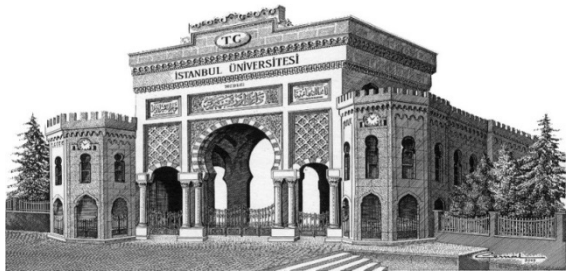


Geriatrik hastalarda sık rastlanan dahili sorunlar

Nereye kadar tedavi edelim?

7. İstanbul Dahiliye Klinikleri Buluşması-2017
Dr. Gülistan Bahat-Öztürk
İstanbul Tıp Fakültesi
İç Hastalıkları AD Geriatri BD

9:00 - 10:30 GERİATRİ PANELİ

(*Panel Koordinatörleri: Prof. Dr. Sema Uçak Basat, Yrd. Doç. Dr. Umut Safer, Doç. Dr. Füsun Erdenen, Yrd. Doç. Dr. Pınar Yıldız, Prof. Dr. M. Akif Karan)*

Oturum Başkanları: Prof. Dr. Sema Uçak Basat, Doç. Dr. Füsun Erdenen

9:00 - 09:15	Yaşlı hastada profilaksi yaklaşımları	*Uzm. Dr. Filiz Demirdağ*
9:15 - 09:30	Geriatrik hastada nöropsikiyatrik değerlendirme	*Uzm. Dr. Mehmet Yürüyen*
9:30 - 09:45	Sarkopeniye yaklaşım	*Doç. Dr. Berrin Karadağ*
9:45 - 10:00	**Geriatrik hastalarda sık rastlanan dâhili sorunlar: Nereye kadar tedavi edelim?**	***Doç. Dr. Gülistan Bahat Öztürk***

10.00-10.30: Tartışma

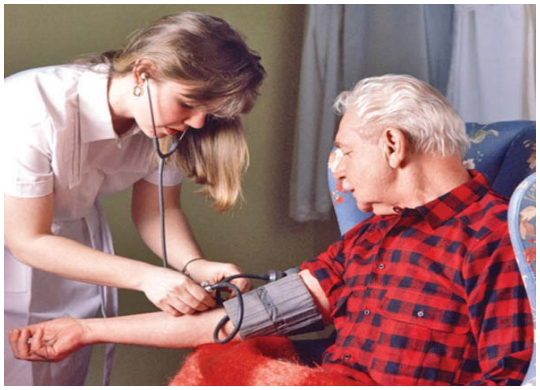
HİPERTANSİYON

YAŞLIDA HİPERTANSİYON

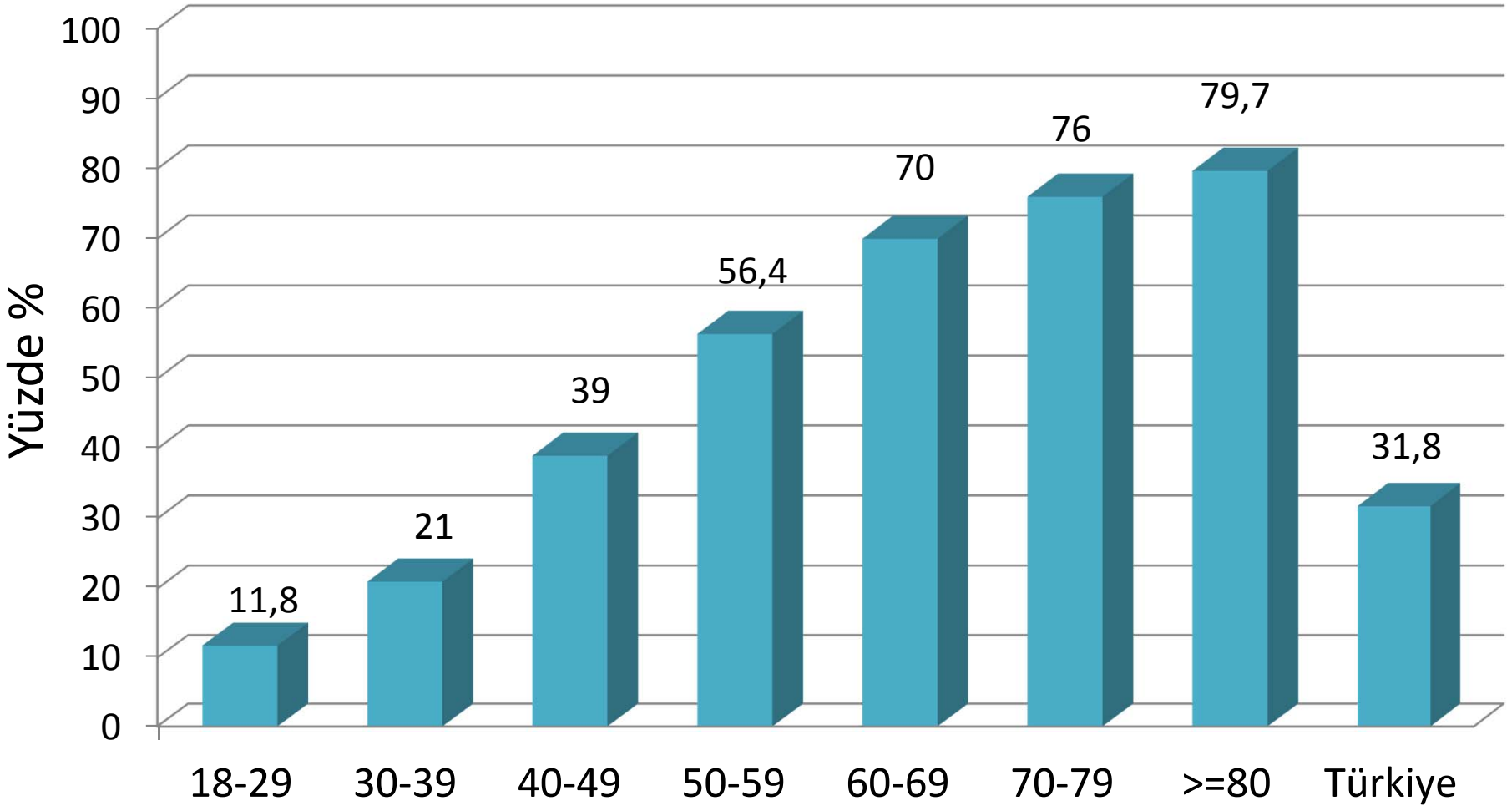
HT YAŞLIDA ÇOK SIK!

- Hipertansiyon (HT)
  - "yaşlılık döneminin hastalığı"dır.

- HT'li olguların 3/4'ü >50 y (NHANES III)
- >60-65 y: %60-80 prevalans!



Yaş Gruplarında Hipertansiyon Prevalansı



AGING MALE

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ISSN: 1368-5538 (print), 1473-0790 (electronic)

Aging Male, 2013; 16(2): 67–72
© 2013 Informa UK Ltd. DOI: 10.3109/13685538.2013.771329

informa
healthcare

ORIGINAL ARTICLE

Assessments of functional status, comorbidities, polypharmacy, nutritional status and sarcopenia in Turkish community-dwelling male elderly

Gulistan Bahat[1], Fatih Tufan[1], Zumrut Bahat[2], Yucel Aydin[3], Asli Tufan[1], Timur Selcuk Akpinar[3], Nilgun Erten[3], and Mehmet Akif Karan[1]

Aging Clin Exp Res. 2014 Jun;26(3):255-9. doi: 10.1007/s40520-014-0229-8. Epub 2014 Apr 30.

Comorbidities, polypharmacy, functionality and nutritional status in Turkish community-dwelling female elderly.

Bahat G[1], Tufan F, Bahat Z, Tufan A, Aydin Y, Akpinar TS, Nadir S, Erten N, Karan MA.

Author information

[1]Division of Geriatrics, Department of Internal Medicine, Istanbul Medical School, Istanbul University, Capa, 34390, Istanbul, Turkey, gbahatozturk@yahoo.com.

- **İTF Geriatri Poliklinik Prevelansı** (n= 789, >=60y)

%71,7

HANGİ KILAVUZ?

- 2013 ESH/ESC Kılavuzu
- 2014 JNC-8 Kılavuzu

Güncel Hipertansiyon Kılavuzları

Table 6. Guideline Comparisons of Goal BP and Initial Drug Therapy for Adults With Hypertension

Guideline	Population	Goal BP, mm Hg	Initial Drug Treatment Options
2014 Hypertension guideline	General ≥60 y	<150/90	Nonblack: thiazide-type diuretic, ACEI, ARB, or CCB
	General <60 y	<140/90	Black: thiazide-type diuretic or CCB
	Diabetes	<140/90	Thiazide-type diuretic, ACEI, ARB, or CCB
	CKD	<140/90	ACEI or ARB
ESH/ESC 2013[37]	General nonelderly	<140/90	β-Blocker, diuretic, CCB, ACEI, or ARB
	General elderly <80 y	<150/90	
	General ≥80 y	<150/90	
	Diabetes	<140/85	ACEI or ARB
	CKD no proteinuria	<140/90	ACEI or ARB
	CKD + proteinuria	<130/90	
CHEP 2013[38]	General <80 y	<140/90	Thiazide, β-blocker (age <60y), ACEI (nonblack), or ARB
	General ≥80 y	<150/90	
	Diabetes	<130/80	ACEI or ARB with additional CVD risk ACEI, ARB, thiazide, or DHPCCB without additional CVD risk
	CKD	<140/90	ACEI or ARB
ADA 2013[39]	Diabetes	<140/80	ACEI or ARB
KDIGO 2012[40]	CKD no proteinuria	≤140/90	ACEI or ARB
	CKD + proteinuria	≤130/80	
NICE 2011[41]	General <80 y	<140/90	<55 y: ACEI or ARB
	General ≥80 y	<150/90	≥55 y or black: CCB
ISHIB 2010[42]	Black, lower risk	<135/85	Diuretic or CCB
	Target organ damage or CVD risk	<130/80	

Heart. 2014 Feb;100(4):317-23. doi: 10.1136/heartjnl-2013-304111. Epub 2013 Jun 27.

Effects of antihypertensive treatment in patients over 65 years of age: a meta-analysis of randomised controlled studies.

