2023 European Society of Hypertension

HỘI NGHỊ KHOA HỌC THƯỜNG NIÊN NĂM 2024

Bài báo cáo

# MỘT SỐ LƯU Ý KHI ĐIỀU TRỊ TĂNG HUYẾT ÁP Ở NGƯỜI CAO TUỔI

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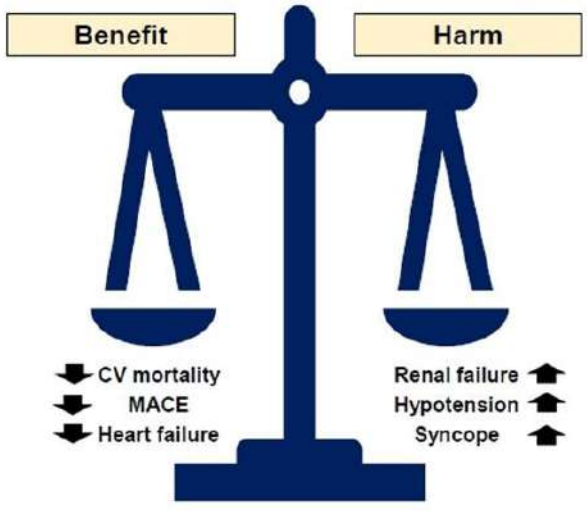
Nội dung bài trình bày được hỗ trợ bởi Novartis. Tài liệu tham khảo sẽ được cung cấp bởi báo cáo viên khi có yêu cầu.

## NGƯỜI CAO TUỔI: BIẾN CỐ DO BỆNH/ DO ĐIỀU TRỊ




**Uncertainty**

Frail patient
Quality of life
Patient with dementia
Cost-effectiveness
Cognitive impairment

Cardiovascular Prevention and Pharmacotherapy 2023;5(2):41-48. DOI: https://doi.org/10.36011/cpp.2023.5.e4

# NGƯỜI CAO TUỔI : BIẾN CỐ TIM MẠCH TĂNG THEO TUỔI

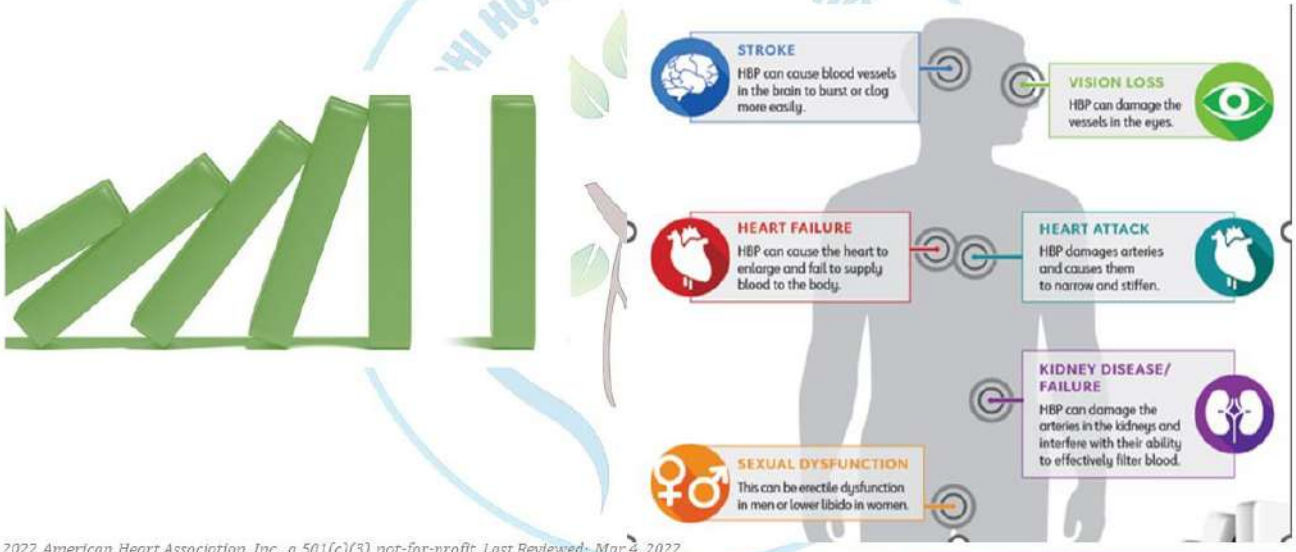
**Table 3.** Risk for Major Cardiovascular Events According to Age Group and Blood Pressure Category

