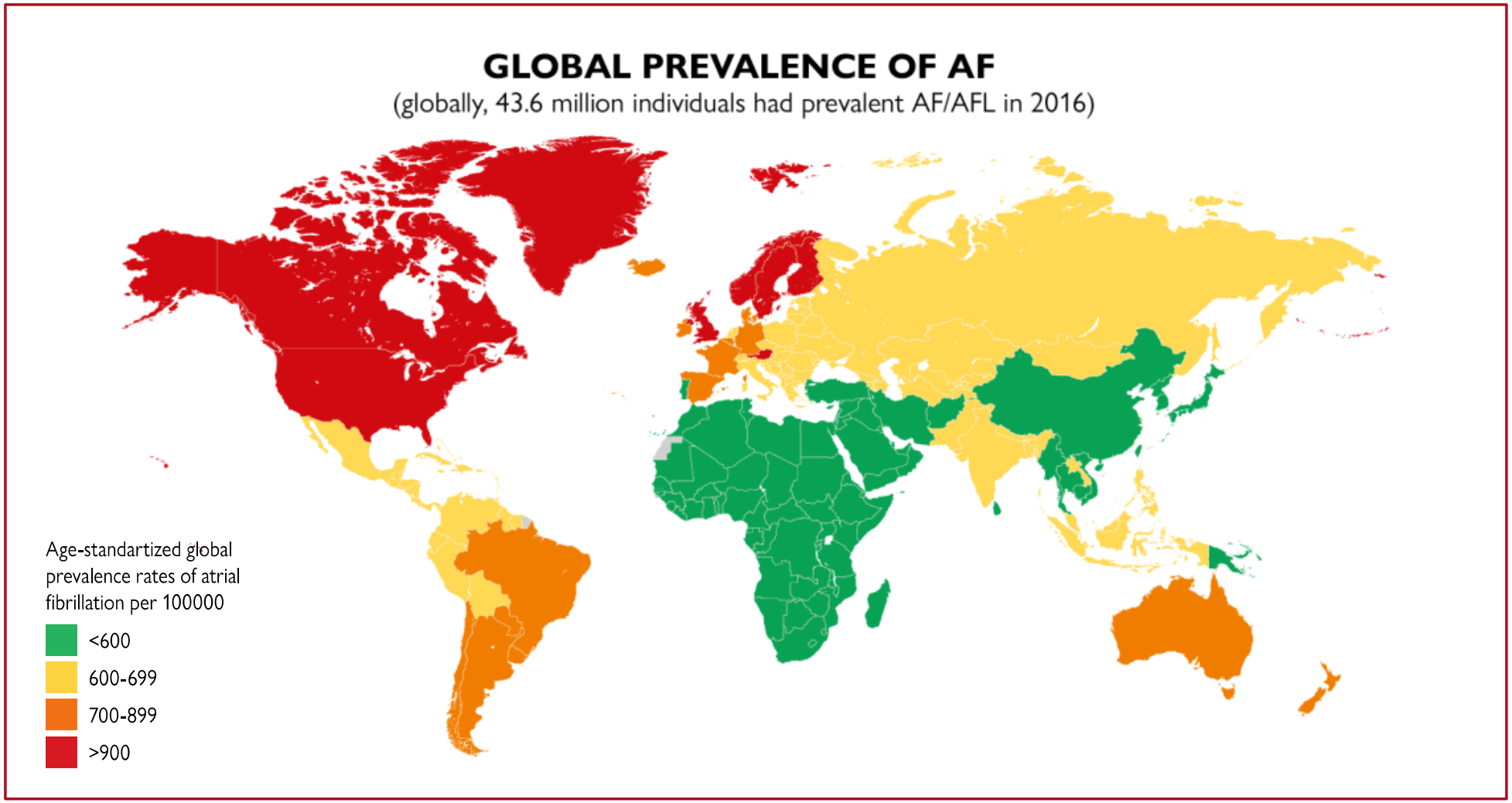
Güncel Bilgiler Işığında AF Hastasını Nasıl Ele Alalım?

Prof. Dr. Alper Kepez
Marmara Üniversitesi Tıp Fakültesi
Kardiyoloji A.D.

10. Atriyal Fibrilasyon Zirvesi 2021, 11-13 Kasım 2021, Antalya

Figure 2 (1) Epidemiology of AF: prevalence



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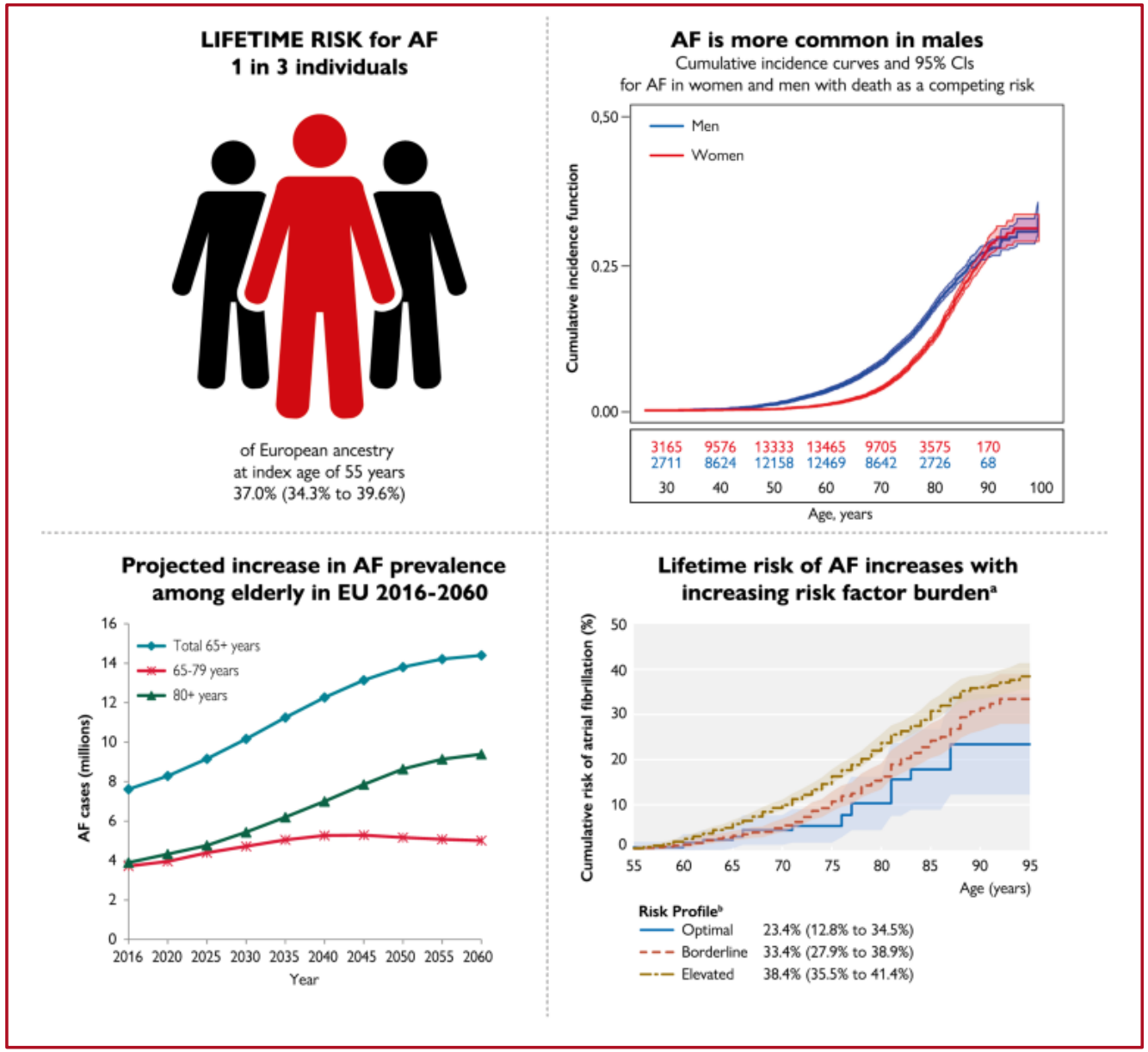

Figure 2 (2)

Epidemiology of AF: lifetime risk and projected rise in the incidence and prevalence

[a]Smoking, alcohol consumption, body mass index, BP, diabetes mellitus (type 1 or 2), and history of myocardial infarction or heart failure. [b]Risk profile: *optimal* – all risk factors are negative or within the normal range; *borderline* – no elevated risk factors but >1 borderline risk factor; *elevated* – >1 elevated risk factor.

