

# Clinical trials of more intensive blood pressure lowering strategie

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## 1 hypertension

Trial	Treatments	Patients	Trials design and methods
<b>more intensive blood pressure lowering strategie vs less intensive blood pressure lowering strategie</b>			
<b>PAST-BP , 2015</b> n=NA	-	-	
<b>Wei , 2013</b> n=NA follow-up: 4 years (mean)	BP <=140/90 mm Hg versus BP <=150/90 mm Hg	Chinese hypertensive patients older than 70 years	Parallel groups China
<b>SPS3 , 2013</b> [NCT00059306.] n=NA follow-up:	less than 130 mm Hg versus 130-149 mm Hg	patients lived in North America, Latin America, and Spain and had recent, MRI-defined symptomatic lacunar infarctions	Parallel groups open-label
<b>HOMED-BP , 2012</b> n=NA follow-up: 5.3 years (median)	tight control (<125/<80 mm Hg (TC)) of HBP versus usual control (125-134/80-84 mm Hg (UC))	with an untreated systolic/diastolic HBP of 135-179/85-119 mm Hg	Parallel groups
<b>VANLISH , 2010</b> n=NA follow-up: 3.07 years (median)	strict blood pressure control (<140 mm Hg) versus moderate blood pressure control (>or =140 mm Hg to <150 mm Hg)	patients aged 70 to 84 years with isolated systolic hypertension (sitting blood pressure 160 to 199 mm Hg)	Parallel groups open-label
<b>JATOS , 2008</b> n=2212/2206 follow-up:	strict treatment to maintain systolic blood pressure below 140 mmHg versus mild treatment to maintain systolic blood pressure below 160 but at or above 140 mmHg	elderly hypertensive patients with essential hypertension (65-85 years old, with a pretreatment systolic blood pressure of above 160 mmHg)	Parallel groups open-label
<b>UKPDS-HDS , 1998</b> n=758/390 follow-up: 8.4 years	blood pressure of <150/85 mm Hg (with the use of an angiotensin converting enzyme inhibitor captopril or a beta blocker atenolol as main treatment) versus less tight control aiming at a blood pressure of <180/105 mm Hg	patients with type 2 diabetes	Parallel groups open-label UK

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
<b>SPRINT , 2015</b> [NCT01206062] n=4678/4683 follow-up:	target of 120 mm Hg versus target of 140 mm Hg	high-risk hypertensive adults 50 years of age and older with one additional cardiovascular risk factor or preexisting kidney disease	Parallel groups open
<b>Cardio-Sis , 2009</b> [NCT00421863] n=558/553 follow-up: 2 years	tighter control of systolic BP with a goal of <130 mm Hg versus usual control, with a goal of <140 mm Hg	nondiabetic patients with hypertension and with SBP of 150 mm Hg or higher confirmed at two different times	Parallel groups open Italy
<b>AASK , 2002</b> n=540/554 follow-up: (range 3-6.4y)	arterial pressure goal of 92 mm Hg or lower versus usual mean arterial pressure goal of 102 to 107 mm Hg/pj	African-Americans, with diastolic blood pressure higher than 94mmHg and a glomerular filtration rate between 20 and 65 ml/min per 1.73 m <sup>2</sup>	Parallel groups open USA
<b>ABCD target (H) , 2000</b> n=237/233 follow-up: 5 year	intensive treatment with a diastolic blood pressure goal of 75 mmHg versus moderate treatment with a diastolic blood pressure goal of 80-89 mmHg	diabetes patients with DBP $\geq$ 90 mmHg	Parallel groups open
<b>ABCD target (N) , 2002</b> n=237/243 follow-up:	intensive treatment (diastolic blood pressure decrease of 10 mmHg below baseline DBP) versus moderate treatment (diastolic blood pressure goal of 80-89 mmHg)	diabetes patients with diastolic blood pressure between 80 and 89mmHg	Parallel groups open
<b>HOT , 1994</b> n=12526/6264 follow-up: 3.8 y	less or equal than 85 mmHg, or less or equal than 80 mmHg versus less or equal than 90 mmHg	patients with diastolic blood pressure between 100 mmHg and 115 mmHg	Factorial plan open 26 countries
<b>REIN-2 , 2005</b> n=169/169 follow-up: 36 months	intensified (systolic/diastolic <130/80 mm Hg) blood-pressure control versus conventional (diastolic <90 mm Hg) blood-pressure control	patients with non-diabetic proteinuric nephropathies receiving background treatment with the ACE inhibitor ramipril	open
<b>MDRD , 1994</b> n=840 follow-up: 2.2 y	low target blood pressure (mean arterial pressure <92 mm Hg) versus usual target blood pressure (mean arterial pressure <107 mm Hg)	patients with predominantly nondiabetic kidney disease and a glomerular filtration rate of 13 to 55 mL/min per 1.73 m <sup>2</sup>	open

continued...

