

Nya europeiska riktlinjer för behandling av högt blodtryck

Lars Svennberg

Överläkare VO kardiologi, Region Gävleborg



2024 ESC Guidelines for the management of elevated blood pressure and hypertension

ESC 2024 Guidelines for the management of elevated blood pressure and hypertension

- Blodtrycksbehandlingen idag är suboptimal
- Ca 10% av patienterna har välkontrollerat blodtryck (?)
- Hem-mätning poängterad
- Detaljerade anvisningar om hur mätning ska gå till
- FF -> mät manuellt
- Uppföljning
 - "Ofta" om okontrollerat
 - Kontrollerat -> 1 gång/år räcker

ESC 2024 Guidelines for the management of elevated blood pressure and hypertension

- Full text 106 sidor
- 1021 referenser
- PP med 138 bilder
- 57 nya rekommendationer...
- 32 sidor i PP med "revised recommendations"...

Ny klassificering

- | | |
|-------------------------------|--------------------|
| • Non-elevated blood pressure | <120/70 mmHg |
| • Elevated blood pressure | 120-139/70-89 mmHg |
| • Hypertension | >140/90 |

Ny klassificering

- | | |
|-------------------------------|--------------------|
| • Non-elevated blood pressure | <120/70 mmHg |
| • Elevated blood pressure | 120-139/70-89 mmHg |
| • Hypertension | >140/90 |
-
- | | |
|---------------------|--|
| • Normalt blodtryck | |
| • Förhöjt blodtryck | |
| • Högt blodtryck | |

Läkemedelsbehandling

- Börja med två läkemedel
 - Ej kontroll -> tre läkemedel
 - Ej kontroll -> ökad dos
 - Ej kontroll -> lägg till betablockerare / MRA / alfablockerare
- Ett läkemedel:
 - Förhöjt blodtryck
 - Skörhet
 - Tendens till blodtrycksfall
 - >85 år

Figure 23

Patient-centred care



Figure 1

Pathophysiology of elevated blood pressure and hypertension

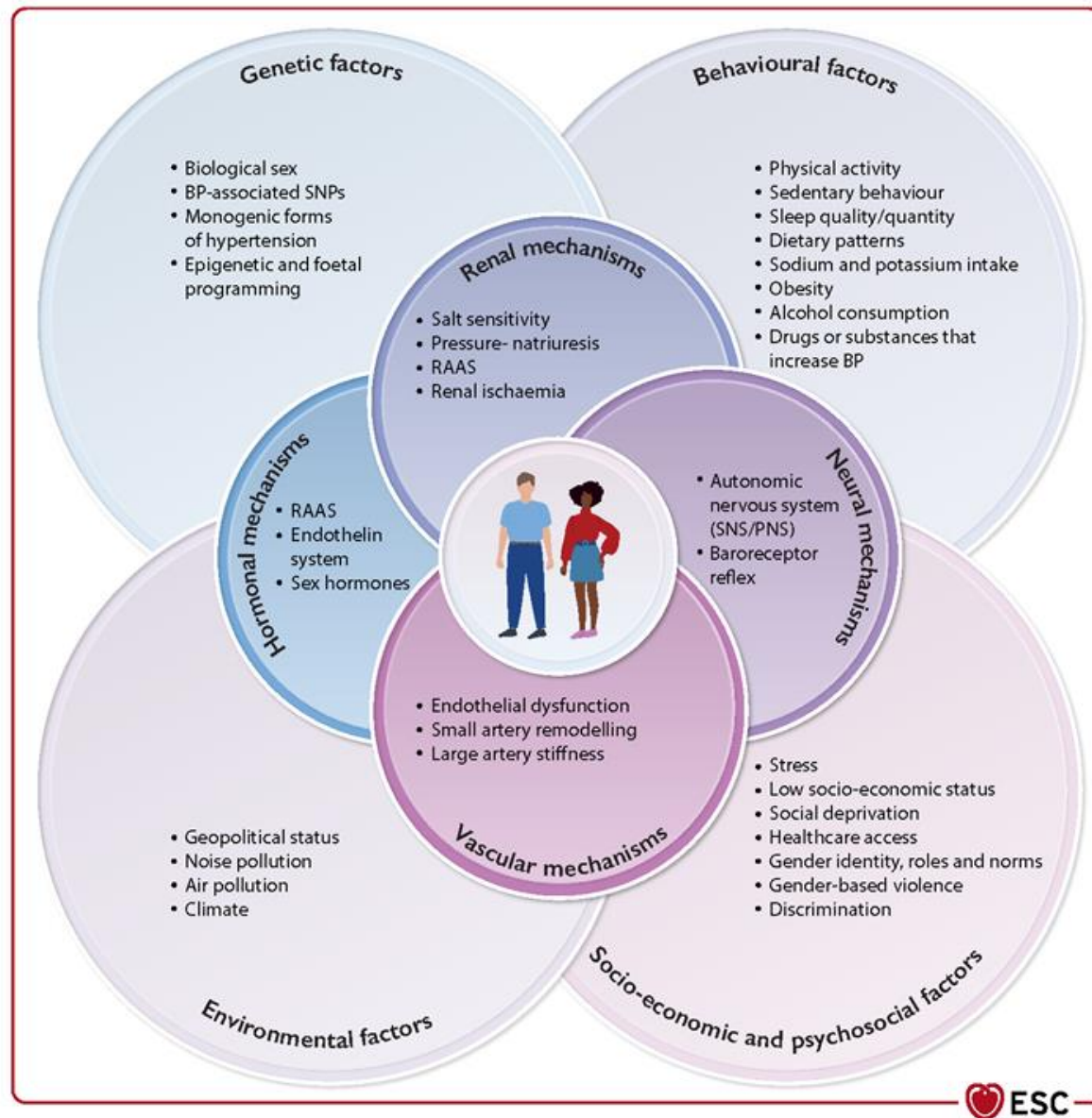


Figure 2

Persistently elevated blood pressure and hypertension lead to hypertension-mediated organ damage and cardiovascular disease

