



Giovanni Vincenzo Gaudio

ASST VALLE OLONA

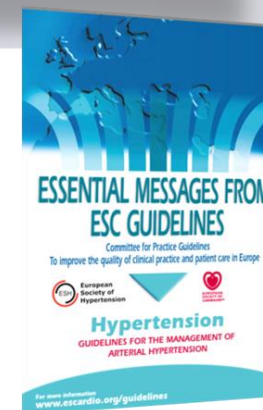
SONDAGGIO APERTO SU BENEFICI E LIMITI DELLA

- MONOTERAPIA
- TERAPIA DI ASSOCIAZIONE
- POLYPILL

2013 ESH/ESC Guidelines for the management of arterial hypertension

Diagnostic evaluation

1. Total cardiovascular risk stratification
2. Diagnostic evaluation
 - 2a. Blood pressure measurement
 - Office blood pressure
 - Out-of-office Bp
 - 2b. Cardiovascular risk factors
 - 2c. Search for asymptomatic organ damage and symptomatic disease
 - 2d. Search for secondary hypertension.
- 3 - Treatment approach
 - 3a. Lifestyle changes
 - 3b. Initiation of antihypertensive drug treatment.
 - 3c. Blood pressure goals
 - 3d. Choice of antihypertensive drugs



2013 ESH/ESC Guidelines for the management of arterial hypertension

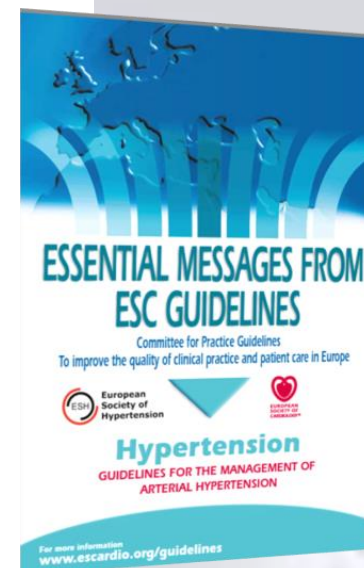
Diagnostic evaluation

4 - Treatment strategies in special conditions

- 4a. White-coat and masked hypertension
- 4b. Elderly
- 4c. pregnancy
- 4d. Diabetes
- 4e. Nephropathy
- 4f. Cerebrovascular disease
- 4g. Heart disease
- 4h. Resistant hypertension

5 - Treatment of associated risk factors

6 - Follow-up and improvement of blood pressure control



Definitions of hypertension by office and out-of-office BP levels

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

BP, blood pressure.

Definitions according to office BP and out-of-office BP (daytime ambulatory or home BP)

?? SISTEMA INTEGRATO

		Office BP (mmHg)	
		SBP <140 and DBP <90	SBP ≥140 or DBP ≥90
Daytime ABP or home BP (mmHg)	SBP <135 and DBP <85	True normotension (NT)	White-coat hypertension (WCHT)
	SBP ≥135 or DBP ≥85	Masked hypertension (MHT)	Sustained hypertension (SHT)



Italian Council
of
Cardiology
Practice

Eur Heart J, 2013; 34: 2159-2219
J Hypertens, 2013; 31: 1281-1357
Blood Pressure, 2013: 193-278



European
Society of
Hypertension



Treatment for masked and white-coat hypertension

Una nuova metanalisi su ipertensione da camice bianco ed eventi cardiovascolari...

Fonte: Briasoulis A. J Hypertens. 2016 Jan 5. [Epub ahead of print].

L'ipertensione da camice bianco è una condizione frequente in particolare negli adolescenti e negli anziani e il suo significato clinico è ancora argomento di dibattito tra gli esperti. In quest' analisi sono stati inclusi da database elettronici (MEDLINE, PUBMED, EMBASE e Cochrane) tutti gli studi clinici prospettici che hanno confrontato gli effetti dell'ipertensione da camice bianco, valutata con rilevando la pressione arteriosa clinica, domiciliare o monitorata nelle 24 ore, rispetto alla condizione di normotensione sugli eventi cardiovascolari e la mortalità cardiovascolare totale. Sono stati inclusi 14 studi con un totale di oltre 2.9700 partecipanti (13.7538 normotesi, 4.806 ipertesi da camice bianco e 10.7756 ipertesi stabili), con età media di 59 anni ed un follow-up di 8 anni. Gli ipertesi da camice bianco hanno mostrato una maggiore incidenza di morbidità e mortalità cardiovascolare, ma non di mortalità totale rispetto ai normotesi. Tuttavia, gli ipertesi da camice bianco mostravano mortalità e morbidità cardiovascolare e mortalità totale molto minore rispetto ai pazienti con ipertensione arteriosa stabile.

Schema di Intervento farmacologico Sulla stratificazione del rischio CV

MONOTERAPIA

TERAPIA DI COMBINAZIONE

MONOTERAPIA	Other risk factors, asymptomatic organ damage or disease	Blood Pressure (mmHg)			
		High normal SBP 130–139 or DBP 85–89	Grade 1 HT SBP 140–159 or DBP 90–99	Grade 2 HT SBP 160–179 or DBP 100–109	Grade 3 HT SBP ≥180 or DBP ≥110
TERAPIA DI COMBINAZIONE	No other RF		Low risk	Moderate risk	High risk
	1–2 RF	Low risk	Moderate risk	Moderate to high risk	High risk
	≥3 RF	Low to Moderate risk	Moderate to high risk	High Risk	High risk
	OD, CKD stage 3 or diabetes	Moderate to high risk	High risk	High risk	High to very high risk
	Symptomatic CVD, CKD stage ≥4 or diabetes with OD/RFs	Very high risk	Very high risk	Very high risk	Very high risk

BP = blood pressure; CKD = chronic kidney disease; CV = cardiovascular; CVD = cardiovascular disease; DBP = diastolic blood pressure; HT = hypertension; OD = organ damage; RF = risk factor; SBP = systolic blood pressure.

Predictive value, availability, reproducibility and cost–effectiveness of some markers of organ damage

Marker	CV predictive value	Availability	Reproducibility	Cost effectiveness
Electrocardiography	+++	++++	++++	++++
Echocardiography, plus Doppler	++++	+++	+++	+++
Estimated glomerular filtration rate	+++	++++	++++	++++
Microalbuminuria	+++	++++	++	++++
Carotid intima–media thickness and plaque	+++	+++	+++	+++
Arterial stiffness (pulse wave velocity)	+++	++	+++	+++
Ankle–brachial index	+++	+++	+++	+++
Fundoscopy	+++	++++	++	+++
<i>Additional measurements</i>				
Coronary calcium score	++	+	+++	+
Endothelial dysfunction	++	+	+	+
Cerebral lacunae/white matter lesions	++	+	+++	+
Cardiac magnetic resonance	++	+	+++	++

CV, cardiovascular. Scores are from + to ++++.



Home	Chi siamo	Congressi	Linee guida	CFC Action	CFC Farmacisti	Cardionews
CFC Expert Opinion	Convenzioni	Focus on	Gruppi di studio	Partner CFC	Rassegna Stampa	

Sede legale: c/o SUMMEET Via Paolo Maspero, 5 21100 Varese - tel 0332 231416 fax 0332 317748
www.summeet.it - email info@summeet.it



Area riservata ai soci

[Entra](#)



**Relazioni e foto
del
Congresso Nazionale
CFC - Varese
21-22 giugno 2014**



Tesseramento 2016-2017
E' in corso il ritesteramento
e l'aggiornamento del DataBase
dei Soci CFC per il biennio
2016-2017

Quale ritieni oggi sia il
sistema più idoneo a
contrastare nella
popolazione l'epidemia
delle malattie
cardiovascolari??

- ☐ Lo studio medico
- ☐ Scuole
- ☐ Ambito lavoro
- ☐ La TV
- ☐ Internet
- ☐ Carta stampata

[Vota](#)

[Guarda i risultati](#)

[Altri Sondaggi](#)

[Partecipa al sondaggio
CFC sull'ipertensione
arteriosa](#)

Il Collegio Federativo di Cardiologia (CFC) è nato con l'intento di aggregare, informare ed aggiornare tutti i medici di diversa estrazione professionale (medici di famiglia, ospedalieri, universitari, ambulatoriali, liberi professionisti) e culturale (cardiologi, internisti, geriatri, diabetologi etc...) che si interessano di cardiologia pratica.

Ha sezioni regionali, gruppi di studio, progetti di studio, un sito web, una newsletter trimestrale chiamata *Cardionews*.

A livello nazionale il CFC organizza congressi, seminari, corsi di Basic Life Support (BLS). Per diversi anni alcuni anche in video teleconferenza mettendo a confronto medici da diverse sedi italiane. Organizza anche corsi ECM e partecipa attivamente alle campagne istituzionali di informazione sanitaria. L'impegno del CFC è stato premiato a livello europeo con l'iscrizione al Council for Cardiology Practice (CCP) della Società Europea di Cardiologia e la partecipazione a tutte le sue iniziative: newsletter, e-journal, linee guida, convegni tra cui l'European Meeting of Cardiology Practice (vedi www.escardio.org).



