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## <u>STATISTICS / RISK</u> <u>REDUCTION</u>

## HYPERTENSION (HIGH BLOOD PRESSURE)

World Wide estimates of individuals with hypertension are 1 billion people currently.

In 2000, 972 million adults were estimated to have hypertension (high blood pressure) worldwide. By 2025, that number is estimated to rise to 1.56 billion. (The Lancet; 365: 9455 January 15, 2005:217-223)

73 million individuals in the United States had hypertension in 2005. (www.americanheart.org/statistics)

The risk of cardiovascular disease, beginning at 115/75 mm Hg doubles with each increment of 20/10 mm Hg.

(Source: Joint National Committee On Prevention, Detection, Evaluation And Treatment Of High Blood Pressure. http://www.nhlbi.nih.gov/guidelines/h ypertension/jnc7full.htm)

Every 10mm lower usual systolic blood pressure or a 5mm lower usual diastolic blood pressure would predict a 50-60% lower risk of stroke death and approximately 40-50% lower risk of death due to coronary artery disease or other vascular event.

(AHA Scientific Statement Circulation, 2007; 115:2761-2788 Clive Rosendorff M.D. et.al. http://circ.ahajournals.org/cgi/conten t/full/115/21/2761)

- Controlling blood pressure leads to 16-25% risk reduction for MI, stroke, and cardiovascular mortality (ASCOT, LIFE, MICROHOPE)
- Controlling blood pressure reduces stroke risk by 22-50% (UKPDS, LIFE, MICROHOPE)

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- Controlling blood pressure with Valsartan in the VALUE Trial, led to 19% fewer hospitalizations for heart failure, compared to the Amlodipine group.
- However failure to control blood pressure with Valsartan to the same level as Amlodipine in the first 6 months, led to increased risk of stroke, myocardial infarction, and death.

Therefore it is important to achieve blood pressure goal sooner than later.

(Stevo Julius et al. The Lancet; 19. June, 2004;363;9426;2022-2031 http://www.lancet.com/journals/lance

	t/article/PIIS0140-6736(04)16451- 9/fulltext)
	Controlling blood pressure with a combination of calcium channel blocker (Amlodipine) and ACE inhibitor (Perindopril) showed a 14- 26% risk reduction for myocardial infarction, angina, heart failure, stroke, peripheral arterial disease, new onset of renal insufficiency, and cardiovascular events and mortality compared to the regimen using beta- blocker (Atenolol) and thiazide diuretic.
	(ASCOT-BPLA Study: Björn Dahlöf et al. The Lancet; 366;9489;895-906 http://www.thelancet.com/journals/la ncet/article/PIIS0140-6736(05)67185- 1/fulltext)