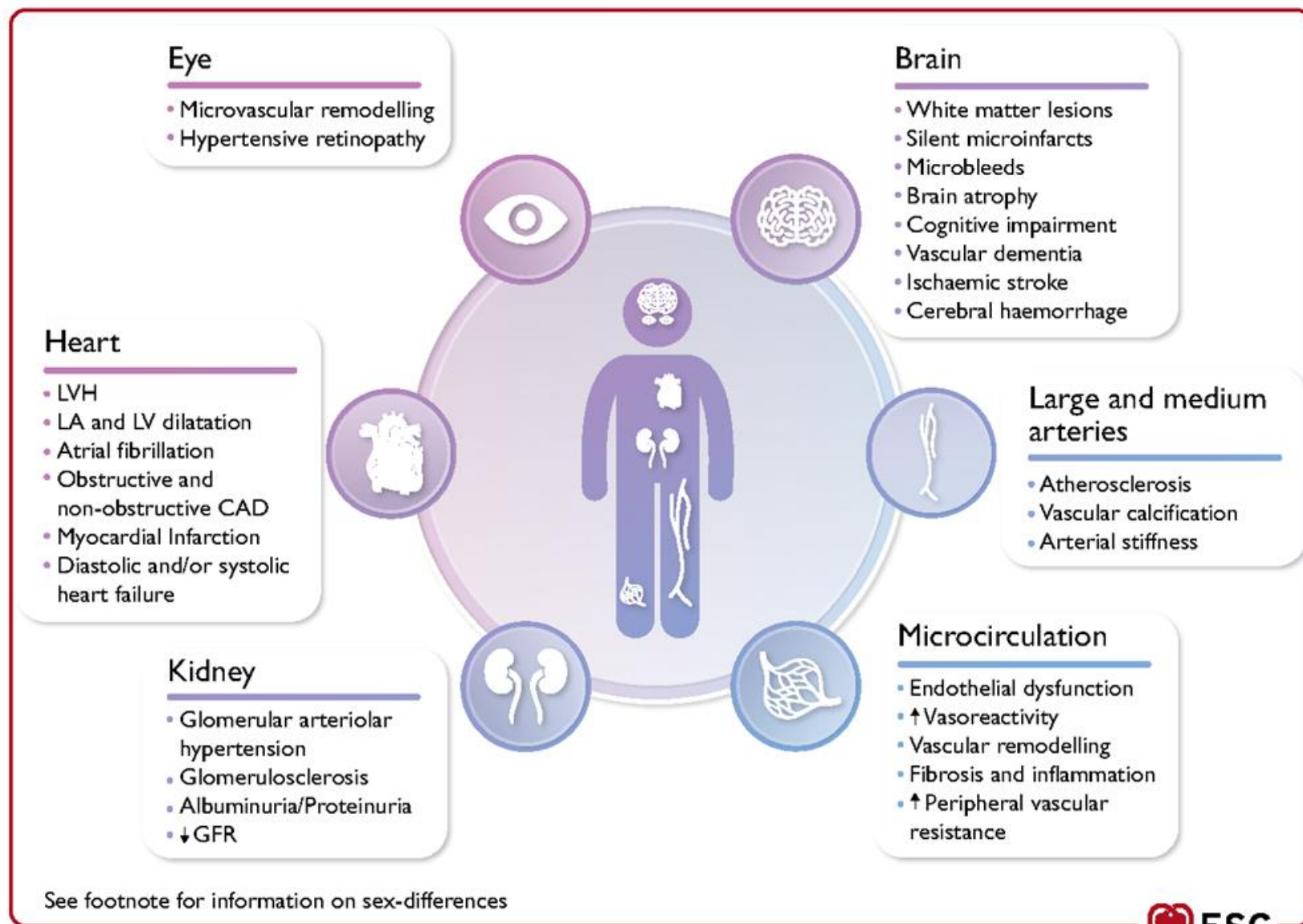


Figure 3

Summary of office blood pressure measurement

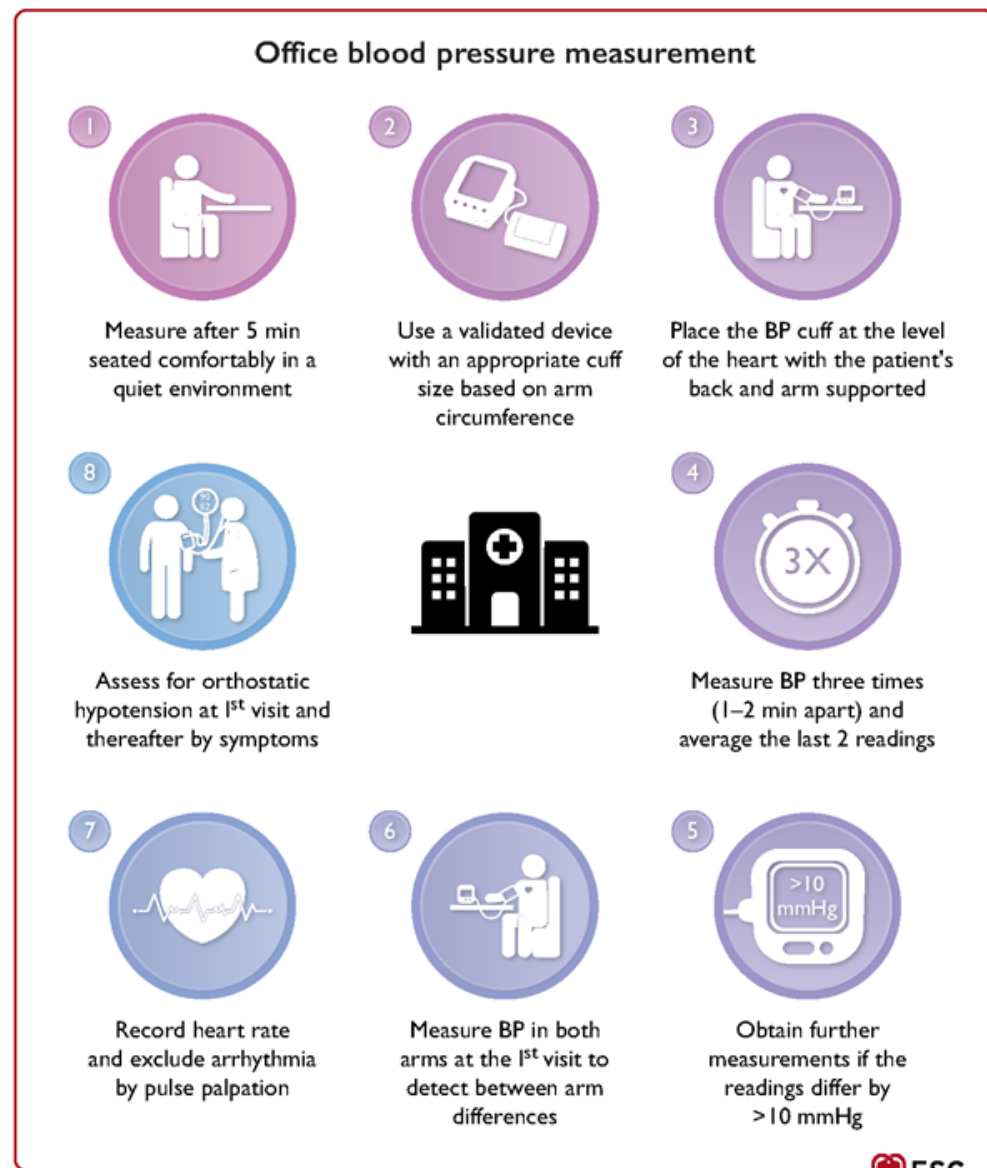


Figure 4

Summary of home blood pressure measurement

