

Blood pressure targets – how low can you get?

Robert Walton for Evidently Cochrane (05 October 2018, updated 14 September 2020)

References:

National Institute for Health and Care Excellence. *Hypertension in adults: diagnosis and management*. London: National Institute for Health and Care Excellence; 2016. (NICE CG127). [Issued August 2011; updated November 2016]. Available from: <https://www.nice.org.uk/guidance/cg127>

NCT01198496. Recurrent stroke prevention clinical outcome study (RESPECTS) [Phase IV study for effect of intensive blood-pressure control using anti-hypertensive agents in essential hypertension with history of stroke]. clinicaltrials.gov/show/NCT01198496 (first received 28 August 2010).

NCT03015311. Strategy of blood pressure intervention in the elderly hypertensive patients (STEP) [Strategy of systolic blood pressure intervention in the elderly hypertensive patients: a prospective randomized open-label blinded-endpoint trial]. clinicaltrials.gov/show/NCT03015311 (first received 2 January 2017).

Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, Cooney MT, Corrà U, Cosyns B, Deaton C, Graham I, Hall MS, Hobbs FDR, Løchen ML, Löllgen H, Marques-Vidal P, Perk J, Prescott E, Redon J, Richter DJ, Sattar N, Smulders Y, Tiberi M, van der Worp HB, van Dis I, Verschuren WMM, Binno S; ESC Scientific Document Group. 2016 European Guidelines on cardiovascular disease prevention in clinical practice: The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts. Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). *Eur Heart J* 2016;37(29):2315-2381. doi: 10.1093/eurheartj/ehw106. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4986030/pdf/ehw106.pdf>

Rapsomaniki E, Timmis A, George J, Pujades-Rodriguez M, Shah AD, Denaxas S, White IR, Caulfield MJ, Deanfield JE, Smeeth L, Williams B, Hingorani A, Hemingway H. Blood pressure and incidence of twelve cardiovascular diseases: lifetime risks, healthy life-years lost, and age-specific associations in 1.25 million people. *Lancet* 2014;383(9932):1899-911. doi: 10.1016/S0140-6736(14)60685-1.

Saiz LC, Gorricho J, Garjón J, Celaya MC, Erviti J, Leache L. Blood pressure targets for the treatment of people with hypertension and cardiovascular disease. *Cochrane Database of Systematic Reviews* 2020, Issue 9. Art. No.: CD010315. DOI: 10.1002/14651858.CD010315.pub4. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010315.pub4/full>

Whelton PK, Carey RM, Aronow WS, Casey DE Jr, Collins KJ, Dennison Himmelfarb C, DePalma SM, Gidding S, Jamerson KA, Jones DW, MacLaughlin EJ, Muntner P, Ovbigele B, Smith SC Jr, Spencer CC, Stafford RS, Taler SJ, Thomas RJ, Williams KA Sr, Williamson JD, Wright JT Jr. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol* 2018;71(19):e127-e248. doi: 10.1016/j.jacc.2017.11.006. Erratum in: *J Am Coll Cardiol* 2018;71(19):2275-2279. Available from: <https://www.sciencedirect.com/science/article/pii/S0735109717415191?via%3Dihub>

White WB, Marfatia R, Schmidt J, Wakefield DB, Kaplan RF, Bohannon RW, Hall CB, Guttmann CR, Moscufo N, Fellows D, Wolfson L. Intensive versus standard ambulatory blood pressure lowering to prevent functional Decline in the Elderly (INFINITY). *Am Heart J* 2013;165(3):258-265.e1. doi: 10.1016/j.ahj.2012.11.008.

Zanchetti A, Liu L, Mancia G, Parati G, Grassi G, Stramba-Badiale M, Silani V, Bilo G, Corrao G, Zambon A, Scotti L, Zhang X, Wang H, Zhang Y, Zhang X, Guan TR, Berge E, Redon J, Narkiewicz K, Dominiczak A, Nilsson P, Viigimaa M, Laurent S, Agabiti-Rosei E, Wu Z, Zhu D, Rodicio JL, Ruilope LM, Martell-Claros N, Pinto F, Schmieder RE, Burnier M, Banach M, Cifkova R, Farsang C, Konradi A, Lazareva I, Sirenko Y, Dorobantu M, Postadzhiyan A, Accetto R, Jelakovic B, Lovic D, Manolis AJ, Stylianou P, Erdine S, Dicker D, Wei G, Xu C, Xie H, Coca A, O'Brien J, Ford G. Blood pressure and LDL-cholesterol targets for prevention of recurrent strokes and cognitive decline in the hypertensive patient: design of the European Society of Hypertension-Chinese Hypertension League Stroke in Hypertension Optimal Treatment randomized trial. *J Hypertens* 2014;32(9):1888-97. doi: 10.1097/HJH.000000000000254.