| | Age <60 y | | | Age 60-79 y | | | Age ≥80 y | | |
|---|---|---|---|---|---|---|---|---|---|
| JNC 7 Stage | Events, % | Age- and Sex-Adjusted HR (95% CI) | Multivariate-Adjusted* HR (95% CI) | Events, % | Age- and Sex-Adjusted HR (95% CI) | Multivariate-Adjusted* HR (95% CI) | Events, % | Age- and Sex-Adjusted HR (95% CI) | Multivariate-Adjusted* HR (95% CI) |
| Major cardiovascular events | | | | | | | | | |
| Normal | 0.7 | 1.0 | 1.0 | 2.9 | 1.0 | 1.0 | 9.5 | 1.0 | 1.0 |
| Prehypertension | 1.5 | 1.7 (0.9-3.1) | 1.7 (0.9-3.1) | 4.9 | 1.5 (1.0-2.5) | 1.4 (0.9-2.2) | 19.8 | 2.0 (1.0-4.0) | 1.9 (0.9-3.9) |
| Stage 1 | 1.7 | 1.9 (0.8-4.2) | 1.8 (0.8-3.9) | 6.0 | 1.7 (1.1-2.9) | 1.5 (0.9-2.5) | 20.3 | 1.9 (1.0-4.0) | 1.8 (0.8-3.7) |
| Stage 2 or treated | 3.0 | 3.1 (1.6-5.8) | 2.9 (1.5-5.5) | 9.6 | 2.7 (1.8-4.2) | 2.1 (1.4-3.3) | 24.7 | 2.5 (1.3-5.0) | 2.4 (1.2-4.6) |

Lloyd-Jones DM, Evans JC, Levy D. Hypertension in adults across the age spectrum: current outcomes and control in the community. *JAMA*. 2005;294(4):466-472.



# NGƯỜI CAO TUỔI : HIỆU ỨNG DOMINO BIẾN CỐ TIM MẠCH




*2022 American Heart Association, Inc., a 501(c)(3) not-for-profit. Last Reviewed: Mar 4, 2022.*
http://www.heart.org/hbp.

# NGƯỜI CAO TUỔI: TỈ LỆ TĂNG HUYẾT ÁP

NHANES
2015–2018

77% người
THA ≥ 65 tuổi

National Health Insurance
Big Data 2002-2021

43.5% ≥ 65 tuổi

National Population
Health Survey 2020

74.9% 70-74 tuổi

Viện TM Quốc gia
2015

60% ở người > 60 tuổi
> 80% ở người > 80 t

Cardiovascular Prevention and Pharmacotherapy 2023;5(2):41-48. DOI: https://doi.org/10.36011/cpp.2023.5.e4

https://www.myheart.org.sg/heart-news/blood-pressure-for-elderly/#:~:text=In%20Singapore%2C%20the%20prevalence%20of,70%20to%2074%20years%3.

Clin Hypertens 30, 7 (2024). https://doi.org/10.1186/s40885-024-00262-z



# NGƯỜI CAO TUỔI:
# ESH 2023 -> THUỐC HẠ ÁP ĐƠN TRỊ



VIÊN PHỐI HỢP
SPC: Single-pill combination
FDC: Fix-dose combination

Prefer SPCs at any step

Start with Dual Combination Therapy in most patients

Start with Monotherapy only in selected patients:
- Low risk hypertension and BP <150/95 mmHg
- or high-normal and very high CV risk
- or frail patients and/or advanced age

**Step 1** Dual combination
ACEi or ARB + CCB or T/TL Diuretic[a]
Increase to full-dose if well tolerated
→ up to ~ 60% controlled[c]

**Step 2** Triple combination
ACEi or ARB + CCB + T/TL Diuretic
Increase to full-dose if well tolerated
→ up to ~ 90% controlled[c]

**Step 3** Add further drugs
True resistant Hypertension[d]
→ up to ~ 5%

Consider to consult hypertension specialist in patients who are still not controlled

BB[b]
Can be used as monotherapy or at any step of combination therapy

[a]Use of Diuretics:
-Consider transition to Loop Diuretic if eGFR is between 30 to 45 ml/min/1.73 m²
-If eGFR <30 ml/min/1.73 m² use Loop Diuretic
[b]BB should be used as guideline directed medical therapy in respective indications or considered in several other conditions
[c]Controlled below 140/90mmHg
[d]When SBP is ≥ 140mmHg or DBP is ≥ 90 mmHg provided that:
-maximum recommended and tolerated doses of a three-drug combination comprising a RAS blocker (either an ACEi or an ARB), a CCB and a Thiazide/Thiazide-like diuretic were used
-adequate BP control has been confirmed by ABPM or by HBPM if ABPM is not feasible
-various causes of pseudo-resistant hypertension (especially poor medication adherence) and secondary hypertension have been excluded