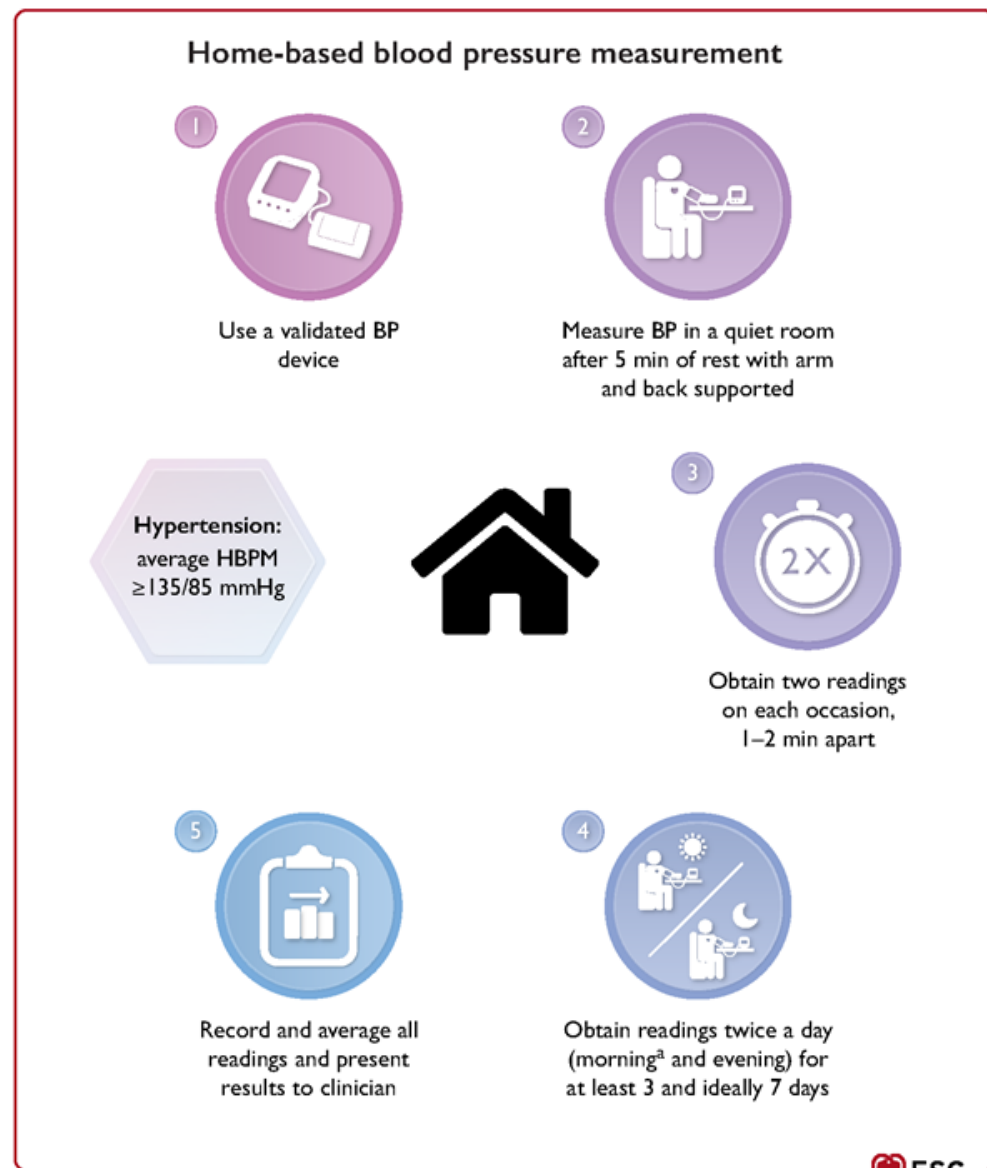


Figure 6

Blood pressure categories

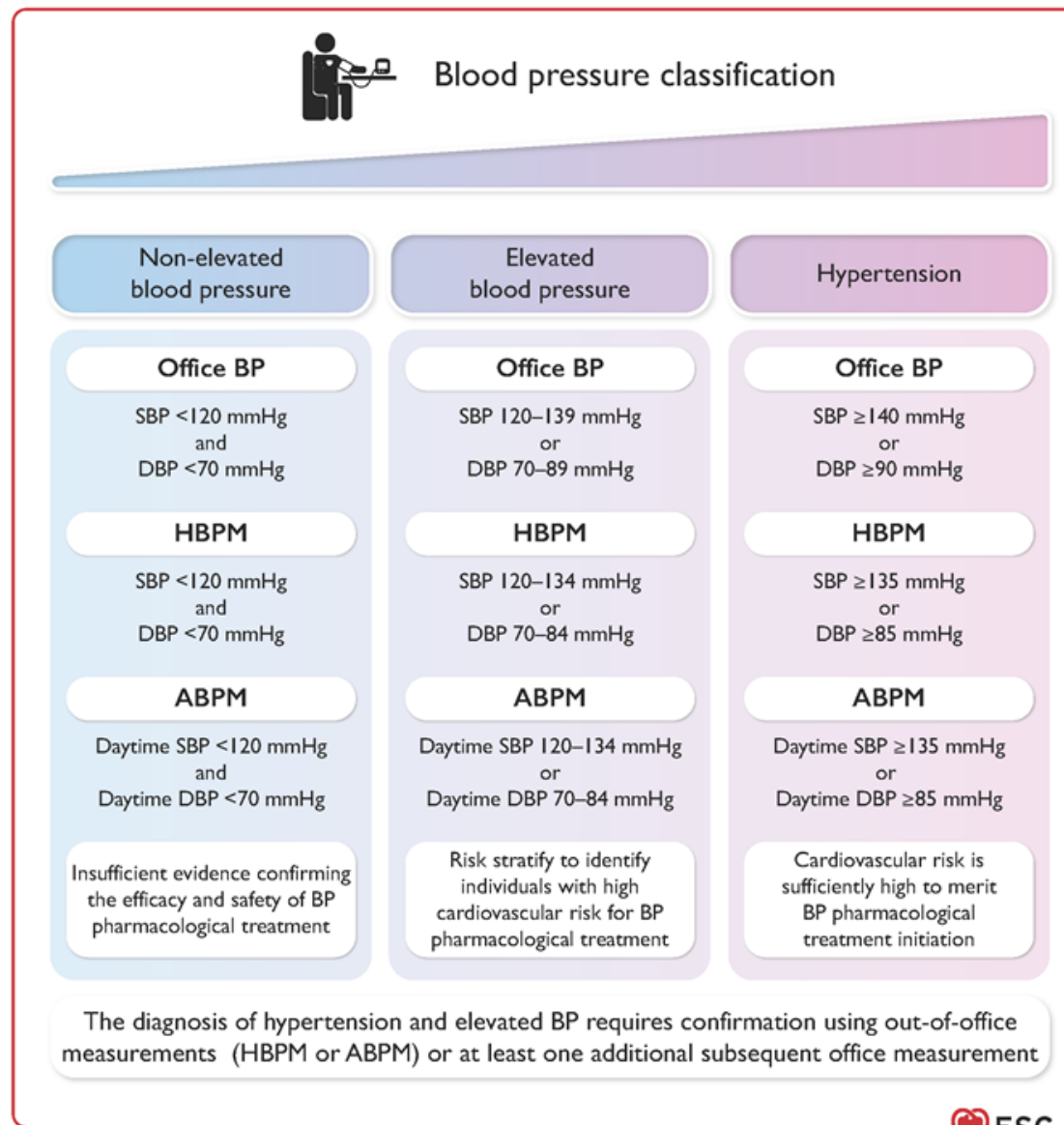


Figure 6

Blood pressure categories

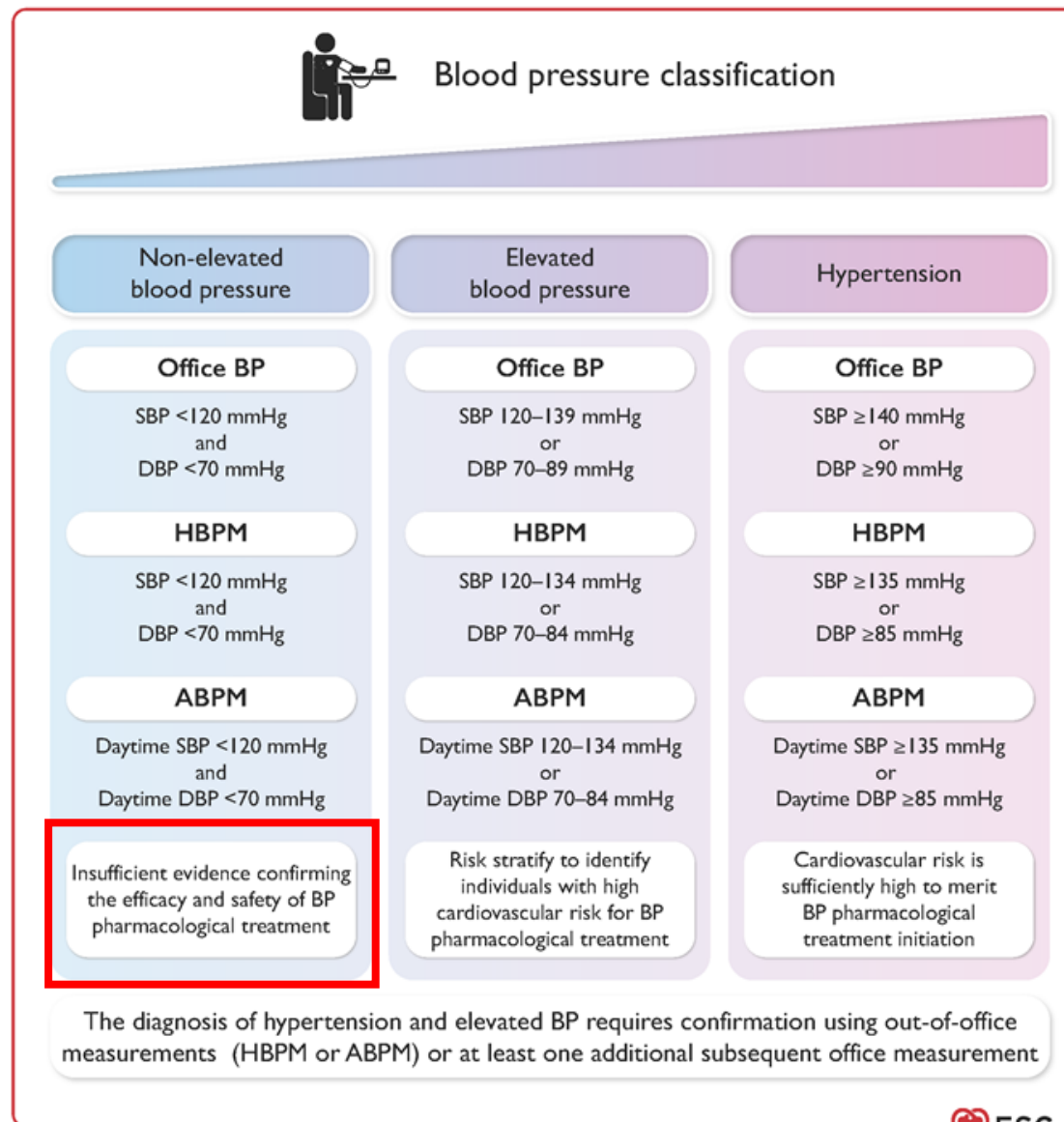