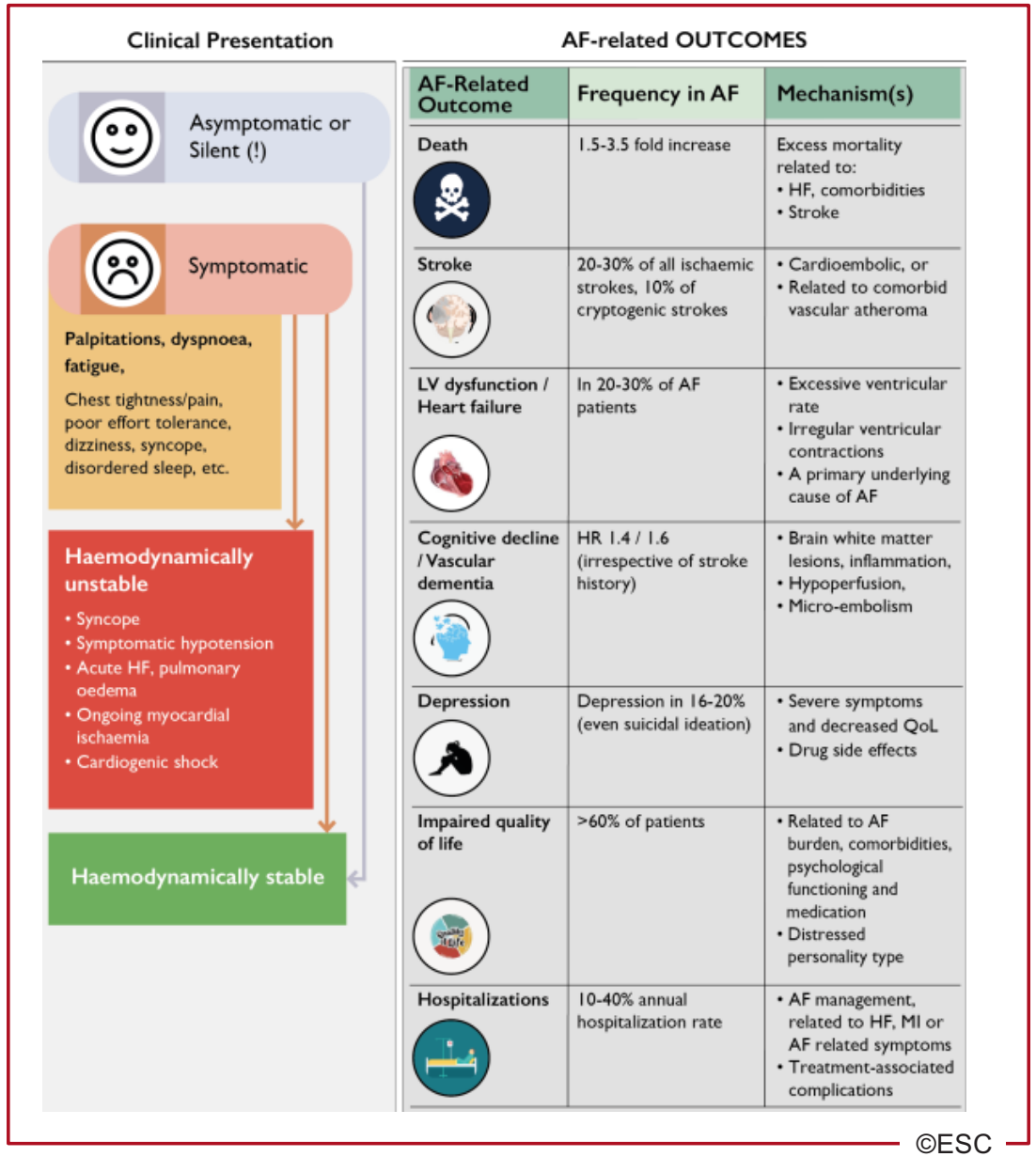

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Figure 4 Clinical presentation of AF and AF-related outcomes

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KLİNİK SONLANIMLAR

AF ile İlişkili Sonuç	AF'de Sıklık	Mekanizma(lar)
Ölüm	1.5 - 3.5 kat artış	Aşağıdakilere bağlı yüksek mortalite: • KY, eşlik eden hastalıklar • İnme
İnme	Tüm iskemik inmelerin %20-30'u, kriptojenik inmelerin %10'u	• Kardiyoembolik veya • Komorbid vasküler aterom ile ilgili
LV disfonksiyonu / Kalp yetmezliği	AF'li hastaların %20-30'unda	• Aşırı ventrikül hızı • Düzensiz ventriküler kasılmalar • AF'nin altında yatan primer neden

AF ile İlişkili Sonuç	AF'de Sıklık	Mekanizma(lar)
Bilişsel zayıflama / Vasküler demans	HR 1.4 / 1.6 (inme öyküsünden bağımsız olarak)	• Beyindeki beyaz madde lezyonları, inflamasyon, • Hipoperfüzyon, • Mikroembolizm
Depresyon	%16-20 oranında depresyon (hatta intihar düşüncesi)	• Şiddetli semptomlar ve azalan yaşam kalitesi • İlaç yan etkileri
Yaşam kalitesinde bozulma	Hastaların >%60'ı	• AF yükü, komorbiditeler, psikolojik fonksiyonlar ve ilaç tedavisi ile ilgili • D tipi kişilik
Hastaneye yatışlar	%10-40 yıllık hastaneye yatış oranı	• KY, MI veya AF ile ilgili semptomlara ilişkin AF yönetimi • Tedaviye bağlı komplikasyonlar

Recommendations for screening to detect AF (1)

Recommendations	Class	Level
Opportunistic screening for AF by pulse taking or ECG rhythm strip is recommended in patients ≥65 years of age.	I	B
It is recommended to interrogate pacemakers and implantable cardioverter defibrillators on a regular basis for AHRE.[a]	I	B

[a]See *sections* for diagnostic criteria for AF and AHRE, and for the management of patients with AHRE.

Recommendations for screening to detect AF (2)

Recommendations	Class	Level
When screening for AF it is recommended that: • The individuals undergoing screening are informed about the significance and treatment implications of detecting AF. • A structured referral platform is organized for screen-positive cases for further physician-led clinical evaluation to confirm the diagnosis of AF and provide optimal management of patients with confirmed AF. • Definite diagnosis of AF in screen-positive cases is established only after physician reviews the single-lead ECG recording of ≥30 seconds or 12-lead ECG and confirms that it shows AF.	I	B
Systematic ECG screening should be considered to detect AF in individuals aged ≥75 years, or those at high risk of stroke.	IIa	B

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Table 4 Classification of AF (1)

AF pattern	Definition
First diagnosed	AF not diagnosed before, irrespective of its duration or the presence/severity of AF-related symptoms.
Paroxysmal	AF that terminates spontaneously or with intervention within 7 days of onset.
Persistent	AF that is continuously sustained beyond 7 days, including episodes that are terminated by cardioversion (drugs or direct current cardioversion) after 7 days or more.
Long-standing persistent	Continuous AF of >12 months' duration when decided to adopt a rhythm control strategy.
Permanent	AF that is accepted by the patient and physician, and no further attempts to restore/maintain sinus rhythm will be undertaken. Permanent AF represents a therapeutic attitude of the patient and physician rather than an inherent pathophysiological attribute of AF, and the term should not be used in the context of a rhythm control strategy with antiarrhythmic drug therapy or AF ablation. Should a rhythm control strategy be adopted, the arrhythmia would be re-classified as 'long-standing persistent AF'.

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Table 4 Classification of AF (2)

Terminology that should be abandoned	
AF pattern	**Definition**
Lone AF	A historical descriptor. Increasing knowledge about the pathophysiology of AF shows that in every patient a cause is present. Hence, this term is potentially confusing and should be abandoned.
Valvular/non-valvular AF	Differentiates patients with moderate/severe mitral stenosis and those with mechanical prosthetic heart valve(s) from other patients with AF, but may be confusing and should not be used.
Chronic AF	Has variable definitions and should not be used to describe populations of AF patients.

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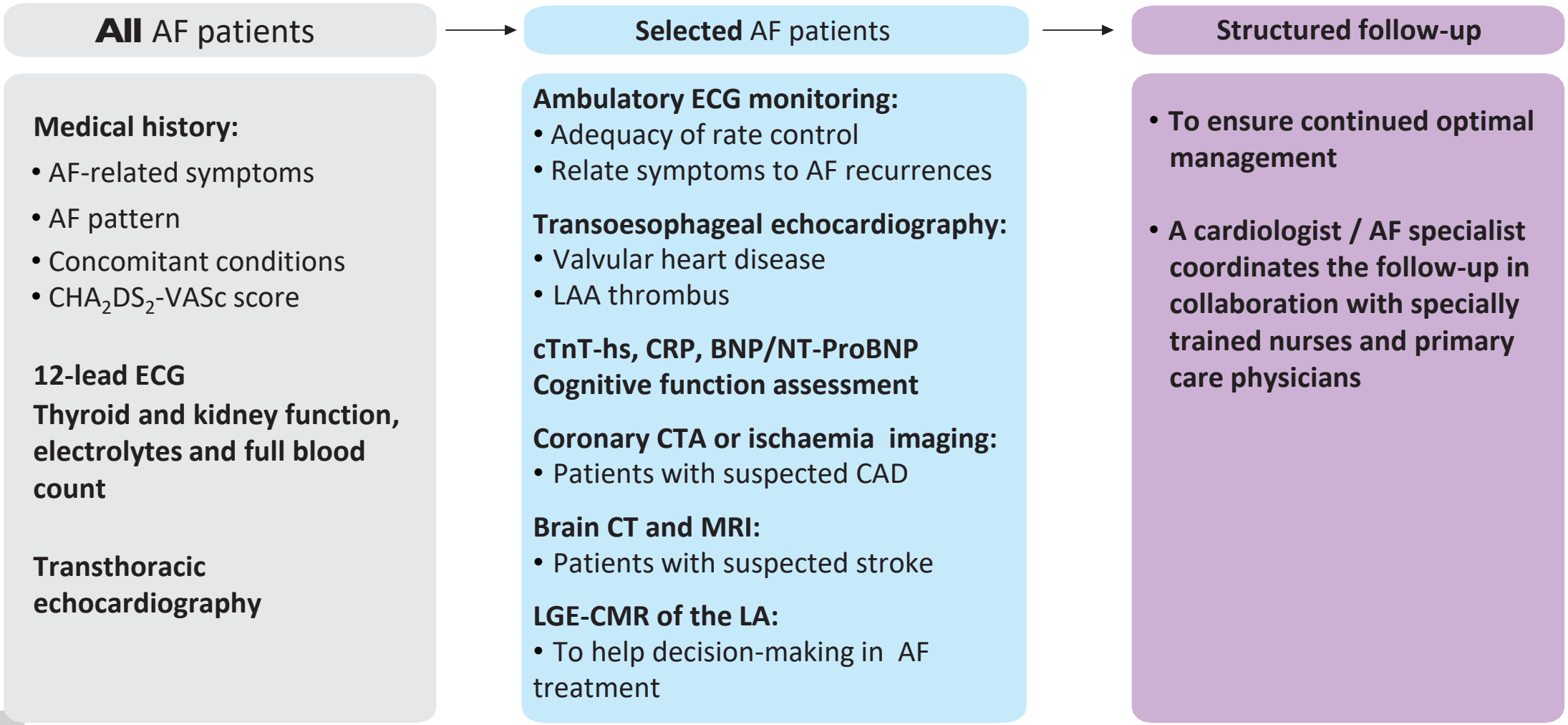
Figure 8 Diagnostic work-up and follow-up in AF patients