2023 ESH Guidelines for the management of arterial hypertension.

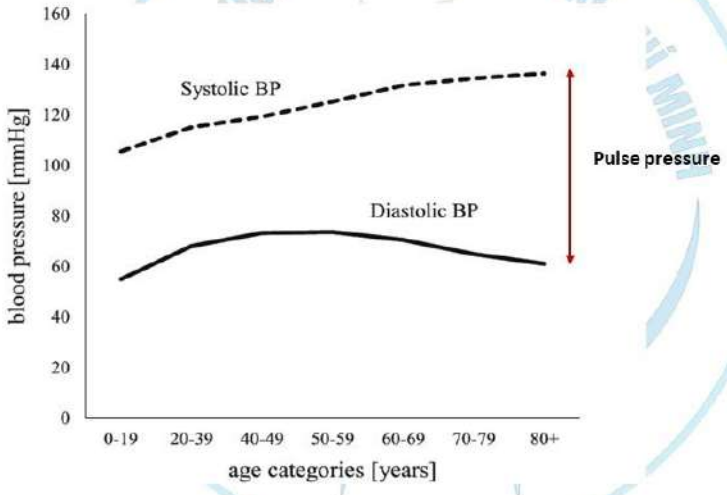
# NGƯỜI CAO TUỔI: ESH 2023 -> XÉT 2 NGƯỠNG TUỔI

| 65–79 tuổi | ≥ 80 tuổi |
|---|---|
| TĂNG HUYẾT ÁP TÂM THU<br><br>KHÔNG CẦN TRỢ GIÚP HOẠT ĐỘNG | YẾU, NHIỀU BỆNH<br><br>KHÁC NHAU NHIỀU VỀ MẶT CHỨC NĂNG |

Mancia, Kreutz et al. Journal of Hypertension 2023, 41:000–000



# NGƯỜI CAO TUỔI: TĂNG HA TÂM THU, GIẢM HA TÂM TRƯƠNG




(1) Pinto E. Blood pressure and ageing. Postgrad Med J. 2007;83(976):109-114.

**Mean SBP and DBP according to age.** The data was extracted from the National Health and Nutrition Examination Survey held in the USA between 2013 and 2014. Source: Centers for Disease Control and Prevention.

# NGƯỜI CAO TUỔI: THA TÂM THU LÀ DẠNG ƯU THẾ

**Pulse pressure (PP) > 65mmHg could be an independent risk factor for CV event & death[1]**

| | Age, y | SBP | DBP | BP Regulation Physiopathology | Main Risks | Better BP Risk Marker | Management |
|---|---|---|---|---|---|---|---|
| | 65–80 | ↑↑ | ↑ | High PR and AS | CV complications, cognitive decline | High SBP | Physical activities, assess TOD and global CVR, medical tt (SBP <140) |
| **Isolated Systolic Hypertension (ISH)** defined as SBP > 140 mmHg with DBP < 90 mmHg | 65–80 | ↑ | ↔↓ | High AS | CV complications, cognitive decline | High SBP, PP, low DBP | Physical activities, assess TOD and global CVR, medical tt (SBP <140) |
| | >80 | ↑↑ | ↔↓ | High AS | CV complications, falls | High PP, low DBP, OH | CGA, medical tt (SBP <150 or SBP <140 according functional status) |
| | >80 | ↔↓ | ↓↔ | High AS and comorbidities | CV complications, falls, loss of autonomy | Normal/low SBP, low DBP; normal/high PP, OH | CGA, deprescribing if SBP <130 or OH, fight polypharmacy |

AS indicates arterial stiffness; BP, blood pressure; CGA, Comprehensive Geriatric Assessment; CV, cardiovascular; CVR, cardiovascular risk; DBP, diastolic blood pressure; OH, orthostatic hypertension; PP, pulse pressure; PR, peripheral resistance; SBP, systolic blood pressure; TOD, target organ damage; and tt, treatment.

(1) Pinto E. Blood pressure and ageing. Postgrad Med J. 2007;83(976):109-114.
(2) Hypertension Management in Older and Frail Older Patients Circ Res. 2019;124:1045-1060.

