting enzyme inhibitors? A meta-analysis of individual patient data. *Ann Intern Med* 2001; **134**: 370–379.
264. Marre M, Lievre M, Chatellier G et al. Effects of low dose ramipril on cardiovascular and renal outcomes in patients with type 2 diabetes and raised excretion of urinary albumin: randomised, double blind, placebo controlled trial (the DIABHYCAR study). *BMJ* 2004; **328**: 495.
265. Ravid M, Lang R, Rachmani R et al. Long-term renoprotective effect of angiotensin-converting enzyme inhibition in non-insulin-dependent diabetes mellitus. A 7-year follow-up study. *Arch Intern Med* 1996; **156**: 286–289.
266. Ravid M, Savin H, Jutrin I et al. Long-term stabilizing effect of angiotensin-converting enzyme inhibition on plasma creatinine and on proteinuria in normotensive type II diabetic patients. *Ann Intern Med* 1993; **118**: 577–581.
267. Trevisan R, Tiengo A. Effect of low-dose ramipril on microalbuminuria in normotensive or mild hypertensive non-insulin-dependent diabetic patients. North-East Italy Microalbuminuria Study Group. *Am J Hypertens* 1995; **8**: 876–883.
268. National Kidney Foundation. KDOQI clinical practice guideline for diabetes and chronic kidney disease: 2012 update. *Am J Kidney Dis* 2012; **60**: 850–886.
269. Lewis EJ, Hunsicker LG, Bain RP et al. The effect of angiotensin-converting-enzyme inhibition on diabetic nephropathy. The Collaborative Study Group. *N Engl J Med* 1993; **329**: 1456–1462.
270. Kasiske BL, Kalil RS, Ma JZ et al. Effect of antihypertensive therapy on the kidney in patients with diabetes: a meta-regression analysis. *Ann Intern Med* 1993; **118**: 129–138.
271. Braunwald E, Domanski MJ, Fowler SE et al. Angiotensin-converting-enzyme inhibition in stable coronary artery disease. *N Engl J Med* 2004; **351**: 2058–2068.
272. Dagenais GR, Pogue J, Fox K et al. Angiotensin-converting-enzyme inhibitors in stable vascular disease without left ventricular systolic dysfunction or heart failure: a combined analysis of three trials. *Lancet* 2006; **368**: 581–588.
273. Dahlöf B, Devereux RB, Kjeldsen SE et al. Cardiovascular morbidity and mortality in the Losartan Intervention For Endpoint reduction in hypertension study (LIFE): a randomised trial against atenolol. *Lancet* 2002; **359**: 995–1003.
274. Fox KM. Efficacy of perindopril in reduction of cardiovascular events among patients with stable coronary artery disease: randomised, double-blind, placebo-controlled, multicentre trial (the EUROPA study). *Lancet* 2003; **362**: 782–788.
275. PROGRESS Collaborative Group. Randomised trial of a perindopril-based blood-pressure-lowering regimen among 6,105 individuals with previous stroke or transient ischaemic attack. *Lancet* 2001; **358**: 1033–1041.
276. Yusuf S, Teo K, Anderson C et al. Effects of the angiotensin-receptor blocker telmisartan on cardiovascular events in high-risk patients intolerant to angiotensin-converting enzyme inhibitors: a randomised controlled trial. *Lancet* 2008; **372**: 1174–1183.
277. Heart Outcomes Prevention Evaluation (HOPE) Study Investigators. Effects of ramipril on cardiovascular and microvascular outcomes in people with diabetes mellitus: results of the HOPE study and MICRO-HOPE substudy. Heart Outcomes Prevention Evaluation Study Investigators. *Lancet* 2000; **355**: 253–259.
278. Lindholm LH, Ibsen H, Dahlöf B et al. Cardiovascular morbidity and mortality in patients with diabetes in the Losartan Intervention For Endpoint reduction in hypertension study (LIFE): a randomised trial against atenolol. *Lancet* 2002; **359**: 1004–1010.
279. Whelton PK, Barzilay J, Cushman WC et al. Clinical outcomes in antihypertensive treatment of type 2 diabetes, impaired fasting glucose concentration, and normoglycemia: Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT). *Arch Intern Med* 2005; **165**: 1401–1409.
280. Strippoli GF, Craig M, Deeks JJ et al. Effects of angiotensin converting enzyme inhibitors and angiotensin II receptor antagonists on mortality and renal outcomes in diabetic nephropathy: systematic review. *BMJ* 2004; **329**: 828.
281. Mann JF, Schmieder RE, McQueen M et al. Renal outcomes with telmisartan, ramipril, or both, in people at high vascular risk (the ONTARGET study): a multicentre, randomised, double-blind, controlled trial. *Lancet* 2008; **372**: 547–553.
282. Yusuf S, Teo KK, Pogue J et al. Telmisartan, ramipril, or both in patients at high risk for vascular events. *N Engl J Med* 2008; **358**: 1547–1559.
283. Chrysostomou A, Pedagogos E, MacGregor L et al. Double-blind, placebo-controlled study on the effect of the aldosterone receptor antagonist spironolactone in patients who have persistent proteinuria and are on long-term angiotensin-converting enzyme inhibitor therapy, with or without an angiotensin II receptor blocker. *Clin J Am Soc Nephrol* 2006; **1**: 256–262.
