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Novosti u liječenju arterijske hipertenzije prema ažuriranim smjernicama

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2018 ESC/ESH Guidelines for the management of arterial hypertension

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Prevalencija i rizik

ESC Congress
Munich 2018

- 1,13 bill.
- -1,5 bill. (2025 g):30-45% odraslih
- HTA je glavni č.rizika za: ishemijsku srčanu bolest,
- cerebrovaskularnu bolest,
- srčanu insuficijenciju,
- KBB,
- kognitivne poremećaje,
- FA,
- perifernu arterijsku bolest
- retinopatiju

2018 ESC-ESH Guidelines for the Management of Arterial Hypertension

Classification of office BP and definitions of hypertension grade

Category	Systolic (mmHg)		Diastolic (mmHg)
Optimal	< 120	and	< 80
Normal	120–129	and/or	80–84
High normal	130–139	and/or	85–89
Grade 1 hypertension	140–159	and/or	90–99
Grade 2 hypertension	160–179	and/or	100–109
Grade 3 hypertension	≥ 180	and/or	≥ 110
Isolated systolic hypertension	≥ 140	and	< 90

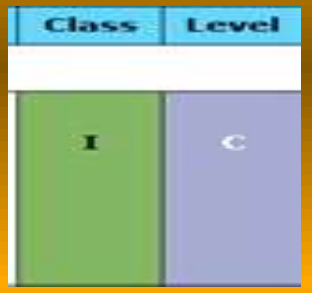
2018 ESC-ESH Guidelines for the Management of Arterial Hypertension

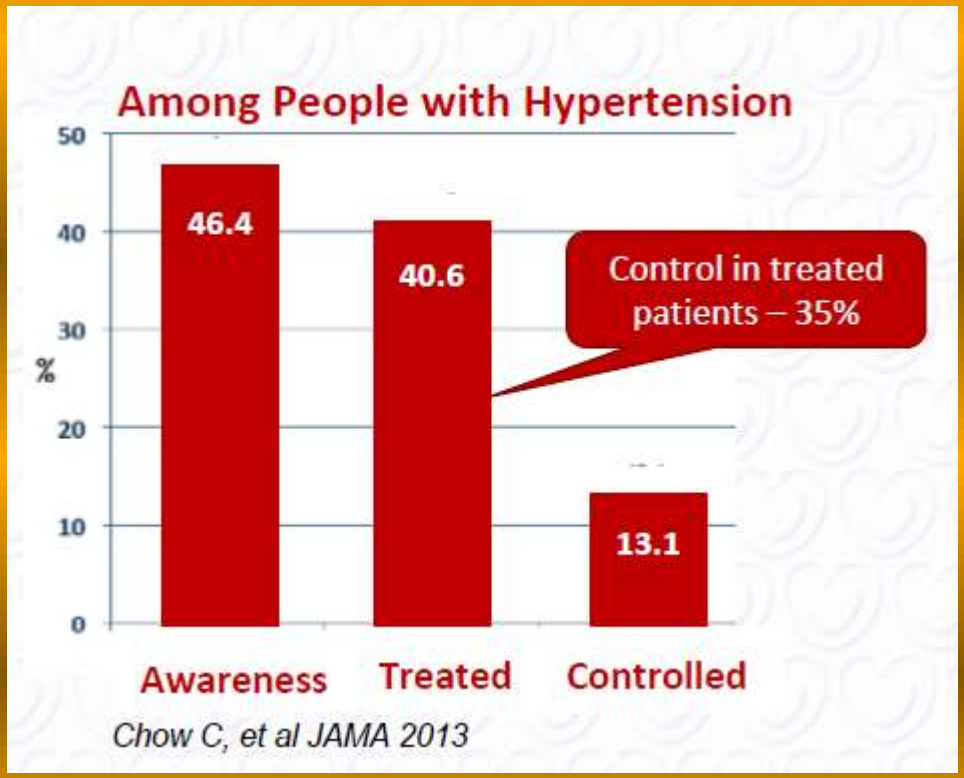
Definitions of hypertension according to office, ambulatory, and home BP levels