Figure 6

Blood pressure categories

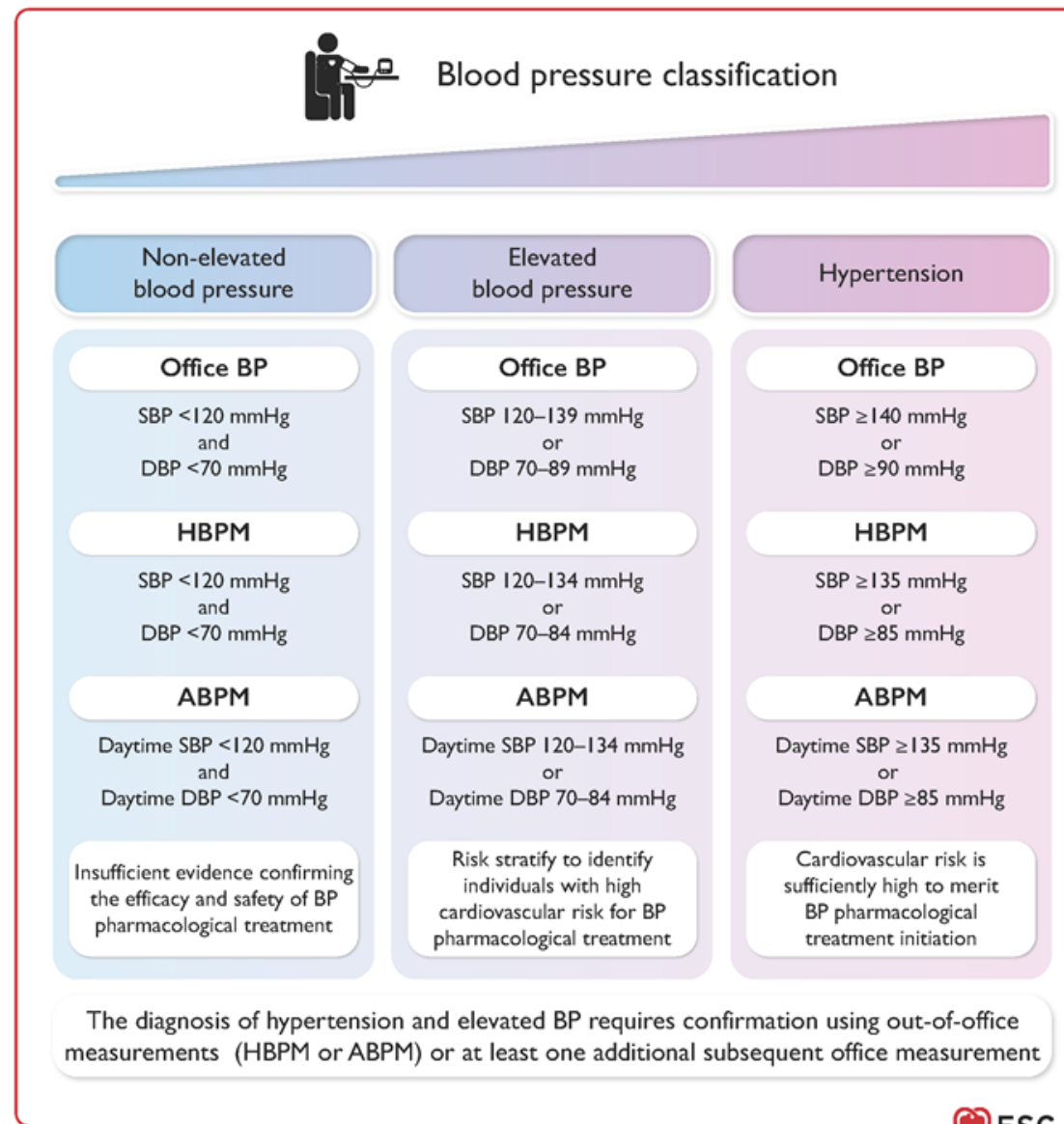


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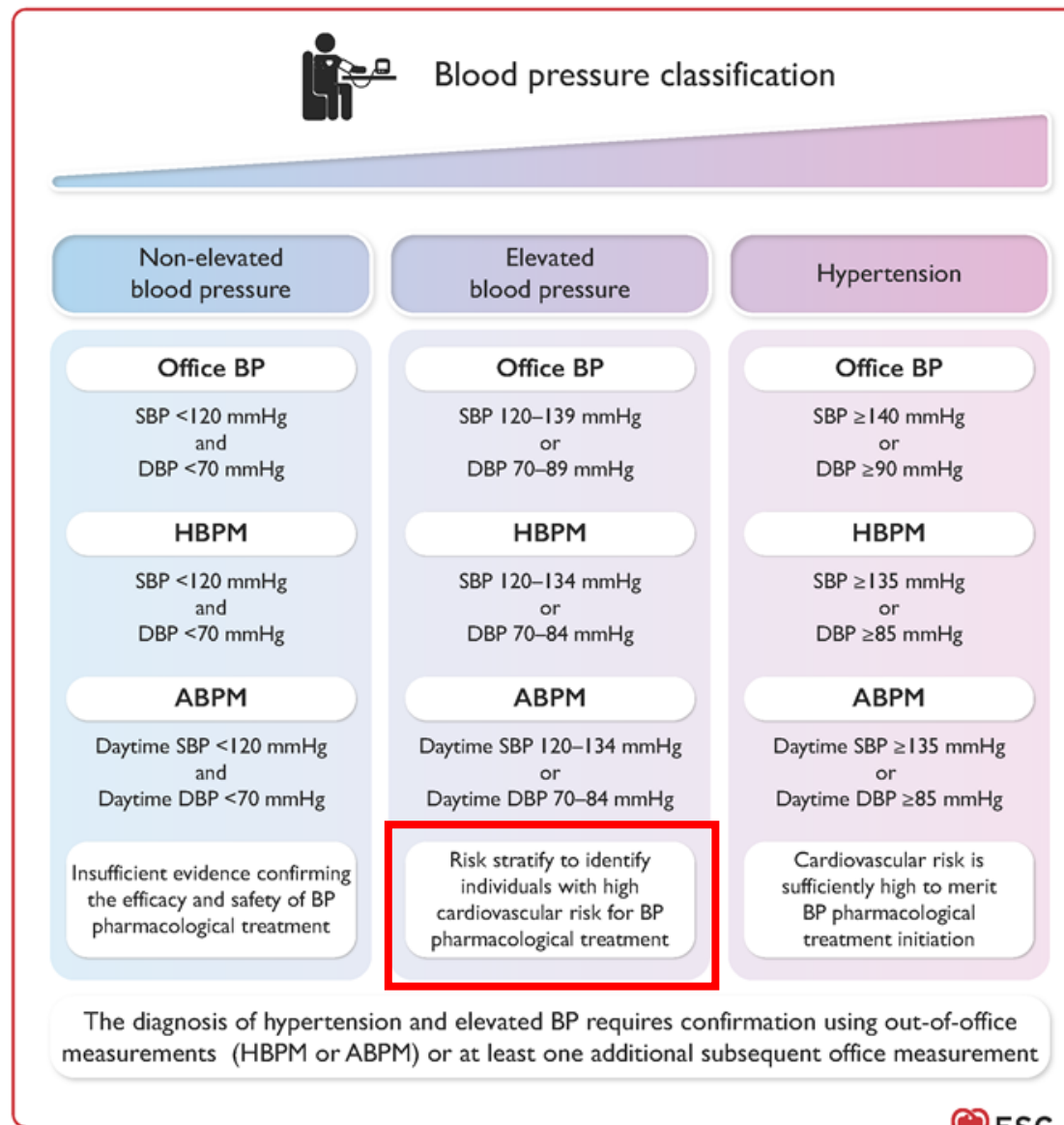