284. Aakhus S, Dahl K, Wideroe TE. Cardiovascular morbidity and risk factors in renal transplant patients. *Nephrol Dial Transplant* 1999; **14**: 648–654.
285. Aakhus S, Dahl K, Wideroe TE. Cardiovascular disease in stable renal transplant patients in Norway: morbidity and mortality during a 5-yr follow-up. *Clin Transplant* 2004; **18**: 596–604.
286. Ducloux D, Kazory A, Chalopin JM. Predicting coronary heart disease in renal transplant recipients: a prospective study. *Kidney Int* 2004; **66**: 441–447.
287. Kasiske BL, Chakkera HA, Roel J. Explained and unexplained ischemic heart disease risk after renal transplantation. *J Am Soc Nephrol* 2000; **11**: 1735–1743.
288. Ojo AO. Cardiovascular complications after renal transplantation and their prevention. *Transplantation* 2006; **82**: 603–611.
289. Opelz G, Wujciak T, Ritz E. Association of chronic kidney graft failure with recipient blood pressure. Collaborative Transplant Study. *Kidney Int* 1998; **53**: 217–222.
290. Opelz G, Dohler B. Improved long-term outcomes after renal transplantation associated with blood pressure control. *Am J Transplant* 2005; **5**: 2725–2731.
291. Kasiske BL, Anjum S, Shah R et al. Hypertension after kidney transplantation. *Am J Kidney Dis* 2004; **43**: 1071–1081.
292. KDIGO Transplant Work Group. KDIGO clinical practice guideline for the care of kidney transplant recipients. *Am J Transplant* 2009; **9** (Suppl 3): S1–S155.

293. EBPG Expert Group on Renal Transplantation. European best practice guidelines for renal transplantation. Section IV: Long-term management of the transplant recipient. IV.5.2. Cardiovascular risks. Arterial hypertension. *Nephrol Dial Transplant* 2002; **17** (Suppl 4): 25–26.
294. Gaston RS, Kasiske BL, Fieberg AM et al. Use of cardioprotective medications in kidney transplant recipients. *Am J Transplant* 2009; **9**: 1811–1815.
295. Holdaas H, Fellstrom B, Jardine AG et al. Effect of fluvastatin on cardiac outcomes in renal transplant recipients: a multicentre, randomised, placebo-controlled trial. *Lancet* 2003; **361**: 2024–2031.
296. Gill JS. Cardiovascular disease in transplant recipients: current and future treatment strategies. *Clin J Am Soc Nephrol* 2008; **3** (Suppl 2): S29–S37.
297. Kuypers DR, Neumayer HH, Fritzsche L et al. Calcium channel blockade and preservation of renal graft function in cyclosporine-treated recipients: a prospective randomized placebo-controlled 2-year study. *Transplantation* 2004; **78**: 1204–1211.
298. Midtvedt K, Hartmann A, Foss A et al. Sustained improvement of renal graft function for two years in hypertensive renal transplant recipients treated with nifedipine as compared to lisinopril. *Transplantation* 2001; **72**: 1787–1792.
299. Rahn KH, Barenbrock M, Fritschka E et al. Effect of nitrendipine on renal function in renal-transplant patients treated with cyclosporin: a randomised trial. *Lancet* 1999; **354**: 1415–1420.
300. van Riemsdijk IC, Mulder PG, de Fijter JW et al. Addition of isradipine (Lomir) results in a better renal function after kidney transplantation: a double-blind, randomized, placebo-controlled, multi-center study. *Transplantation* 2000; **70**: 122–126.
301. Cross NB, Webster AC, Masson P et al. Antihypertensives for kidney transplant recipients: systematic review and meta-analysis of randomized controlled trials. *Transplantation* 2009; **88**: 7–18.
302. Knoll GA, Blydt-Hansen TD, Campbell P et al. Canadian Society of Transplantation and Canadian Society of Nephrology commentary on the 2009 KDIGO clinical practice guideline for the care of kidney transplant recipients. *Am J Kidney Dis* 2010; **56**: 219–246.
303. Olyaei AJ, de Mattos AM, Bennett WM. Nephrotoxicity of immunosuppressive drugs: new insight and preventive strategies. *Curr Opin Crit Care* 2001; **7**: 384–389.
304. Dawson KL, Patel SJ, Putney D et al. Cardioprotective medication use after renal transplantation. *Clin Transplant* 2010; **24**: E253–E256.
305. Hiremath S, Ferguson D, Doucette S et al. Renin angiotensin system blockade in kidney transplantation: a systematic review of the evidence. *Am J Transplant* 2007; **7**: 2350–2360.
306. Heinze G, Mitterbauer C, Regele H et al. Angiotensin-converting enzyme inhibitor or angiotensin II type 1 receptor antagonist therapy is associated with prolonged patient and graft survival after renal transplantation. *J Am Soc Nephrol* 2006; **17**: 889–899.
307. Opelz G, Zeier M, Laux G et al. No improvement of patient or graft survival in transplant recipients treated with angiotensin-converting enzyme inhibitors or angiotensin II type 1 receptor blockers: a collaborative transplant study report. *J Am Soc Nephrol* 2006; **17**: 3257–3262.