**Foto apertura
sede del Piemonte**



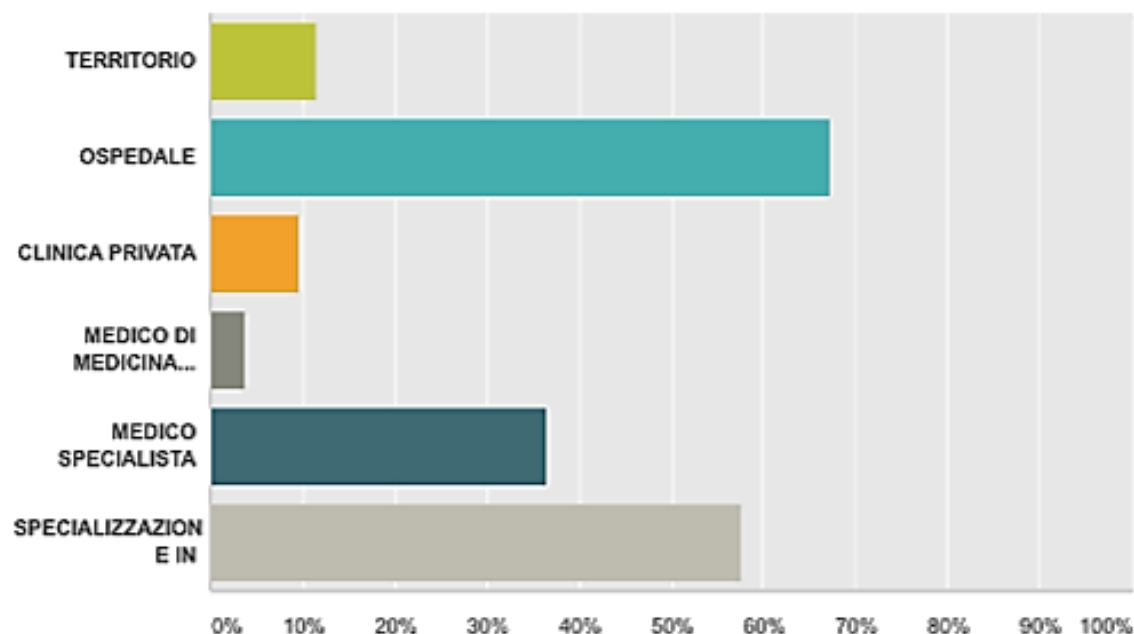
**Il Congresso provinciale CFC
Messina 21 febbraio 2015**

News
(clic sui titoli per i link)

**CONVENZIONE CFC
INTERMED**
News del 15/01/2016
**E' ATTIVA LA
CONVENZIONE CFC
NAZIONALE-
INTERMED TUTTI I
SOCI ATTIVI**

DOVE SVOLGE LA SUA ATTIVITA' CLINICA ?

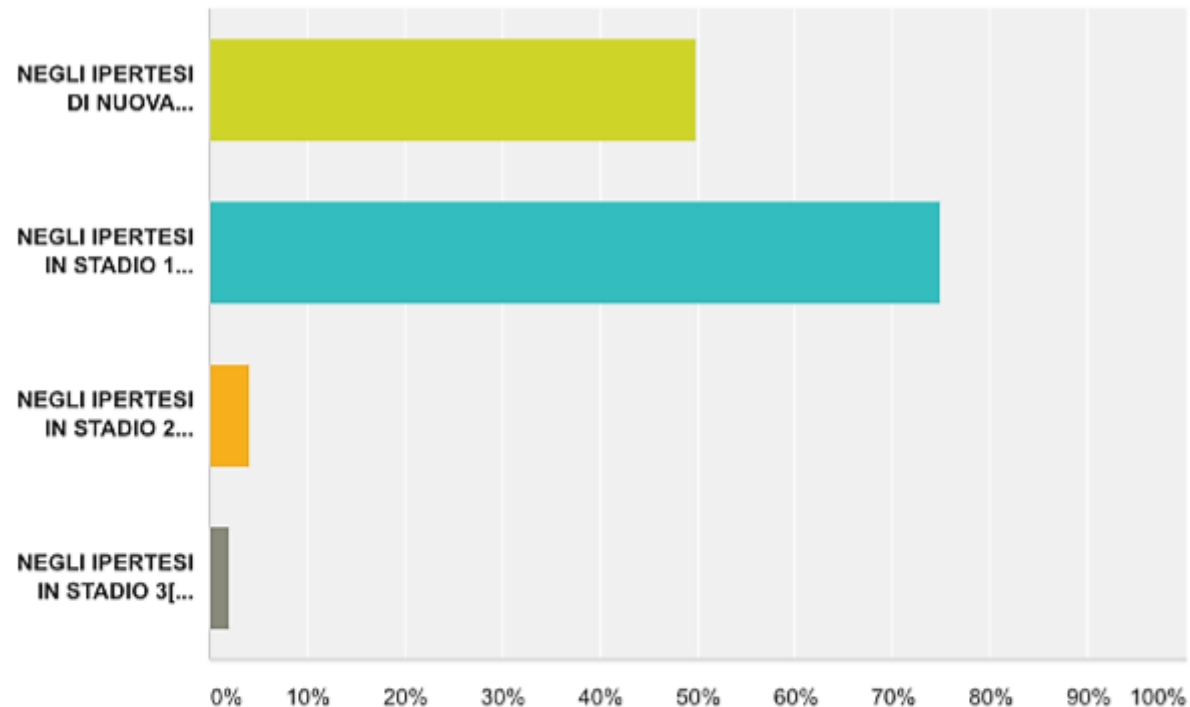
Hanno risposto: 52 Hanno saltato la domanda: 0



Opzioni di risposta	Risposte
TERRITORIO	11,54% 6
OSPEDALE	67,31% 35
CLINICA PRIVATA	9,62% 5
MEDICO DI MEDICINA GENERALE	3,85% 2
MEDICO SPECIALISTA	36,54% 19
SPECIALIZZAZIONE IN	57,69% 30
Totale rispondenti: 52	

QUANDO UTILIZZA LA MONOTERAPIA?

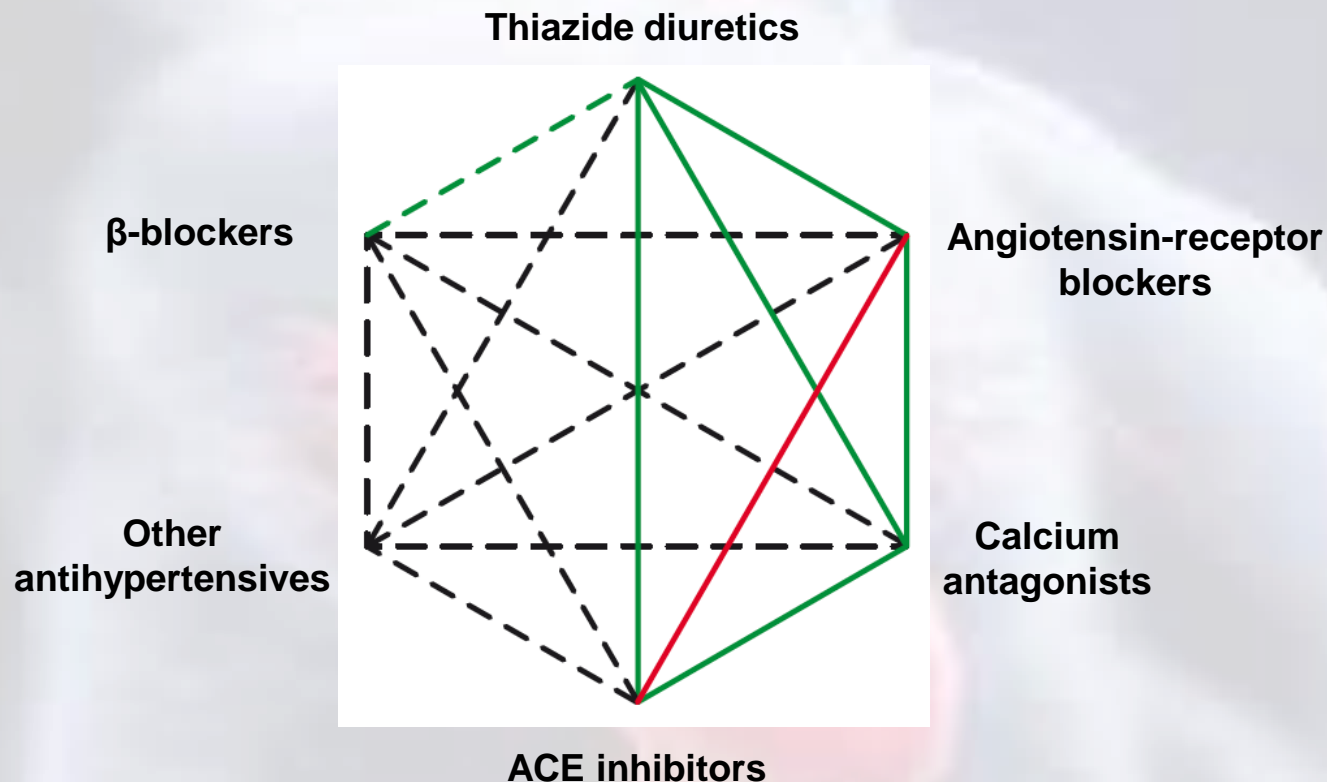
Hanno risposto: 48 Hanno saltato la domanda: 4