Briasoulis A[1], Agarwal V, Tousoulis D, Stefanadis C.

<150/80 mmHg

inme, KVH, KY ve herhangi bir sebepten ölüm ↓

Meta-analiz

18 RCT çalışması

Takip süresi 3,4 yıl

n=114 854 (≥65y)

Madalyonun öteki yüzü

NIH Public Access
Author Manuscript
Arch Intern Med. Author manuscript; available in PMC 2013 August 13.

Published in final edited form as:
Arch Intern Med. 2012 August 13; 172(15): 1162–1168. doi:10.1001/archinternmed.2012.2555.

Rethinking the Association of High Blood Pressure with Mortality in Elderly Adults: The Impact of Frailty

>=65 y
n= 2340

- **Kırılgan yaşlılar (Yürüme Hızı)**
  - **KB vs Mortalite ilişki yok**
  - **En kırılgan olanlarda "yüksek KB" olanlarda "mortalite daha az"!**

Heart. 2014 Feb;100(4):317-23. doi: 10.1136/heartjnl-2013-304111. Epub 2013 Jun 27.

Effects of antihypertensive treatment in patients over 65 years of age: a meta-analysis of randomised controlled studies.

Briasoulis A[1], Agarwal V, Tousoulis D, Stefanadis C.

CONTEXT: Despite the high incidence of hypertension, the elderly population is not represented in clinical trials as they have upper age limits or do not present age-specific results.

OBJECTIVES: The present study was designed to systematically review prospective randomized trials and assess the effects of antihypertensive treatment on cardiovascular, all-cause mortality, stroke and heart failure in patients over 65 years of age.

DATA SOURCES: We systematically searched the electronic databases, MEDLINE, PUBMED, EMBASE and Cochrane for prospective randomized studies (1970-2012) in which patients were randomized either to antihypertensive treatment and non-drug control group or to different antihypertensive treatments.

STUDY SELECTION: We identified 18 clinical studies, with 19 control arms and 19 treatment arms examining 59285 controls, 55569 hypertensive patients with an average follow up duration of 3.44 years. The mean age of patients on treatment was 71.04 years.

DATA EXTRACTION: Included studies were divided and analyzed in 2 subgroups: i) studies comparing treatment group vs non-drug placebo group with a BP decrease of 27.3/11.1 mmHg and ii) studies comparing two anti-hypertensive regimens with baseline BP ~157/86, and BP reduction to less than 140/80.

RESULTS: A significant reduction in all four outcomes was found in the first group of studies. In the second group similar BP reduction resulted in equivalent risk reduction in both treatment groups. In the meta-regression analysis mean SBP difference was linearly associated with all-cause, cardiovascular, stroke and heart failure risk reduction.

CONCLUSION: Reducing BP to a level of 150/80 mmHg is associated with large benefit in stroke, cardiovascular and all-cause mortality as well as heart failure risk in elderly individuals. Different antihypertensive regimens with equal BP reduction have similar effects on cardiovascular outcomes. SBP rather than DBP reduction is significantly related to lower cardiovascular risk in this population.

Recent eLetters

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Displaying 1-10 letters out of 632 published

Under-representation of Frail or Medically Compromised Hypertensive Older People in the Paper

Gulistan Bahat, MD Asli Tufan, Mehmet Akif Karan

Istanbul University, Istanbul Medical School, Department of Internal Medicine, Division of Geriatric

Re: **Effects of antihypertensive treatment in patients over 65 years of age: a meta-analysis of randomised controlled studies**. **Briasoulis**, et al. **100:4 317-323** doi:**10.1136/heartjnl-2013-304111**

Under-representation of Frail or Medically Compromised Hypertensive Older People in the Paper Gulistan Bahat*, Asli Tufan, Mehmet Akif Karan

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Education | Heart Asia | Online First

- Education In Heart:Cardiac MRI assessment of atrial fibrosis in atrial fibrillation: implications for diagnosis and therapy (1 Apr 2014)
- Education In Heart:Analytically false or

The findings by Odden et al[1] and our data stress the importance of adapting practice to the specific needs of each older adult. Function is a collector of the enormous amount of biological and "vital" events that have occurred during the long natural history of each subject[3] and should be factored into assessment and treatment decisions.

New York, NY 10025 (eargulian@chpnet.org).

Conflict of Interest Disclosures: None reported.

1. Odden MC, Peralta CA, Haan MN, Covinsky KE. Rethinking the association of high blood pressure with mortality in elderly adults: the impact of frailty. *Arch Intern Med*. 2012;172(15):1162-1168.
2. Goodwin JS. Gait speed: an important vital sign in old age. *Arch Intern Med*. 2012;172(15):1168-1169.

Yaşlı Hastada HT Tedavisi Bireyselleştirilmeli!
Fonksiyonellik Değerlendirilmeli!

Conflict of Interest Disclosures: None reported.

1. Odden MC, Peralta CA, Haan MN, Covinsky KE. Rethinking the association of high blood pressure with mortality in elderly adults: the impact of frailty. *Arch Intern Med*. 2012;172(15):1162-1168.
2. Goodwin JS. Gait speed: an important vital sign in old age. *Arch Intern Med*. 2012;172(15):1168-1169.

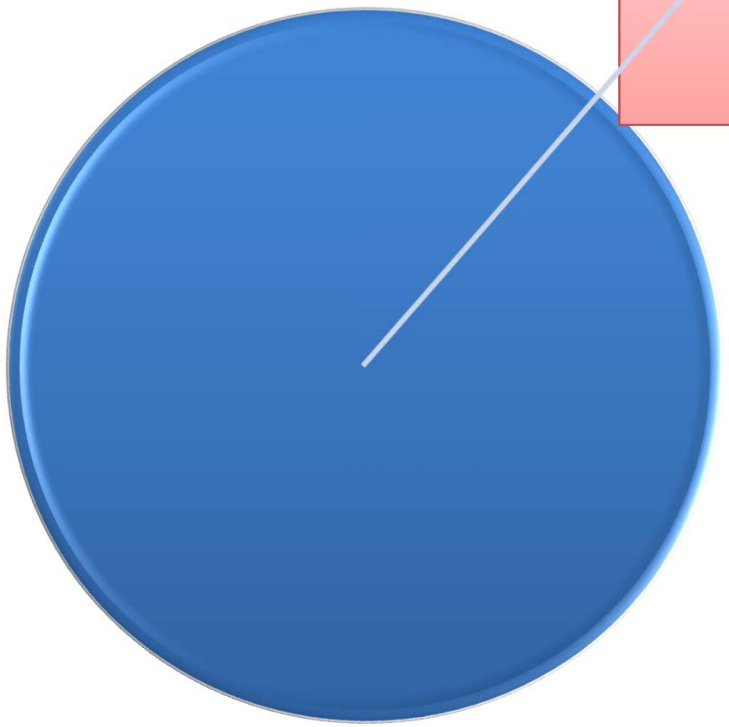
3. Rozzini R, Frisoni GB, Ferrucci L, Barbisoni P, Bertozzi B, Trabucchi M. The effect of chronic diseases on physical function: comparison between activities of daily living scales and the Physical Performance Test. *Age Ageing*. 1997;26(4):281-287.

BP. However, for slower-walking older persons, caution is needed with regard to BP levels measured in out-of-office settings, since we recently demonstrated that slower walking speed in older hypertensive patients (n=148; mean age, 75.5 years) was associated with high nocturnal (ie, sleep) BP or less nocturnal BP dipping (ie, non-dipping), but not daytime or office BP.[2] Because a high

Rozzini R, Trabucchi M. Gait speed and high blood pressure. JAMA Intern Med. 2013 Feb 25;173(4):324-5.

2016

YENİ VERİ VAR MI?



2015'E KADAR TÜM ÇALIŞMALARDA

- ÇALIŞMA BAŞINDAKİ SKB >=160 mmHg

- ÇALIŞMA SONU SKB >140 mmHg

- 140-160 mmHg'li olgularda (İSH) çalışma (-)

UpToDate. Treatment of HT in the elderly patient, particularly ISH

SPRINT

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 NOVEMBER 26, 2015 VOL. 373 NO. 22

A Randomized Trial of Intensive versus Standard Blood-Pressure Control

The SPRINT Research Group*

ABSTRACT

BACKGROUND

The most appropriate targets for systolic blood pressure to reduce cardiovascular morbidity and mortality among persons without diabetes remain uncertain.

METHODS

We randomly assigned 9361 persons with a systolic blood pressure of 130 mm Hg or higher and an increased cardiovascular risk, but without diabetes, to a systolic blood-pressure target of less than 120 mm Hg (intensive treatment) or a target of less than 140 mm Hg (standard treatment). The primary composite outcome was myocardial infarction, other acute coronary syndromes, stroke, heart failure, or death from cardiovascular causes.

The members of the writing committee (Jackson T. Wright, Jr., M.D., Ph.D., Jeff D. Williamson, M.D., M.H.S., Paul K. Whelton, M.D., Joni K. Snyder, R.N., B.S.N., M.A., Kaycee M. Sink, M.D., M.A.S., Michael V. Rocco, M.D., M.S.C.E., David M. Reboussin, Ph.D., Mahboob Rahman, M.D., Suzanne Oparil, M.D., Cora E. Lewis, M.D., M.S.P.H., Paul L. Kimmel, M.D., Karen C. Johnson, M.D., M.P.H., David C. Goff, Jr., M.D., Ph.D., Lawrence J. Fine, M.D., Dr.P.H., Jeffrey A. Cutler, M.D., M.P.H., William C. Cush-

SPRINT
(Systolic Blood Pressure Intervention Trial)

- **ÇALIŞMA BAŞI SKB >=130 mmHg**
  - **Manuel: 135-140 mm Hg**

- **Hedef SKB <120 mm Hg vs Hedef SKB<140 mmHg**
  - **Manuel: <125-130 mm Hg vs <145-150 mmHg**