308. el-Agroudy AE, Hassan NA, Foda MA et al. Effect of angiotensin II receptor blocker on plasma levels of TGF-beta 1 and interstitial fibrosis in hypertensive kidney transplant patients. *Am J Nephrol* 2003; **23**: 300–306.
309. Philipp T, Martinez F, Geiger H et al. Candesartan improves blood pressure control and reduces proteinuria in renal transplant recipients: results from SECRET. *Nephrol Dial Transplant* 2010; **25**: 967–976.
310. Knoll GA, Cantarovich M, Cole E et al. The Canadian ACE-inhibitor trial to improve renal outcomes and patient survival in kidney transplantation—study design. *Nephrol Dial Transplant* 2008; **23**: 354–358.
311. Ardissino G, Vigano S, Testa S et al. No clear evidence of ACEi efficacy on the progression of chronic kidney disease in children with hypodysplastic nephropathy—report from the ItalKid Project database. *Nephrol Dial Transplant* 2007; **22**: 2525–2530.
312. Flynn JT, Mitsnefes M, Pierce C et al. Blood pressure in children with chronic kidney disease: a report from the Chronic Kidney Disease in Children study. *Hypertension* 2008; **52**: 631–637.
313. Mitsnefes M, Ho PL, McEnery PT. Hypertension and progression of chronic renal insufficiency in children: a report of the North American Pediatric Renal Transplant Cooperative Study (NAPRTCS). *J Am Soc Nephrol* 2003; **14**: 2618–2622.
314. Sinha R, Saad A, Marks SD. Prevalence and complications of chronic kidney disease in paediatric renal transplantation: a K/DOQI perspective. *Nephrol Dial Transplant* 2010; **25**: 1313–1320.
315. Wong H, Mylrea K, Feber J et al. Prevalence of complications in children with chronic kidney disease according to KDOQI. *Kidney Int* 2006; **70**: 585–590.
316. Chavers BM, Li S, Collins AJ et al. Cardiovascular disease in pediatric chronic dialysis patients. *Kidney Int* 2002; **62**: 648–653.
317. Parekh RS, Carroll CE, Wolfe RA et al. Cardiovascular mortality in children and young adults with end-stage kidney disease. *J Pediatr* 2002; **141**: 191–197.
318. Lilien MR, Groothoff JW. Cardiovascular disease in children with CKD or ESRD. *Nat Rev Nephrol* 2009; **5**: 229–235.
319. National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. *Pediatrics* 2004; **114**: 555–576.
320. Dionne JM, Turik MM, Hurley RM. Blood pressure abnormalities in children with chronic kidney disease. *Blood Press Monit* 2008; **13**: 205–209.
321. Gimbel C, Wuhl E, Arbeiter K et al. Superior consistency of ambulatory blood pressure monitoring in children: implications for clinical trials. *J Hypertens* 2009; **27**: 1568–1574.
322. Krmar RT, Berg UB. Blood pressure control in hypertensive pediatric renal transplants: role of repeated ABPM following transplantation. *Am J Hypertens* 2008; **21**: 1093–1099.
323. Wuhl E, Mehls O, Schaefer F. Antihypertensive and antiproteinuric efficacy of ramipril in children with chronic renal failure. *Kidney Int* 2004; **66**: 768–776.
324. Groothoff JW, Lilien MR, van de Kar NC et al. Cardiovascular disease as a late complication of end-stage renal disease in children. *Pediatr Nephrol* 2005; **20**: 374–379.
325. Mitsnefes M, Flynn J, Cohn S et al. Masked hypertension associates with left ventricular hypertrophy in children with CKD. *J Am Soc Nephrol* 2010; **21**: 137–144.
326. Sorof JM, Alexandrov AV, Cardwell G et al. Carotid artery intimal-medial thickness and left ventricular hypertrophy in children with elevated blood pressure. *Pediatrics* 2003; **111**: 61–66.
327. Muntner P, Arshad A, Morse SA et al. End-stage renal disease in young black males in a black-white population: longitudinal analysis of the Bogalusa Heart Study. *BMC Nephrol* 2009; **10**: 40.
328. Li S, Chen W, Srinivasan SR et al. Childhood blood pressure as a predictor of arterial stiffness in young adults: the bogalusa heart study. *Hypertension* 2004; **43**: 541–546.
329. Juonala M, Jarvinen MJ, Maki-Torkko N et al. Risk factors identified in childhood and decreased carotid artery elasticity in adulthood: the Cardiovascular Risk in Young Finns Study. *Circulation* 2005; **112**: 1486–1493.
330. Kavey RE, Allada V, Daniels SR et al. Cardiovascular risk reduction in high-risk pediatric patients: a scientific statement from the American Heart Association Expert Panel on Population and Prevention Science; the Councils on Cardiovascular Disease in the Young, Epidemiology and Prevention, Nutrition, Physical Activity and Metabolism, High Blood Pressure Research, Cardiovascular Nursing, and the Kidney in Heart Disease; and the Interdisciplinary Working Group on Quality of Care and Outcomes Research; endorsed by the American Academy of Pediatrics. *Circulation* 2006; **114**: 2710–2738.
331. Gonzalez Celedon C, Bitsori M, Tullus K. Progression of chronic renal failure in children with dysplastic kidneys. *Pediatr Nephrol* 2007; **22**: 1014–1020.