Clinical scenario	Recommendations
Initiation and maintenance treatment <i>Monotherapy or in combination</i>	<ul style="list-style-type: none"> • Diuretics (thiazides, chlorthalidone, indapamide) • BBs • CCBs • ACE-I • ARBs

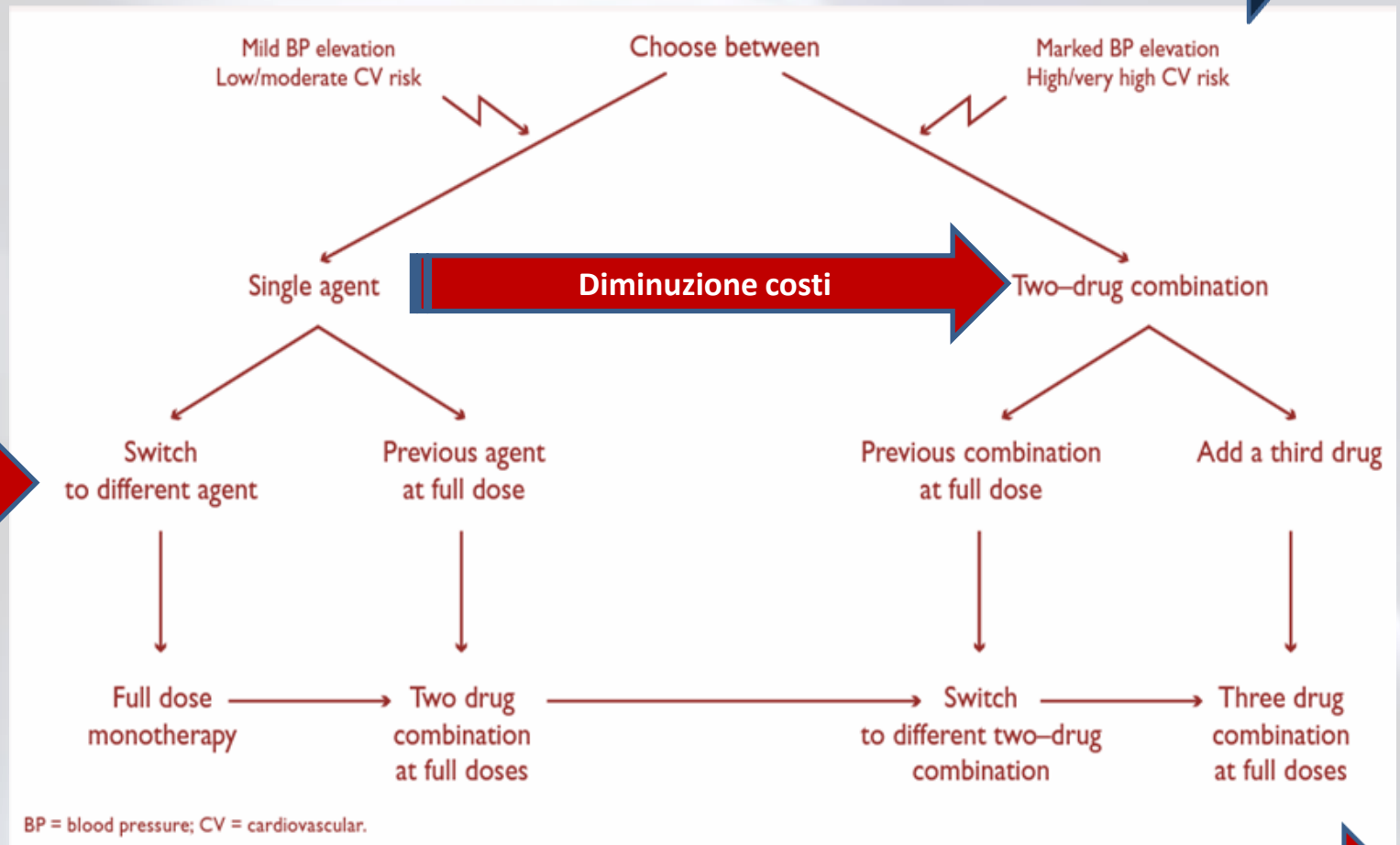
Totale rispondenti: 48

Combinations of classes of antihypertensive drugs



Green continuous lines: preferred combinations; **green dashed line:** useful combination (with some limitations); **black dashed lines:** possible but less well tested combinations; **red continuous line:** not recommended combination. Although verapamil and diltiazem are sometimes used with a beta-blocker to improve ventricular rate control in permanent atrial fibrillation, only dihydropyridine calcium antagonists should normally be combined with beta-blockers.

Monotherapy vs. drug combination strategies to achieve target BP.
Moving from a less intensive to a more intensive therapeutic strategy should be done whenever BP target is not achieved.



Treatment in specific conditions

Condition	Drug
Asymptomatic organ damage	
LVH	LVH ACE inhibitor, calcium antagonist, ARB
Asymptomatic atherosclerosis	Calcium antagonist, ACE inhibitor
Microalbuminuria	ACE inhibitor, ARB
Renal dysfunction	ACE inhibitor, ARB
Clinical CV event	
Previous stroke	Any agent effectively lowering BP
Previous myocardial infarction	BB, ACE inhibitor, ARB
Angina pectoris	BB, calcium antagonist
Heart failure	Diuretic, BB, ACE inhibitor, ARB, mineralocorticoid receptor antagonists
Aortic aneurysm	BB
Atrial fibrillation, prevention	Consider ARB, ACE inhibitor, BB or mineralocorticoid receptor antagonist
Atrial fibrillation, ventricular rate control	BB, non-dihydropyridine calcium antagonist
ESRD/proteinuria	ACE inhibitor, ARB
Peripheral artery disease	ACE inhibitor, calcium antagonist
Other	
ISH (elderly)	Diuretic, calcium antagonist
Metabolic syndrome	ACE inhibitor, ARB, calcium antagonist
Diabetes mellitus	ACE inhibitor, ARB
Pregnancy	Methyldopa, BB, calcium antagonist
Blacks	Diuretic, calcium antagonist

ACE, angiotensin-converting enzyme; ARB, angiotensin receptor blocker; BB, beta-blocker; BP, blood pressure; CV, cardiovascular; ESRD, end-stage renal disease; ISH, isolated systolic hypertension; LVH, left ventricular hypertrophy.

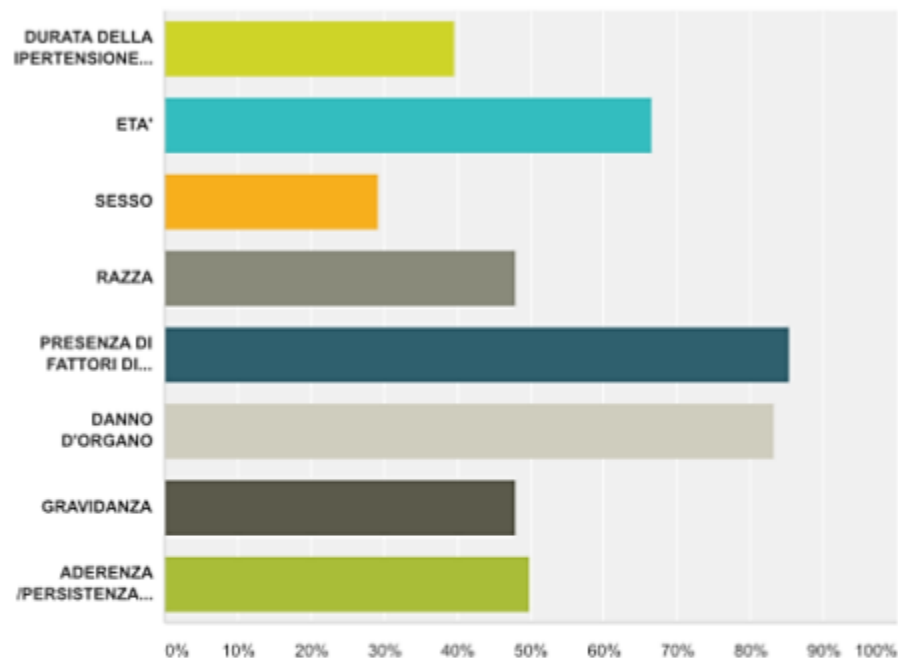
Compelling contraindications for hypertension treatment

Class	Contraindications	
	Compelling	Possible
Diuretics (thiazides)	Gout	Metabolic syndrome Glucose intolerance Pregnancy Hypercalcemia Hypokalaemia
Beta-blockers	Asthma A–V block (grade 2 or 3)	Metabolic syndrome Glucose intolerance Athletes and physically active patients COPD (except for vasodilator beta-blockers)
Calcium antagonists (dihydropyridines)		Tachyarrhythmia Heart failure
Calcium antagonists (verapamil, diltiazem)	A–V block (grade 2 or 3, trifascicular block) Severe LV dysfunction Heart failure	
ACE inhibitors	Pregnancy Angioneurotic oedema Hyperkalaemia Bilateral renal artery stenosis	Women with child bearing potential
Angiotensin receptor blockers	Pregnancy Hyperkalaemia Bilateral renal artery stenosis	Women with child bearing potential
Mineralocorticoid receptor antagonists	Acute or severe renal failure (eGFR <30 mL/min) Hyperkalaemia	

A-V, atrio-ventricular; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; LV, left ventricular.