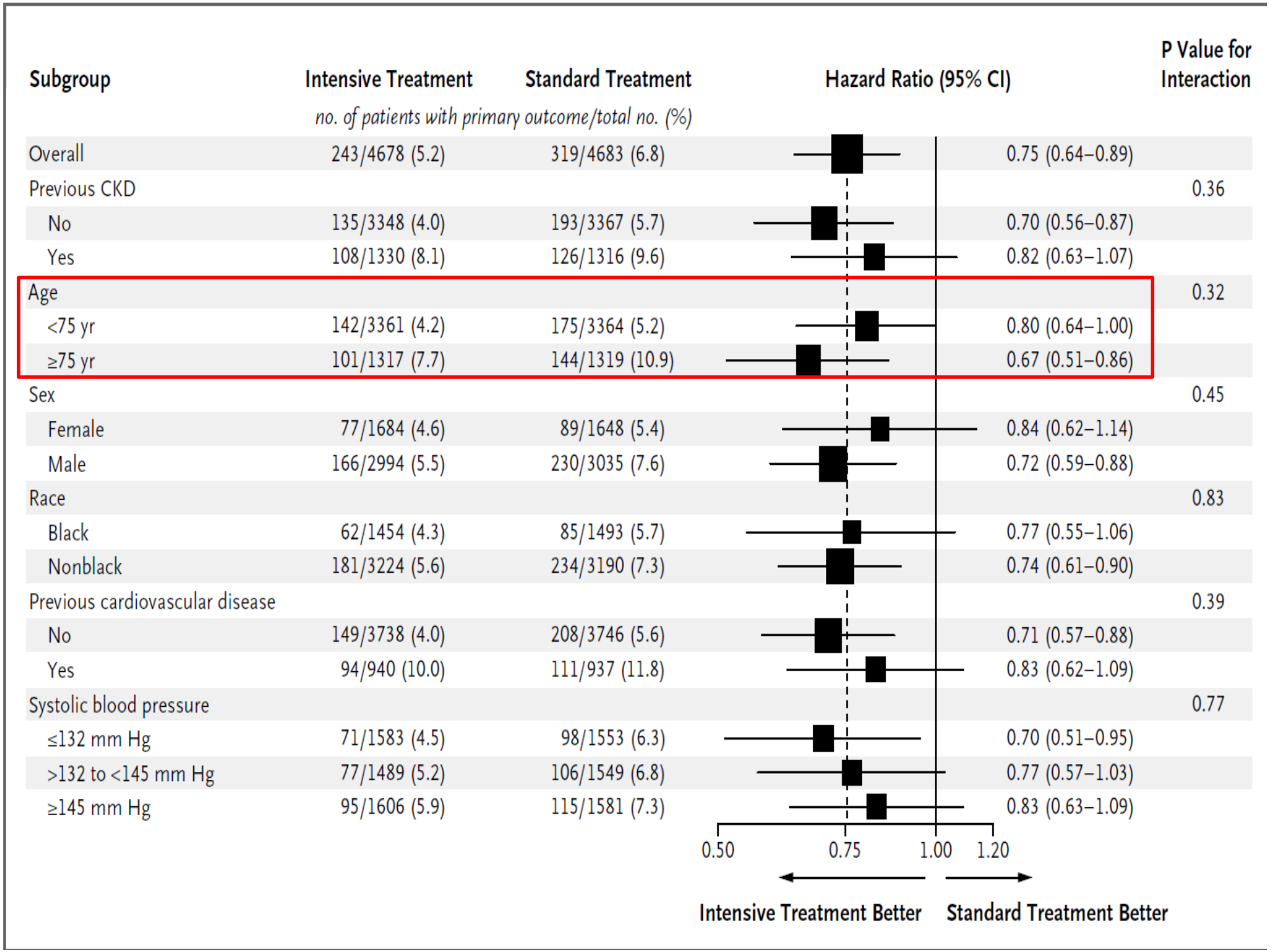
- **Çalışma sonucu 121.4 mmHg vs 136.2 mmHg**
  - **Manuel: 126-131 mm Hg vs 141-146 mm Hg**

UpToDate. Treatment of HT in the elderly patient, particularly ISH

SPRINT
(Systolic Blood Pressure Intervention Trial)

- Erken sonlandırıl !!!
- 3.3 yıl
- Pr
  (A ,kalp
  yet
- Mortalite

İNTENSİF TEDAVİ GRUBUNDA DAHA AZ (HR:0,75- HR:0,73)


Subgroup
Intensive Treatment
Standard Treatment
Hazard Ratio (95% CI)
P Value for Interaction
no. of patients with primary outcome/total no. (%)
Overall 243/4678 (5.2) 319/4683 (6.8) 0.75 (0.64–0.89)
Previous CKD 0.36
No 135/3348 (4.0) 193/3367 (5.7) 0.70 (0.56–0.87)
Yes 108/1330 (8.1) 126/1316 (9.6) 0.82 (0.63–1.07)
Age 0.32
<75 yr 142/3361 (4.2) 175/3364 (5.2) 0.80 (0.64–1.00)
≥75 yr 101/1317 (7.7) 144/1319 (10.9) 0.67 (0.51–0.86)
Sex 0.45
Female 77/1684 (4.6) 89/1648 (5.4) 0.84 (0.62–1.14)
Male 166/2994 (5.5) 230/3035 (7.6) 0.72 (0.59–0.88)
Race 0.83
Black 62/1454 (4.3) 85/1493 (5.7) 0.77 (0.55–1.06)
Nonblack 181/3224 (5.6) 234/3190 (7.3) 0.74 (0.61–0.90)
Previous cardiovascular disease 0.39
No 149/3738 (4.0) 208/3746 (5.6) 0.71 (0.57–0.88)
Yes 94/940 (10.0) 111/937 (11.8) 0.83 (0.62–1.09)
Systolic blood pressure 0.77
≤132 mm Hg 71/1583 (4.5) 98/1553 (6.3) 0.70 (0.51–0.95)
>132 to <145 mm Hg 77/1489 (5.2) 106/1549 (6.8) 0.77 (0.57–1.03)
≥145 mm Hg 95/1606 (5.9) 115/1581 (7.3) 0.83 (0.63–1.09)
0.50
0.75
1.00
1.20
Intensive Treatment Better
Standard Treatment Better

SPRINT
(Systolic Blood Pressure Intervention Trial)

opment of ESRD was noted, though the number of events was small (Table 2). Among partici-

assignment among participants 75 years of age or older were similar to those in the overall cohort (Table S6 in the Supplementary Appendix).

DISCUSSION

SPRINT showed that among adults with hypertension but without diabetes, lowering systolic blood pressure to a target goal of less than 120 mm Hg, as compared with the standard goal of less than 140 mm Hg, resulted in significantly lower rates of fatal and nonfatal cardiovascular events and death from any cause. Trial participants assigned to the lower systolic blood-pressure target (intensive-treatment group), as compared with those assigned to the higher target (standard-treatment group), had a 25% lower relative risk of the primary outcome; in addition, the intensive-treatment group had lower rates of several other important outcomes, including heart fail-

normalities, and acute kidney injury or acute

DM ve inme (-) erişkinlerde ve yaşlılarda Hedef SKB< 120 mm Hg

SPRINT
(Systolic Blood Pressure Intervention Trial)

opment of ESRD was noted, though the number of events was small (Table 2). Among partici-

assignment among participants 75 years of age or older were similar to those in the overall cohort (Table S6 in the Supplementary Appendix).

DM ve

yaşlılarda

Hedef SKB< 120 mm Hg

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cardiovascular events and
death from any cause. Trial participants assigned to the lower systolic blood-pressure target (intensive-treatment group), as compared with those assigned to the higher target (standard-treatment group), had a 25% lower relative risk of the primary outcome; in addition, the intensive-treatment group had lower rates of several other important outcomes, including heart fail-

normalities, and acute kidney injury or acute

Madalyonun öteki yüzü

SPRINT
(Systolic Blood Pressure Intervention Trial)

opment of ESRD was noted, though the number of events was small (Table 2). Among partici-
pants who did not

assignment among participants 75 years of age or
the overall co-
Appendix).

KIRILGAN
YAŞLILAR???

< 120 mm Hg

any cause. Trial participants as-
to the lower systolic blood-pressure target (intensive-treatment group), as compared with those assigned to the higher target (standard-treatment group), had a 25% lower relative risk of the primary outcome; in addition, the intensive-treatment group had lower rates of several other important outcomes, including heart fail-

in the Supplementary Appendix). Serious adverse events of hypotension, syncope, electrolyte abnormalities, and acute kidney injury or acute

SPRINT

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 NOVEMBER 26, 2015 VOL. 373 NO. 22

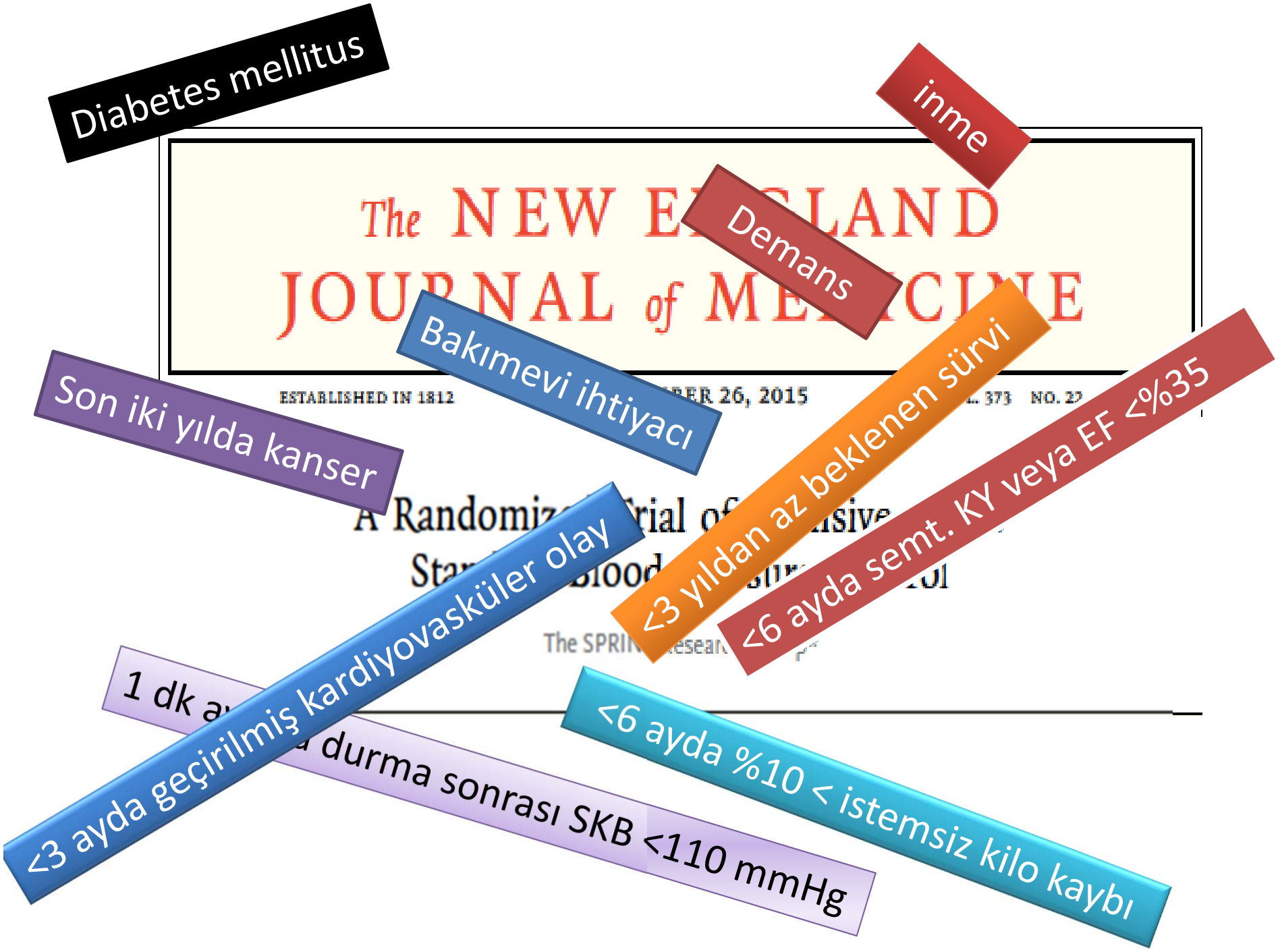
A Randomized Trial of Intensive versus Standard Blood-Pressure Control