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Recommendations for structured characterization of AF

Recommendations	Class	Level
Structured characterization of AF, which includes clinical assessment of stroke risk, symptom status, burden of AF, and evaluation of substrate, should be considered in all AF patients, to streamline the assessment of AF patients at different healthcare levels, inform treatment decision-making, and facilitate optimal management of AF patients.	IIa	C

Central Illustration Management of AF (1)

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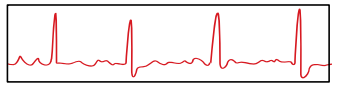
CC To ABC

Confirm AF



A 12-lead ECG or a rhythm strip showing AF pattern for ≥30 s

Charactirize AF (the 4S-AF scheme)

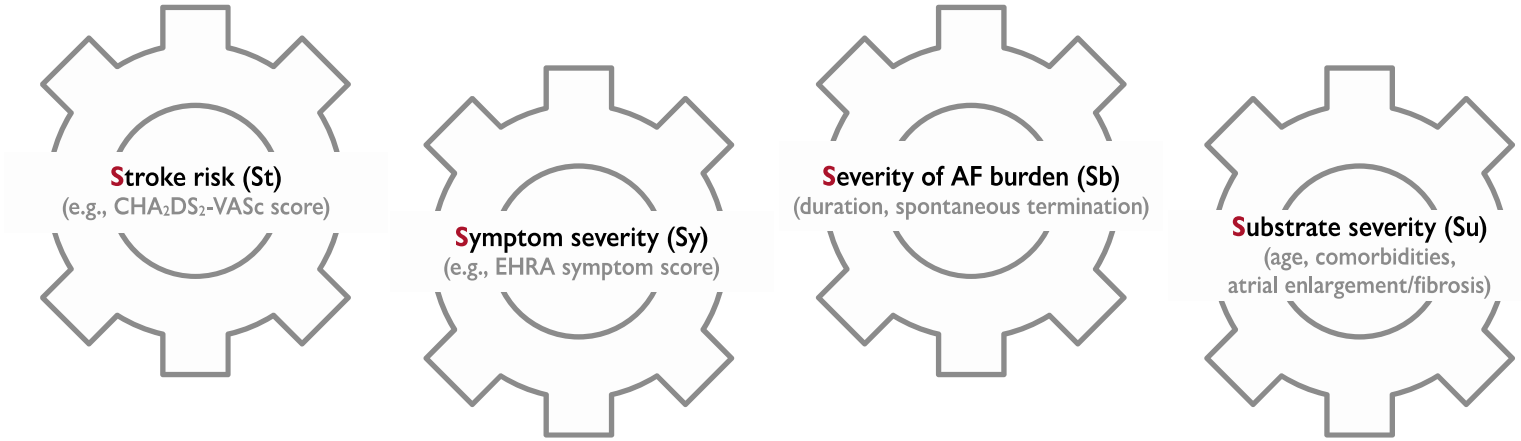


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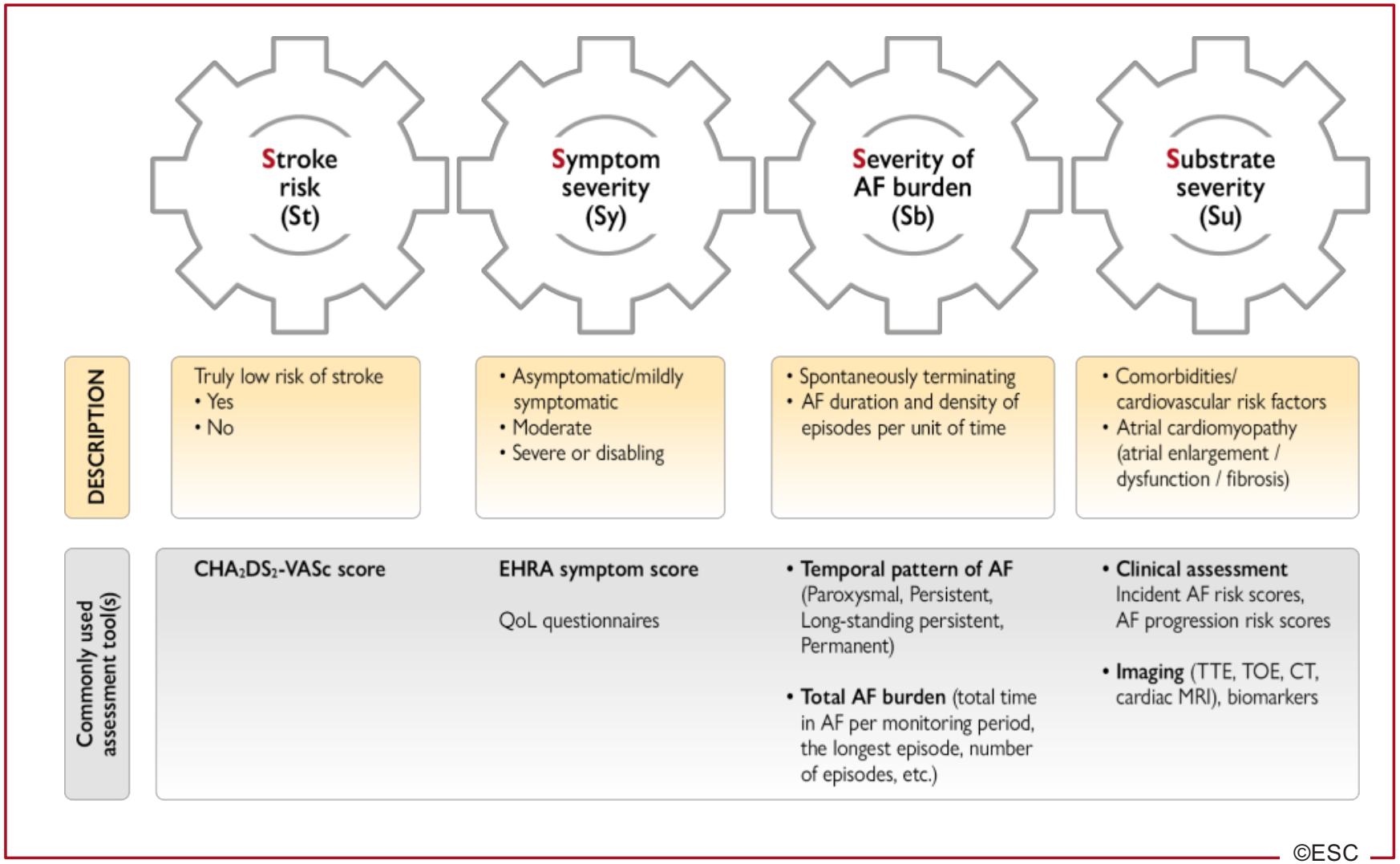
Figure 5 4S-AF scheme as an example of structured characterization of AF