SU QUALI CARATTERISTICHE DEL PAZIENTE FONDA LA SUA SCELTA TERAPEUTICA?

Hanno risposto: 48 Hanno saltato la domanda: 4



Opzioni di risposta	Risposte
▼ DURATA DELLA IPERTENSIONE ARTERIOSA	39,58% 19
▼ ETA'	66,67% 32
▼ SESSO	29,17% 14
▼ RAZZA	47,92% 23
▼ PRESENZA DI FATTORI DI RISCHIO CV MULTIPLI	85,42% 41
▼ DANNO D'ORGANO	83,33% 40
▼ GRAVIDANZA	47,92% 23
▼ ADERENZA /PERSISTENZA ALLA TERAPIA	50,00% 24

Totale rispondenti: 48

Hypertension treatment for women

Clinical scenario	Recommendations
Hormone therapy and selective estrogen receptor modulators	<ul style="list-style-type: none"> <i>Not recommended; should be used for primary or secondary CVD prevention</i>
If treatment of younger perimenopausal women is considered for severe menopausal symptoms	<ul style="list-style-type: none"> Weigh risk/benefit profile
Drug treatment of severe hypertension in pregnancy (SBP >160 mmHg or DBP >110 mmHg)	<ul style="list-style-type: none"> <i>Recommended</i>
Pregnant women with persistent BP elevations $\geq 150/95$ mmHg BP $\geq 140/90$ mmHg in presence of gestational hypertension, subclinical OD, or symptoms	<ul style="list-style-type: none"> Consider drug treatment
High risk of pre-eclampsia	<ul style="list-style-type: none"> Consider treating with low-dose aspirin from 12 weeks until delivery <i>Providing low risk of GI hemorrhage</i>
Women with child-bearing potential	<ul style="list-style-type: none"> <i>RAS blockers not recommended</i>
Methyldopa, labetalol, nifedipine	<ul style="list-style-type: none"> Consider as preferential drugs in pregnancy For pre-eclampsia: intravenous labetalol or infusion of nitroprusside

SBP, systolic blood pressure; DBP, diastolic blood pressure; BP, blood pressure; OD, organ damage; CVD, cardiovascular disease; GI, gastrointestinal; RAS, renin-angiotensin system.

Hypertension treatment for people with heart disease

Recommendations	Additional considerations
SBP goals for hypertensive patients with CHD: <140 mmHg	
BBs for hypertensive patients with recent MI	<ul style="list-style-type: none"> Other CHD: other antihypertensive agents can be used; BBs, CCBs preferred
Diuretics, BBs, ACE-I, ARBs, and/or mineralcorticoid receptor antagonist for patients with heart failure or severe LV dysfunction	<ul style="list-style-type: none"> Reduce mortality and hospitalization
No evidence that any hypertension drug beneficial for patients with heart failure and preserved EF	<ul style="list-style-type: none"> However, in these patients and patients with hypertension and systolic dysfunction: consider lowering SBP to ~ 140 mmHg Guide treatment by symptom relief
Consider ACE-I and ARBs (and BBs and mineralcorticoid receptor antagonist in coexisting heart failure) in patients at risk of new or recurrent AF	
Antihypertensive therapy in all patients with LVH	<ul style="list-style-type: none"> Initiate treatment with an agent with greater ability to regress LVH (ACE-I, ARBs, CCBs)

SBP, systolic blood pressure; BB, beta-blocker; MI, myocardial infarction; ACE-I, angiotensin-converting-enzyme inhibitor; ARB, angiotensin receptor blocker; LV, left ventricular; EF, ejection fraction; CHD, coronary heart disease; CCB, calcium channel blockers; AF, atrial fibrillation; LVH, left ventricular hypertrophy.

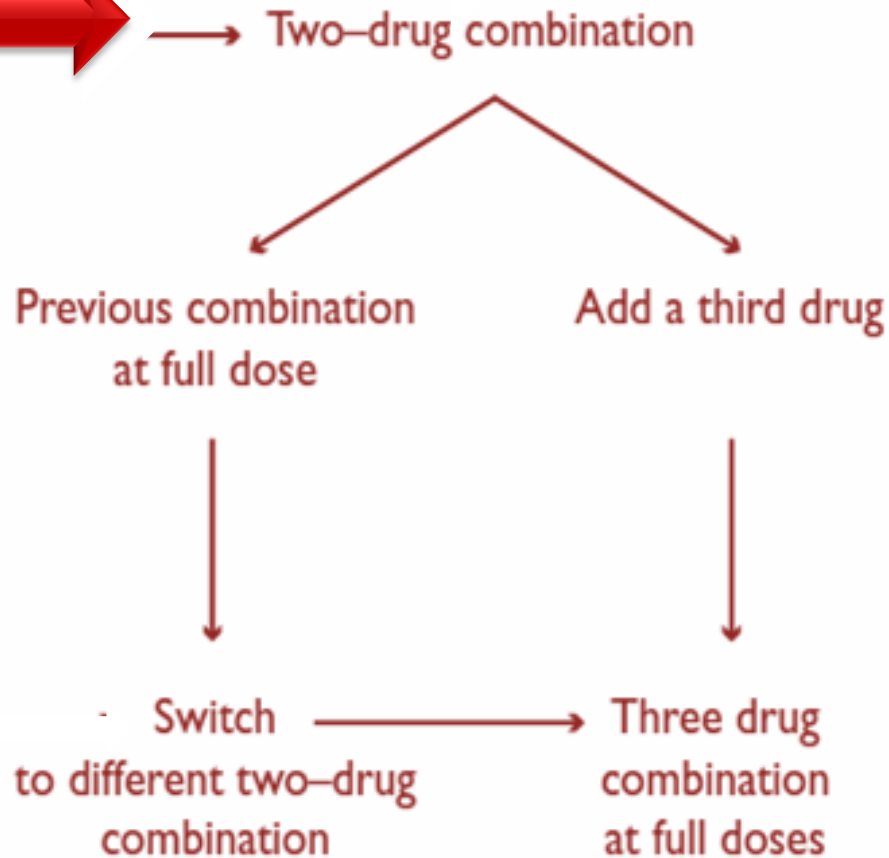
**SE RITIENE NECESSARIA UNA TERAPIA DI
ASSOCIAZIONE CON QUALE INIZIA PIU'
FREQUENTEMENTE ?**

Answered: 48 Skipped: 4

Answer Choices	Responses
ACEI+DIURETICO	27.08% 13
SARTANO+DIURETICO	10.42% 5
CALCIOANTAGONISTA+DIURETICO	0.00% 0
CALCIOANTAGONISTA+ACEI	35.42% 17
CALCIOANTAGONISTA+SARTANO	22.92% 11
BETABLOCCANTE+DIURETICO	2.08% 1
ALFABETABLOCCANTE	0.00% 0
TRIPLICE A BASSO DOSAGGIO	0.00% 0
TRIPLICE A MEDIO DOSAGGIO	0.00% 0
TRIPLICE AD ALTO DOSAGGIO	2.08% 1
Total	48

Schema di Intervento farmacologico


Quale ?



Quale ?