The SPRINT Research Group*

of cardiovascular events. Increased cardiovascular risk was defined by one or more of the following: clinical or subclinical cardiovascular disease other than stroke; chronic kidney disease, excluding polycystic kidney disease, with an estimated glomerular filtration rate (eGFR) of 20 to less than 60 ml per minute per 1.73 m^2 of body-surface area, calculated with the use of the four-variable Modification of Diet in Renal Disease equation; a 10-year risk of cardiovascular disease of 15% or greater on the basis of the Framingham risk score; or an age of 75 years or older. Patients with diabetes mellitus or prior stroke were excluded. Detailed inclusion and exclusion criteria are listed in the Supplementary Appendix. All participants provided written informed

Takeda Pharmaceuticals International and Arbor Pharmaceuticals; neither company had any other role in the study.

Participants were seen monthly for the first 3 months and every 3 months thereafter. Medications for participants in the intensive-treatment group were adjusted on a monthly basis to target a systolic blood pressure of less than 120 mm Hg. For participants in the standard-treatment group, medications were adjusted to target a systolic blood pressure of 135 to 139 mm Hg, and the dose was reduced if systolic blood pressure was less than 130 mm Hg on a single visit or less than 135 mm Hg on two consecutive visits. Dose adjustment was based on a mean of three blood-pressure measure-


Diabetes mellitus
inme
Demans
Bakımevi ihtiyacı
Son iki yılda kanser
<3 yıldan az beklenen sürvi
<6 ayda semt. KY veya EF <%35
<3 ayda geçirilmiş kardiyovasküler olay
1 dk a
durma sonrası SKB <110 mmHg
<6 ayda %10 < istemsiz kilo kaybı
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YAŞLILARDA SPRİNT İLERİ ANALİZİ?

SPRINT >= 75 y

Original Investigation

Intensive vs Standard Blood Pressure Control and Cardiovascular Disease Outcomes in Adults Aged ≥75 Years

A Randomized Clinical Trial

Jeff D. Williamson, MD, MHS; Mark A. Supiano, MD; William B. Applegate, MD, MPH; Dan R. Berlowitz, MD; Ruth C. Campbell, MD, MSPH; Glenn M. Chertow, MD; Larry J. Fine, MD; William E. Haley, MD; Amret T. Hawfield, MD; Joachim H. Ix, MD, MAS; Dalane W. Kitzman, MD; John B. Kostis, MD; Marie A. Krousel-Wood, MD; Lenore J. Launer, PhD; Suzanne Oparil, MD; Carlos J. Rodriguez, MD, MPH; Christianne L. Roumie, MD, MPH; Ronald I. Shorr, MD, MS; Kaycee M. Sink, MD, MAS; Virginia G. Wadley, PhD; Paul K. Whelton, MD; Jeffrey Whittle, MD; Nancy F. Woolard; Jackson T. Wright Jr, MD, PhD; Nicholas M. Pajewski, PhD; for the SPRINT Research Group

Table 1. Baseline Characteristics of Participants Aged 75 Years or Older

	Intensive Treatment (n = 1317)	Standard Treatment (n = 1319)
Female sex	499 (37.9)	501 (38.0)
Age, mean (SD), y	79.8 (3.9)	79.9 (4.1)
Race/ethnicity, No. (%)		
White	977 (74.2)	987 (74.8)
Black	225 (17.1)	226 (17.1)
Hispanic	89 (6.8)	85 (6.4)
Other	26 (2.0)	21 (1.6)
Seated blood pressure, mean (SD), mm Hg		
Systolic	141.6 (15.7)	141.6 (15.8)
Diastolic	71.5 (11.0)	70.9 (11.0)
Orthostatic hypotension, No. (%)	127 (9.6)	124 (9.4)
Serum creatinine, median (IQR), mg/dL	1.1 (0.9-1.3)	1.1 (0.9-1.3)
Estimated GFR[a]		
Mean (SD), mL/min/1.73 m^2	63.4 (18.2)	63.3 (18.3)
Level <60 mL/min/1.73 m^2, No. (%)	584 (44.3)	577 (43.7)
Level <45 mL/min/1.73 m^2, No. (%)	207 (15.7)	212 (16.1)
Urinary albumin to creatinine ratio, median (IQR), mg/g	13.0 (7.2-31.6)	13.4 (7.2-33.4)
History of cardiovascular disease, No. (%)	338 (25.7)	309 (23.4)
Total cholesterol, mean (SD), mg/dL	181.4 (39.0)	181.8 (38.7)
Fasting HDL cholesterol, mean (SD), mg/dL	55.9 (15.1)	55.7 (14.9)
Fasting total triglycerides, median (IQR), mg/dL	96.0 (71.0-130.0)	99.0 (72.0-134.5)
Fasting plasma glucose, mean (SD), mg/dL	97.9 (12.1)	98.2 (11.6)
Statin use, No. (%)	682 (51.8)	697 (52.8)
Aspirin use, No. (%)	820 (62.3)	765 (58.0)
10-y Framingham cardiovascular disease risk, median (IQR), %	24.2 (16.8-32.8)	25.0 (17.0-33.4)
Body mass index, mean (SD)[b]	27.8 (4.9)	27.7 (4.6)
No. of antihypertensive agents taking at baseline visit, mean (SD)	1.9 (1.0)	1.9 (1.0)
Gait speed		
Median (IQR), m/s	0.90 (0.77-1.05)	0.92 (0.77-1.06)
Speed <0.8 m/s, No. (%)	371 (28.2)	369 (28.0)
Frailty index, median (IQR)[c]	0.18 (0.13-0.23)	0.17 (0.12-0.22)
Frailty status, No. (%)		
Fit (frailty index ≤0.10)	159 (12.1)	190 (14.4)
Less fit (frailty index >0.10 to ≤0.21)	711 (54.0)	745 (56.5)
Frail (frailty index >0.21)	440 (33.4)	375 (28.4)
Montreal Cognitive Assessment score, median (IQR)[d]	22.0 (19.0-25.0)	22.0 (19.0-25.0)

Table 4. Incidence of Cardiovascular and Mortality Outcomes by Frailty Status and Gait Speed

		Intensive Treatment		Standard Treatment				
		No./Total With Outcome Events	% (95% CI) With Outcome Events/y	No./Total With Outcome Events	% (95% CI) With Outcome Events/y	HR (95% CI)[a]	*P* Value	*P* Value for Interaction
Frailty status[b]								
Primary outcome[c]	Fit	4/159	0.80 (0.30-2.12)	10/190	1.72 (0.93-3.20)	0.47 (0.13-1.39)[d]	.20	
	Less fit	48/711	2.23 (1.68-2.97)	77/745	3.51 (2.81-4.39)	0.63 (0.43-0.91)	.01	.84
	Frail	50/440	3.90 (2.96-5.15)	61/375	5.80 (4.52-7.46)	0.68 (0.45-1.01)	.06	
All-cause mortality	Fit	5/159	0.98 (0.41-2.36)	6/190	1.01 (0.45-2.24)	0.95 (0.27-3.15)[d]	.93	
	Less fit	26/711	1.16 (0.79-1.71)	52/745	2.24 (1.71-2.95)	0.48 (0.29-0.78)	.003	.52
	Frail	40				0.64 (0.41-1.01)	.05	
Primary outcome plus all-cause mortality[c]	Fit	8				0.71 (0.28-1.69)[d]	.45	
	Less fit	65				0.60 (0.44-0.83)	.002	.88
	Frail	69				0.67 (0.48-0.95)	.02	
Gait speed								
Primary outcome[c]	Speed ≥0.8 m/s	59/880	2.22 (1.72-2.87)	86/893	3.24 (2.63-4.01)	0.67 (0.47-0.94)	.02	
	Speed <0.8 m/s	34/371	3.15 (2.25-4.41)	54/369	5.22 (4.00-6.81)	0.63 (0.40-0.99)	.05	.85
	Missing	9/66	4.40 (2.29-8.46)	8/57	5.13 (2.57-10.27)	0.86 (0.33-2.29)[d]	.75	
All-cause mortality	Speed ≥0.8 m/s	40/880	1.45 (1.07-1.98)	60/893	2.16 (1.67-2.78)	0.65 (0.43-0.98)	.04	
	Speed <0.8 m/s	29/371	2.56 (1.78-3.68)	40/369	3.57 (2.62-4.86)	0.75 (0.44-1.26)	.28	.68
	Missing	4/66	1.85 (0.69-4.93)	7/57	4.19 (2.00-8.80)	0.44 (0.12-1.47)[d]	.20	
Primary outcome plus all-cause mortality[c]	Speed ≥0.8 m/s	82/880	3.08 (2.48-3.83)	119/893	4.48 (3.74-5.36)	0.67 (0.50-0.89)	.006	
	Speed <0.8 m/s	51/371	4.70 (3.57-6.18)	73/369	7.00 (5.56-8.80)	0.69 (0.46-1.01)	.06	.91
	Missing	11/66	5.37 (2.97-9.70)	13/57	8.30 (4.82-14.30)	0.64 (0.28-1.44)[d]	.28	

HIZLI YÜRÜYENLERDE ANLAMLI!
YAVAŞ YÜRÜYENLERDE ANLAMSIZ!