332. Wingen AM, Fabian-Bach C, Schaefer F et al. Randomised multicentre study of a low-protein diet on the progression of chronic renal failure in children. European Study Group of Nutritional Treatment of Chronic Renal Failure in Childhood. *Lancet* 1997; **349**: 1117–1123.
333. Silverstein DM, Leblanc P, Hempe JM et al. Tracking of blood pressure and its impact on graft function in pediatric renal transplant patients. *Pediatr Transplant* 2007; **11**: 860–867.
334. Mitsnefes MM, Omolojo A, McEnery PT. Short-term pediatric renal transplant survival: blood pressure and allograft function. *Pediatr Transplant* 2001; **5**: 160–165.
335. Seeman T, Pohl M, Misselwitz J et al. Angiotensin receptor blocker reduces proteinuria independently of blood pressure in children already treated with Angiotensin-converting enzyme inhibitors. *Kidney Blood Press Res* 2009; **32**: 440–444.
336. Furth SL, Flynn JT, Pierce CB et al. Lower systolic BP associated with slower CKD progression in the CKD study. *J Am Soc Nephrol* 2010; **21**: 551A.
337. Lurbe E, Cifkova R, Cruickshank JK et al. Management of high blood pressure in children and adolescents: recommendations of the European Society of Hypertension. *J Hypertens* 2009; **27**: 1719–1742.

338. Tullus K. Safety concerns of angiotensin II receptor blockers in preschool children. *Arch Dis Child* 2011; **96**: 881–882.
339. Simonetti GD, Santoro L, Ferrarini A et al. Systemic hypertension and proteinuria in childhood chronic renal parenchymal disease: role of antihypertensive drug management. *Paediatr Drugs* 2007; **9**: 413–418.
340. Hadtstein C, Schaefer F. Hypertension in children with chronic kidney disease: pathophysiology and management. *Pediatr Nephrol* 2008; **23**: 363–371.
341. Hogg RJ, Delucchi A, Sakihara G et al. A multicenter study of the pharmacokinetics of lisinopril in pediatric patients with hypertension. *Pediatr Nephrol* 2007; **22**: 695–701.
342. Li D, Xing H, Hao K et al. Hypertensive patients from two rural Chinese counties respond differently to benazepril: the Anhui Hypertension Health Care Study. *Ann Epidemiol* 2004; **14**: 123–128.
343. Soffer B, Zhang Z, Miller K et al. A double-blind, placebo-controlled, dose-response study of the effectiveness and safety of lisinopril for children with hypertension. *Am J Hypertens* 2003; **16**: 795–800.
344. Wells T, Frame V, Soffer B et al. A double-blind, placebo-controlled, dose-response study of the effectiveness and safety of enalapril for children with hypertension. *J Clin Pharmacol* 2002; **42**: 870–880.
345. Wells T, Rippley R, Hogg R et al. The pharmacokinetics of enalapril in children and infants with hypertension. *J Clin Pharmacol* 2001; **41**: 1064–1074.
346. Ellis D, Moritz ML, Vats A et al. Antihypertensive and renoprotective efficacy and safety of losartan. A long-term study in children with renal disorders. *Am J Hypertens* 2004; **17**: 928–935.
347. Tanaka Y, Nagai M, Date T et al. Effects of bradykinin on cardiovascular remodeling in renovascular hypertensive rats. *Hypertens Res* 2004; **27**: 865–875.
348. Van Dyck M, Proesmans W. Renoprotection by ACE inhibitors after severe hemolytic uremic syndrome. *Pediatr Nephrol* 2004; **19**: 688–690.
349. Wong CS, Pierce CB, Cole SR et al. Association of proteinuria with race, cause of chronic kidney disease, and glomerular filtration rate in the chronic kidney disease in children study. *Clin J Am Soc Nephrol* 2009; **4**: 812–819.
350. Gartenmann AC, Fossali E, von Vigier RO et al. Better renoprotective effect of angiotensin II antagonist compared to dihydropyridine calcium channel blocker in childhood. *Kidney Int* 2003; **64**: 1450–1454.
351. White CT, Macpherson CF, Hurley RM et al. Antiproteinuric effects of enalapril and losartan: a pilot study. *Pediatr Nephrol* 2003; **18**: 1038–1043.
352. Lubrano R, Soscia F, Elli M et al. Renal and cardiovascular effects of angiotensin-converting enzyme inhibitor plus angiotensin II receptor antagonist therapy in children with proteinuria. *Pediatrics* 2006; **118**: e833–e838.
353. Mancia G, Laurent S, Agabiti-Rosei E et al. Reappraisal of European guidelines on hypertension management: a European Society of Hypertension Task Force document. *J Hypertens* 2009; **27**: 2121–2158.
354. World Health Organization. Definition of an older or elderly person. Health statistics and health information systems <http://www.who.int/healthinfo/survey/ageingdefnolder/en/index.html> (accessed 21 June 2012).
355. Gueyffier F, Bulpitt C, Boissel JP et al. Antihypertensive drugs in very old people: a subgroup meta-analysis of randomised controlled trials. INDANA Group. *Lancet* 1999; **353**: 793–796.