Category	Systolic (mmHg)		Diastolic (mmHg)
Office BP[a]	≥ 140	and/or	≥ 90
Ambulatory BP			
Daytime (or awake) mean	≥ 135	and/or	≥ 85
Night-time (or asleep) mean	≥ 120	and/or	≥ 70
24-h mean	≥ 130	and/or	≥ 80
Home BP mean	≥ 135	and/or	≥ 85

Dijagnoza HTA

- -treba biti utemeljena na ponavljanim mjerenjima tlaka
- / više od jednom/ izuzev teške hipertenzije
- (npr gr III i kod visoko rizičnih bolesnika)





TABLICA 1. Pogreške položaja ispitanika i njihov utjecaj na arterijski tlak.

Položaj ispitanika	Promjena arterijskoga tlaka
sjedenje bez naslanjanja leđa	↑dijastolički za 6 mm Hg
prekrižene noge	↑sistolički za 8 – 10 mm Hg
nepoduprta ruka	↑tlaka za 8 – 10 mm Hg
ruka iznad razine desnog atrija	↓lažno
ruka ispod razine desnog atrija	↑lažno
prebrzo ispuhivanje balona	↓sistolički lažno, dijastolički lažno ↑

TABLICA 2. Preporučene veličine orukvica prema Britanskom i Američkom društvu za hipertenziju.

Britansko društvo za hipertenziju	Američko društvo za hipertenziju
Standardna veličina orukavice za odrasle: 12 x 26 cm	Opseg nadlaktice 27 – 37: 13 x 30 cm
Pretile osobe: 12 x 40 cm	Opseg nadlaktice 35 – 44: 16 x 38 cm
Djeca i mršavi odrasli: 12 x 18 cm	Opseg nadlaktice 45 – 52: 20 x 42 cm

*navedene mjere orukvice odnose se na veličinu balona

TABLICA 3. Mjerenje arterijskoga tlaka u ordinaciji.

- prije početka mjerenja omogućiti ispitaniku da sjedi u miru oko 3 do 5 minuta u prostoriji na sobnoj temperaturi
- ispitanik mora sjediti s oba stopala na podu (ne s prekriženim nogama), naslonjen leđima na stolac i rukom oslonjenom na podlogu stola
- nadlaktica mora biti oslobođena od odjeće – rukav ne smije biti samo povučen prema gore („zafrknut"), nego skinut
- učiniti 2 mjerenja u sjedećem položaju s razmakom do 2 minute. Pristupiti i trećem mjerenju ako se prva dva znatno razlikuju (>20/10 mm Hg). Izračunati srednju vrijednost zadnjih dvaju mjerenja.
- u bolesnika s fibrilacijom atrija ili drugim nepravilnostima srčanog ritma učiniti više mjerenja, po mogućnosti koristiti se aneroidnim ili hibridnim uređajima uz auskultacijsku metodu
- koristiti se standardnom orukvicom (12 cm širokom i 35 cm dugom), ali imati u ordinaciji orukvicu za nadlaktice opsega većeg od 32 cm, kao i manje orukvice za mršavije osobe
- pripasati orukvicu na razini desnog atrija, bez obzira na položaj ispitanika
- pri primjeni auskultacijske metode koristiti se I. fazom Korotkofljevih šumova za sistolički tlak i V. fazom za dijastolički tlak
- pri prvom pregledu izmjeriti arterijski tlak nad objema rukama, a u slučaju razlike ubuduće mjeriti arterijski tlak na ruci s izmjerenim većim vrijednostima
- mjeriti arterijski tlak nakon 1 i 3 minute stajanja u starijih ispitanika, dijabetičara i kod drugih stanja pri kojima postoji sumnja ili mogu biti praćeni ortostatskom hipotenzijom
- mjeriti frekvenciju srca palpacijom radijalne arterije u trajanju od 30 sekundi ako se ne rabi uređaj koji automatski mjeri i frekvenciju

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Classification of hypertension stages according to BP levels, presence of CV risk factors, HMOD, or comorbidities