EDITORIAL

SPRINT Results in Older Patients
How Low to Go?

Aram V. Chobanian, MD

In this issue of *JAMA*, Williamson and colleagues[1] report the results of a preplanned, appropriately powered subgroup analysis of data from the Systolic Blood Pressure intervention Trial (SPRINT) in persons aged 75 years or older. SPRINT was a randomized, clinical, open-label study of

Related article page 2673

Nevertheless, many clinicians still have concerns about reducing SBP to less than 160 mm Hg in older patients, with their reluctance based on such factors as the very high prevalence of systolic hypertension in their practices, potential adverse effects of medications in older persons, the need to use 2 or more antihypertensive medications to achieve recommended blood pressure (BP) goals, and hesitation of both cli-

indicating that not all patients in the study attained the pre-set SBP goal of less than 120 mm Hg. Furthermore, only ambulatory, community-based persons were recruited into the study, so the results may not be relevant to frail individuals and others restricted to their homes or to institutions. The investigators tried to address the frailty issue by performing post hoc secondary analyses in which the effect of levels of frailty and functional ability on the primary outcome was estimated. Although the findings did not appear to show an influence of these factors on the benefits of intensive BP treatment, such analyses can only be considered exploratory in nature.

Toplumda yaşayan ambulatuvar hastalar

- Evden çıkamayan yaşlılar (-)
- Bakımevi (-)

The available safety data in the subgroup of patients 75 years or older in this trial are somewhat reassuring, in that no

Ortostatik hipot (+) olan yaşlılar dışlanmış!

col for intensive blood pressure lowering, except that only patients with type 2 diabetes were included in ACCORD but were excluded from SPRINT. No difference in primary outcome with intensive vs standard therapy was found in ACCORD, although a significant reduction in stroke incidence was

Although the story is incomplete, the available evidence supports a stepwise approach to treatment beginning with an initial SBP goal of less than 140 mm Hg. If lowering SBP to that level is tolerated well, further titration with careful monitoring should be considered to achieve an SBP goal of less than 130 mm Hg. The choice of antihypertensive medications can vary depending on clinician and patient preference, considering that several studies have shown that the major benefit of treatment depends on BP lowering rather than type of antihypertensive medication used.[11] In general, however, the preferred first-line drugs should be diuretics, calcium antagonists, angiotensin receptor antagonists, and angiotensin-converting enzyme inhibitors. β Receptor antagonists are also valuable as first-line agents in patients with coronary heart disease, arrhythmias, and heart failure. Combination drug preparations are useful because therapy often will involve multiple drugs. Since older persons with SBP less than 110 mm Hg while standing were excluded in SPRINT, the risk of syncope and falls may have been underestimated, and particular attention should be given to avoidance of orthostatic hypotension with treatment.

Intensive Blood Pressure Treatment in Adults Aged 60 Years or Older

TO THE EDITOR: In their valuable systematic review and meta-analysis, Weiss and colleagues (1) reviewed many studies on optimal management strategies for hypertension in older adults. They state that antihypertensive treatment effects in 2 trials (SPRINT [Systolic Blood Pressure Intervention Trial] and HYVET [Hypertension in the Very Elderly Trial]) did not differ according to frailty status. However, according to the second report on SPRINT participants (2), primary composite cardiovascular outcomes and all-cause mortality did not decrease in frail participants ($P = 0.06$ and 0.05, respectively) or slow gait speed ($P = 0.05$ and 0.28, respectively) when they received intensive compared with standard treatment (3). In HYVET, both the frailer and fitter older adults with hypertension seemed to benefit from treatment. In this trial, frailty was evaluated by the frailty index, but at most approximately 5% of participants had limitations in walking and activities of daily living. Hence, the reported lack of modification of the positive effect of antihypertensive treatment as measured by the frailty index does not supply data on older adults who specifically have slow gait speed, functional limitation, or both. Investigation of the effect of antihypertensive treatment in this population would provide a better perspective (3). In accordance with this argument, the European Society of Hypertension and the European Union Geriatric Medicine Society published a joint expert opinion article in 2016 on the management of very old, frail persons with hypertension and suggested obtaining accurate information on the functional capacity of these patients before making therapeutic decisions (4).

Weiss and colleagues also state that data to assess the risks and benefits of antihypertensive treatment among institutionalized elderly patients or those with multiple comorbidities are lacking. However, the PARTAGE (Predictive Values of Blood Pressure and Arterial Stiffness in Institutionalized Very Aged Population) study assessed all-cause mortality in institutionalized persons older than 80 years according to systolic blood pressure (SBP) levels and number of antihypertensive drugs (5). The authors of this study reported a higher risk for death in patients with low SBP (<130 mm Hg) who were receiving multiple antihypertensive agents than other participants. This longitudinal study provides substantial data on the harms of using antihypertensive agents in frail older adults.

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can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=L17-0287.

doi:10.7326/L17-0287

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IN RESPONSE: We appreciate Dr. Bahat and colleagues' comments on the data available to inform blood pressure targets among frail older adults with poor functional status and multimorbidity. The 2 randomized controlled trials in our review that compared frail subgroups with nonfrail ones, SPRINT and HYVET, did identify similar benefits of lower blood pressure targets regardless of frailty status within their patient populations (1–3). We did not believe that pooling the results of these studies was statistically sound because of heterogeneous study design, patient populations, and blood pressure targets, as well as potential differences in how frailty was identified. Although both trials used an index to assess this variable, the 2 indices probably differed somewhat in terms of included characteristics and the HYVET frailty analysis excluded many patients because of missing data.

Moreover, on the basis of the modest frailty index scores reported (median score, 0.17 and 0.18 for HYVET and SPRINT participants, respectively) and the reported study exclusion characteristics, it is unlikely that either study enrolled patients with levels of frailty or functional status seen among patients who require a higher level of care (for example, those in a skilled nursing facility). Fougère and associates recently reported a mean frailty index score of 0.4 among patients in

Bahat et al. Ann Intern Med. 2017 Aug 15;167(4):288

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LETTER

THE AMERICAN JOURNAL of MEDICINE®

Blood Pressure Goals in Functionally Limited Elderly Patients

To the Editor:

We have read the review article entitled "Isolated Systolic Hypertension: An Update After SPRINT" by Bavishi et al[1] with great interest. In their valuable article, the authors reviewed optimal management strategies of isolated systolic hypertension and systolic blood pressure goals in light of the Systolic Blood Pressure Intervention Trial (SPRINT)[2] and other landmark trials, including the HYpertension in the Very Elderly Trial (HYVET) study.[3] Even if the SPRINT trial suggests intensive treatment of hypertension in the elderly group, Bavishi et al[1] concluded that to lower the blood pressure of all hypertension patients uniformly to 120 mm Hg is clearly absurd, because aggressive blood pressure-lowering may be harmful in elderly patients, which is a heterogeneous group in terms of genetic, physiologic, metabolic, pathologic, psychological, and cultural factors. We agree with the authors and would like to give comments from the viewpoint of frailty and gait-speed status of the elderly group. Both are major responsible factors for heterogeneity of the elderly group.

In May 2016, the SPRINT research group detailed their results for the prespecified subgroup of adults ≥75 years, and presented the outcomes according to frailty and gait-speed status.[4] In subjects with slow gait speed, none of the outcomes, namely, primary outcome (composite of nonfatal myocardial infarction, acute coronary syndrome not resulting in a myocardial infarction, nonfatal stroke, nonfatal acute decompensated heart failure, and death from cardiovascular causes), all-cause-mortality, and primary outcome plus all-cause mortality was better in the intensive-treatment group ($P = .05$, .28 and .06, respectively). In the frail group, the

Another trial, HYVET, investigated the possible interaction between effects of treatment for hypertension and frailty in older adults. They reported no evidence of an interaction between effect of treatment for hypertension and frailty as measured by the Frailty Index (FI). However, the significance of means for frailty evaluation should be considered in this study. As the authors noted, there is currently much concern that such treatment may not be appropriate in more frail older adults due to significant reports indicating this association. The important point is that the relationship between systolic blood pressure and mortality was reported to vary by frailty designated by, specifically, "walking speed"[5,6]—not by any other complex FI. Very recently, in the re-analysis of the Systolic Hypertension in the Elderly Program (SHEP) trial data, specifically, "functional status," is reported to modify the outcomes related to antihypertensive treatment in elderly patients. Among persons with a functional limitation, those receiving antihypertensive treatment had a higher rate of death, cardiovascular death, and myocardial infarction.[7] However, in the current HYVET study, the authors evaluated frailty by FI. The specific investigation of the impact of antihypertensive treatment in the group having low gait speed or functional limitation shall give a better view, which we think would be a substantial contribution to the hypertension literature.

In conclusion, we strongly suggest that the impact of low gait speed and functional limitations in elderly patients receiving antihypertensive treatment remain uncertain in the HYVET trial and proved no benefit in the SPRINT trial.

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Bahat et al. Am J Med. 2017 Jul;130(7):e319-e320.

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Another trial, HYVET, investigated the possible interaction between effects of treatment for hypertension and frailty in older adults. They reported no evidence of an interaction between effect of treatment for hypertension and frailty as measured by the Frailty Index (FI). However, the significance of means for frailty evaluation should be considered in this study. As the authors noted, there is currently much concern that such treatment may not be appropriate in more frail older adults due to significant reports indicating this association. The important point is that the relationship between systolic blood pressure and mortality was reported to vary by frailty designated by, specifically, "walking speed"[5,6]—not by any other complex FI. Very recently, in the re-analysis of the Systolic Hypertension in the Elderly Program (SHEP) trial data, specifically, "functional status," is reported to modify the outcomes related to antihypertensive treatment in elderly patients. Among persons with a functional limitation, those receiving antihypertensive treatment had a higher rate of death, cardiovascular death, and myocardial infarction.[7] However, in the current HYVET study, the authors evaluated frailty by FI. The specific investigation of the impact of antihypertensive treatment in the group having low gait speed or functional limitation shall give a better view, which we think would be a substantial contribution to the hypertension literature.