LG e terapie di associazione

La Metanalisi di più di 40 studi ha dimostrato che **la combinazione di farmaci antipertensivi** appartenenti a 2 classi differenti:



Incrementa la riduzione dei valori pressori rispetto all'aumento del dosaggio della monoterapia



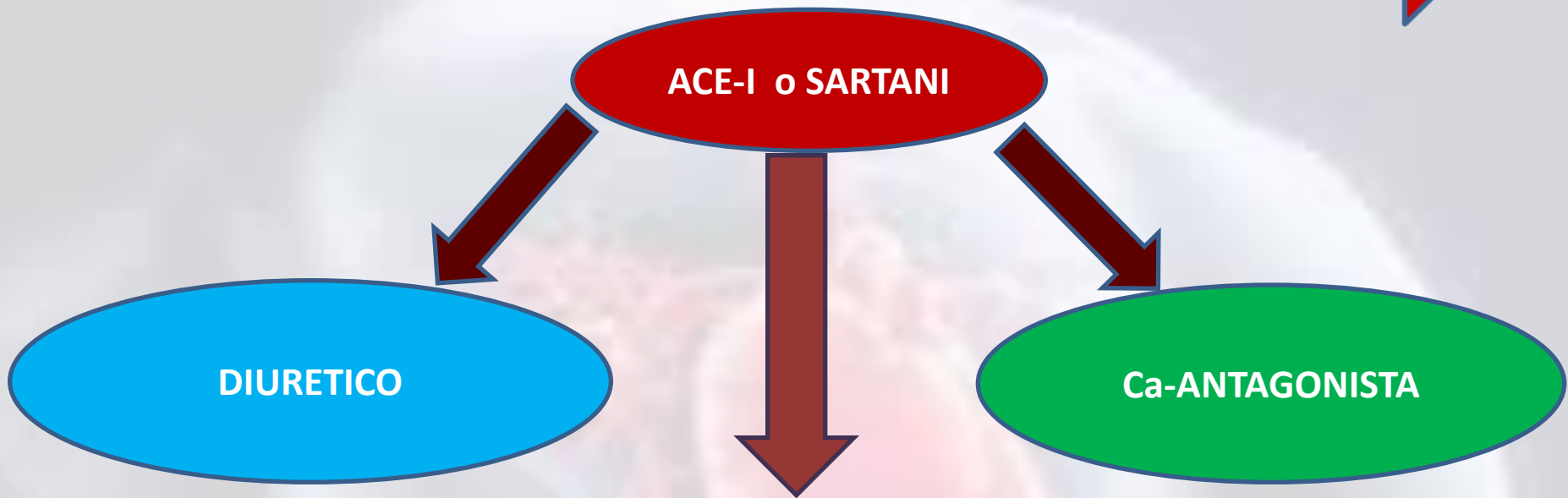
Clinical scenario	Recommendations
Initiation and maintenance treatment <i>Monotherapy or in combination</i>	<ul style="list-style-type: none"> • Diuretics (thiazides, chlorthalidone, indapamide) • BBs • CCBs • ACE-I • ARBs
Consider some agents as preferential choice in specific conditions due to:	<ul style="list-style-type: none"> • Use in trials in those conditions • Great effectiveness in specific types of OD
Consider two-drug combination therapy in patient with:	<ul style="list-style-type: none"> • High baseline BP • High CV risk
Combination of two RAS antagonists	<i>Not recommended</i>
Consider other drug combinations for BP reduction	Most preferable option may be combinations successfully used in trial
Combination therapy with fixed doses of two drugs in a single tablet	May be recommended due to potential for improved adherence

Hypertension treatment for people with metabolic syndrome

Recommendations	Additional considerations
Lifestyle changes for all	<ul style="list-style-type: none">• Especially weight loss and physical activity• <i>Improve BP and components of metabolic syndrome, delay diabetes onset</i>
Antihypertensive agents that potentially improve – or not worsen – insulin sensitivity are recommended	<ul style="list-style-type: none">• RAS blockers• CCBs
BBs and diuretics only as additional drugs	<ul style="list-style-type: none">• Preferably in combination with a potassium-sparing agent
Prescribe antihypertensive drugs with particular care in patients with metabolic disturbances when...	<ul style="list-style-type: none">• BP $\geq 140/90$ mmHg after lifestyle changes to maintain BP $< 140/90$ mmHg
No drug treatment in patients with metabolic syndrome and high normal BP	

BP, blood pressure; BB, beta blockers; CCB, calcium channel blockers; RAS, renin–angiotensin system.

Quale associazione preferire?



STUDIO ACCOMPLISH

The **NEW ENGLAND**
JOURNAL *of* **MEDICINE**

ESTABLISHED IN 1812

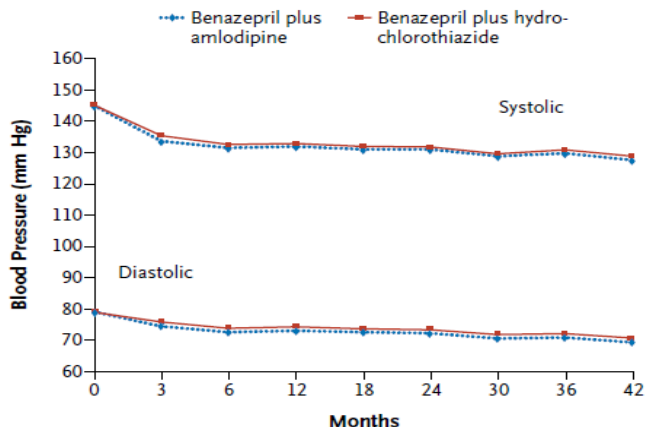
DECEMBER 4, 2008

VOL. 359 NO. 23

Il solo trial ad aver comparato le 2 associazioni

ACE-inibitore/Ca-Antagonista rispetto all'ACE-inibitore diuretico

RISULTATI STUDIO ACCOMPLISH

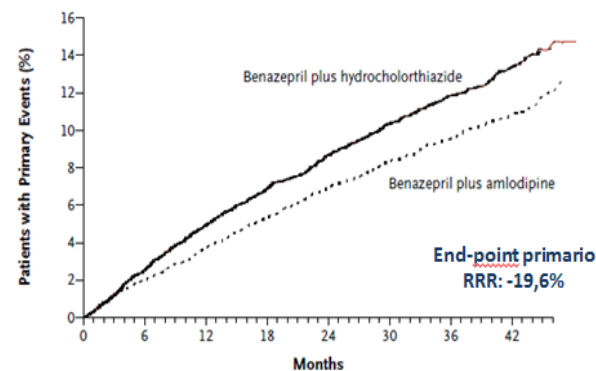


No. at Risk	0	3	6	12	18	24	30	36	42
Benazepril plus amlodipine	5740	5517	5404	5178	5010	4866	4298	2804	1074
Benazepril plus hydrochlorothiazide	5757	5537	5408	5222	5033	4825	4299	2529	1042

Riduzioni pressorie simili nei valori sistolici e diastolici

**End-point primario:
evento cardiovascolare + mortalità per cause
cardiovascolari:**

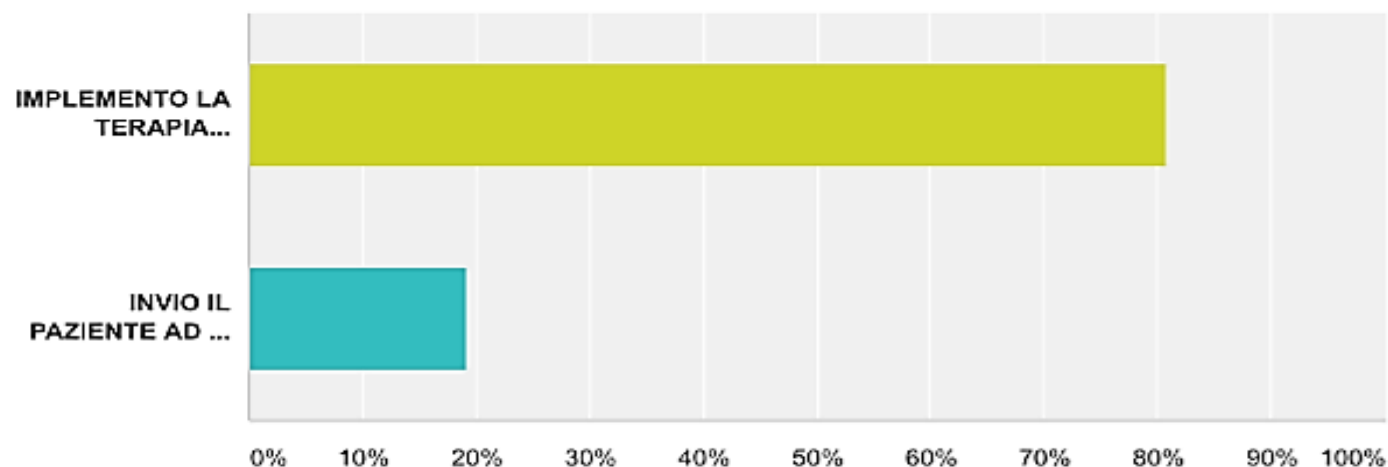
ACE-I/Ca-Antagonista -19,6% vs ACE-I/Diuretico



No. at Risk	0	6	12	18	24	30	36	42
Benazepril plus amlodipine	5512	5317	5141	4959	4739	2826	1447	
Benazepril plus hydrochlorothiazide	5483	5274	5082	4892	4655	2749	1390	

COME SI COMPORTA NEI PAZIENTI IN STADIO 3?