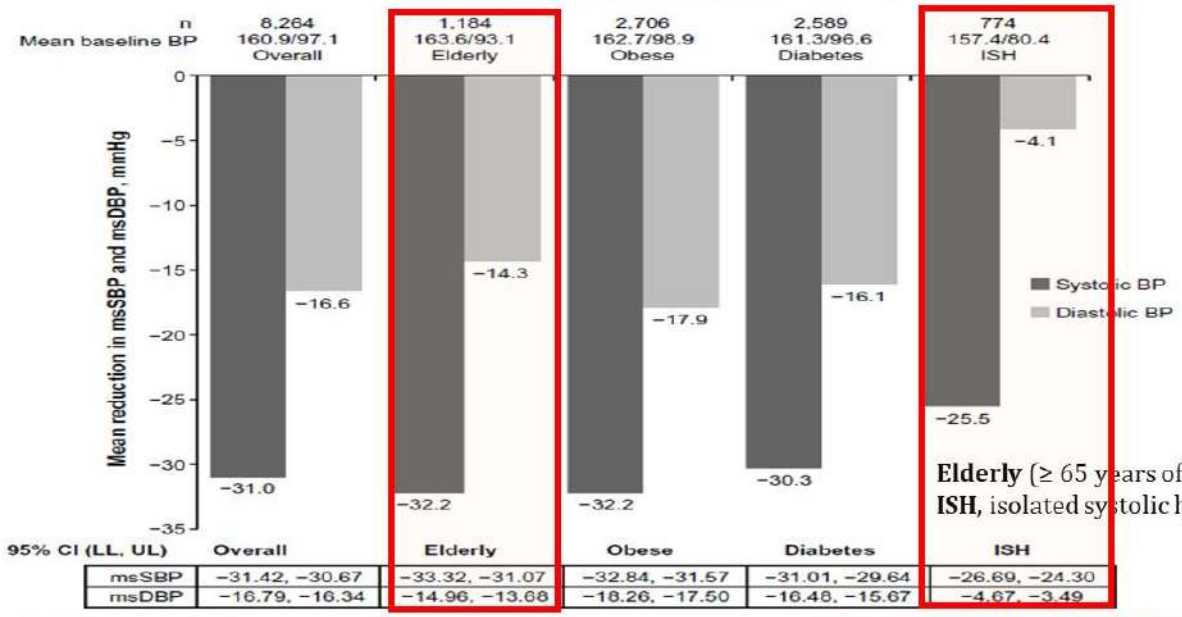


# NGƯỜI 65-79 TUỔI: HA ĐÍCH VÀ THUỐC

| Recommendations and statements | CoR | LoE |
|---|---|---|
| **Patients 65 to 79 years old** | | |
| The recommended office threshold for initiation of drug treatment is 140/90 mmHg. | I | A |
| The primary goal of treatment is to lower BP to <140/80mmHg. | I | A |
| However, lowering BP to below 130/80mmHg can be considered if treatment is well tolerated. | I | B |
| **Patients 65 to 79 years old with ISH** | | |
| The primary goal of treatment is to lower SBP in the 140 to 150 mmHg range. | I | A |
| However, a reduction of office SBP in the 130 to 139 mmHg range should be considered if well tolerated, albeit cautiously if DBP is already below 70 mmHg. | I | B |
| In dedicated RCTs in older patients with ISH, CCBs and Thiazide/Thiazide-like diuretics have been mainly used. However, all other major drug classes can be used, because of the frequent co-existence of compelling indications and the need of combination therapy to control SBP. | I | A |
| Initiation of treatment with a two-drug combination is also recommended in most older patients with ISH, who are not frail. | I | C |

**Mancia, Kreutz et al.** Journal of Hypertension 2023, 41:000–000

# NGƯỜI CAO TUỔI, THA TÂM THU: HIỆU QUẢ PHỐI HỢP AMLODIPINE/VALSARTAN




| 95% CI (LL, UL) | Overall | Elderly | Obese | Diabetes | ISH |
|---|---|---|---|---|---|
| msSBP | −31.42, −30.67 | −33.32, −31.07 | −32.84, −31.57 | −31.01, −29.64 | −26.69, −24.30 |
| msDBP | −16.79, −16.34 | −14.96, −13.68 | −18.26, −17.50 | −16.48, −15.67 | −4.67, −3.49 |

Assaad-Khalil et al. Vascular Health and Risk Management 2015:11 71–78



# NGƯỜI ≥ 80 TUỔI: HA ĐÍCH

| Recommendations and statements | CoR | LoE |
|---|---|---|
| **Patients ≥80 years old** | | |
| The recommended office SBP threshold for initiation of drug treatment is 160 mmHg. | I | B |
| However, a lower SBP threshold in the 140 to 159 mmHg range may be considered. | II | C |
| Office SBP should be lowered in the 140 to 150 mmHg range. | I | A |
| However, reduction of office SBP between 130 to 139 mmHg may be considered if well tolerated, albeit cautiously if DBP is already below 70 mmHg. | II | B |

**Mancia, Kreutz et al.** Journal of Hypertension 2023, 41:000–000

# NGƯỜI ≥ 80 TUỔI: SỰ AN TOÀN

| Additional recommendations[a] | | |
|---|---|---|
| In frail patients, initiation of drug treatment and the treatment target for office SBP and DBP should be individualized. | I | C |
| Initiation with monotherapy should be considered in patients with frailty and/or advanced age. | I | C |
| Do not aim to target office SBP below 120 mmHg or DBP below 70 mmHg during drug treatment. | III | C |
| However, in patients with low office DBP, i.e. below 70 mmHg, SBP should be still lowered, albeit cautiously, if on-treatment SBP is still well above target values | II | C |
| Reduction of treatment can be considered in patients age 80 years or older with a low SBP (<120mmHg) or in the presence of severe orthostatic hypotension or a high frailty level. | II | C |
| Withdrawal of BP-lowering drug treatment on the basis of age, even when patients attain an age of ≥ 80 years, is not recommended, if treatment is well tolerated. | III | B |
| In older patients, treatment may start with lower doses and uptitration should be slower. | II | C |
| The search for orthostatic hypotension in old patients should be systematic, even in the absence of symptoms. Back titration or discontinuation of BP lowering drugs should be considered in patients with orthostatic hypotension. | I | C |
| In old patients with hypertension there should always be an assessment of functional/autonomy status including cognitive function. | I | C |
| In patients with reduced functional/autonomy status and/or dementia treatment should be individualized. | I | C |

