

IS A REDUCED SBP TARGET WARRANTED?

The Cardio-Sis multicenter trial results demonstrate that a systolic blood pressure (SBP) target 10 mmHg lower than the standard goal of 140 mmHg reduces the likelihood of left ventricular hypertrophy and other clinical events in nondiabetic patients with hypertension. Paulo Verdecchia, the study's lead investigator, believes "...these findings should [be] an incentive to doctors and patients to be more aggressive in [treating] these patients, with the aim of achieving more regression of left ventricular hypertrophy and, hopefully, a lesser risk of cardiovascular events."

The researchers assessed 1,111 white patients, aged ≥ 55 years, who did not have diabetes but had an SBP of 150 mmHg or greater and at least one other cardiovascular risk factor. Patients received antihypertensive drug therapy, individually tailored for a target SBP of either <140 mmHg ($n=553$) or <130 mmHg ($n=558$). Participants attended follow-up appointments every 4 months for 2 years, which included electrocardiographic assessments of left ventricular hypertrophy at baseline and after 1 and 2 years.

Of the patients assigned to a target SBP <140 mmHg, 66.9% achieved the target and 27.3% achieved an SBP <130 mmHg at the 2-year follow-up. In this group, the event rate was 5.14 (95% CI 3.9–6.7) per 100 patient-years, and 17.1% had ventricular hypertrophy (the primary outcome of the study). By contrast, 78.7% of patients assigned to a target SBP <130 mmHg, achieved an SBP <140 mmHg and 72.2% achieved their target. This group of patients had an event rate of 2.54 (95% CI 1.75–3.72) per 100 patient-years, and 11.4% had left ventricular hypertrophy. The NIH SPRINT trial will investigate an even lower goal (<120 mmHg), notes Verdecchia.

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Original article Verdecchia, P. *et al.* Usual versus tight control of systolic blood pressure in non-diabetic patients with hypertension (Cardio-Sis): an open-label randomised trial. *Lancet* 374, 525–533 (2009).