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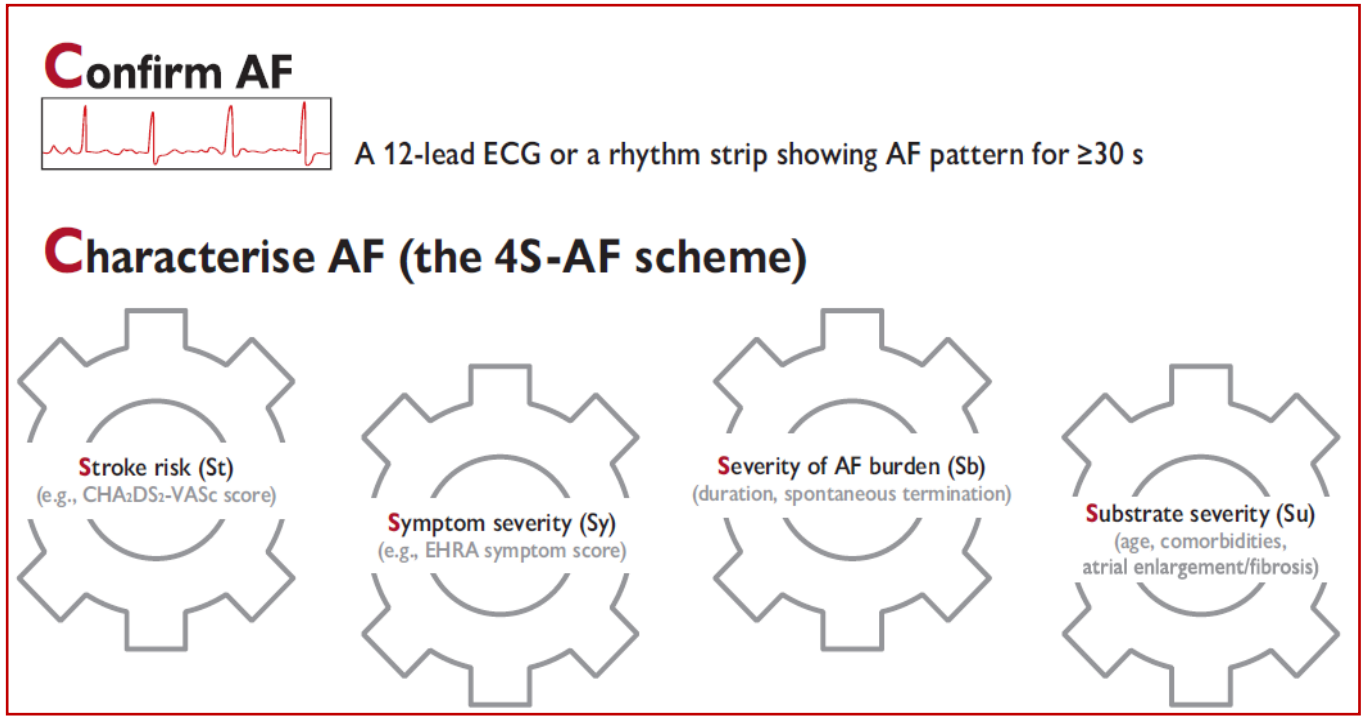
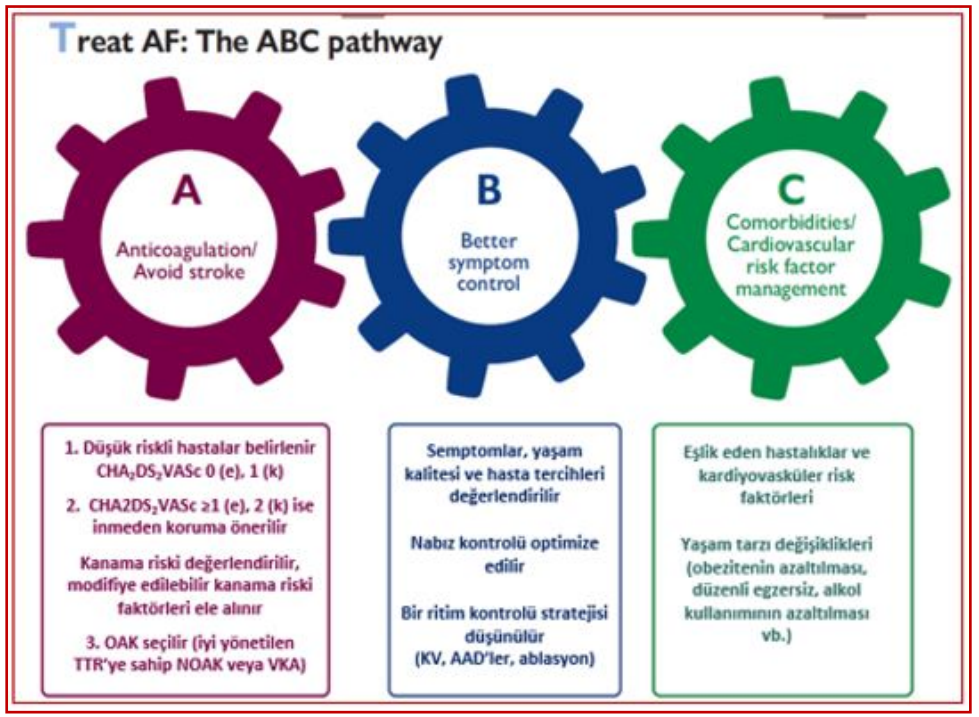
AF Yönetimi

CC To ABC





AAD, antiarrhythmic drug; AF, atrial fibrillation; ECG, electrocardiogram; EHRA, European Heart Rhythm Association; CV, cardioversion;NOAC, non-vitamin K antagonist oral anticoagulant; OAC, oral anticoagulant; TTR, time in therapeutic range; VKA, vitamin K antagonist.

Hindricks G *et al*. *Eur Heart J* 2020; doi: 10.1093/eurheartj/ehaa612.

ENTEGRE AF YÖNETİMİ

Hasta Merkezli

Optimize inmeyi önleme stratejisi

Hız veya ritim kontrolüyle semptom kontrolü

Kardiyovasküler risk faktörlerinin/komorbiditelerin yönetimi

Hasta eğitimi/kendi kendine yönetim
(bireysel hedefler ve/veya aksiyon planı, alevlenme yönetimi dahil)

Sağlık mesleği mensubunun eğitimi

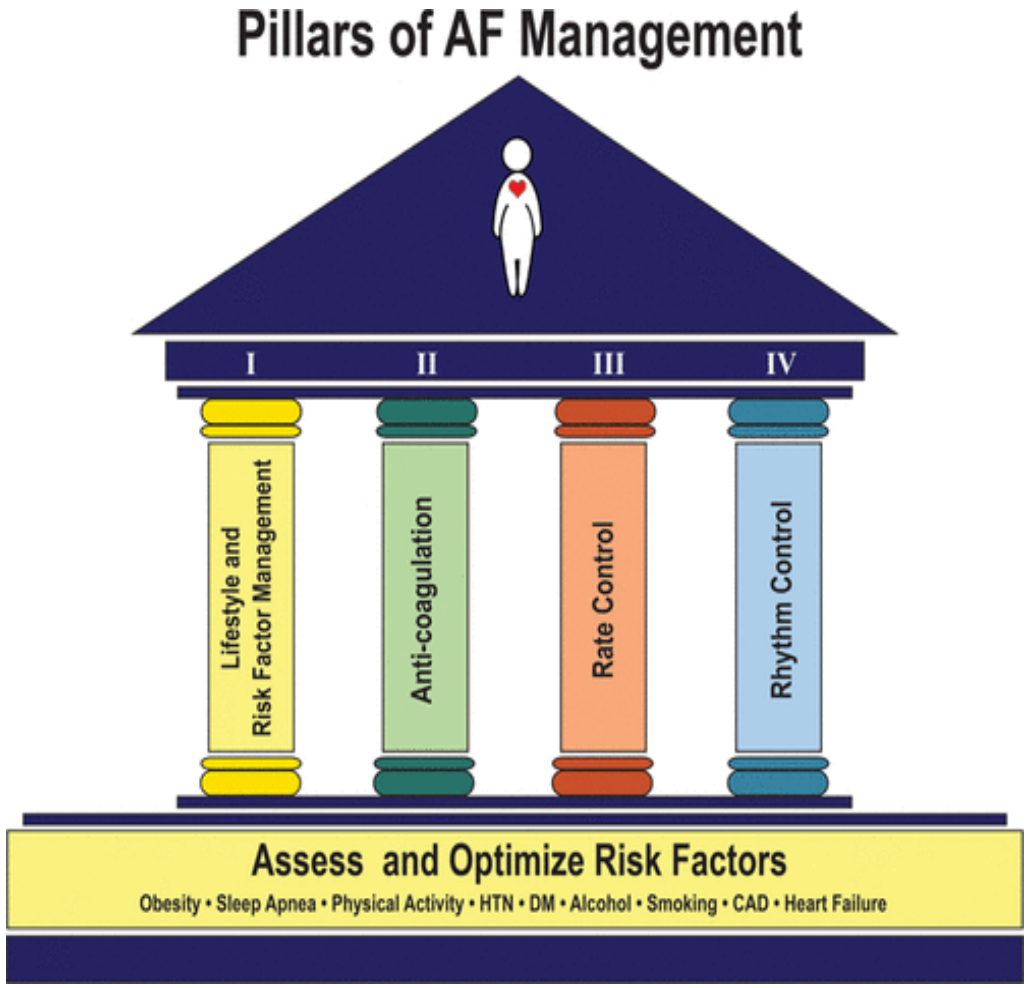
Yaşam tarzı modifikasyonu
(sigarayı bırakma, kilo vermek için diyete müdahale, egzersiz)

Psikososyal yönetim
(bilişsel davranış terapisi, stres yönetimi, diğer psikolojik değerlendirme ve/veya tedaviler)