Mancia, Kreutz et al. Journal of Hypertension 2023, 41:000–000



# NGƯỜI ≥ 80 TUỔI: TÌNH TRẠNG CHỨC NĂNG VÀ TỰ ĐỘNG

TABLE 21. Adapting BP-lowering strategies in patients older than 80 years according to their functional/autonomy status (adapted from [38])

| Characteristics | Group 1<br>Fit | Group 2<br>Slowed but autonomous for most activities | Group 3<br>Severely dependent |
|---|---|---|---|
| Diagnosis | -ADL (Katz) ≥5/6<br>and<br>-absence of clinically significant dementia (MMSE≤20/30)<br>and<br>-routine walking activities | -Profile between Groups 1 and 3 | -ADL (Katz) ≤2/6<br>or<br>-severe dementia (MMSE ≤10/30)<br>or<br>chronic bedridden<br>or<br>-end of life |
| Therapeutic strategy | - Initiate drug treatment if office SBP ≥160 mmHg<br>- However, in most cases initiation of treatment in the 140 to 159 mmHg range maybe considered<br>- Office SBP should be lowered in the 140 to 150 mmHg range<br>- However, reduction of office SBP between 130 to 139 mmHg may be considered if well tolerated, albeit cautiously if DBP is already below 70 mmHg<br>- Consider to start with monotherapy | - Initiate drug treatment if office SBP ≥160mmHg<br>- However, a lower office SBP threshold in the 140 to 159 mmHg range may be considered<br>- Office SBP should be lowered in the 140 to 150 mmHg range<br>- However, reduction of office SBP between 130 to 139mmHg may be considered if well tolerated, albeit cautiously if office DBP is already below 70 mmHg<br>- Consider to start with monotherapy and titrate antihypertensive medication cautiously<br>- Consider treatment reduction if office SBP is very low (<120 mmHg) or in patients with orthostatic hypotension<br>- Make a more detailed evaluation of the functional status: SPPB (mobility), handgrip (muscular force), mini-GDS scale (depression), and MNA-SF (nutritional status) | - Priorize therapeutic strategies according to comorbidities and polypharmacy issues<br>- Consider treatment if office SBP ≥160 mmHg<br>- Target treatment of office SBP to a range of 140–150 mmHg<br>- Reduce treatment if office SBP is very low (<120 mmHg) or in patients with orthostatic hypotension<br>- Correct other factors and medications decreasing BP |

**ADL** [952]: Activities of Daily Living (Katz Index) scaled rated from 0 (completely dependent) to 6 (completely autonomous). This scale comprises 6 ADL: Bathing, Dressing, Toileting, Transferring, Feeding and Continence. For each ADL '0' means that the person is unable to do it without assistance, 0.5 need of some assistance, 1 no need of any assistance.
**MMSE** [955]: Mini mental status evaluation. Score 0-30, 30 best, 0-10 severe dementia, 11-20 moderate dementia.
**SPPB** [956]: Short Physical Performance Battery. Combined test including a balance test, a gait speed test and a 5-time chair stand test. Each one of the 3 tests is scored from 0 to 4, 4 best. The total score is from 0 to 12, 0-6 high risk of falls, 10-12 low risk of falls.
**Mini GDS** [957]: Geriatric depression scale. 4 questions score 0 to 4 (classically score 3-4 indicates a high risk of depression).
**MNA-SF** [958]: Mini nutritional assessment short form. Six items, score 0-14 (0-10 possible malnutrition, 14 best).

Mancia, Kreutz et al. Journal of Hypertension 2023, 41:000–000

# NGƯỜI CAO TUỔI: HẠ HUYẾT ÁP TƯ THẾ

AHA SCIENTIFIC STATEMENT

## Orthostatic Hypotension in Adults With Hypertension: A Scientific Statement From the American Heart Association

Stephen P. Juraschek, MD, PhD, Chair; Melissa M. Cortez, DO; John M. Flack, MD, MPH; Lama Ghazi, MD, PhD; Rose Anne Kenny, MD; Mahboob Rahman, MD; Telisa Spikes, RN, PhD; Cyndya A. Shibao, MD, MSCI; Italo Biaggioni, MD, Vice Chair; on behalf of the American Heart Association Council on Hypertension

- Orthostatic hypotension (OH) prevalence increases with age and with disease burden.
- OH is estimated to affect ≈10% of adults ≥60 years of age and increases to 16% to 30% among adults >65 years of age.
- Moreover, it affects 50% to 65% of institutionalized older adults and as many as 10% of adults with hypertension