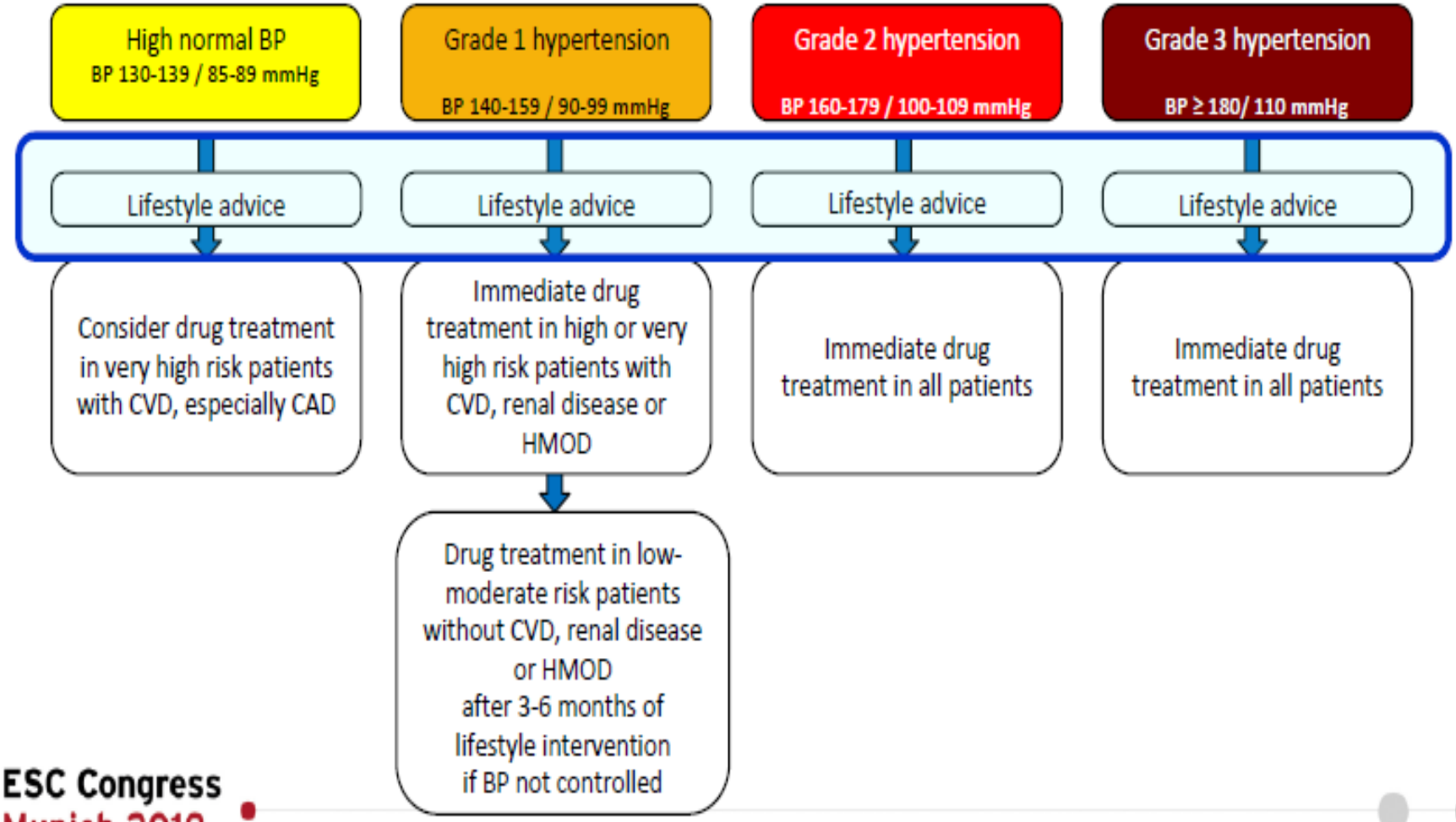
Hypertension disease staging	Other risk factors, HMOD, or disease	BP (mmHg) grading			
		High-normal SBP 130–139 DBP 85–89	Grade 1 SBP 140–159 DBP 90–99	Grade 2 SBP 160–179 DBP 100–109	Grade 3 SBP ≥ 180 DBP ≥ 110
Stage 1 (uncomplicated)	No other risk factors	Low risk	Low risk	Moderate risk	High risk
	1 or 2 risk factors	Low risk	Moderate risk	Moderate – high risk	High risk
	≥ 3 risk factors	Low –moderate risk	Moderate – high risk	High risk	High risk
Stage 2 (asymptomatic disease)	HMOD, CKD grade 3, or diabetes mellitus without organ damage	Moderate – high risk	High risk	High risk	High – very high risk
Stage 3 (established disease)	Established CVD, CKD grade ≥ 4, or diabetes mellitus with organ damage	Very high risk	Very high risk	Very high risk	Very high risk