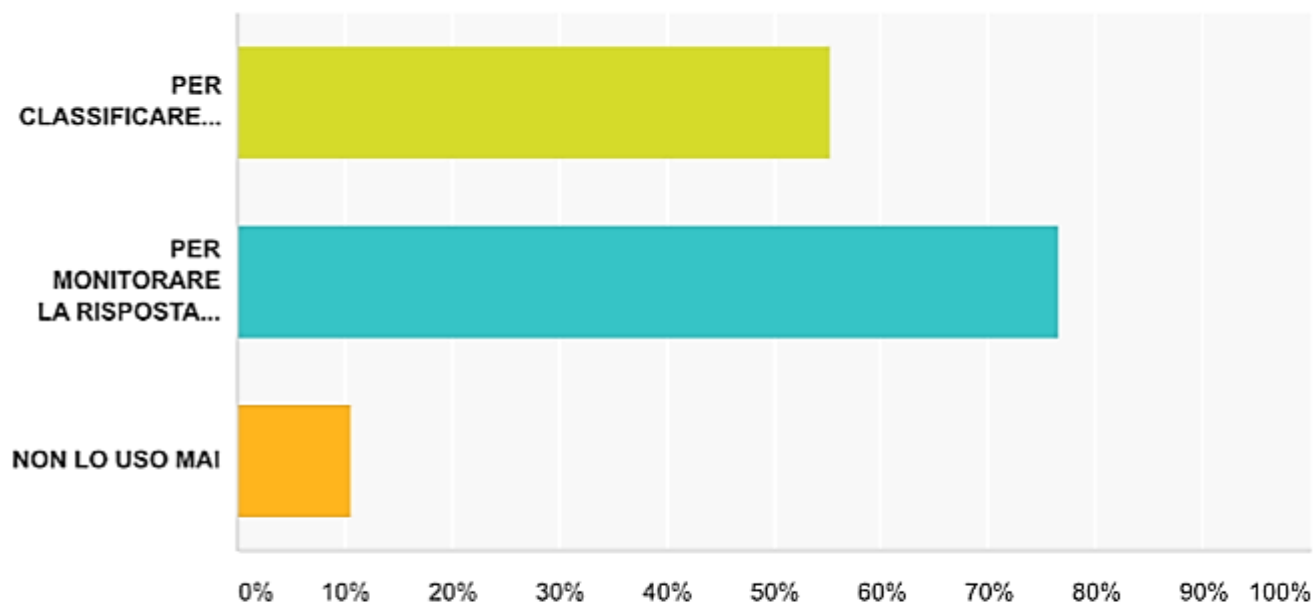
Answered: 47 Skipped: 5



Answer Choices	Responses	
▼ IMPLEMENTO LA TERAPIA EVENTUALMENTE IN ATTO	80.85%	38
▼ INVIO IL PAZIENTE AD UN CENTRO DI SECONDO LIVELLO	19.15%	9
Total	47	

QUANDO UTILIZZA IL MONITORAGGIO PA 24 ORE?

Answered: 47 Skipped: 5



Answer Choices	Responses	
PER CLASSIFICARE IL PAZIENTE PRIMA DI INIZIARE UN TRATTAMENTO	55.32%	26
PER MONITORARE LA RISPOSTA ALLA TERAPIA	76.60%	36
NON LO USO MAI	10.64%	5

Total Respondents: 47

Clinical indications for out-of-office BP measurement for diagnostic purposes

Clinical indications for HBPM or ABPM

- Suspicion of white-coat hypertension
 - Grade I hypertension in the office
 - High office BP in individuals without asymptomatic organ damage and at low total CV risk
- Suspicion of masked hypertension
 - High normal BP in the office
 - Normal office BP in individuals with asymptomatic organ damage or at high total CV risk
- Identification of white-coat effect in hypertensive patients
- Considerable variability of office BP over the same or different visits
- Autonomic, postural, post-prandial, siesta- and drug-induced hypotension
- Elevated office BP or suspected pre-eclampsia in pregnant women
- Identification of true and false resistant hypertension

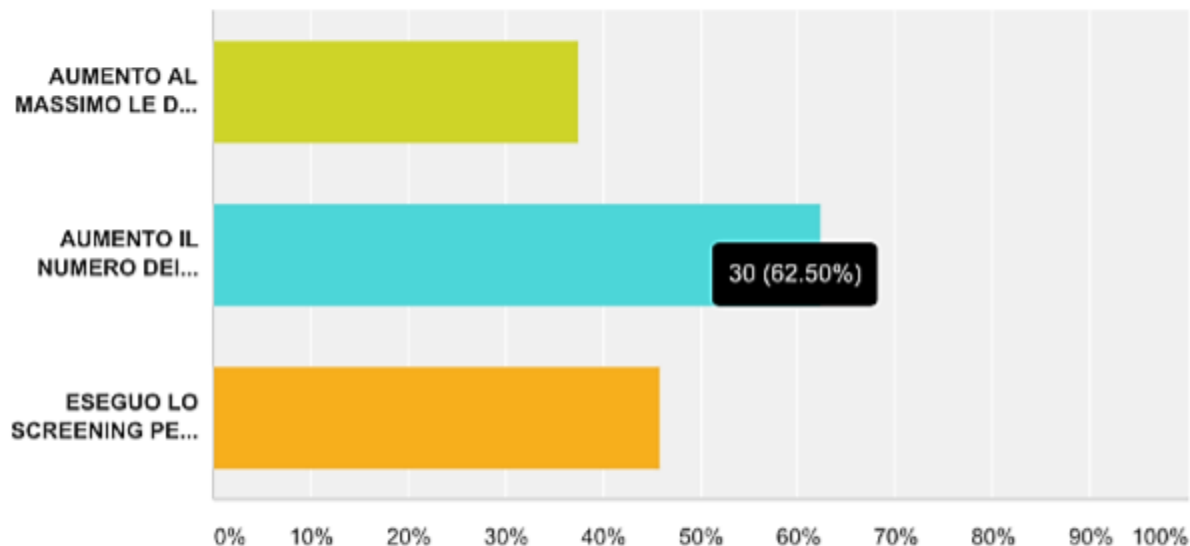
Specific indications for ABPM

- Marked discordance between office BP and home BP
- Assessment of dipping status
- Suspicion of nocturnal hypertension or absence of dipping, such as in patients with sleep apnoea, CKD, or diabetes
- Assessment of BP variability

BP, blood pressure; ABPM, ambulatory blood pressure monitoring; BP, blood pressure; CKD, chronic kidney disease; CV, cardiovascular; HBPM, home blood pressure monitoring.

COME SI COMPORTA IN CASO DI MANCATO RAGGIUNGIMENTO DEL TARGET?

Answered: 48 Skipped: 4



Answer Choices	Responses	
▼ AUMENTO AL MASSIMO LE DOSI IN USO	37.50%	18
▼ AUMENTO IL NUMERO DEI FARMACI	62.50%	30
▼ ESEGUO LO SCREENING PER FORME SECONDARIE	45.83%	22

Total Respondents: 48

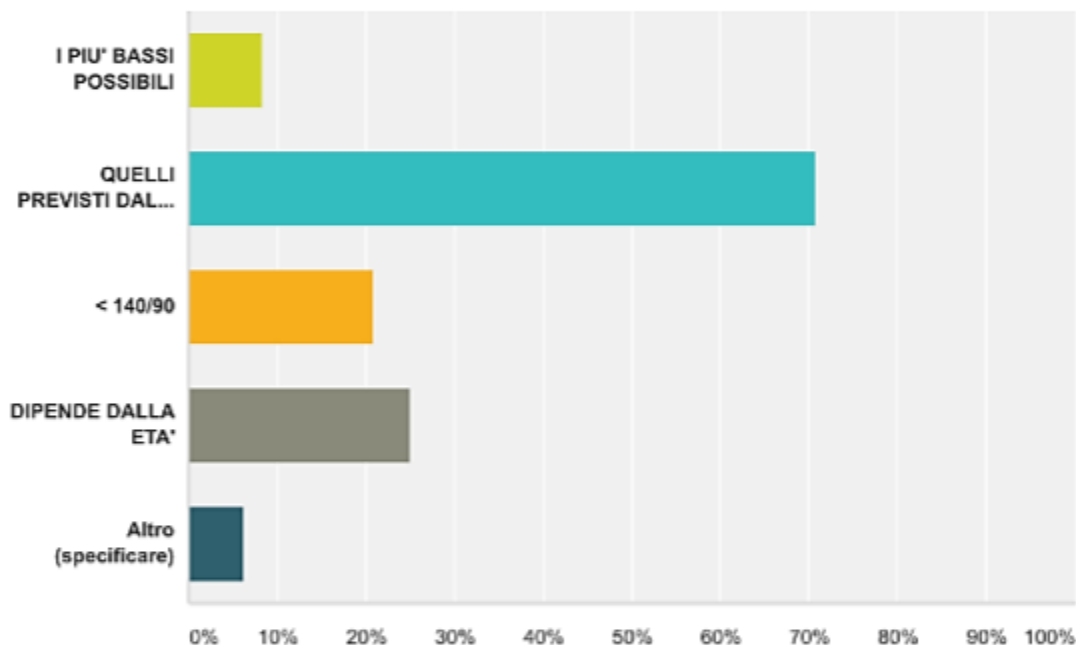
Clinical indications and diagnostics of secondary hypertension