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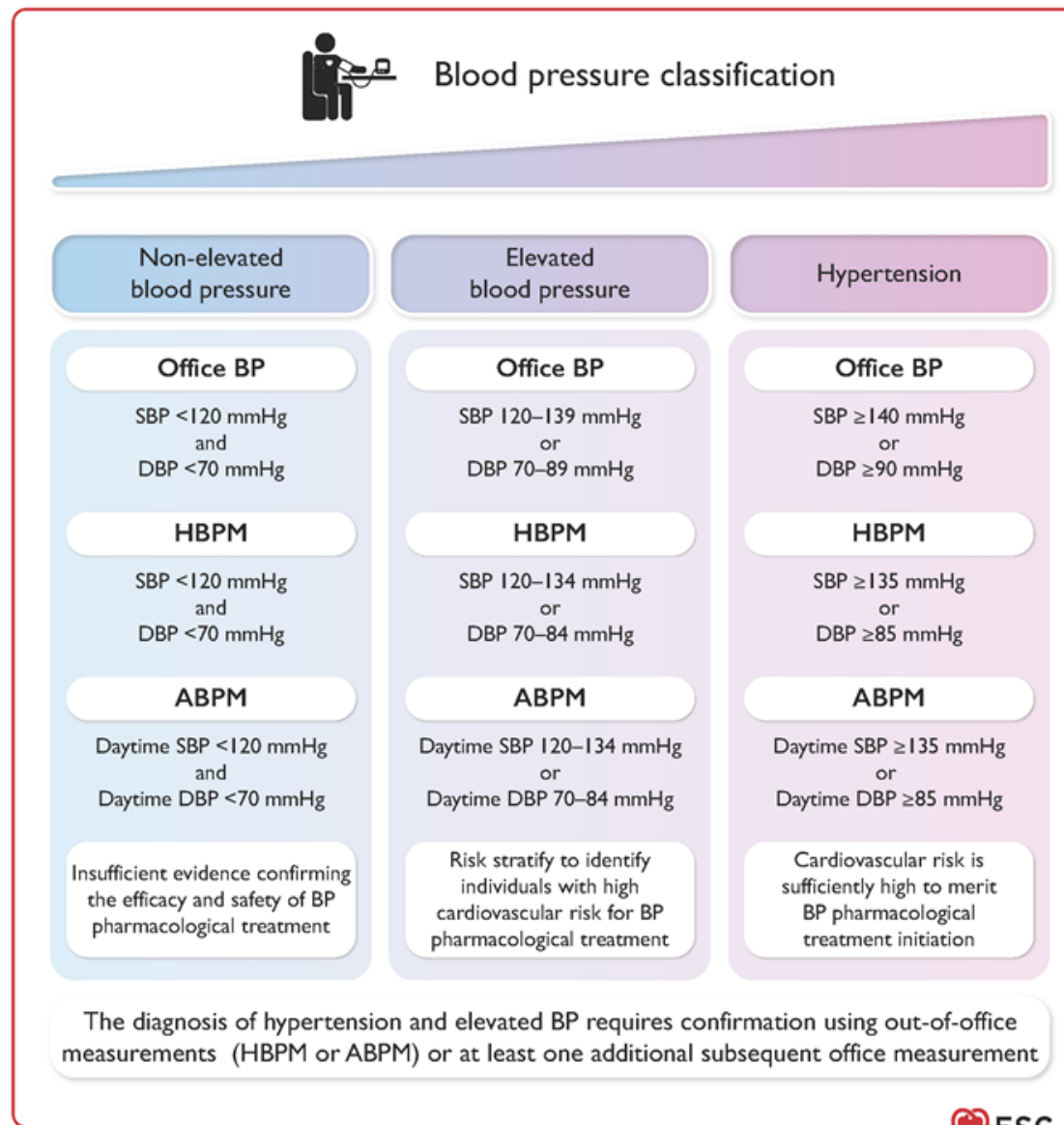
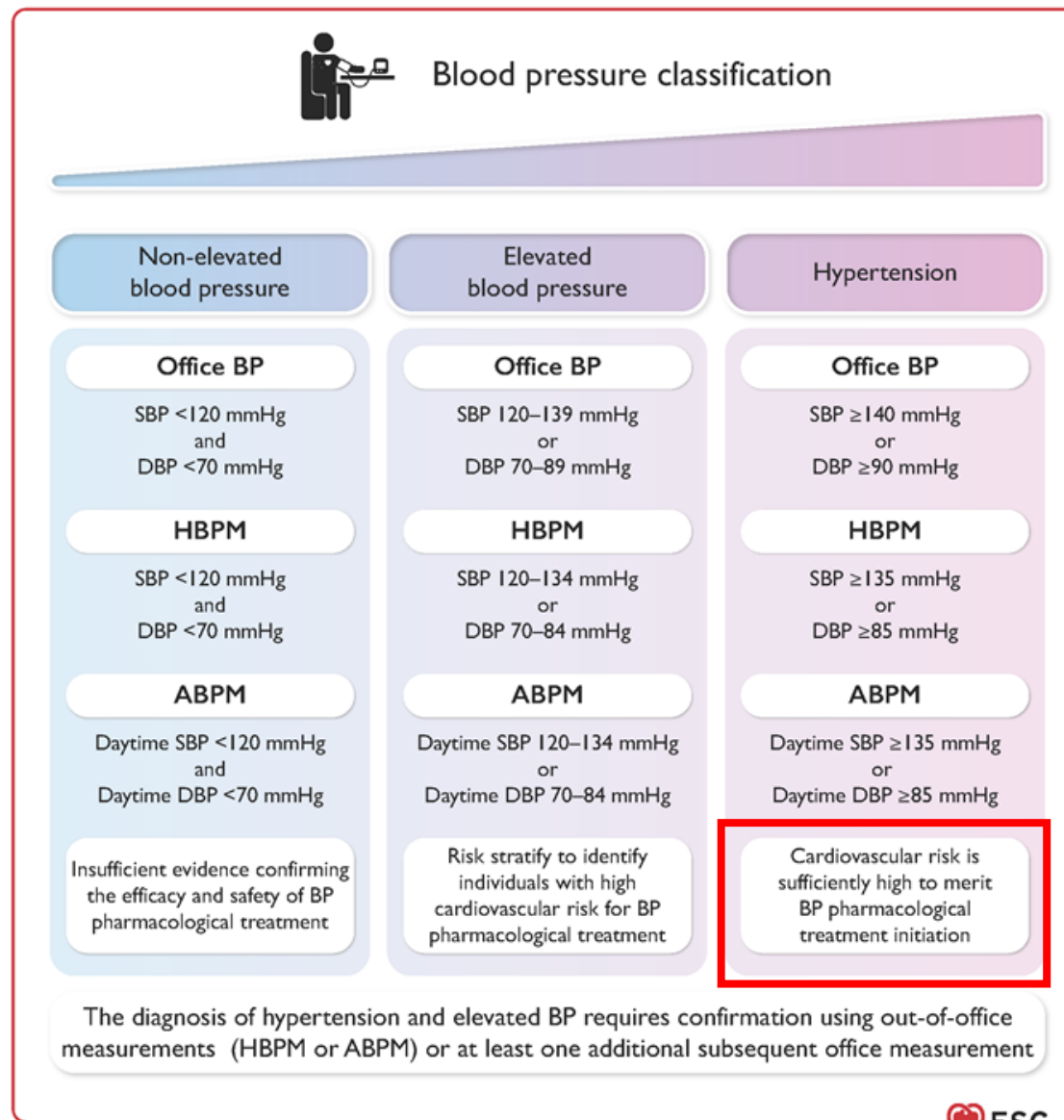
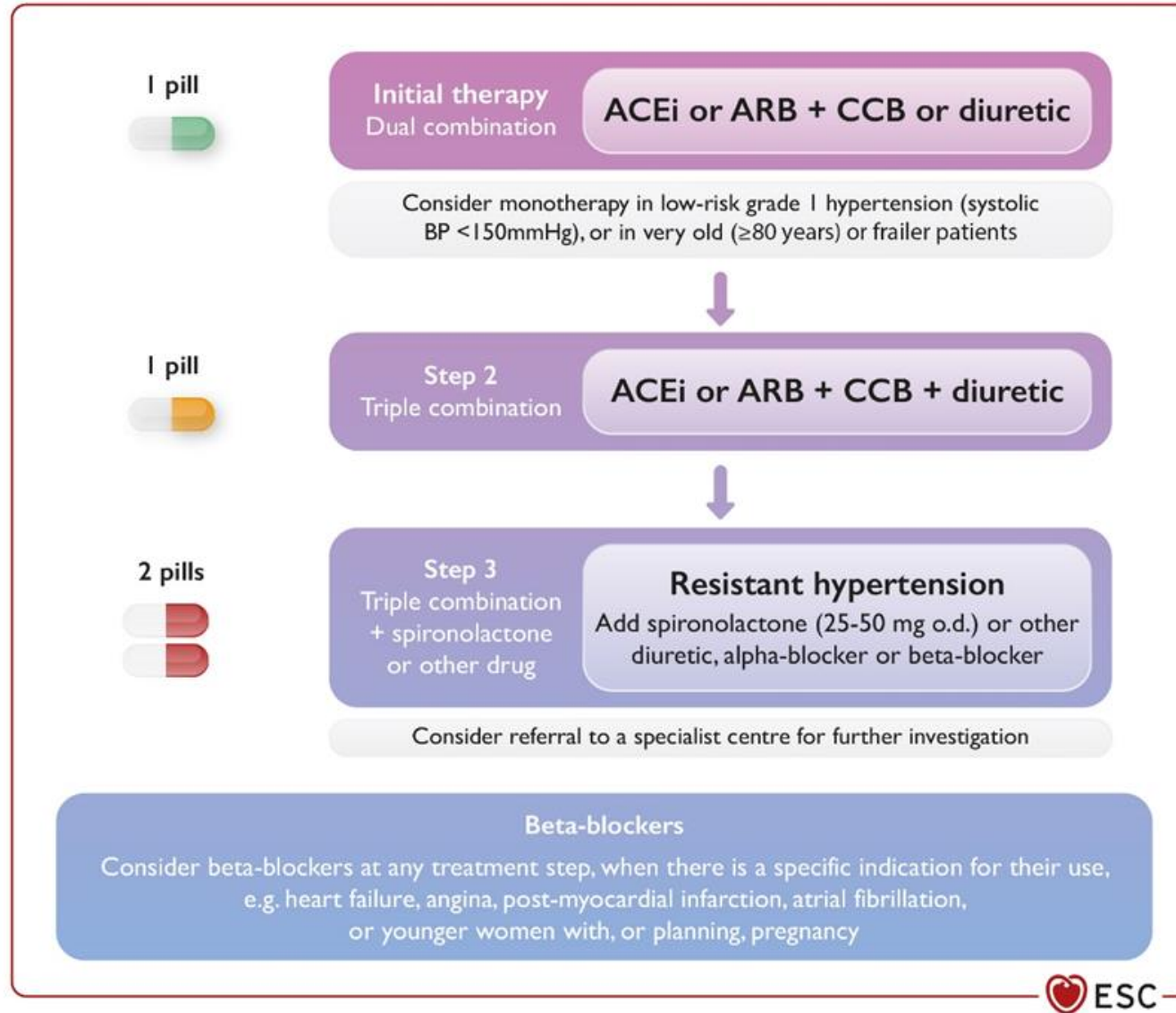