356. Nair R, Bell JM, Walker PD. Renal biopsy in patients aged 80 years and older. *Am J Kidney Dis* 2004; **44**: 618–626.
357. Vaupel JW, Carey JR, Christensen K et al. Biodemographic trajectories of longevity. *Science* 1998; **280**: 855–860.
358. Kithas PA, Supiano MA. Hypertension and chronic kidney disease in the elderly. *Adv Chronic Kidney Dis* 2010; **17**: 341–347.
359. Zhou XJ, Rakheja D, Yu X et al. The aging kidney. *Kidney Int* 2008; **74**: 710–720.
360. Coresh J, Selvin E, Stevens LA et al. Prevalence of chronic kidney disease in the United States. *JAMA* 2007; **298**: 2038–2047.
361. Coresh J, Wei GL, McQuillan G et al. Prevalence of high blood pressure and elevated serum creatinine level in the United States: findings from the third National Health and Nutrition Examination Survey (1988–1994). *Arch Intern Med* 2001; **161**: 1207–1216.
362. O'Hare AM, Bertenthal D, Covinsky KE et al. Mortality risk stratification in chronic kidney disease: one size for all ages? *J Am Soc Nephrol* 2006; **17**: 846–853.
363. Zhang L, Zhang P, Wang F et al. Prevalence and factors associated with CKD: a population study from Beijing. *Am J Kidney Dis* 2008; **51**: 373–384.
364. Chadban SJ, Briganti EM, Kerr PG et al. Prevalence of kidney damage in Australian adults: The AusDiab kidney study. *J Am Soc Nephrol* 2003; **14**: S131–S138.
365. Imai E, Horio M, Watanabe T et al. Prevalence of chronic kidney disease in the Japanese general population. *Clin Exp Nephrol* 2009; **13**: 621–630.
366. Collins AJ, Foley RN, Herzog C et al. United States Renal Data System 2008 Annual Data Report. *Am J Kidney Dis* 2009; **53**: S1–S374.
367. McDonald S, Excell L, Livingston Re. ANZDATA Registry Report 2008. Australian and New Zealand Dialysis and Transplant Registry. Adelaide, South Australia.
368. Byrne C, Steenkamp R, Castledine C et al. UK Renal Registry 12th Annual Report (December 2009): chapter 4: UK ESRD prevalent rates in 2008: national and centre-specific analyses. *Nephron Clin Pract* 2010; **115** (Suppl 1): c41–67.
369. Fischer MJ, O'Hare AM. Epidemiology of hypertension in the elderly with chronic kidney disease. *Adv Chronic Kidney Dis* 2010; **17**: 329–340.
370. Kalaitzidis R, Li S, Wang C et al. Hypertension in early-stage kidney disease: an update from the Kidney Early Evaluation Program (KEEP). *Am J Kidney Dis* 2009; **53**: S22–S31.
371. Rao MV, Qiu Y, Wang C et al. Hypertension and CKD: Kidney Early Evaluation Program (KEEP) and National Health and Nutrition Examination Survey (NHANES), 1999–2004. *Am J Kidney Dis* 2008; **51**: S30–S37.
372. Soliman EZ, Prineas RJ, Go AS et al. Chronic kidney disease and prevalent atrial fibrillation: the Chronic Renal Insufficiency Cohort (CRIC). *Am Heart J* 2010; **159**: 1102–1107.
373. London GM, Marchais SJ, Guerin AP et al. Arterial structure and function in end-stage renal disease. *Nephrol Dial Transplant* 2002; **17**: 1713–1724.
374. Young JH, Klag MJ, Muntner P et al. Blood pressure and decline in kidney function: findings from the Systolic Hypertension in the Elderly Program (SHEP). *J Am Soc Nephrol* 2002; **13**: 2776–2782.
375. Cameron JS, Macias-Nunez JF. Chronic renal failure in the elderly, In: Davison AM, Cameron JS, Grunfeld, J-P et al. (eds) *Oxford Textbook of Clinical Nephrology*. Oxford University Press, 2005.
376. Gomez Campdera FJ, Luno J, Garcia de Vinuesa S et al. Renal vascular disease in the elderly. *Kidney Int Suppl* 1998; **68**: S73–S77.
377. O'Hare AM, Kaufman JS, Covinsky KE et al. Current guidelines for using angiotensin-converting enzyme inhibitors and angiotensin II-receptor antagonists in chronic kidney disease: is the evidence base relevant to older adults? *Ann Intern Med* 2009; **150**: 717–724.
378. Turgut F, Balogun RA, Abdel-Rahman EM. Renin-angiotensin-aldosterone system blockade effects on the kidney in the elderly: benefits and limitations. *Clin J Am Soc Nephrol* 2010; **5**: 1330–1339.
379. Weiss JW, Thorp ML, O'Hare AM. Renin-angiotensin system blockade in older adults with chronic kidney disease: a review of the literature. *Curr Opin Nephrol Hypertens* 2010; **19**: 413–419.
380. Horio M, Imai E, Yasuda Y et al. Modification of the CKD epidemiology collaboration (CKD-EPI) equation for Japanese: accuracy and use for population estimates. *Am J Kidney Dis* 2010; **56**: 32–38.