İlaç tedavisine uyumu destekleyen stratejiler

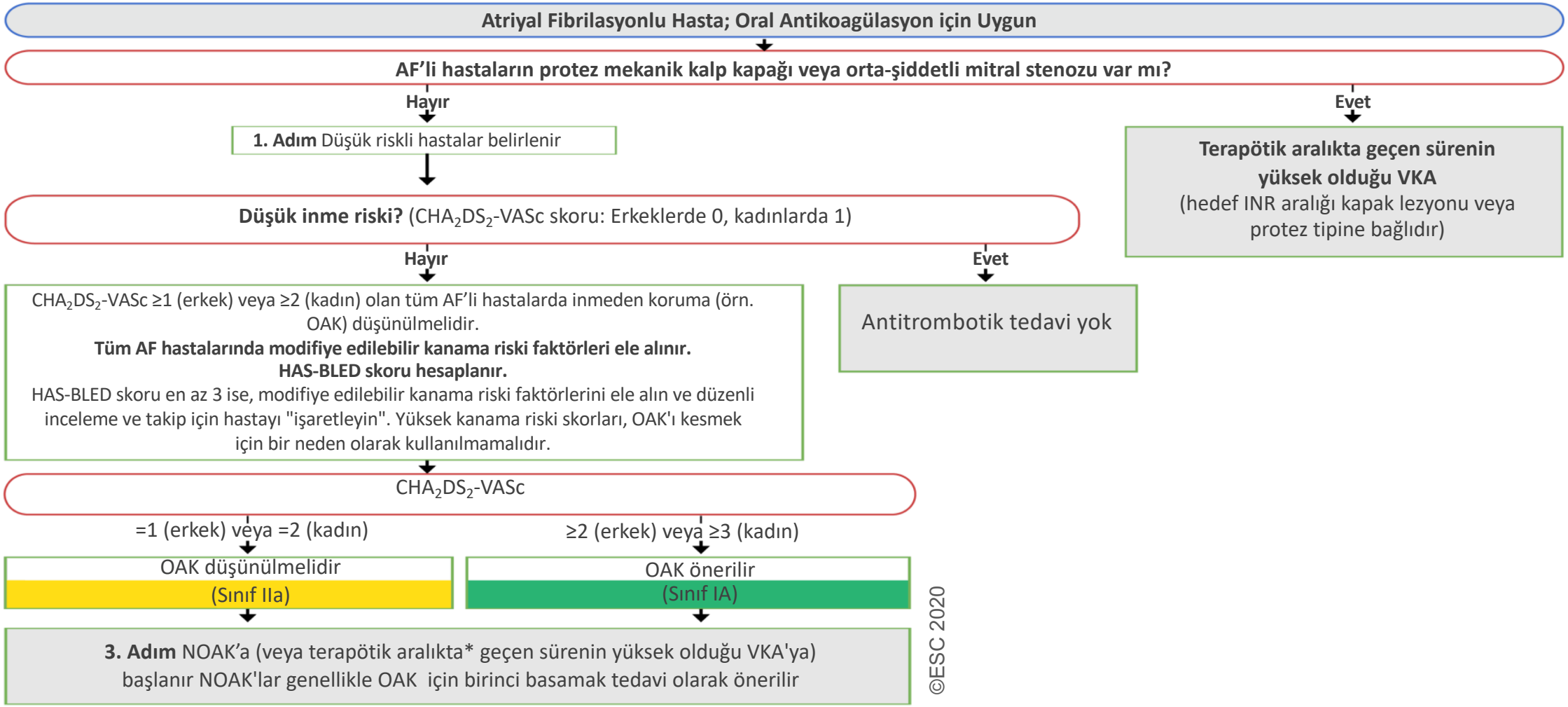
Multidisipliner ekip yaklaşımı
Farklı disiplinlerden SMM'lerin ekipler oluşturması ve aktif katılımı; hizmetlerin entegrasyonu; MDT toplantısı (gerektiğinde)

Primer ve sekonder bakım/tedavi arasında net iletişim ve yapılandırılmış takip



Mina K. Chung. Circulation. Lifestyle and Risk Factor Modification for Reduction of Atrial Fibrillation: A Scientific Statement From the American Heart Association, Volume: 141, Issue: 16, Pages: e750-e772, DOI: (10.1161/CIR.0000000000000748)

Antikoagülasyon/İnmeden Kaçınma: ‘3 Adımda AF’ Hasta Yolağı



[a]VKA düşünülüyorsa, SAMe-TT_2R_2 skoru hesaplanır: skor 0-2 ise, VKA tedavisi (örn. Varfarin) veya NOAK düşünülebilir; skor >2 ise, iyi antikoagülasyon kontrolüne yardımcı olmak için VKA kullanıcıları için düzenli inceleme/sık INR kontrolleri/danışmanlık düzenlenmeli veya bunun yerine NOAK kullanımı yeniden düşünülmelidir; TTR ideal olarak >%70’tir.

Hindricks G, et al. Eur Heart J 2020 Aug 29;ehaa612. doi: 10.1093/eurheartj/ehaa612.

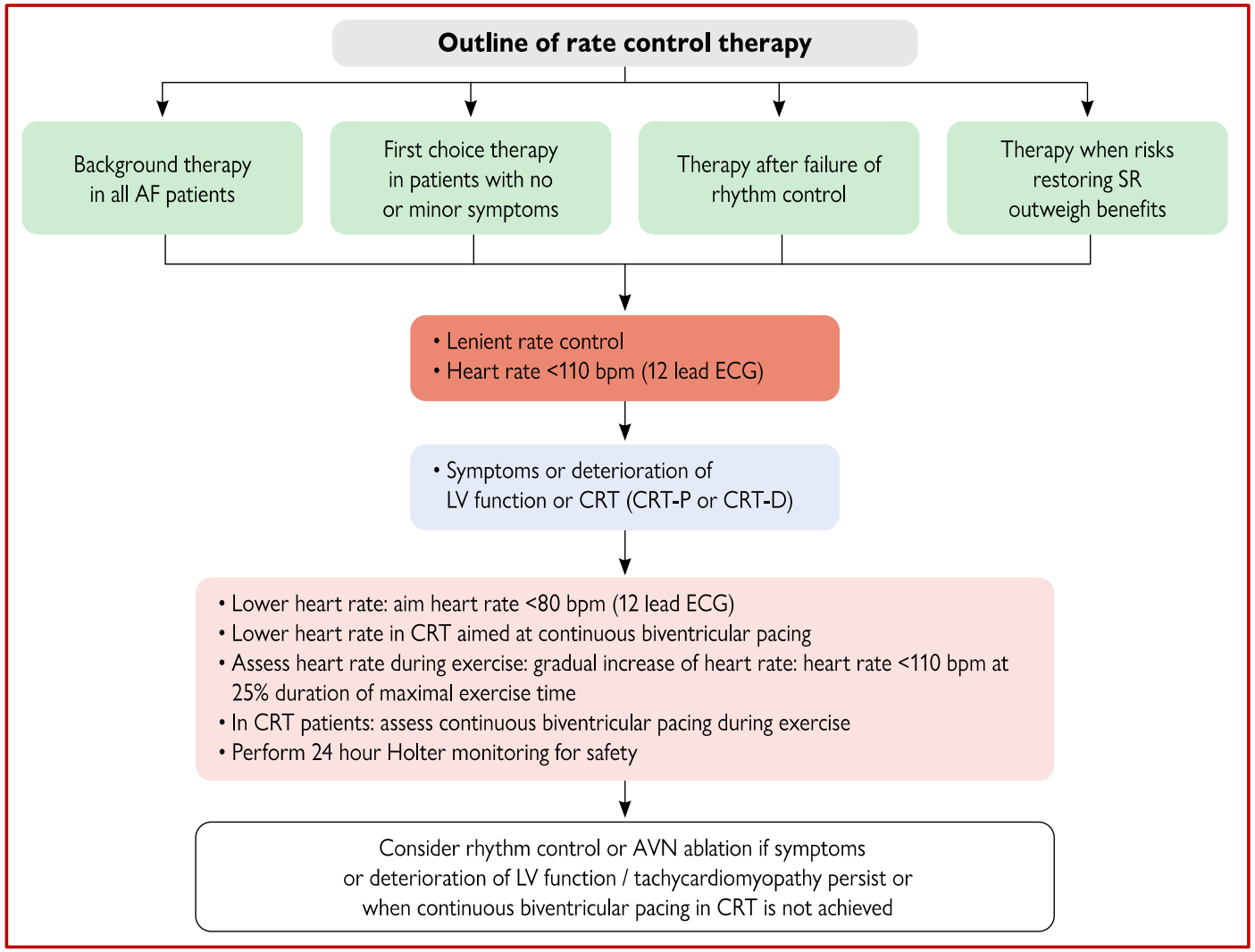
Atriyal Fibrilasyon?

Hız kontrolü kabul edilebilir.

Ritm kontrolünün ek avantajları olabilir.

Kateter ablasyon?