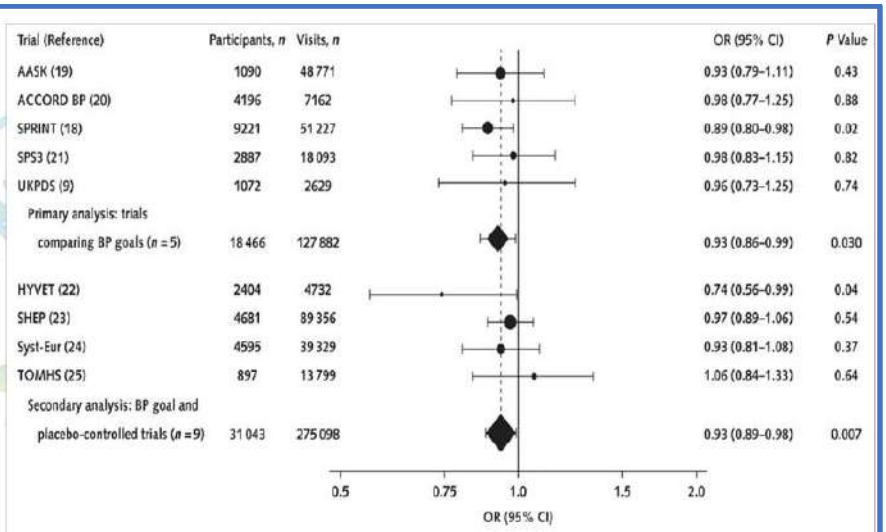
*Hypertension. 2024;81:e16–e30. DOI: 10.1161/HYP.0000000000000236*



# HẠ ÁP TƯ THẾ VÀ ĐIỀU TRỊ HẠ ÁP

**New meta-analysis[2]**

- 18 466 participants with 127 882 follow-up visits.
- Intensive BP treatment lowered risk for OH (odds ratio, 0.93 [95% CI, 0.86 to 0.99]).
- Effects did not differ by prerandomization OH (P for interaction = 0.80).



| Trial (Reference) | Participants, *n* | Visits, *n* | OR (95% CI) | *P* Value |
|---|---|---|---|---|
| AASK (19) | 1090 | 48 771 | 0.93 (0.79–1.11) | 0.43 |
| ACCORD BP (20) | 4196 | 7162 | 0.98 (0.77–1.25) | 0.88 |
| SPRINT (18) | 9221 | 51 227 | 0.89 (0.80–0.98) | 0.02 |
| SPS3 (21) | 2887 | 18 093 | 0.98 (0.83–1.15) | 0.82 |
| UKPDS (9) | 1072 | 2629 | 0.96 (0.73–1.25) | 0.74 |
| Primary analysis: trials comparing BP goals (*n* = 5) | 18 466 | 127 882 | 0.93 (0.86–0.99) | 0.030 |
| HYVET (22) | 2404 | 4732 | 0.74 (0.56–0.99) | 0.04 |
| SHEP (23) | 4681 | 89 356 | 0.97 (0.89–1.06) | 0.54 |
| Syst-Eur (24) | 4595 | 39 329 | 0.93 (0.81–1.08) | 0.37 |
| TOMHS (25) | 897 | 13 799 | 1.06 (0.84–1.33) | 0.64 |
| Secondary analysis: BP goal and placebo-controlled trials (*n* = 9) | 31 043 | 275 098 | 0.93 (0.89–0.98) | 0.007 |



Figure. Effects of BP treatment on risk for orthostatic hypotension, by study.

**Conclusion:** Intensive BP-lowering treatment decreases risk for OH. Before or in the setting of more intensive BP treatment, OH should not be viewed as a reason to avoid or de-escalate treatment for hypertension.

*(1) Hypertension. 2024;81:e16–e30. DOI: 10.1161/HYP.0000000000000236 (2) Ann Intern Med. 2021 January ; 174(1). 58–68. doi:10.7326/M20-4298.*

# HẠ ÁP TƯ THẾ VÀTHUỐC HẠ ÁP

- Drugs that impair sympathetic nervous system are associated with OH.
- Most pts with essential HT can be treated with recommended first-line antihypertensive agents without exacerbation of OH.
- Removing antihypertensives could worsen symptoms and risk for OH. Thus, removing first-line antihypertensive agents should not be an immediate response for patients with hypertension found to have OH.