381. Stevens LA, Schmid CH, Greene T et al. Comparative performance of the CKD Epidemiology Collaboration (CKD-EPI) and the Modification of Diet in Renal Disease (MDRD) Study equations for estimating GFR levels above 60 mL/min/1.73 m<sup>2</sup>. *Am J Kidney Dis* 2010; **56**: 486–495.
382. Nakamura T, Kanno Y, Takenaka T et al. An angiotensin receptor blocker reduces the risk of congestive heart failure in elderly hypertensive patients with renal insufficiency. *Hypertens Res* 2005; **28**: 415–423.
383. Dulin BR, Haas SJ, Abraham WT et al. Do elderly systolic heart failure patients benefit from beta blockers to the same extent as the non-elderly? Meta-analysis of >12,000 patients in large-scale clinical trials. *Am J Cardiol* 2005; **95**: 896–898.
384. Aymanns C, Keller F, Maus S et al. Review on pharmacokinetics and pharmacodynamics and the aging kidney. *Clin J Am Soc Nephrol* 2010; **5**: 314–327.
385. O'Hare AM. The management of older adults with a low eGFR: moving toward an individualized approach. *Am J Kidney Dis* 2009; **53**: 925–927.
386. Eriksen BO, Ingebrigtsen OC. The progression of chronic kidney disease: a 10-year population-based study of the effects of gender and age. *Kidney Int* 2006; **69**: 375–382.
387. Roderick PJ, Atkins RJ, Smeeth L et al. CKD and mortality risk in older people: a community-based population study in the United Kingdom. *Am J Kidney Dis* 2009; **53**: 950–960.
388. Fogari R, Zoppi A. Effect of antihypertensive agents on quality of life in the elderly. *Drugs Aging* 2004; **21**: 377–393.
389. Musini VM, Tejani AM, Bassett K et al. Pharmacotherapy for hypertension in the elderly. *Cochrane Database Syst Rev* 2009; CD000028.
390. Bejan-Angoulvant T, Saadatian-Elahi M, Wright JM et al. Treatment of hypertension in patients 80 years and older: the lower the better? A meta-analysis of randomized controlled trials. *J Hypertens* 2010; **28**: 1366–1372.

391. Bulpitt CJ, Beckett NS, Cooke J et al. Results of the pilot study for the Hypertension in the Very Elderly Trial. *J Hypertens* 2003; **21**: 2409–2417.
392. Gong L, Zhang W, Zhu Y et al. Shanghai trial of nifedipine in the elderly (STONE). *J Hypertens* 1996; **14**: 1237–1245.
393. JATOS Study Group. Principal results of the Japanese trial to assess optimal systolic blood pressure in elderly hypertensive patients (JATOS). *Hypertens Res* 2008; **31**: 2115–2127.
394. Ogihara T, Saruta T, Rakugi H et al. Target blood pressure for treatment of isolated systolic hypertension in the elderly: valsartan in elderly isolated systolic hypertension study. *Hypertension* 2010; **56**: 196–202.
395. Aronow WS, Fleg JL, Pepine CJ et al. ACCF/AHA 2011 expert consensus document on hypertension in the elderly: a report of the American College of Cardiology Foundation Task Force on Clinical Expert Consensus Documents developed in collaboration with the American Academy of Neurology, American Geriatrics Society, American Society for Preventive Cardiology, American Society of Hypertension, American Society of Nephrology, Association of Black Cardiologists, and European Society of Hypertension. *J Am Soc Hypertens* 2011; **5**: 259–352.
396. MacGregor MS, Taal MW. Renal Association Clinical Practice Guideline on detection, monitoring and management of patients with CKD. *Nephron Clin Pract* 2011; **118** (Suppl 1): c71–c100.
397. Moser M, Cushman WC, Ziegler MG. The treatment of hypertension in the elderly. *J Clin Hypertens (Greenwich)* 2008; **10**: 58–68.
398. Menon V, Katz R, Mukamal K et al. Alcohol consumption and kidney function decline in the elderly: alcohol and kidney disease. *Nephrol Dial Transplant* 2010; **25**: 3301–3307.
399. Soni RK, Weisbrod SD, Unruh ML. Health-related quality of life outcomes in chronic kidney disease. *Curr Opin Nephrol Hypertens* 2010; **19**: 153–159.
400. Anderson S, Halter JB, Hazzard WR et al. Prediction, progression, and outcomes of chronic kidney disease in older adults. *J Am Soc Nephrol* 2009; **20**: 1199–1209.
401. O'Brien E, Asmar R, Beilin L et al. Practice guidelines of the European Society of Hypertension for clinic, ambulatory and self blood pressure measurement. *J Hypertens* 2005; **23**: 697–701.
402. Akpolat T. Home sphygmomanometers: what should a nephrologist know? *J Nephrol* 2011; **24**: 300–306.
403. Parati G, Stergiou GS, Asmar R et al. European Society of Hypertension practice guidelines for home blood pressure monitoring. *J Hum Hypertens* 2010; **24**: 779–785.
404. Benetos A, Adamopoulos C, Bureau JM et al. Determinants of accelerated progression of arterial stiffness in normotensive subjects and in treated hypertensive subjects over a 6-year period. *Circulation* 2002; **105**: 1202–1207.