CV Risk Influenced by:

- Severity of Hypertension
- Other risk factors (SCORE)
- Hypertension-Mediated Organ Damage (HMOD)
- Co-existing disease (CVD, CKD, Diabetes)

2018 ESC-ESH Guidelines for the Management of Arterial Hypertension

Initiation of BP-lowering treatment at different initial office BP levels



Terapijski ciljevi u ordinacijskoj kontroli hipertenzivnih bolesnika

- 1. sniziti tlak u svih hipertenzivnih bolesnika

1 A

- <140/90 mmHg
- Provjeriti da li se pacijent pridržava uputa o uzimanju lijekova
- Ciljne vrijednosti tlaka≤ 130/80 mmHg u većine bolesnika

Office Blood Pressure Treatment Target Ranges

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Recommendations	Class	Level
It is recommended that the first objective of treatment should be to lower BP to < 140/90 mmHg in all patients, and provided that the treatment is well tolerated, treated BP values should be targeted to 130/80 mmHg or lower, in most patients.	I	A
In patients < 65 years receiving BP-lowering drugs, it is recommended that SBP should be lowered to a BP range of 120 to < 130 mmHg in most patients.[a]	I	A
In older patients (aged ≥ 65 years) receiving BP-lowering drugs:		
• It is recommended that SBP should be targeted to a BP range of 130 to < 140 mmHg.	I	A
• Close monitoring of adverse effects is recommended.	I	C
• These BP targets are recommended for patients at any level of CV risk and in patients with and without established CVD.	I	A

[a]Less evidence is available for this target in low–moderate-risk patients.

www.escardio.org/guidelines

Williams B, Mancia G et al. Eur Heart J (2018); doi:10.1093/eurheartj/ehy339
Williams B, Mancia G et al. J Hypertens (2018); doi:10.1097/HJH0000000000001940

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Office BP treatment target range

Age group	Office SBP treatment target ranges (mmHg)					Office DBP treatment target ranges (mmHg)
	Hypertension	+ Diabetes	+ CKD	+ CAD	+ Stroke/TIA	
18–64 years	**Target to 130** *or lower if tolerated* Not < 120	**Target to 130** *or lower if tolerated* Not < 120	**Target to < 140 to 130** *if tolerated*	**Target to 130** *or lower if tolerated* Not < 120	**Target to 130** *or lower if tolerated* Not < 120	70-79
65–79 years	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	70-79
≥ 80 years	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	**Target to 130-139** *if tolerated*	70-79
Office DBP treatment target ranges (mmHg)	70-79	70-79	70-79	70-79	70-79	

Tretman HTA:**Promjene životnih navika**

- Antihipertenzivni tretman uključuje :
- intervencije usmjerene promjeni loših životnih navika
- **lijekove**
- Restrikcija soli, alkohola,
- zdrava prehrana,kontrola TT,
- tjelovježba, prestanak pušenja
- Ove intervencije mogu odgoditi potrebu uzimanja antihipertenzivnih lijekova
- Ili imaju komplementaran učinak antihipertenzivima