Figure 6

Blood pressure categories





Core drug treatment strategy for hypertension. This algorithm is appropriate for most patient with hypertension-mediated organ damage, diabetes mellitus, cerebrovascular disease, and peripheral artery disease

Målnivå

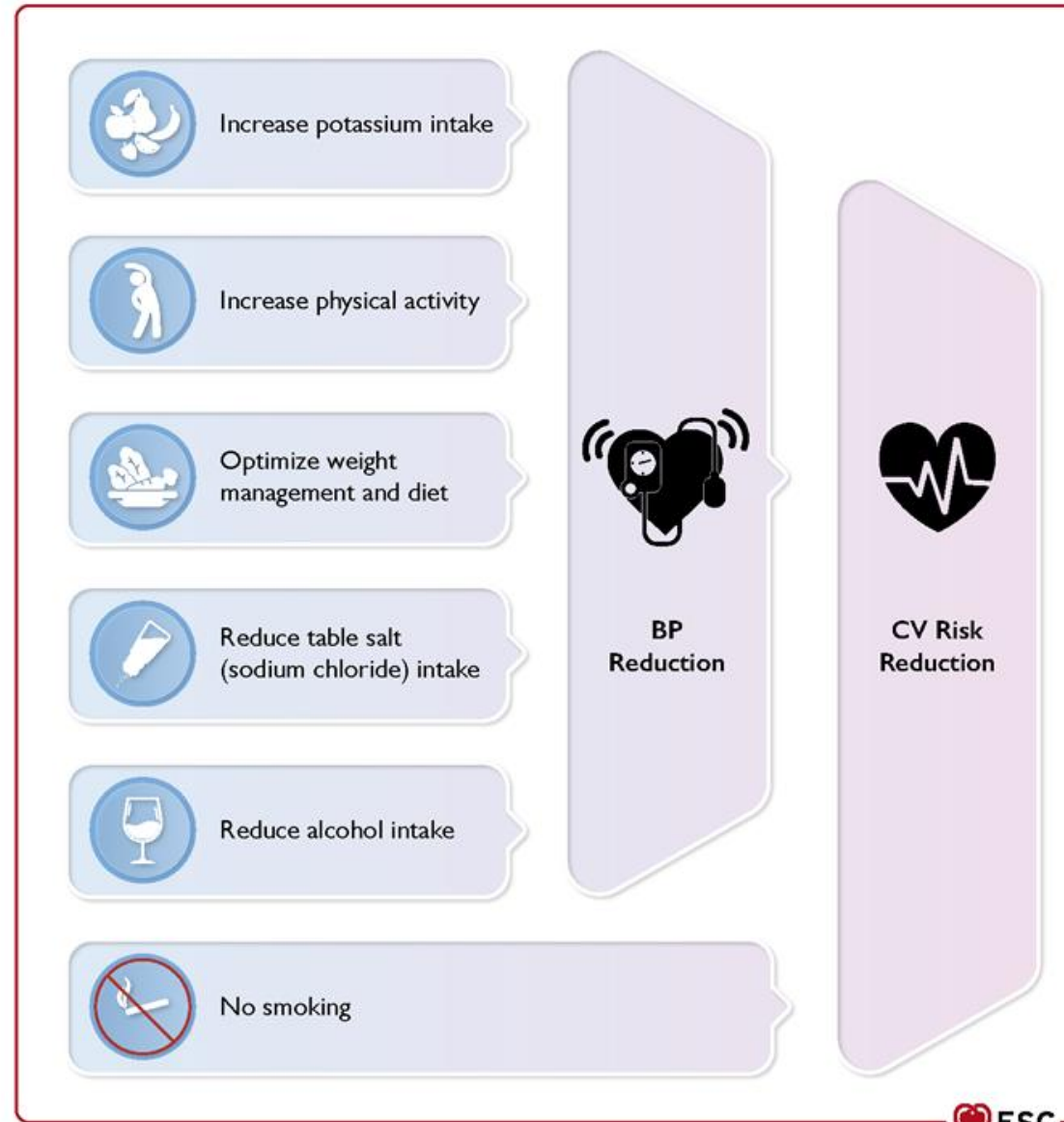
ALARA = as low as reasonably achievable

Livsstil

- Minska salt (NaCl) intag
- Öka kaliumintag
- Optimera kroppsvikt
- Minska alkoholintag
- Öka fysisk aktivitet
- No smoking

Figure 17

Effects of main lifestyle factors on blood pressure and cardiovascular risk reduction



New recommendations (5)

Recommendations	Class	Level
<i>Diagnosing hypertension and investigating underlying causes cont.</i>		
Objective evaluation of adherence (either directly observed treatment or detecting prescribed drugs in blood or urine samples) should be considered in the clinical work-up of patients with apparent resistant hypertension, if resources allow.	Ila	B
If moderate-to-severe CKD is diagnosed, it is recommended to repeat measurements of serum creatinine, eGFR, and urine ACR at least annually.	I	C
Coronary artery calcium scoring may be considered in patients with elevated BP or hypertension when it is likely to change patient management.	Ilb	B
Patients with resistant hypertension should be considered for referral to clinical centres with expertise in hypertension management for further testing.	Ila	B
It is recommended that patients with hypertension presenting with suggestive signs, symptoms, or medical history of secondary hypertension are appropriately screened for secondary hypertension.	I	B
Screening for primary aldosteronism by renin and aldosterone measurements should be considered in all adults with confirmed hypertension (BP \geq 140/90 mmHg).	Ila	B