405. Mourad JJ, Pannier B, Blacher J et al. Creatinine clearance, pulse wave velocity, carotid compliance and essential hypertension. *Kidney Int* 2001; **59**: 1834–1841.
406. O'Brien E, Coats A, Owens P et al. Use and interpretation of ambulatory blood pressure monitoring: recommendations of the British hypertension society. *BMJ* 2000; **320**: 1128–1134.
407. Imai Y, Otsuka K, Kawano Y et al. Japanese society of hypertension (JSH) guidelines for self-monitoring of blood pressure at home. *Hypertens Res* 2003; **26**: 771–782.
408. Ernst ME, Bergus GR. Ambulatory blood pressure monitoring. *South Med J* 2003; **96**: 563–568.
409. Pickering TG, Shimbo D, Haas D. Ambulatory blood-pressure monitoring. *N Engl J Med* 2006; **354**: 2368–2374.
410. Protogerou AD, Safar ME, Iaria P et al. Diastolic blood pressure and mortality in the elderly with cardiovascular disease. *Hypertension* 2007; **50**: 172–180.
411. Bavry AA, Anderson RD, Gong Y et al. Outcomes Among hypertensive patients with concomitant peripheral and coronary artery disease: findings from the INternational VErapamil-SR/Trandolapril STudy. *Hypertension* 2010; **55**: 48–53.
412. Sleight P, Redon J, Verdecchia P et al. Prognostic value of blood pressure in patients with high vascular risk in the Ongoing Telmisartan Alone and in combination with Ramipril Global Endpoint Trial study. *J Hypertens* 2009; **27**: 1360–1369.
413. Kovacs CP, Trivedi BK, Kalantar-Zadeh K et al. Association of low blood pressure with increased mortality in patients with moderate to severe chronic kidney disease. *Nephrol Dial Transplant* 2006; **21**: 1257–1262.
414. Eijkelkamp WB, Zhang Z, Remuzzi G et al. Albuminuria is a target for renoprotective therapy independent from blood pressure in patients with type 2 diabetic nephropathy: post hoc analysis from the Reduction of Endpoints in NIDDM with the Angiotensin II Antagonist Losartan (RENAAL) trial. *J Am Soc Nephrol* 2007; **18**: 1540–1546.
415. Hellemons ME, Persson F, Bakker SJ et al. Initial angiotensin receptor blockade-induced decrease in albuminuria is associated with long-term renal outcome in type 2 diabetic patients with microalbuminuria: a post hoc analysis of the IRMA-2 trial. *Diabetes Care* 2011; **34**: 2078–2083.
416. Hou FF, Xie D, Zhang X et al. Renoprotection of Optimal Antiproteinuric Doses (ROAD) Study: a randomized controlled study of benazepril and losartan in chronic renal insufficiency. *J Am Soc Nephrol* 2007; **18**: 1889–1898.
417. Heeg JE, de Jong PE, van der Hem GK et al. Efficacy and variability of the antiproteinuric effect of ACE inhibition by lisinopril. *Kidney Int* 1989; **36**: 272–279.
418. Houlihan CA, Allen TJ, Baxter AL et al. A low-sodium diet potentiates the effects of losartan in type 2 diabetes. *Diabetes Care* 2002; **25**: 663–671.
419. Buter H, Hemmeler MH, Navis G et al. The blunting of the antiproteinuric efficacy of ACE inhibition by high sodium intake can be restored by hydrochlorothiazide. *Nephrol Dial Transplant* 1998; **13**: 1682–1685.
420. Burgess E, Muirhead N, Rene de Cotret P et al. Supramaximal dose of candesartan in proteinuric renal disease. *J Am Soc Nephrol* 2009; **20**: 893–900.
421. Shiigai T, Shichiri M. Late escape from the antiproteinuric effect of ace inhibitors in nondiabetic renal disease. *Am J Kidney Dis* 2001; **37**: 477–483.
422. Lemarie CA, Schiffrin EL. The angiotensin II type 2 receptor in cardiovascular disease. *J Renin Angiotensin Aldosterone Syst* 2010; **11**: 19–31.
423. Kunz R, Friedrich C, Wolbers M et al. Meta-analysis: effect of monotherapy and combination therapy with inhibitors of the renin angiotensin system on proteinuria in renal disease. *Ann Intern Med* 2008; **148**: 30–48.
424. Navaneethan SD, Nigwekar SU, Sehgal AR et al. Aldosterone antagonists for preventing the progression of chronic kidney disease: a systematic review and meta-analysis. *Clin J Am Soc Nephrol* 2009; **4**: 542–551.
425. Lambers Heerspink HJ, de Zeeuw D. ONTARGET still OFF-TARGET? *Circulation* 2011; **123**: 1049–1051.
426. Parving HH, Brenner BM, McMurray JJ et al. Baseline characteristics in the Aliskiren Trial in Type 2 Diabetes Using Cardio-Renal Endpoints (ALTITUDE). *J Renin Angiotensin Aldosterone Syst* 2012; **13**: 387–393.
427. Novartis. Novartis announces termination of ALTITUDE study with Rasilez®/Tekturna® in high-risk patients with diabetes and renal impairment. <http://www.novartis.com/newsroom/media-releases/en/2011/1572562.shtml> (accessed on 20 December 2011).