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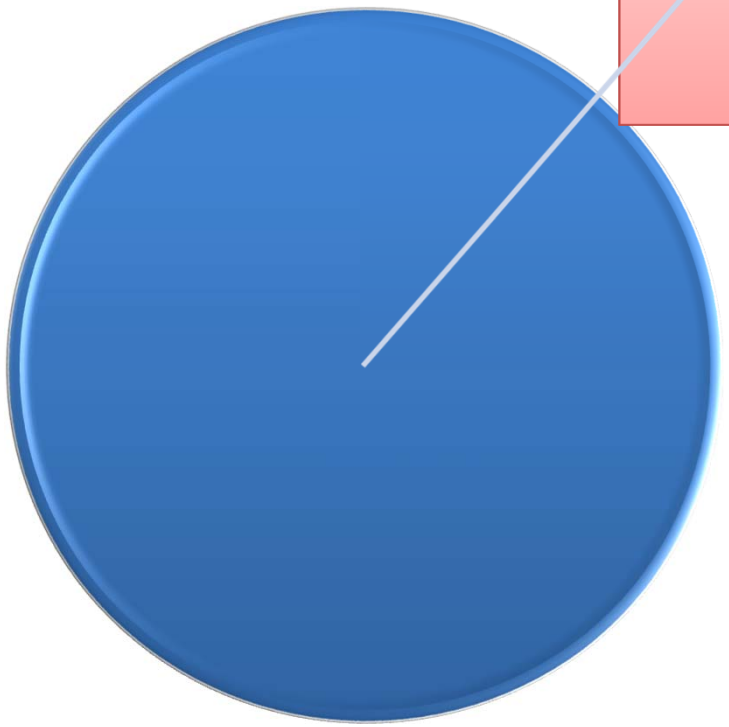
2016-2017

SPRINT'TEN

BAŞKA VERİ VAR MI?



ESH-EUGMS

2016

Expert Opinion

An Expert Opinion From the European Society of Hypertension–European Union Geriatric Medicine Society Working Group on the Management of Hypertension in Very Old, Frail Subjects

Athanase Benetos,* Christopher J. Bulpitt,* Mirko Petrovic, Andrea Ungar, Enrico Agabiti Rosei, Antonio Cherubini, Josep Redon, Tomasz Grodzicki, Anna Dominiczak, Timo Strandberg, Giuseppe Mancia

Two years after the publication of the 2013 guidelines for the management of arterial hypertension of the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC),[1] the ESH and the European Union Geriatric Medicine Society have created a common working group to examine the management of hypertensive subjects aged >80 years. The general term hypertension in the elderly is not sufficiently accurate because it mixes younger old patients (60–70 years) with the oldest old. Our group believes that the management of hypertension in individuals aged ≥80 years should be specifically addressed. Although arbitrary, this cutoff value identifies a population that is expanding faster than any other

Benefits of Treatment

The 2013 ESH/ESC guidelines[1] reported the results of the Hypertension in the Very Elderly Double Blind Trial (HYVET). This showed that in hypertensive patients aged ≥80 years, the administration of the thiazide-like diuretic indapamide supplemented, if necessary, by the angiotensin-converting enzyme inhibitor perindopril led to a significant reduction in the risk of major cardiovascular events and all-cause death when compared with placebo.[2] From this, the guidelines concluded that there is evidence that antihypertensive treatment is beneficial in octogenarians in whom BP is elevated and that, therefore, BP-lowering interventions can be strongly recom-

Benetos A et al. An Expert Opinion From the European Society of Hypertension-European Union Geriatric Medicine Society Working Group on the Management of Hypertension in Very Old, Frail Subjects. Hypertension. 2016 May;67(5):820-5

KIRILGANLIĞI DEĞERLENDİR!

YAŞLIDA HT YÖNETİMİNE ENTEGRE EDİLMELİ!

Suggestions of the Working Group for the Management of Hypertension in Octogenarians

Based on the above comments, we propose the following:

Treatment Initiation

The 2013 ESH/ESC guidelines state that in individuals aged ≥80 years with an initial SBP≥160 mm Hg, SBP should be reduced by drug treatment provided that patients are in good physical and mental conditions. We believe that this recommendation should be accompanied by (1) a more precise definition of the meaning of the term good physical and mental conditions and (2) an indication of how physical conditions, mental conditions, and the frailty status can be assessed.

A rapid (<10 minutes) assessment of frailty is feasible. The most frequently used is the Fried frailty phenotype[39] in which frailty is defined by the presence of at least 3 of the following: weight loss, exhaustion, weakness, decreased gait speed, and diminished physical activity. Other scales used in different countries[40–42] may also be referred to.

KIRILGAN (+)

- Kırılganlık derecesi
- Fonksiyon
- Kognisyon
- Sürvi
- Çoklu ilaç kullanımı
- HipoT sekonder faktörlerini ara
  - OrtoHipoT
  - Dehidratasyon
  - Malnütrisyon
  - İlaçlar

Frail Very Old Patients *(People Living in Nursing Homes or Needing Assistance on a Daily Basis for Their Basic Activities)*

The 2013 ESH/ESC guidelines state that "in frail older patients, it is recommended to leave decisions on antihypertensive therapy to the treating physician, and base them on monitoring of the clinical effects of treatment." We suggest that in these patients, therapeutic decisions should be preceded by (1) accurate information on their functional capacity, cognitive status. Although notoriously difficult, an estimate of patient's prognosis should also be attempted; (2) attention to multiple drug administration so common in this age stratum; (3) stratification of the frailty status by one of the available rapid methods; and (4) identification and correction of factors that predispose to an excessive BP reduction, orthostatic hypotension, and other hypotensive episodes, such as concomitant treatments, malnutrition, and dehydration. The decision of the practicing physician to start treatment in a frail very old patient should be especially cautious (low drug doses and monotherapy) and patient status should be checked on a frequent basis.

Age and Ageing 2015; **44:** 912–913
doi: 10.1093/ageing/afv147

Should guidance for the use of antihypertensive medication in older people with frailty be different?

Anti-HT reçetelerken **yaş> 60-80 yaş** olması kararımızı vermede **KESİNLİKLE YETERLİ DEĞİL!!**

Kırılganlık, fonksiyonel durum, yürüme hızı göz önüne alınmalı

Fonksiyonel sınırlamaları olan yaşlılarda antiHT tedavi yaşam kalitesini ve yaşam süresini azaltabilir.

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Outcomes of Intensive Blood Pressure Lowering in Older Hypertensive Patients

Chirag Bavishi, MD, MPH,[a] Sripal Bangalore, MD, MHA,[b] Franz H. Messerli, MD[c,d]

Meta-analiz*

>10.000 HT (>= 65 y)

- SPRINT
- 3 büyük RCT

3 yıllı izlem

Daha az tx vs yoğun tx

- KV olay, KV mortalite ve KY'de azalma
- Ciddi advers olay veya renal yetmezlikte artış (-) (SINIRLI VERİ)

*Bavishi et al. J Am Coll Cardiol 2017; 69:486

TABLE 3 Pooled Relative Risk of Efficacy and Safety Outcomes With Intensive Versus Standard BP Lowering in Elderly Patients

Clinical Outcomes	Intensive BP Lowering	Standard BP lowering	Pooled RR (95% CI)	p Value	I^2
Efficacy					
MACE	200/5,437 (3.7)	280/5,420 (5.2)	0.71 (0.60-0.84)	0.0001	0
Cardiovascular mortality	60/5,437 (1.1)	94/5,420 (1.7)	0.67 (0.45-0.98)	0.04	25%
Myocardial infarction	57/5,437 (1.0)	72/5,420 (1.3)	0.79 (0.56-1.12)	0.18	0
Stroke	116/5,437 (2.1)	142/5,420 (2.6)	0.80 (0.61-1.05)	0.11	19%
Heart failure	49/3,892 (1.3)	79/3,886 (2.0)	0.63 (0.40-0.99)	0.04	21%
Safety					
Serious adverse events	1,274/5,074 (25.1)	1,252/5,059 (24.7)	1.02 (0.94-1.09)	0.69	19%
Renal failure	57/5,067 (1.1%)	28/5,049 (0.6)	1.81 (0.86-3.80)	0.12	46%

Values are n/N (%) unless otherwise indicated.

BP = blood pressure; CI = confidence interval; MACE = major adverse cardiovascular event(s); RR = relative risk.

The greater use of diuretic agents in combination with angiotensin-converting enzyme inhibitors and angiotensin-receptor blockers in the intensive (vs. standard treatment) group of the SPRINT study, as compared to the other 3 studies, may have resulted in more pronounced alterations in intrarenal hemodynamics, leading to a rise in serum creatinine. This phenomenon is largely considered functional and reversible rather than a structural and irreversible rise in serum creatinine, in general, and is thought to be self-limited and nonprogressive (17-19). However, in the SPRINT trial, the renal events were lower the effect on worsening of renal function with intensive BP reduction. It should be noted that reporting of adverse events was not uniform, and event definitions vary across the trials. We were able to analyze only serious adverse events and renal failure, as they were most commonly reported across the trials. Except for SPRINT (6,16), none of the trials evaluated for frailty status, symptomatic hypotension, and syncope. Additional trials are needed to thoroughly investigate the effect of intensive BP control on renal function and serious adverse events.

ÖNERİLEN MİNİMUM DKB

- KAH(+): 65 MMHG
- KAH(-): 60 MMHG*
- SİSTEMİK HİPOPERFÜZYON BELİRTİLERİNİN GÖRÜLDÜĞÜ DAHA YÜKSEK DKB

*UpToDate. What is goal blood pressure in the treatment of hypertension?

Yaşlıda ilaç tedavisinde önemli sınırlama yapan sebepler

- Ortostatik HipoT
- Postprandial HipoT
- Mental Fonksiyonlarda Kötüleşme

KLİNİK TAKİP ÖNEMLİ!

Eve götürülecek mesajlar

- İleri yaş antiHT tedavinin daha az verilmesini gerektirmemektedir.