Trial	Treatments	Patients	Trials design and methods
<b>Toto , 1995</b> n=42/35 follow-up:	strict blood pressure control (DBP 65 to 80 mm Hg) versus usual blood pressure control (DBP 85 to 95 mm Hg)	non-diabetic patients (age 25 to 73) with long-standing hypertension (DBP $\geq$ 95 mm Hg), chronic renal insufficiency (GFR $\leq$ 70 ml/min/1.73 m <sup>2</sup> ) and a normal urine sediment	open
<b>ACCORD blood pressure , 2008</b> [NCT00000620] n=2362/2371 follow-up: 4.7y	intensive therapy, targeting a systolic pressure of less than 120 mm Hg versus standard therapy, targeting a systolic pressure of less than 140 mm Hg	patients with a median glycosylated hemoglobin level of 8.1% at high risk for cardiovascular events	Factorial plan open USA, Canada
<b>ESH-CHL-SHOT</b> <i>ongoing</i> [NCT01563731] n=NA	-	-	-

More details and results :

- anti hypertensive agents for hypertension in diabetic patients at <http://www.trialresultscenter.org/go-Q10>
- intensive blood pressure control for hypertension in all type of patients at <http://www.trialresultscenter.org/go-Q336>
- intensive blood pressure control for hypertension in diabetic patients at <http://www.trialresultscenter.org/go-Q343>
- intensive blood pressure control for hypertension in non diabetic patients at <http://www.trialresultscenter.org/go-Q344>
- intensive blood pressure control for hypertension in patients with chronic kidney disease at <http://www.trialresultscenter.org/go-Q495>

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Asayama K, Ohkubo T, Metoki H, Obara T, Inoue R, Kikuya M, Thijs L, Staessen JA, Imai Y Cardiovascular outcomes in the first trial of antihypertensive therapy guided by self-measured home blood pressure. Hypertens Res 2012;35:1102-10 [22895063] [10.1038/hr.2012.125](https://doi.org/10.1038/hr.2012.125)

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#### **ESH-CHL-SHOT, :**

ongoing trial NCT01563731

## 2 diabetes type 2

Trial	Treatments	Patients	Trials design and methods
<b>more intensive blood pressure lowering strategie vs less intensive blood pressure lowering strategie</b>			
ABCD target (H) , 2000 n=237/233 follow-up: 5 year	intensive treatment with a diastolic blood pressure goal of 75 mmHg versus moderate treatment with a diastolic blood pressure goal of 80-89 mmHg	diabetes patients with DBP >=90 mmHg	Parallel groups open

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
ABCD target (N) , 2002 n=237/243 follow-up:	intensive treatment (diastolic blood pressure decrease of 10 mmHg below baseline DBP) versus moderate treatment (diastolic blood pressure goal of 80-89 mmHg)	diabetes patients with diastolic blood pressure between 80 and 89mmHg	Parallel groups open

More details and results :

- anti hypertensive agents for diabetes type 2 in patients with hypertension at <http://www.trialresultscenter.org/go-Q83>

## References

### ABCD target (H) , 2000:

Estacio RO, Jeffers BW, Gifford N, Schrier RW Effect of blood pressure control on diabetic microvascular complications in patients with hypertension and type 2 diabetes. Diabetes Care 2000;23 Suppl 2:B54-64 [10860192]

### ABCD target (N) , 2002:

Schrier RW, Estacio RO, Esler A, Mehler P Effects of aggressive blood pressure control in normotensive type 2 diabetic patients on albuminuria, retinopathy and strokes. Kidney Int 2002;61:1086-97 [11849464] 10.1046/j.1523-1755.2002.00213.x

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