428. Lambers Heerspink HJ, Perkovic V, de Zeeuw D. Is doubling of serum creatinine a valid clinical ‘hard’ endpoint in clinical nephrology trials? *Nephron Clin Pract* 2011; **119**: c195–c199; discussion c199.
429. Suissa S, Hutchinson T, Brophy JM et al. ACE-inhibitor use and the long-term risk of renal failure in diabetes. *Kidney Int* 2006; **69**: 913–919.
430. Onuigbo MA, Onuigbo NT. Late onset azotemia from RAAS blockade in CKD patients with normal renal arteries and no precipitating risk factors. *Ren Fail* 2008; **30**: 73–80.
431. Remuzzi G, Ruggenenti P, Perna A et al. Continuum of renoprotection with losartan at all stages of type 2 diabetic nephropathy: a post hoc analysis of the RENAAL trial results. *J Am Soc Nephrol* 2004; **15**: 3117–3125.
432. Li PK, Chow KM, Wong TY et al. Effects of an angiotensin-converting enzyme inhibitor on residual renal function in patients receiving peritoneal dialysis. A randomized, controlled study. *Ann Intern Med* 2003; **139**: 105–112.
433. Hall YN, Hsu CY, Iribarren C et al. The conundrum of increased burden of end-stage renal disease in Asians. *Kidney Int* 2005; **68**: 2310–2316.
434. Stewart JH, McCredie MR, Williams SM. Geographic, ethnic, age-related and temporal variation in the incidence of end-stage renal disease in Europe, Canada and the Asia-Pacific region, 1998–2002. *Nephrol Dial Transplant* 2006; **21**: 2178–2183.
435. Stewart JH, McCredie MR, Williams SM et al. The enigma of hypertensive ESRD: observations on incidence and trends in 18 European, Canadian, and Asian-Pacific populations, 1998 to 2002. *Am J Kidney Dis* 2006; **48**: 183–191.
436. Lloyd-Jones D, Adams R, Carnethon M et al. Heart disease and stroke statistics—2009 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation* 2009; **119**: e21–e181.
437. Divers J, Freedman BI. Susceptibility genes in common complex kidney disease. *Curr Opin Nephrol Hypertens* 2010; **19**: 79–84.

438. Freedman BI, Sedor JR. Hypertension-associated kidney disease: perhaps no more. *J Am Soc Nephrol* 2008; **19**: 2047–2051.
439. Flack JM, Sica DA, Bakris G et al. Management of high blood pressure in Blacks: an update of the International Society on Hypertension in Blacks consensus statement. *Hypertension* 2010; **56**: 780–800.
440. Genovese G, Friedman DJ, Ross MD et al. Association of trypanolytic ApoL1 variants with kidney disease in African Americans. *Science* 2010; **329**: 841–845.
441. Becker GJ, Wheeler DC. Blood pressure control in CKD patients: why do we fail to implement the guidelines? *Am J Kidney Dis* 2010; **55**: 415–418.
442. Schmitt KE, Edie CF, Laflam P et al. Adherence to antihypertensive agents and blood pressure control in chronic kidney disease. *Am J Nephrol* 2010; **32**: 541–548.
443. Keenan K, Hayen A, Neal BC et al. Long term monitoring in patients receiving treatment to lower blood pressure: analysis of data from placebo controlled randomised controlled trial. *BMJ* 2009; **338**: b1492.
444. Owens DK, Lohr KN, Atkins D et al. AHRQ series paper 5: grading the strength of a body of evidence when comparing medical interventions—agency for healthcare research and quality and the effective health-care program. *J Clin Epidemiol* 2010; **63**: 513–523.
445. Guyatt GH, Oxman AD, Kunz R et al. Going from evidence to recommendations. *BMJ* 2008; **336**: 1049–1051.
446. The AGREE Collaboration. Development and validation of an international appraisal instrument for assessing the quality of clinical practice guidelines: the AGREE project. *Qual Saf Health Care* 2003; **12**: 18–23.
447. Shiffman RN, Shekelle P, Overhage JM et al. Standardized reporting of clinical practice guidelines: a proposal from the Conference on Guideline Standardization. *Ann Intern Med* 2003; **139**: 493–498.
448. Institute of Medicine. *Finding What Works in Health Care: Standards for Systematic Reviews*. The National Academies Press: Washington, DC, 2011.
449. Institute of Medicine. *Clinical Practice Guidelines We Can Trust*. The National Academies Press: Washington, DC, 2011.
450. Siebenhofer A, Plank J, Horvath K et al. Angiotensin receptor blockers as anti-hypertensive treatment for patients with diabetes mellitus: meta-analysis of controlled double-blind randomized trials. *Diabet Med* 2004; **21**: 18–25.
451. Casas JP, Chua W, Loukogeorgakis S et al. Effect of inhibitors of the renin-angiotensin system and other antihypertensive drugs on renal outcomes: systematic review and meta-analysis. *Lancet* 2005; **366**: 2026–2033.
452. Ogihara T, Kikuchi K, Matsuoka H et al. The Japanese Society of Hypertension Guidelines for the Management of Hypertension (JSH 2009). *Hypertens Res* 2009; **32**: 3–107.
453. American Diabetes Association. Standards of medical care in diabetes—2012. *Diabetes Care* 2012; **35** (Suppl 1): S11–S63.