Higher Risk

| Class | Examples | Mechanism |
|---|---|---|
| Alpha-1-blocker | Doxazosin, prazosin, terazosin | Adrenergic inhibition |
| Central alpha agonist | Clonidine, guanfacine | Adrenergic inhibition |
| Peripheral alpha agonists | Reserpine | Adrenergic inhibition |
| Vasodilating beta blockers | Carvedilol, labetalol, nebivolol | Adrenergic inhibition |
| Beta blockers | Atenolol, metoprolol, propranolol | Adrenergic inhibition |
| Direct vasodilators | Hydralazine, minoxidil | Vasodilation |
| Nitrates | Nitroglycerin, isosorbide dinitrate | Vasodilation |
| Phosphodiesterase inhibitors | Sildenafil, tadalafil | Vasodilation |
| Nondihydropyridine calcium channel blockers | Diltiazem, verapamil | Adrenergic inhibition |
| Loop diuretics | Furosemide, torsemide | Hypovolemia |
| Dihydropyridine calcium channel blockers (CCB)* | Amlodipine, nifedipine | Vasodilation |
| Thiazide/thiazide-like/thiazide-type diuretics* | Chorthalidone, hydrochlorothiazide, indapamide | Hypovolemia |
| Potassium sparing diuretics | Amiloride, triamterene | Hypovolemia |
| Aldosterone blockers | Eplerenone, sprinolactone | Hypovolemia |
| Angiotensin-converting enzyme inhibitors (ACEi)* | Lisinopril | RAAS Inhibition |
| Angiotensin receptor blockers (ARB)* | Losartan, valsartan | RAAS Inhibition |

Lower Risk

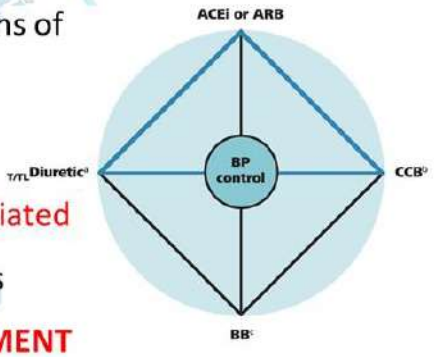
Figure 3. Relative ranking of hypertension classes according to risk of OH.

*Hypertension. 2024;81:e16–e30. DOI: 10.1161/HYP.0000000000000236*



# NGƯỜI CAO TUỔI: CHỌN THUỐC ĐƠN TRỊ

- No evidence of more pronounced long-term benefits or harms of any specific drug class
- Any of the five major drug classes can be used
- Older patients may be more susceptible to side effects associated with BBs, most importantly fatigue or sleep-related disorders
- **BBS SHOULD NOT BE A GENERAL FIRST CHOICE FOR TREATMENT**




Mancia, Kreutz et al. Journal of Hypertension 2023, 41:000–000

# NGUY CƠ NGƯNG THUỐC HẠ ÁP

**38 placebo-controlled RCTs (147 788 patients)**

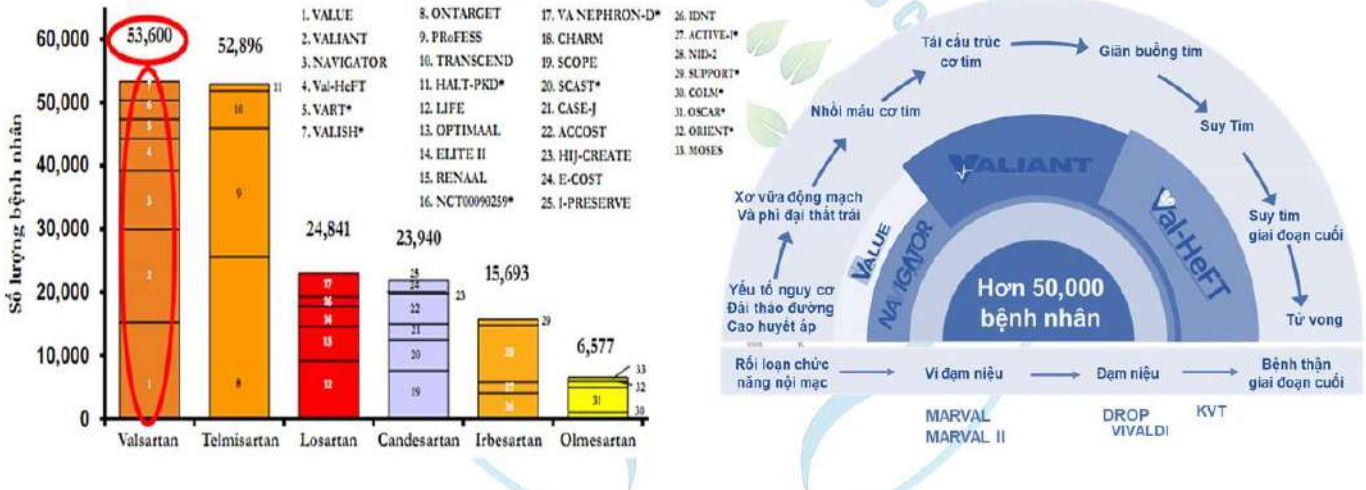
| Drug class | Trials | Standardized RR | P heterogeneity | Absolute risk change 1000 pts/5 years |
|---|---|---|---|---|
| D | 6 | 2.23 | <0.001 | 43 |
| BB | 4 | 2.88 | <0.001 | 55 |
| CA | 6 | 2.03 | 0.001 | 84 |
| ACEI | 10 | 2.78 | <0.001 | 258 |
| ARB | 12 | 1.13 | <0.001 | 18 |
| Central | 6 | 1.74 | 0.25 | 10 |

Adapted from **FIGURE 1.** Changes in relative and absolute risk of treatment discontinuations for adverse events attributed to treatment (Adverse events) in placebo-controlled randomized controlled trials. **ACEI**, angiotensin-converting enzyme inhibitors; **ARB**, angiotensin receptor blockers; **BB**, beta-blockers; **CA**, calcium antagonists; **Central**, centrally acting drugs; **D**, diuretics; **RR**, risk ratio.