Figure 13 Outline of rate control therapy



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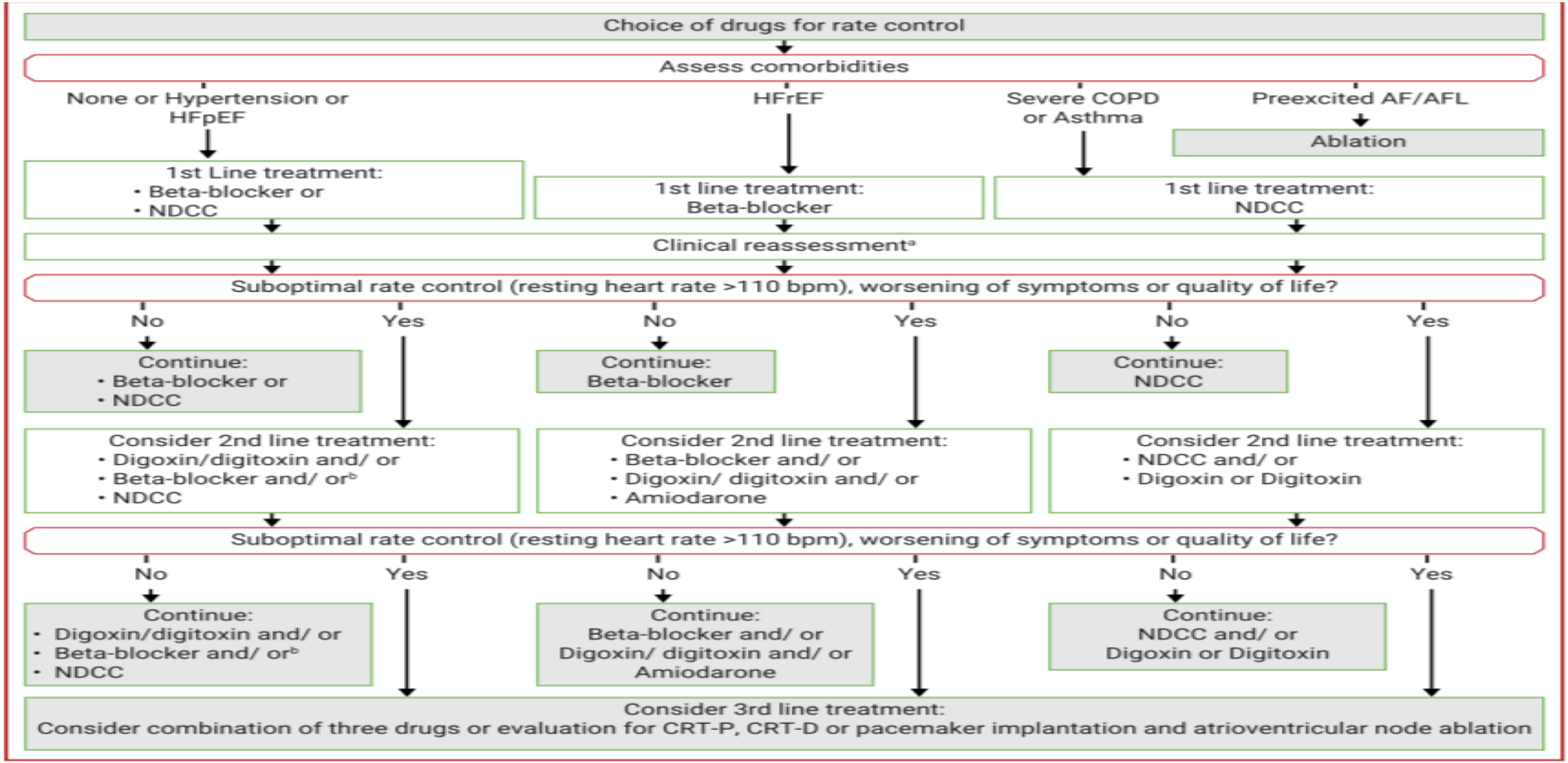
AF HIZ KONTROLÜ



AF RİTİM KONTROL

- AF hastalarında semptom bazlı şikayetler olabileceği gibi asemptomatik seyirli ya da hastanın farklı nedenlere yorduğu şikayetlerin temelinde AF olabileceği unutulmamalıdır.
- Güncel veriler yeni başlangıçlı AF hastalarında sinüs ritmine döndürmenin faydalı olabileceği yönündedir.

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Early Rhythm-Control Therapy in Patients with Atrial Fibrillation

P. Kirchhof, A.J. Camm, A. Goette, A. Brandes, L. Eckardt, A. Elvan, T. Fetsch, I.C. van Gelder, D. Haase, L.M. Haegeli, F. Hamann, H. Heidbüchel, G. Hindricks, J. Kautzner, C.-H. Kuck, L. Mont, G.A. Ng, J. Rekosz, N. Schoen, U. Schotten, A. Suling, J. Taggeselle, S. Themistoclakis, E. Vettorazzi, P. Vardas, K. Wegscheider, S. Willems, H.J.G.M. Crijns, and G. Breithardt, for the EAST-AFNET 4 Trial Investigators*

EAST – AFNET 4 Hypothesis and setting

Does early rhythm control therapy improve outcomes compared to usual care in patients with early, recently diagnosed atrial fibrillation at risk of stroke?

EAST- AFNET 4 is a multi-centre, investigator-initiated trial. Sponsor is AFNET,

supported by AFNET, BMBF, DHS, DZHK, EHRA, Sanofi, St Jude Medical/Abbott.

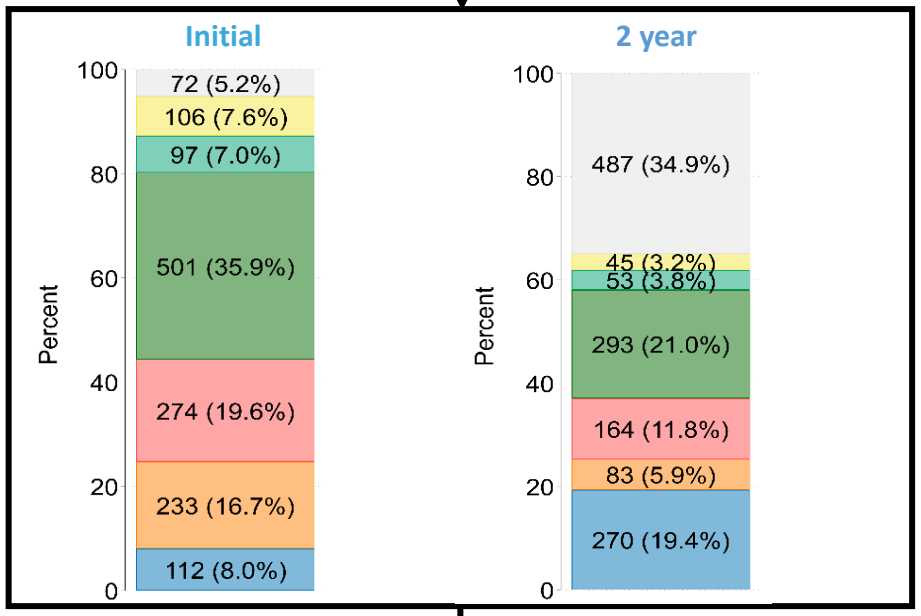
EAST – AFNET 4 CONSORT diagram

2789 patients randomized by 135 sites in 11 countries

Randomization

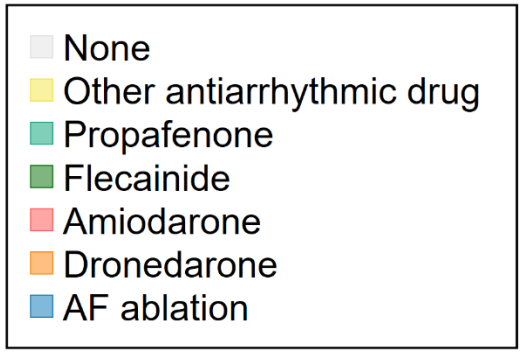
Early Rhythm Control (n=1,395)

Included in primary analysis n=1,395



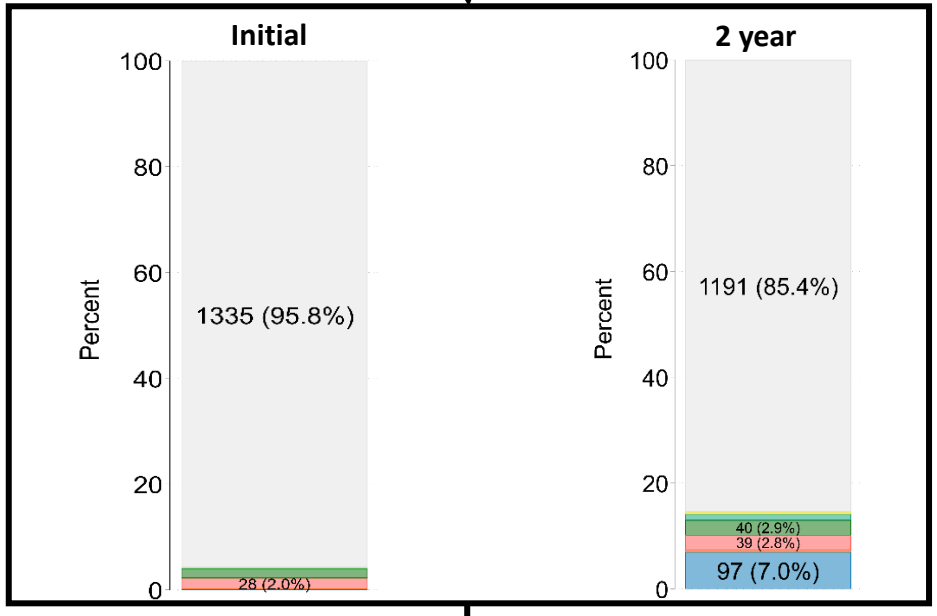
Total FU-years lost: 582/6963 (8.4%)

465 FU-years because 115 patients withdrew (6.7%)
117 FU-years lost to follow-up in 56 patients (1.7%)



Usual Care (n=1,394)