Adoption of lifestyle changes in patients with hypertension

Recommendations	Class	Level
Salt restriction to < 5 g per day is recommended	I	A
It is recommended to restrict alcohol consumption to: • Less than 14 units per week for men. • Less than 8 units per week for women.	I	A
It is recommended to avoid binge drinking.	III	C
Increased consumption of vegetables, fresh fruits, fish, nuts, unsaturated fatty acids (olive oil), low consumption of red meat, and consumption of low-fat dairy products are recommended.	I	A
Body-weight control is indicated to avoid obesity (BMI > 30 kg/m^2 or waist circumference > 102 cm in men and > 88 cm in women) and aim at a healthy BMI (about 20–25 kg/m^2) and waist circumference values (< 94 cm in men and < 80 cm in women) to reduce BP and CV risk.	I	A
Regular aerobic exercise (e.g. at least 30 min of moderate dynamic exercise on 5–7 days per week) is recommended.	I	A
Smoking cessation and supportive care and referral to smoking cessation programs are recommended.	I	B

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Uvođenje antihipertenziva

- **preporuka:** kod većine pacijenata liječenje **<u>početi sa dva, ne sa jednim antihipertenzivom!!</u>**
- Jedini izuzetak odnosi se na mali broj pacijenata koji ciljni tlak mogu postići
- sa jednim lijekom ili na staru populaciju

- <u>Strategija liječenja HTA jednim lijekom</u>
- Istraživanja su pokazala kako postoji direktna korelacija broja antihipertenziva i loše adherencije za lijek
- SPC(single pill combination) antihipertenzivi se preferiraju

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Follow-up: New concepts

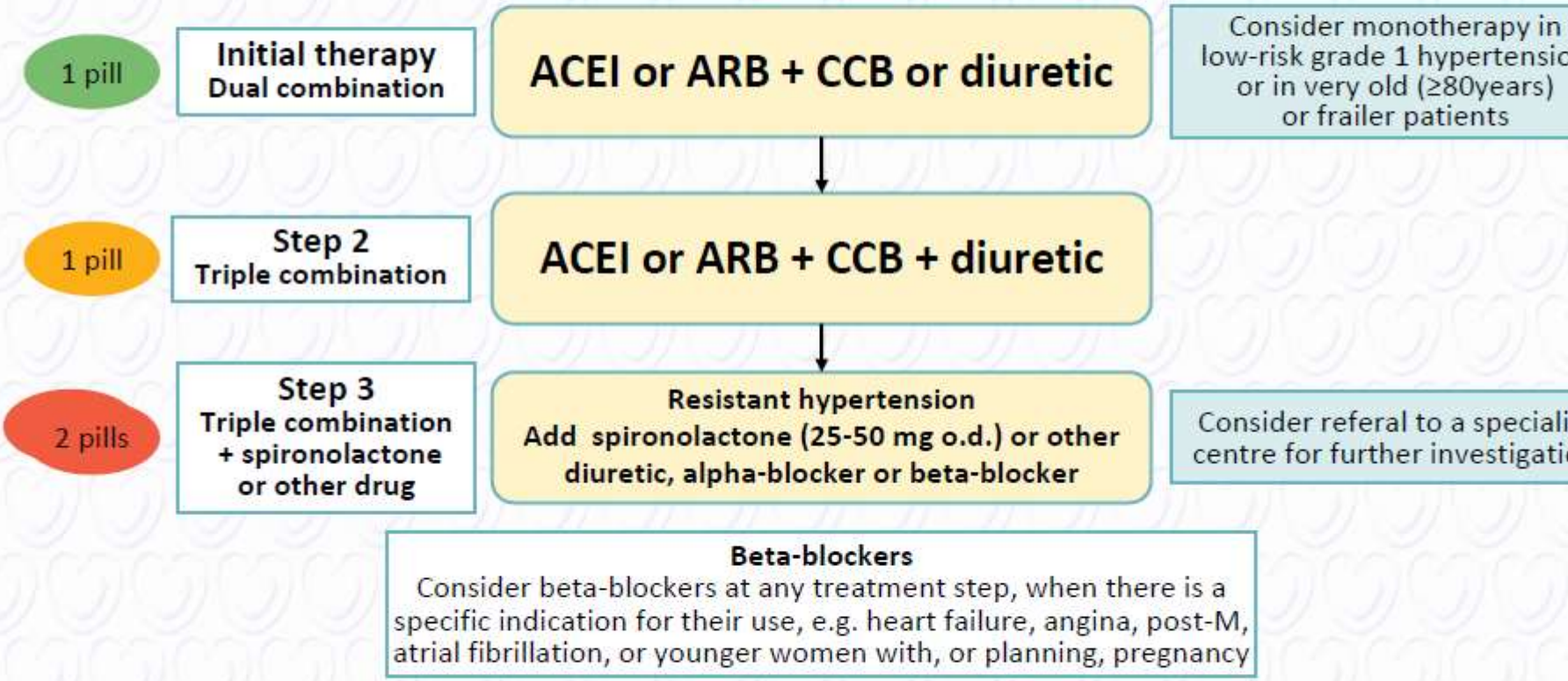
*** Detecting poor adherence to drug therapy**