	CLINICAL INDICATIONS		DIAGNOSTICS		
Common causes	Clinical history	Physical examination	Laboratory investigations	First-line test(s)	Additional/confirmatory test(s)
Renal parenchymal disease	History of urinary tract infection or obstruction, haematuria, analgesic abuse; family history of polycystic kidney disease	Abdominal masses (in case of polycystic kidney disease)	Presence of protein, erythrocytes, or leucocytes in the urine, decreased GFR	Renal ultrasound	Detailed work-up for kidney disease
Renal artery stenosis	<ul style="list-style-type: none"> - Fibromuscular dysplasia: early onset hypertension (especially in women) - Atherosclerotic stenosis: hypertension of abrupt onset, worsening or increasingly difficult to treat; flash pulmonary oedema 	Abdominal bruit	Difference of >1.5 cm in length between the two kidneys (renal ultrasound), rapid deterioration in renal function (spontaneous or in response to RAA blockers)	Renal Duplex Doppler ultrasonography	Magnetic resonance angiography, spiral computed tomography, intra-arterial digital subtraction angiography
Primary aldosteronism	Muscle weakness; family history of early onset hypertension and cerebrovascular events at age <40 years	Arrhythmias (in case of severe hypokalaemia)	Hypokalaemia (spontaneous or diuretic-induced); incidental discovery of adrenal masses	Aldosterone–renin ratio under standardized conditions (correction of hypokalaemia and withdrawal of drugs affecting RAA system)	Confirmatory tests (oral sodium loading, saline infusion, fludrocortisone suppression, or captopril test); adrenal CT scan; adrenal vein sampling
Uncommon causes					
Pheochromocytoma	Paroxysmal hypertension or a crisis superimposed to sustained hypertension; headache, sweating, palpitations and pallor; positive family history of pheochromocytoma	Skin stigmata of neurofibromatosis (café-au-lait spots, neurofibromas)	Incidental discovery of adrenal (or in some cases, extra-adrenal) masses	Measurement of urinary fractionated metanephrines or plasma-free metanephrines	CT or MRI of the abdomen and pelvis; ¹²³ I-labelled metaiodoben-zyl-guanidine scanning; genetic screening for pathogenic mutations
Cushing's syndrome	Rapid weight gain, polyuria, polydipsia, psychological disturbances	Typical body habitus (central obesity, moon-face, buffalo hump, red striae, hirsutism)	Hyperglycaemia	24-h urinary cortisol excretion	Dexamethasone-suppression tests

CT, computed tomography; GFR, glomerular filtration rate; MRI, magnetic resonance imaging; RAA, renin–angiotensin–aldosterone.

A QUALI LIVELLI DI PRESSIONE ARTERIOSA VUOLE PORTARE I PAZIENTI CHE TRATTA CON TRIPLICE TERAPIA

Answered: 48 Skipped: 4



Answer Choices	Responses	
I PIU' BASSI POSSIBILI	8.33%	4
QUELLI PREVISTI DALLE LINEE GUIDA	70.83%	34
< 140/90	20.83%	10
DIPENDE DALLA ETA'	25.00%	12
Altro (specificare)	6.25%	3
Total Respondents: 48		

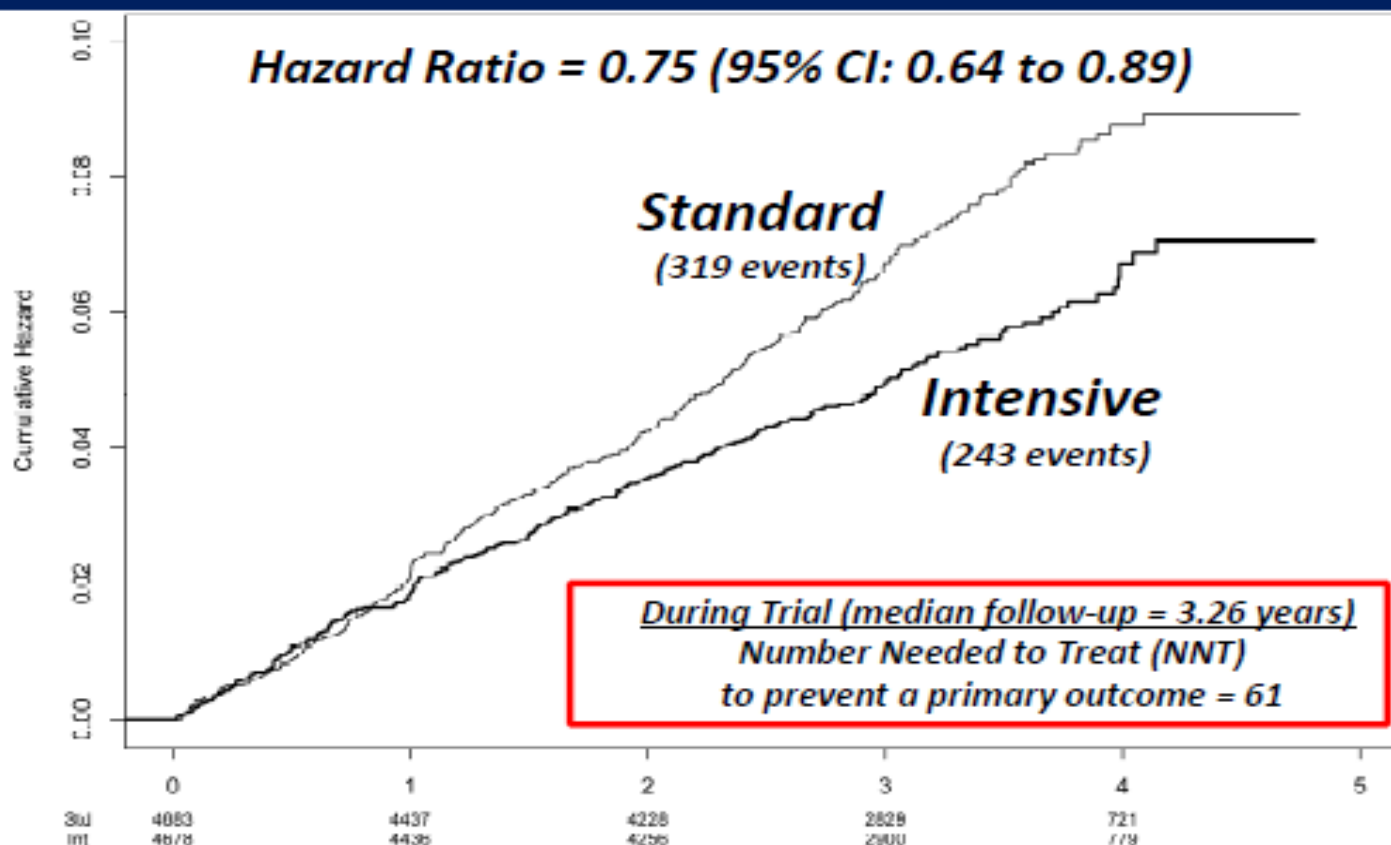
Blood pressure goals in hypertensive patients

Recommendations	
SBP goal for “most” <ul style="list-style-type: none">•Patients at low–moderate CV risk•Patients with diabetes•Consider with previous stroke or TIA•Consider with CHD•Consider with diabetic or non-diabetic CKD	<140 mmHg
SBP goal for elderly <ul style="list-style-type: none">•Ages <80 years•Initial SBP ≥160 mmHg	140-150 mmHg
SBP goal for fit elderly Aged <80 years	<140 mmHg
SBP goal for elderly >80 years with SBP <ul style="list-style-type: none">•≥160 mmHg	140-150 mmHg
DBP goal for “most”	<90 mmHg
DB goal for patients with diabetes	<85 mmHg

SBP, systolic blood pressure; CV, cardiovascular; TIA, transient ischaemic attack; CHD, coronary heart disease; CKD, chronic kidney disease; DBP, diastolic blood pressure.