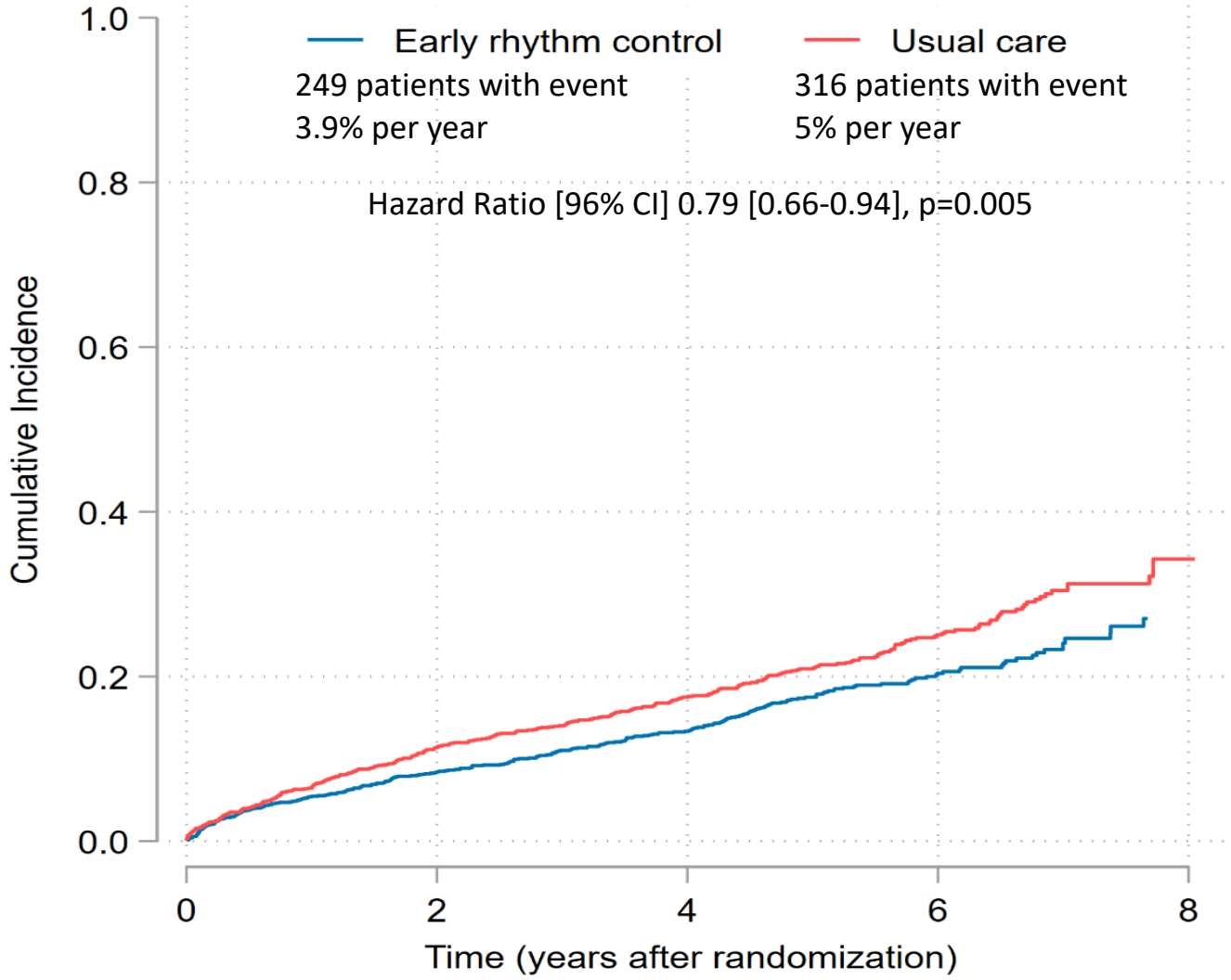
Included in primary analysis n=1,394



Total FU-years lost: 409/6859 (6.0%)

299 FU-years because 79 patients withdrew (4.4%)
110 FU-years lost to FU in 65 patients (1.6%)

EAST – AFNET 4 analysis of first primary outcome



Patients at risk

Early rhythm control	1395	1193	913	404	26
Usual care	1394	1169	888	405	34

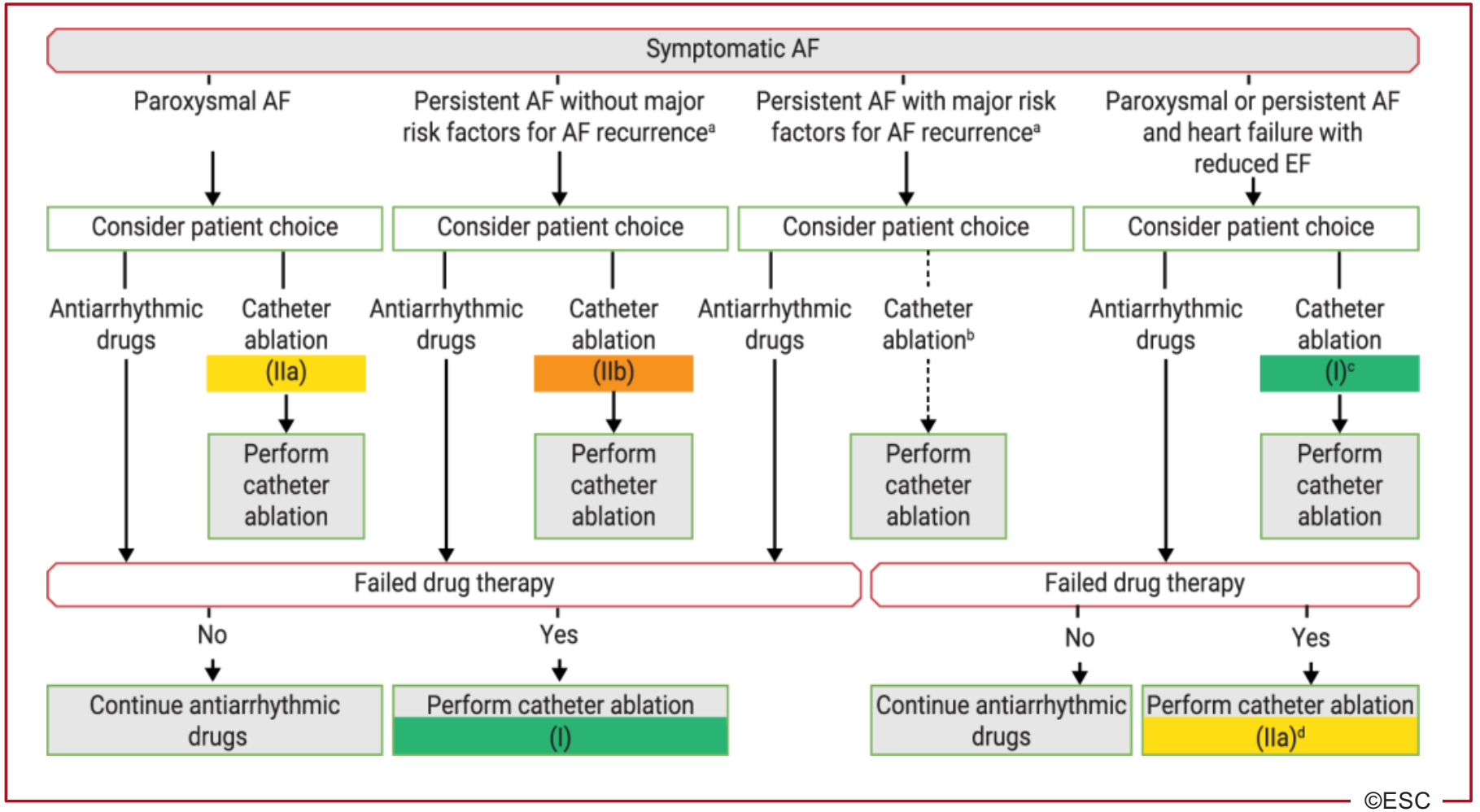
EAST – AFNET 4 Conclusions

Early initiation of rhythm control therapy reduced cardiovascular outcomes in patients with early AF and cardiovascular conditions without affecting nights spent in hospital.

As expected, the early rhythm control strategy was associated with more adverse events related to rhythm control therapy, but the overall safety of both treatment strategies was comparable.

These results have the potential to inform the future use of rhythm control therapy, further improving the care of patients with early AF.

Figure 17 Indications for catheter ablation of symptomatic AF



[a]Significantly enlarged LA volume, advanced age, long AF duration, renal dysfunction, and other cardiovascular risk factors. [b]In rare individual circumstances, catheter ablation may be carefully considered as first-line therapy. [c]Recommended to reverse LV dysfunction when tachycardiomyopathy is highly probable. [d]To improve survival and reduce hospitalization.