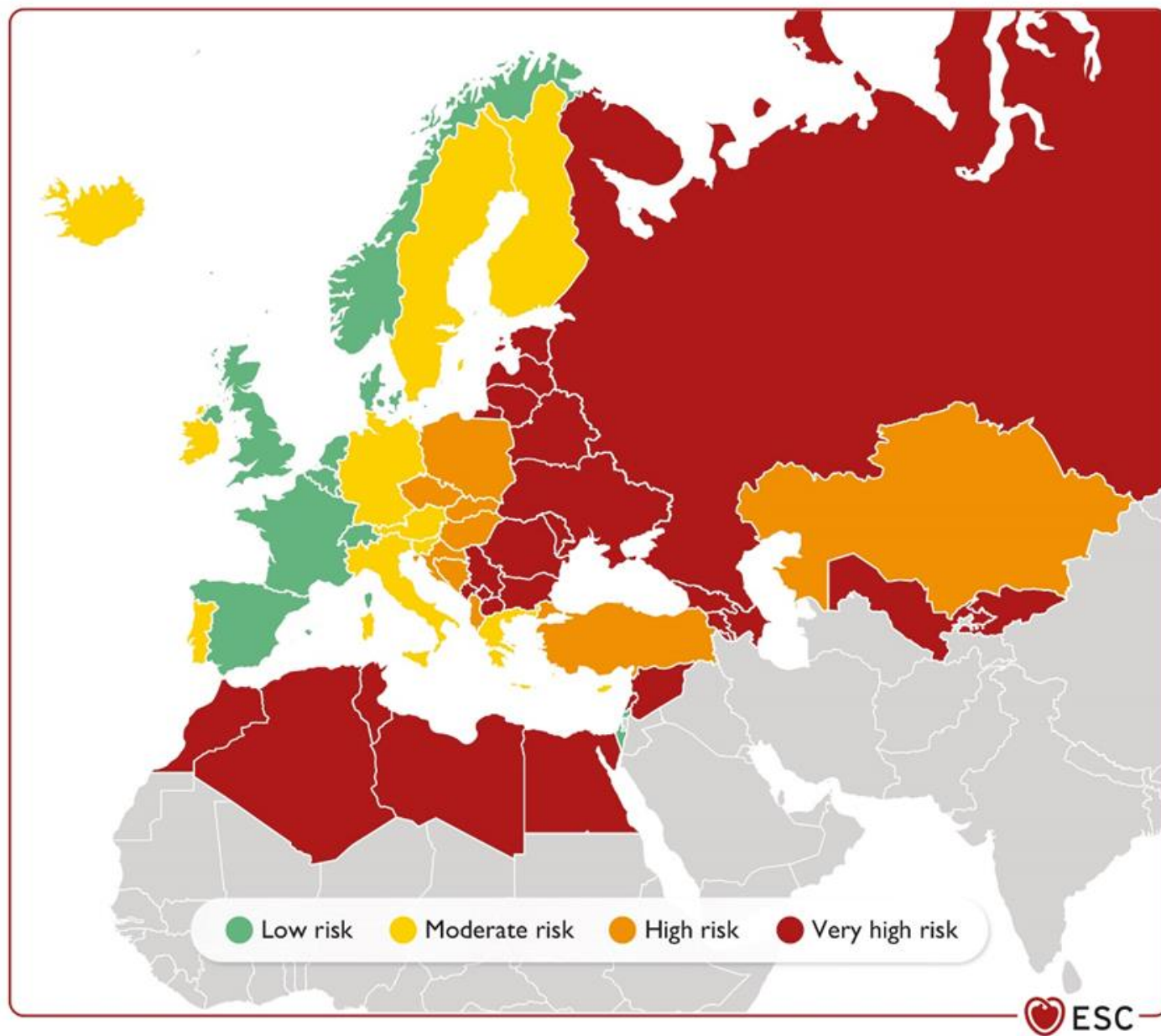
New recommendations (8)

Recommendations	Class	Level
<i>Preventing and treating elevated blood pressure cont.</i>		
It is recommended to maintain BP-lowering drug treatment lifelong, even beyond the age of 85 years, if well tolerated.	I	A
Because the benefit in reducing CVD outcomes is uncertain in these settings, and noting that close monitoring of treatment tolerance is advised, BP-lowering treatment should only be considered from $\geq 140/90$ mmHg (office) among persons meeting the following criteria: <ul style="list-style-type: none">• pre-treatment symptomatic orthostatic hypotension;• age ≥ 85 years;• clinically significant moderate-to-severe frailty;• and/or limited predicted lifespan (<3 years).	IIa	B
In cases where BP-lowering treatment is poorly tolerated and achieving a target systolic of 120–129 mmHg is not possible, it is recommended to target a systolic BP level that is ‘as low as reasonably achievable’ (ALARA principle).	I	A

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Risk regions based on World Health Organization cardiovascular mortality rates



SCORE2 & SCORE2-OP

10-year risk of (fatal and non-fatal) CV events in populations at moderate CVD risk



Women

Men

Non-smoking

Smoking

Non-smoking

Smoking

Non-HDL cholesterol

Systolic blood pressure (mmHg)
SCORE2-OP

3.0-3.9
150 200 250
4.0-4.9
200 250
5.0-5.9
250
6.0-6.9

3.0-3.9
150 200 250
4.0-4.9
200 250
5.0-5.9
250
6.0-6.9

mmol/L
mg/dL

3.0-3.9
150 200 250
4.0-4.9
200 250
5.0-5.9
250
6.0-6.9

3.0-3.9
150 200 250
4.0-4.9
200 250
5.0-5.9
250
6.0-6.9

160-179

37 39 40 42

41 43 44 46

Age (y)

37 45 53 62

37 45 53 61

140-159

35 36 38 39

39 40 42 43

85-89

36 43 51 59

35 43 51 59

120-139

32 34 35 37

36 38 39 41

80-84

34 41 49 57

34 41 48 57

100-119

30 32 33 34

34 35 37 38

75-79

32 39 47 55

32 39 46 55

160-179

27 28 30 31

34 35 37 39

70-74

30 35 41 47

34 40 46 53

140-159

24 25 27 28

30 32 33 35

80-84

27 32 37 43

31 36 42 48

120-139

21 22 24 25

27 28 30 31

75-79

25 29 34 40

28 33 38 44

100-119

19 20 21 22

24 25 27 28

70-74

22 26 31 36

25 30 35 40

160-179

19 20 21 23

27 29 30 32

75-79

24 27 31 35

31 35 39 44

140-159

16 17 18 19

24 25 26 28

70-74

21 23 27 30

27 30 34 38

120-139

14 15 15 16

20 21 22 24

75-79

17 20 23 26

23 26 29 33

100-119

12 12 13 14

17 18 19 20

70-74

15 17 19 22

19 22 25 29

160-179

13 14 15 16

22 23 25 26

70-74

19 21 23 25

28 31 34 36

140-159

11 11 12 13

18 19 20 22

70-74

15 17 18 20

23 25 28 30

120-139

9 9 10 11

15 16 17 18

70-74

12 13 15 16

19 20 22 24

100-119

7 7 8 8

12 13 13 14

70-74

10 11 12 13

15 16 18 20

SCORE2 and SCORE2-OP
risk chart for fatal and
non-fatal (MI, stroke)
ASCVD
Moderate CVD Risk (1)