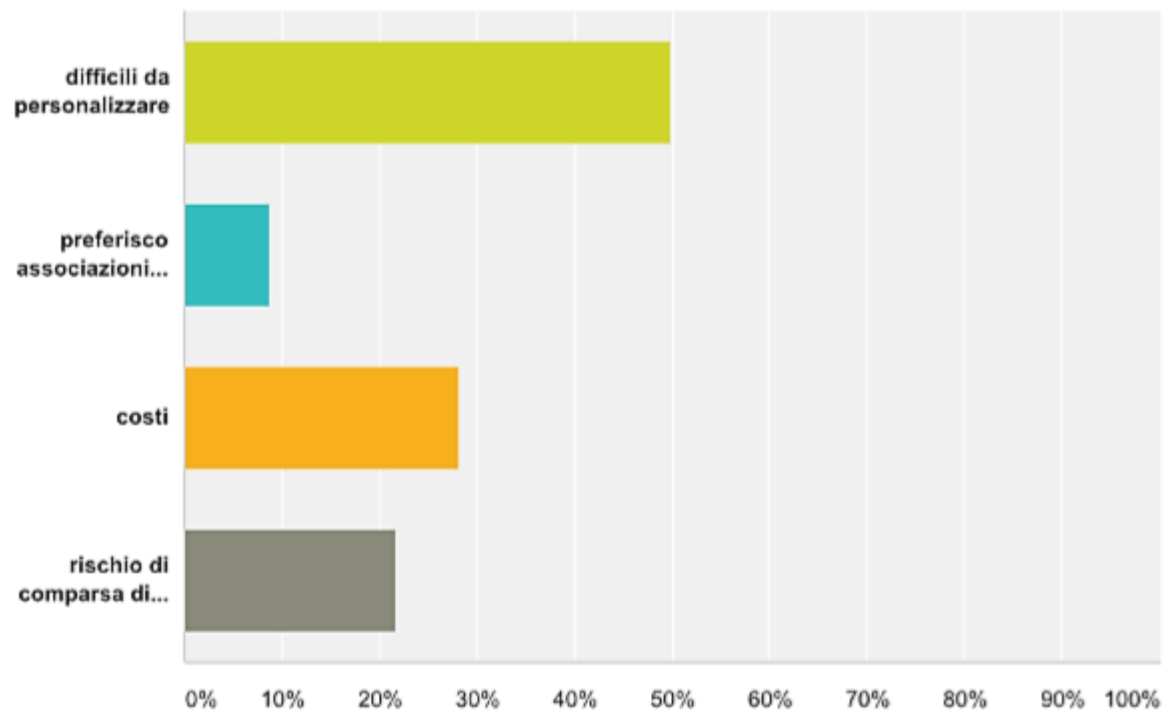
A PROPOSITO DI TARGET

SPRINT Primary Outcome Cumulative Hazard



quali sono le difficoltà che intravede nell'uso di terapie di associazione precostituite?

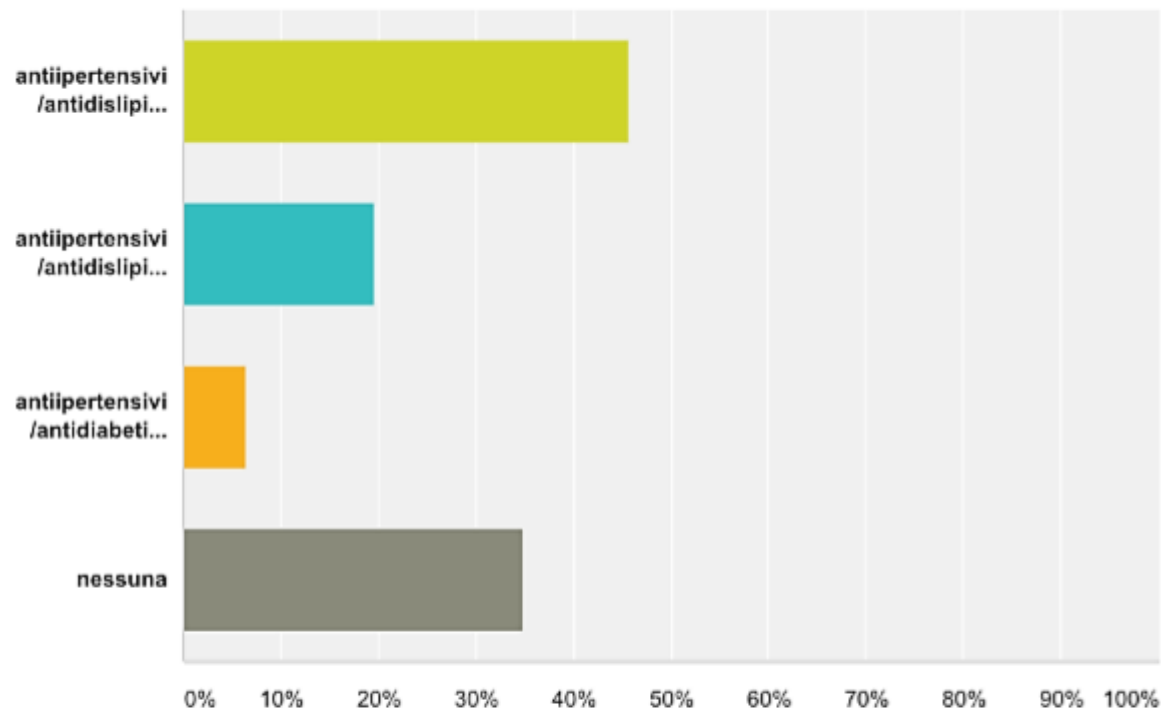
Answered: 46 Skipped: 6



Answer Choices	Responses	
▼ difficili da personalizzare	50.00%	23
▼ preferisco associazioni estemporanee	8.70%	4
▼ costi	28.26%	13
▼ rischio di comparsa di effetti collaterali	21.74%	10
Total Respondents: 46		

Quali terapie di associazione precostituite vorrebbe per il futuro?

Answered: 46 Skipped: 6



Answer Choices	Responses	
antiipertensivi/antidislipidemici/antitrombotici	45.65%	21
antiipertensivi/antidislipidemici/antidiabetici	19.57%	9
antiipertensivi/antidiabetici/antitrombotici	6.52%	3
nessuna	34.78%	16
Total Respondents: 46		

Table 1. Polypill content by trial

Study	Polypill contents (dose)	Comparator
CRUCIAL 2011	Amlodipine 5 to 10 mg Atorvastatin 10mg ¹	Usual care
CUSP 2009	Amlodipine 5 mg Atorvastatin 20 mg	Placebo
Malekzadeh 2010	Aspirin 81 mg Atorvastatin 20 mg Enalapril 2.5 mg Hydrochlorothiazide 12.5 mg	Placebo
PILL 2011	Aspirin 75 mg Hydrochlorothiazide 12.5 mg Lisinopril 10 mg Simvastatin 20 mg	Placebo
Soliman 2009	Aspirin 75 mg Hydrochlorothiazide 12.5 mg Lisinopril 10 mg Simvastatin 20 mg	Usual care
TIPS 2009	Aspirin 100 mg Atenolol 50 mg Hydrochlorothiazide 12.5 mg Ramipril 5 mg Simvastatin 20 mg	8 other drug/drug combination groups: 1) Aspirin 100mg 2) Aspirin 100mg, hydrochlorothiazide 12.5mg, atenolol 50mg, ramipril 5mg 3) Hydrochlorothiazide 12.5mg 4) Hydrochlorothiazide 12.5mg, atenolol 50mg 5) Hydrochlorothiazide 12.5mg, ramipril 5mg 6) Hydrochlorothiazide 12.5mg, atenolol 50mg, ramipril 5mg 7) Ramipril 5mg, atenolol 50mg 8) Simvastatin 20mg
TOGETHER 2010	Amlodipine 5 to 10 mg Atorvastatin 10mg	Amlodipine 5 to 10 mg
UMPIRE 2013	Aspirin 75mg Atenolol 50mg Lisinopril 40mg Simvastatin 40mg	Usual care



PROBLEMI ANCORA APERTI

1. Should antihypertensive drug treatment be given to all patients with grade 1 hypertension when their CV risk is low-to-moderate?
2. Should elderly patients with a SBP between 140 and 160 mmHg be given antihypertensive drug treatments?
3. Should drug treatment be given to subjects with white-coat hypertension? Can this condition be differentiated into patients needing or not needing treatment?
4. Should antihypertensive drug treatment be started in the high normal BP range and, if so, in which patients?
5. What are the optimal office BP values (i.e. the most protective and safe) for patients to achieve by treatment in different demographic and clinical conditions?
6. **Do treatment strategies based on control of out-of-office BP provide an advantage (reduced clinical morbidity and mortality, fewer drugs, fewer side-effects) over strategies based on conventional (office) BP control?**



PROBLEMI ANCORA APERTI

1. What are the optimal out-of-office (home and ambulatory) BP values to be reached with treatment and should targets be lower or higher in high risk hypertensives?
2. Does central BP add to CV event prediction in untreated and treated hypertensive patients?
3. Do invasive procedures for treatment of resistant hypertension compare favourably with the best drug treatment and provide long-term BP control and reduction of morbid and fatal events?
4. Do treatment-induced changes in asymptomatic organ damage predict outcome? Which measures –or combinations of measures–are most valuable?
5. Are lifestyle measures known to reduce BP capable of reducing morbidity and mortality in hypertensive patients?
- 6. Does a treatment-induced reduction of 24h BP variability add to CV protection by antihypertensive treatment?**
7. Does BP reduction substantially lower CV risk in resistant hypertension?