Eve götürülecek mesajlar

- İleri yaş antiHT tedavinin daha az verilmesini gerektirmemektedir.
- **OTOMATİK CİHAZLA**
- **Uygun yaşlılarda SKB<120 mmHg hedefi geçerli olabilir**

Eve götürülecek mesajlar

- İleri yaş antiHT tedavinin daha az verilmesini gerektirmemektedir.
- OTOMATİK CİHAZLA
- Uygun yaşlılarda SKB<120 mmHg hedefi geçerlidir
- **Kırılgan yaşlılarda "SKB <150 mm Hg" veya "serebral hipoperfüzyon belirtileri-ortostatizm-fonksiyonelliğe göre"**

"DAHA YÜKSEK" olmalıdır

DİABETES MELLİTUS

UpToDate. Treatment of type 2 diabetes mellitus in the older patient. https://www.uptodate.com/contents/treatment-of-type-2-diabetes-mellitus-in-the-older-patient?source=search_result&search=Treatment%20of%20type%202%20diabetes%20mellitus%20in%20the%20older%20patient&selectedTitle=1~150

ÖZET VE TAVSİYE

- Yaşlılar çok heterojen
  - Toplumda
  - Bakımevinde
  - Fit veya Kırılgan
  - Çoklu komorbidite-fonksiyonel bağımlılık
- Genel sağlık durumu
- Hipoglisemi riski
- Beklenen sürvi

✓ Glisemik kontrol hedefleri
✓ Risk faktör yönetimi

Yaşlıda glisemik hedefler

«Fit yaşlıda uzun süreli klinik çalışma verisi yok»

Fit ilaçla tedavi edilen yaşlılarda hedef

- **A1C < %7,5**
- AKŞ: 140-150 mg/dL

Yaşlıda glisemik hedefler

«Kırılgan»

«Medikal-Fonksiyonel ko-morbidite +»

«Yaşam beklentisi <10 y»

(ilaç tx)

- **A1C ≤ %8**
- AKŞ: 160-170 mg/dL

Yaşlıda glisemik hedefler

Çok yaşlıda hedef daha da yüksek olabilir (biyolojik yaş!)

- **A1C < %8,5**
- Açlık-preprandial glukoz: 200 mg/dL

Yaşlıda glisemik hedefler

Çok yaşlıda hedef daha da yüksek olabilir (biyolojik yaş!)

- **A1C <**
- Açlık-p g/dL

Amaç

- QoL sağlanması
- Hipoglisemiden kaçınma

Hipoglisemiye duyarlılık daha fazla!

Hipoglisemiden kaçınmak ana hedeflerden biri!

KV risk azaltım stratejileri

- Sigara içilmemesi
- HT Tx
- HL Tx
- Egzersiz
- Aspirin (LH)

Beslenme tedavisi yaşlıda çok kritik!

İLAÇ SEÇİMİ

Kontrendikasyon yoksa

Metformin ilk basamak (Grade 2B)

İnsülin ilk basamak olabilir

- Tip 2 DM
- HbA1c > %9
- Açlık plazma glukozu >250 mg/dL
- random glukoz >300 mg/dL
- Ketonüri

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İLAÇ SEÇİMİ

Fit yaşlılarda

- Metformini tanı anında başla (**Grade 2C**)
  - Tanı sırasında HbA1c ilaçla hedeflenen düzeyin altında bile olsa

Metformin muhtemelen

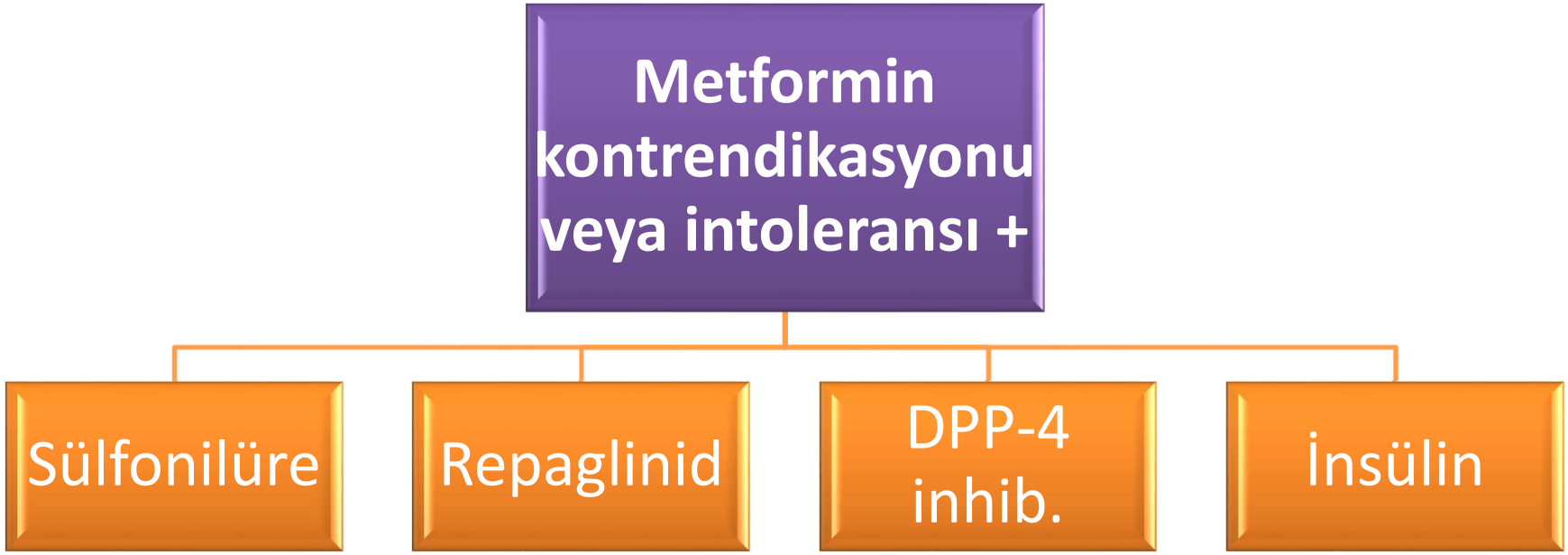
- Her düzeydeki glisemiyi güvenli olarak düşürür
- Hipergliseminin ilerlemesini azaltır
- DM-ilişkili komplikasyon oluşumunu azaltır

İLAÇ SEÇİMİ

Tanı sırasında HbA1c ilaçla hedeflenen düzeyine yakın olan olgularda

- İlaç kullanmayı tercih etmiyorsa
  - 3-6 ay yaşam tarzı değişikliği ile izlem (merformin öncesi)

İLAÇ SEÇİMİ


Metformin kontrendikasyonu veya intoleransı +
Sülfonilüre
Repaglinid
DPP-4 inhib.
İnsülin