SCORE2

160-179

140-159

120-139

100-119

160-179

140-159

120-139

100-119

160-179

140-159

120-139

100-119

160-179

140-159

120-139

100-119

160-179

140-159

120-139

100-119

160-179

140-159

120-139

100-119

10 10 11 12

8 9 9 9

7 7 7 8

5 6 6 6

7 8 8 9

6 6 7 7

5 5 5 6

4 4 4 5

5 6 6 7

4 4 5 5

3 3 4 4

3 3 3 3

4 4 5 5

3 3 4 4

2 2 3 3

2 2 2 2

3 3 3 4

2 2 3 3

2 2 2 2

1 1 1 2

2 2 3 3

1 2 2 2

1 1 1 2

1 1 1 1

15 16 17 18

13 13 14 15

10 11 12 12

9 9 9 10

12 13 14 15

10 11 11 12

8 9 9 10

6 7 7 8

10 11 11 12

8 8 9 10

6 7 7 8

5 5 6 6

8 8 9 10

6 6 7 8

5 5 6 6

3 4 4 5

6 7 8 9

5 5 6 6

3 4 4 5

3 3 3 4

5 5 6 7

3 4 5 5

3 3 3 4

2 2 2 3

65-69

60-64

55-59

50-54

45-49

40-44

14 15 17 18

12 13 14 15

10 11 12 13

8 9 10 10

11 12 13 15

9 10 11 12

7 8 9 10

6 7 7 8

9 10 11 12

7 8 9 10

5 6 7 8

4 5 6 6

7 8 9 10

5 6 7 8

4 5 5 6

3 4 4 5

5 6 7 8

4 5 5 6

3 4 4 5

2 3 3 4

4 5 6 7

3 4 4 5

2 3 3 4

2 2 2 3

20 22 23 25

17 18 20 21

14 15 17 18

12 13 14 15

17 18 20 22

14 15 17 18

11 13 14 15

9 10 11 12

14 16 17 20

11 13 14 16

9 10 11 13

7 8 9 10

11 13 15 17

9 10 12 14

7 8 9 11

5 6 7 8

9 11 13 15

7 8 10 12

5 7 8 9

4 5 6 7

8 9 11 13

6 7 8 10

4 5 6 8

3 4 5 6

**SCORE2 and SCORE2-OP
risk chart for fatal and
non-fatal (MI, stroke)
ASCVD
Moderate CVD Risk (2)**

Cardiovascular disease risk categories based on SCORE2 and SCORE2-OP in apparently healthy people according to age

	<50 years	50-69 years	≥70 years ^a
Low-to-moderate CVD risk: risk factor treatment generally not recommended	<2.5%	<5%	<7.5%
High CVD risk: risk factor treatment should be considered	2.5 to <7.5%	5 to <10%	7.5 to <15%
Very high CVD risk: risk factor treatment generally recommended ^a	≥7.5%	≥10%	≥15%

Revised recommendations (1)

2018 Guidelines	Class	Level	2024 Guidelines	Class	Level
<i>Definition and classification of elevated blood pressure and hypertension</i>					
It is recommended that BP be classified as optimal, normal, high-normal, or grades 1–3 hypertension, according to office BP.	I	C	It is recommended that BP be categorized as non-elevated BP, elevated BP, and hypertension to aid treatment decisions.	I	B
CV risk assessment with the SCORE system is recommended for hypertensive patients who are not already at high or very high risk due to established CVD, renal disease, or diabetes, a markedly elevated single risk factor (e.g. cholesterol), or hypertensive LVH.	I	B	SCORE2 is recommended for assessing 10-year risk of fatal and non-fatal CVD among individuals aged 40–69 years with elevated BP who are not already considered at increased risk due to moderate or severe CKD, established CVD, HMOD, diabetes mellitus, or familial hypercholesterolaemia.	I	B

Revised recommendations (2)

2018 Guidelines	Class	Level	2024 Guidelines	Class	Level
Definition and classification of elevated blood pressure					
CV risk assessment with the SCORE system is recommended for hypertensive patients who are not already at high or very high risk due to established CVD, renal disease, or diabetes, a markedly elevated single risk factor (e.g. cholesterol), or hypertensive LVH.	I	B	SCORE2-OP is recommended for assessing the 10-year risk of fatal and non-fatal CVD among individuals aged ≥ 70 years with elevated BP who are not already considered at increased risk due to moderate or severe CKD, established CVD, HMOD, diabetes mellitus, or familial hypercholesterolaemia.	I	B

Revised recommendations (11)

2018 Guidelines	Class	Level	2024 Guidelines	Class	Level
<i>Preventing and treating elevated blood pressure (blood pressure targets)</i>					
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	To reduce CVD risk, it is recommended that treated systolic BP values in most adults be targeted to 120–129 mmHg, provided the treatment is well tolerated.	I	A
A diastolic BP target of <80 mmHg should be considered for all hypertensive patients, independent of the level of risk and comorbidities.	IIa	B	In cases where on-treatment systolic BP is at or below target (120–129 mmHg) but diastolic BP is not at target (≥ 80 mmHg), intensifying BP-lowering treatment to achieve an on-treatment diastolic BP of 70–79 mmHg may be considered to reduce CVD risk.	IIb	C

Figure 20

Systolic blood pressure categories and treatment target range

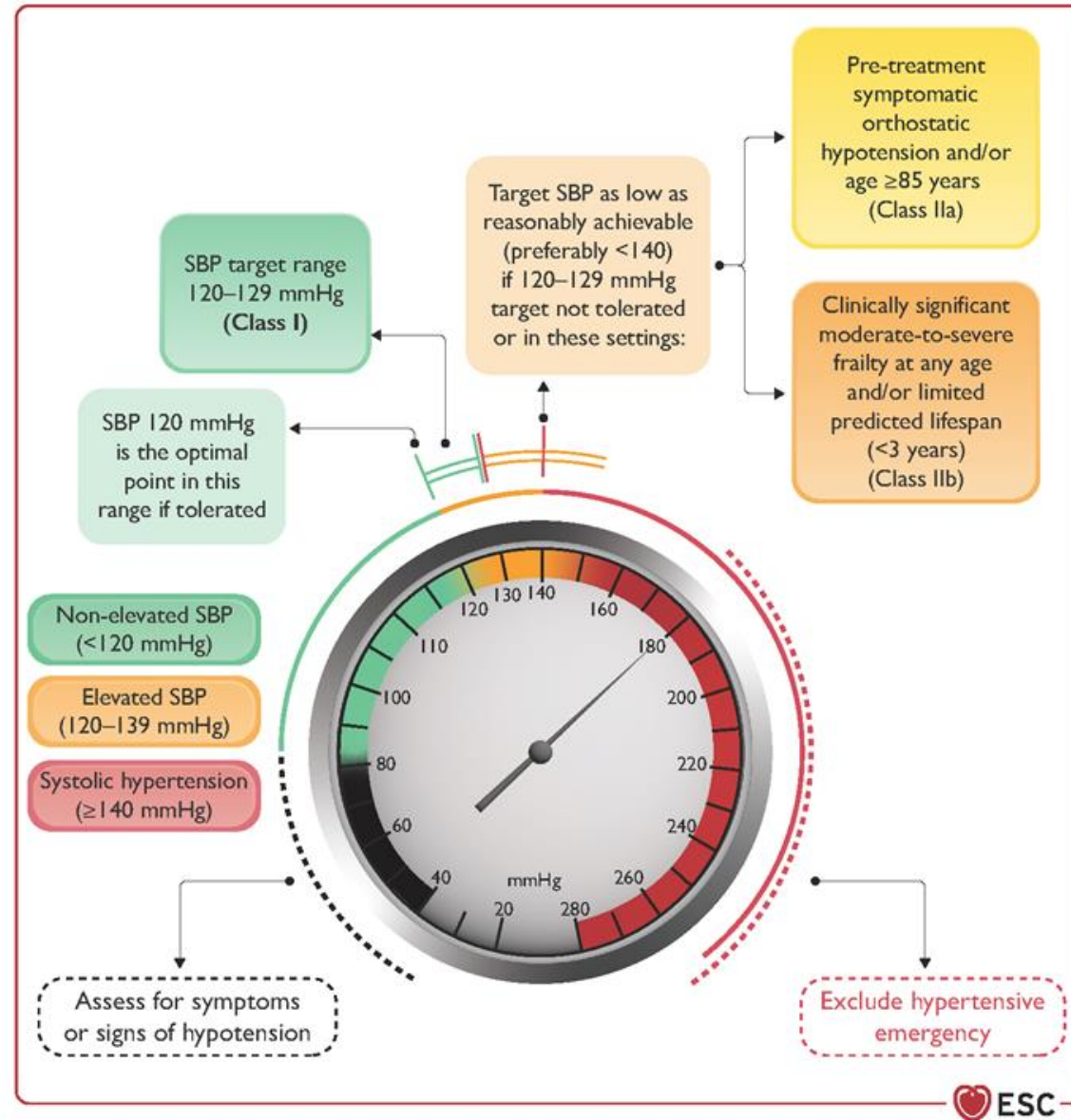




Figure 10

Protocol for confirming hypertension diagnosis