*(1) Discontinuations for AEs attributed to different classes of antihypertensive drugs: meta-analyses of RCTs. Journal of Hypertension*



# VALSARTAN NHIỀU BẰNG CHỨNG BẢO VỆ CHUỖI BỆNH TIM MẠCH –THẬN




1. Julius et al. Lancet 2004; 363:2022–31; 2. Pfeffer et al. N Engl J Med 2003;349:1893–906; 3. Cohn et al. N Engl J Med 2001; 345:1667–75;
4. Califf et al. Am Heart J 2000;156:823–32; 5.. Viberti et al. Circulation 2002;106:672–8; 6. Karalliedde et al. Hypertension 2006;51:1617–23; 7. Hollenberg et al. J Hypertens 2007;

# VALSARTAN BẢO VỆ TIM MẠCH

**VALUE**
Valsartan Antihypertensive Long-term Use Evaluation trial

RCT, 15.245 BN tăng huyết áp

**- 23%**

Đái tháo đường mới khởi phát vs. amlodipine[1]

**VALIANT**
VALsartan In Acute myocardial iNfarcTion trial

RCT, 14.703 BN sau nhồi máu cơ tim

**- 25%**

Tử vong do mọi nguyên nhân vs. giả dược[4,5]

**Val-HeFT**
Valsartan Heart Failure Trial

RCT, 5.010 BN suy tim

**- 44%**

Tử vong + biến cố tim mạch vs. giả dược[2,3]

1. Julius S.et al. Lancet 2004; 363: 2022-31; 2. Maggioni AP, Anand I, Gottlieb SO, et al; on behalf of the Val-HeFT Investigators 3. Pfeffer MA, McMurray JJV, Velazquez EJ, et al.N Engl J Med. 2003;349(20):1893-1906.
4. Jugdutt BI. 2006;2(2):125-138.; 5. Cohn JN, Tognoni G;N Engl J Med. 2001;345(23):1667-1675.



# VALSARTAN BẢO VỆ THẬN

**DROP Trial**
The Diovan Reduction Of Proteinuria

RCT, 391 BN đái tháo đường

**-25%**

Mức bài tiết albumin niệu (UAER) vs. mức nền[1]

**MARVAL Trial**
The MicroAlbuminuria Reduction With VALsartan

RCT, 332 BN đái tháo đường

**LỢI ÍCH TRÊN THẬN ĐỘC LẬP VỚI HẠ ÁP**

Cải thiện UAER (-44%) hơn vs. amlodipine (-8%) dù hạ áp tương đương[2]

**VIVALDI Trial**
inVestigate the efficacy of telmisartan versus VALsartan in hypertensive type 2 Diabetic patients with overt nephropathy

RCT, 885 BN đái tháo đường

**-33 mg/24h**
vs. mức nền

Mức bài tiết protein niệu (UPER) tương đương telmisartan[3]

**KVT**
Kanagawa Valsartan Trial

RCT, 885 BN bệnh thận mạn tiến triển, tiền chạy thận

**-43%**

Biến cố trên thận (gấp đôi sCr hoặc tiến triển ESRD) vs. thường quy không ARB[4]

1. Journal of Hypertension 2007, 25:1921–1926 2. Viberti et al. Circulation 2002;106:672–8 3. Nephrol Dial Transplant (2008) 23: 3174–3183 4. Hypertension Research (2013)

# ĐIỀU TRỊ TĂNG HUYẾT ÁP Ở NGƯỜI CAO TUỔI

## ESH 2023

Tăng huyết áp tâm thu
Thường khởi trị phối hợp thuốc hạ áp, nếu không yếu

65-79 tuổi
HA đích < 130/80 mmHg nếu dung nạp
Phối hợp thuốc nếu không suy yếu, VD Valsartan/amlodipine

≥ 80 tuổi
HA đích 130- 139 mmHg nếu dung nạp. Nên đơn trị, VD Valsartan
Lưu ý hạ áp tư thế , Đánh giá tình trạng chức năng/ tự động

HỘI NGHỊ KHOA HỌC THƯỜNG NIÊN NĂM 2024 23

HỘI NGHỊ KHOA HỌC THƯỜNG NIÊN NĂM 2024 24