A strong emphasis on the **importance of evaluating treatment adherence** as a major cause of poor BP control.

*** A key role for nurses, pharmacists in the longer-term management of hypertension**

The important role of nurses and pharmacists in the education, support, and follow-up of treated hypertensive patients is emphasized as part of the overall strategy to improve BP control.

Figure 4. Core drug-treatment strategy for uncomplicated hypertension. The core algorithm is also appropriate for most patients with HMOD, cerebrovascular disease, diabetes, or PAD



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European Heart Journal (2018) doi:10.1093/eurheartj/ehy3
European Journal of Hypertension (2018) doi:10.1097/HJH.0000000000019

First step combination treatment in some specific conditions

- Diabetes: RAS blocker+CCB or D (IA)
- CAD: BB or CCB+RAS blocker (IA)
- CKD: RAS blocker+ CCB or D (loop D)
- Cerebrovascular Disease:RAS Blocker+CCB or D(IA)
- AF: BB and/or nondihCCB (IIaB)
- Hf(r/p*EF):RAS blocker+BB,D+Antialdo(IA)(*IIaB)
- COPD: RAS blocker+CCB
- LEAD: RAS blocker+CCB or D (*BB may be considered)
- Blacks: D+CCB (IB)

Williams, Mancia et al., J Hypertens 2018 and Eur Heart J 2018, in press

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Hypertension in specific circumstances

- Management of hypertension emergencies
- Updated recommendations on the management of BP in acute stroke
- Updated recommendations on the management of hypertension in women and pregnancy
- Hypertension in different ethnic groups
- Hypertension and chronic obstructive pulmonary disease
- Hypertension and AF and other arrhythmias
- Oral anticoagulant use in hypertension
- Hypertension and sexual dysfunction
- Hypertension and cancer therapies
- Perioperative management of hypertension
- Glucose-lowering drugs and BP

Top-line Summary - New concepts

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Blood Pressure measurement

- Wider use of out-of-office BP measurement with ABPM and/or HBPM, especially HBPM, as an option to confirm the diagnosis of hypertension, detect white coat and masked hypertension and monitor BP control.

Less conservative treatment of hypertension - especially in older and very old patients

- Lower BP thresholds and treatment targets for older patients – with emphasis on considerations of biological rather than chronological age (i.e. the importance of frailty, independence, and the tolerability of treatment)

New target ranges for Blood Pressure in treated patients

- Target BP ranges for treated patients to better identify the recommended BP target and the lower boundary of safety for treated BP, according to a patient's age and specific comorbidities.

Top-line Summary - New concepts

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A Single Pill treatment strategy to improve BP control

- **Preferred use of two-drug combination** therapy for the initial treatment of most people with hypertension.
- **A single-pill treatment strategy for hypertension** with the preferred use of single pill combination therapy for most patients.
- **Simplified drug-treatment algorithms** with the preferred use of an ACE inhibitor or ARB combined with a CCB or/and a thiazide/thiazide-like diuretic as the core treatment strategy for most patients, with beta-blockers used for specific indications.

Detecting poor adherence to drug therapy

- Strong emphasis on the importance of evaluating treatment adherence as a major cause of poor BP control.

Key role for nurses, pharmacists in the longer-term management of hypertension

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Interventions that may improve drug adherence in hypertension

- Physician level
- Patient level
- Drug treatment level
- Health system level