İLAÇ SEÇİMİ

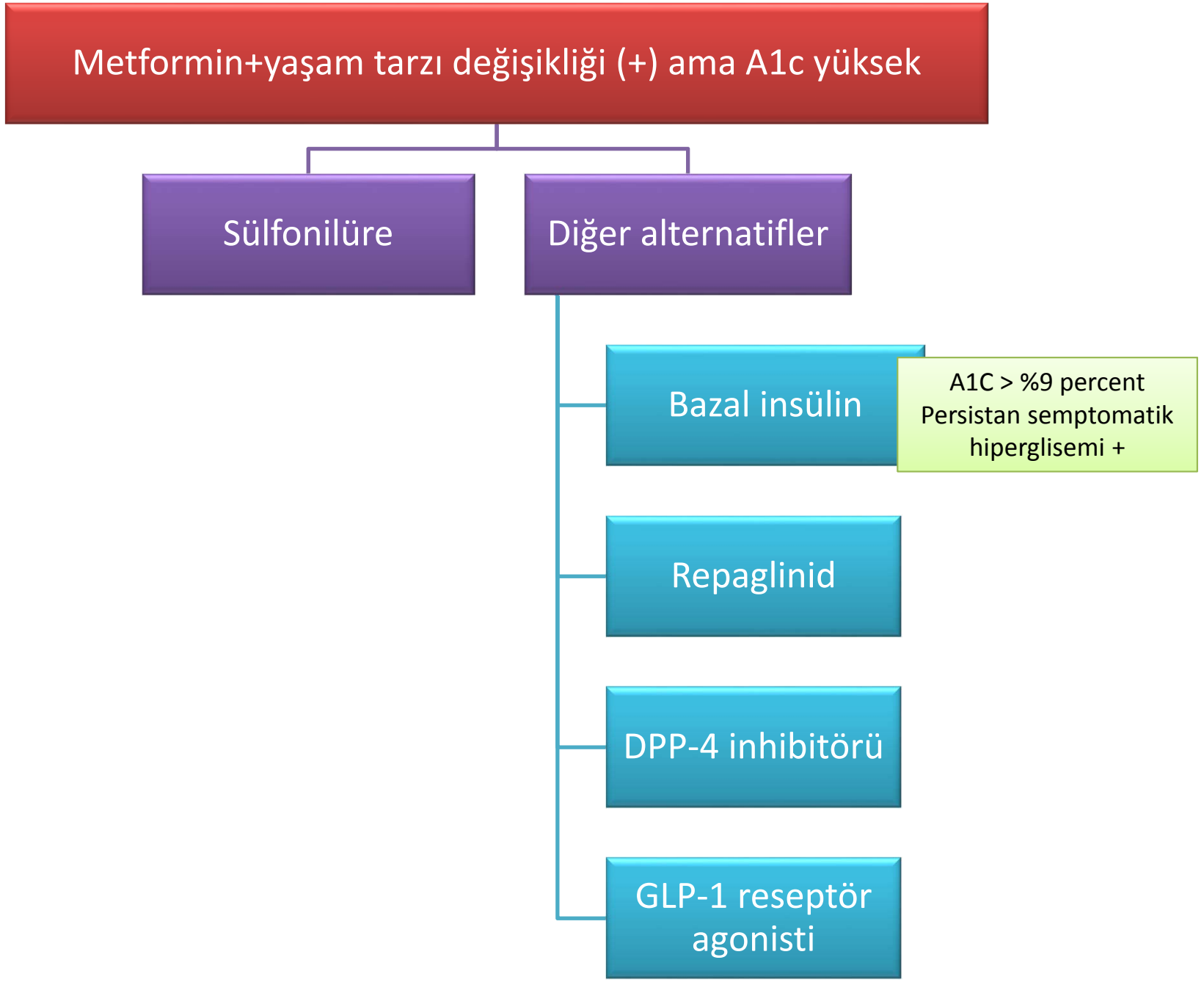
Repaglinid

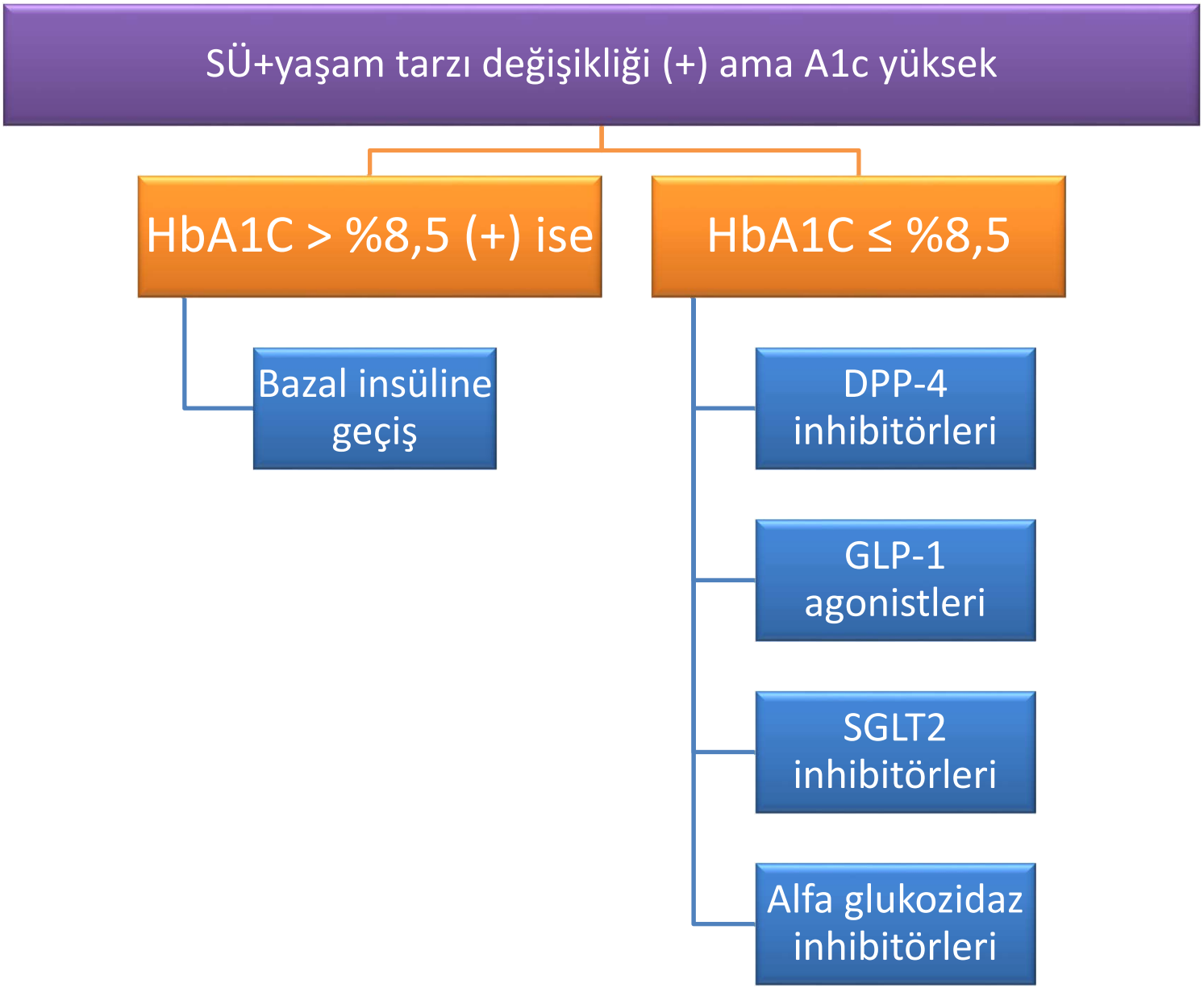
- KBY
- Hipoglisemiye meyil

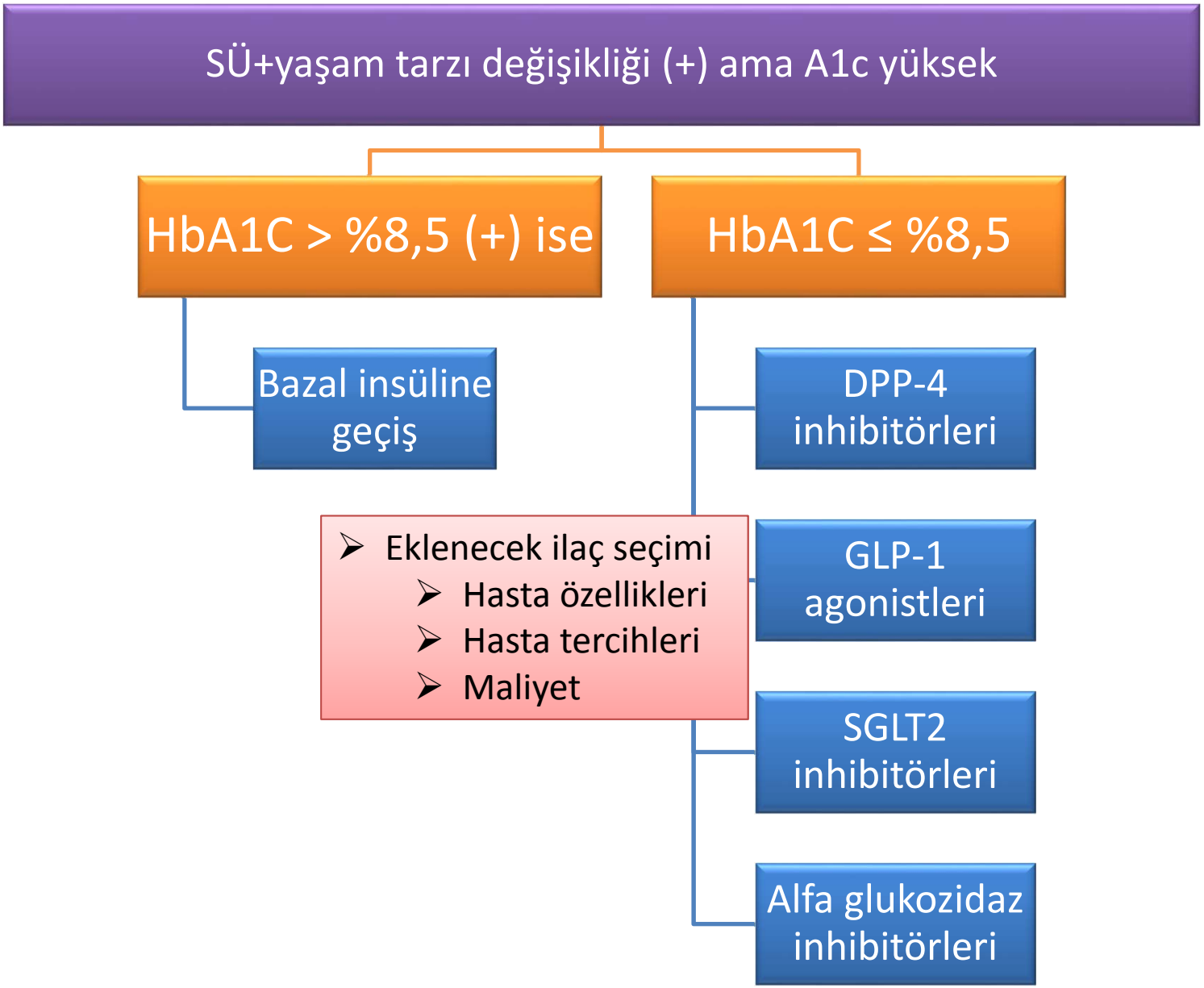
İLAÇ SEÇİMİ

DPP-4 inhib.

- HbA1c düşüşü: ~%0.6
- Hipoglisemi riski düşük
- Kilo açısından nötr
- Uzun süreli güvenlik?
- Pahalı


Metformin+yaşam tarzı değişikliği (+) ama A1c yüksek
Sülfonilüre
Diğer alternatifler
Bazal insülin
A1C > %9 percent
Persistan semptomatik hiperglisemi +
Repaglinid
DPP-4 inhibitörü
GLP-1 reseptör agonisti


SÜ+yaşam tarzı değişikliği (+) ama A1c yüksek
HbA1C > %8,5 (+) ise
HbA1C ≤ %8,5
Bazal insüline geçiş
DPP-4 inhibitörleri
GLP-1 agonistleri
SGLT2 inhibitörleri
Alfa glukozidaz inhibitörleri


SÜ+yaşam tarzı değişikliği (+) ama A1c yüksek
HbA1C > %8,5 (+) ise
HbA1C ≤ %8,5
Bazal insüline geçiş
DPP-4 inhibitörleri
Eklenecek ilaç seçimi
Hasta özellikleri
Hasta tercihleri
Maliyet
GLP-1 agonistleri
SGLT2 inhibitörleri
Alfa glukozidaz inhibitörleri

Yaşlı DM

- Polifarmasi
- Fonksiyonel bozulmalar
- Kognitif bozulma
- Depresyon
- Üİ
- Düşme
- Persistan ağrı

Göz önünde bulundurulmalı Değerlendirilmeli

HİPERLİPİDEMİ

ÖZET VE TAVSİYE

Total kolesterol, LDL, TG her 2 cinste de 3-8. dekadlar arası artar

Daha ileri yaşlarda total kolesterol ve LDL'de düşüş olur

Dislipidemi 60-80 yaş arasındaki yaşlılarda KVH için iyi bilinen bir risk faktörü

Ancak >80y yaşlılarda veri sınırlı!

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Kılavuzlarda HL tarama ve tedavisi «risk temelli algoritmalara» dayanır

- Milyonlarca >75 y yaşlı
  - «sadece yaş faktörü nedeniyle»
  - «statin tedavisi adayı!!!»

Yüksek riskli hastalarda (-en azından 80 yaşa kadar)

- HL'nin statinlerle tedavisi LDL ve KVH olay/ölümü azaltır


Yaşlılardaki aşikar klinik faydalar
Statin yan etkileri (Myalji, KC enzim yükselmeleri, glukoz artışı)
Faydaya kadar geçecek zaman

Eşlik eden morbiditeler ve dizabiliteler

İleri yaşlı hastalarda

Yüksek serum kolesterolü ile ateroskleroz arasındaki ilişkiyi azaltıyor!