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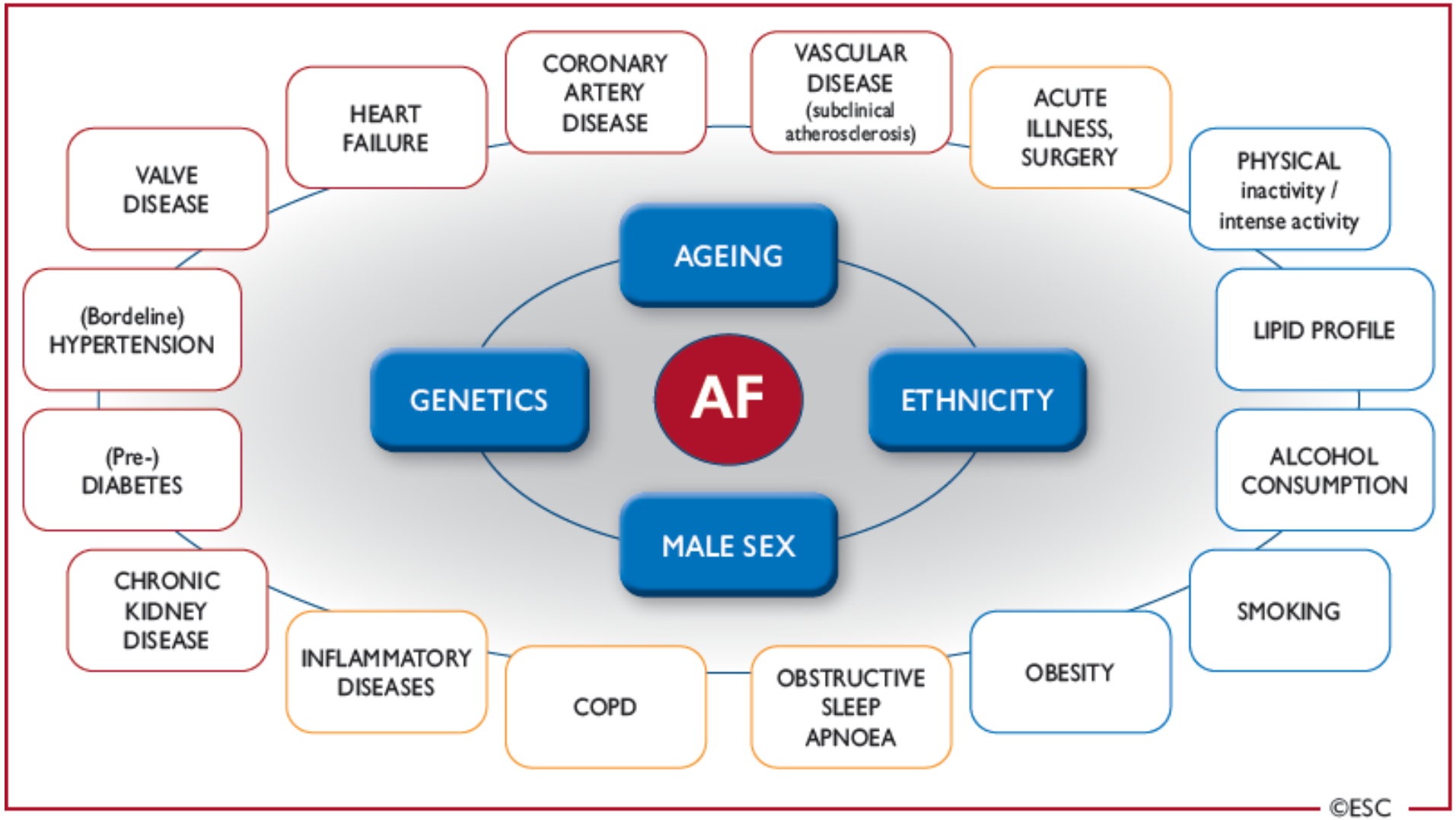
First-line therapy		
AF catheter ablation for PVI should/may be considered as first-line rhythm control therapy to improve symptoms in selected patients with symptomatic:		
• Paroxysmal AF episodes,[240–242,614,615] or	IIa	B
• Persistent AF without major risk factors for AF recurrence.[253–255,264,598–601,609,610,633,636,641,724,745,746,832]	IIb	C
as an alternative to AAD class I or III, considering patient choice, benefit, and risk.		
AF catheter ablation:		
• Is recommended to reverse LV dysfunction in AF patients when tachycardia-induced cardiomyopathy is highly probable, independent of their symptom status.[666,675,676]	I	B
• Should be considered in selected AF patients with HF with reduced LVEF to improve survival and reduce HF hospitalization.[612,659,662–666,668–671,817–826]	IIa	B
AF catheter ablation for PVI should be considered as a strategy to avoid pacemaker implantation in patients with AF-related bradycardia or symptomatic pre-automaticity pause after AF conversion considering the clinical situation.[816–818]	IIa	C
Lifestyle modification and other strategies to improve outcomes of ablation		
Weight loss is recommended in obese patients with AF, particularly those who are being evaluated to undergo AF ablation.[636,638,639,643,646,772,786–791]	I	B
Strict control of risk factors and avoidance of triggers are recommended as part of a rhythm control strategy.[636,637]	I	B

Figure 3 Summary of risk factors for incident AF



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AF Yönetiminde Risk Faktör Modifikasyonu

- Obezite
- Fiziksel İnaktivite
- Uyku Apnesi
- Diyabetes mellitus
- Hipertansiyon
- Diğer modifiye edilebilen risk faktörleri

Obezite

- Obesite AF gelişimi ve persiste olması için güçlü bir risk faktörüdür.
- Fazla kilolu ve obez hastalarda ağırlığın en az %10 azaltılmasının AF yükünde azalmaya neden olduğunu gösteren bulgular mevcuttur.
- Obez hastalarda bariyatrik cerrahinin yeni AF gelişimi ve AF ablasyonu sonrası AF rekürrensi riskinde azalma ile ilişkili olduğu bildirilmiştir.
- Risk altındaki popülasyonu daha net belirlemek ve AF hastalarında optimal obezite yönetimi ile ilgili ek verilere ihtiyaç var.

Circulation. 2020;141:e750–e772.

Fiziksel İnaktivite

- Mevcut veriler orta düzeyde fizik aktivite artışının AF önlenmesi ve tedavisinde yardımcı olabileceğini düşündürmektedir.
- Düzenli aerobik egzersiz AF yükünü azaltmada, AF ile ilişkili semptomların azaltılmasında ve hayat kalitesinin artırılmasında etkilidir.
- 2018 Physical Activity Guidelines Advisory Committee tarafından önerilen orta düzeyde egzersiz AF riskini artırmamaktadır (150 dk/hafta).
- Orta düzeyde egzersizin yararlı olduğuna ilişkin kanıtlar mevcut iken, abartılı egzersiz aktivitelerinin AF riskinde artışa neden olabileceği bildirilmektedir.

Circulation. 2020;141:e750–e772.

Uyku İle İlişkili Solunum Bozuklukları

- AF hastalarında uyku ile ilişkili solunum bozuklukları prevelansı yüksektir.
- Gözlemsel veriler uyku ile ilişkili solunum bozuklukları ile AF insidansı, yükü ve tedaviye yanıtının ilişkili olduğunu göstermektedir.
- Uyku ile ilişkili solunum bozukluğu olup CPAP tedavisi alan hastalarda AF ablasyonu sonrası daha düşük AF rekürrensi olduğu bildirilmiştir.
- Bu nedenle AF hastalarında eş zamanlı bulunan uyku ile ilişkili solunum bozukluğunun taranması ve tedavisi önemli bir risk faktör modifikasyonu olabilir.
- Konu ile ilgili randomize çalışma sonuçlarına ihtiyaç vardır.

Circulation. 2020;141:e750–e772.

Diyabetes mellitus

- DM daha yüksek AF riski ile ilişkilidir ve yapısal, elektriksel ve otonomik değişikliklere katkıda bulunabilir.
- Glisemik kontrolün AF riskinde azalma ile ilişkili olduğu gösterilmiştir.
- Diyabet tedavisi güncel kılavuzlara göre uygulanmalıdır.

Circulation. 2020;141:e750–e772.

Hipertansiyon

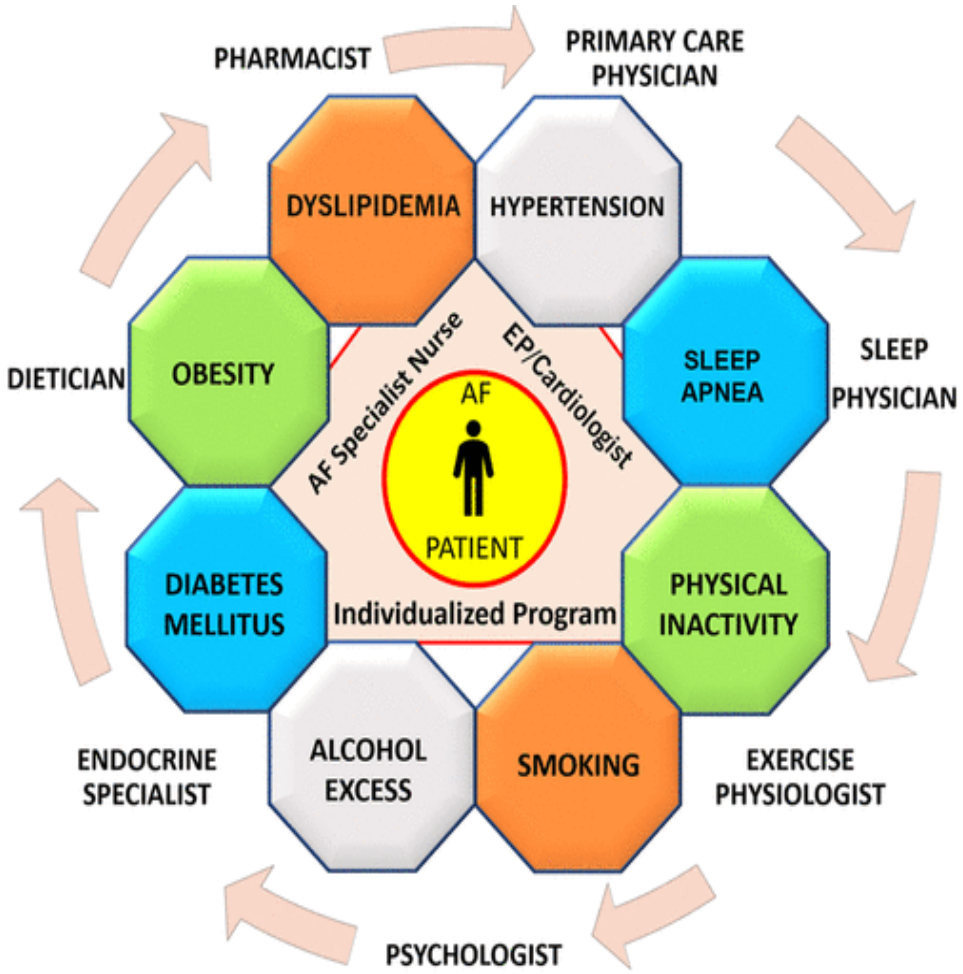
- Hipertansiyon AF gelişimde artış ile ilişkilidir.
- Hipertansiyon tedavisi güncel kılavuzlara göre uygulanmalı ve farmakolojik tedavi yanında yaşam tarzı değişikliklerini de kapsamalıdır (obesite, fiziksel inaktivite ve diyet).

Circulation. 2020;141:e750–e772.

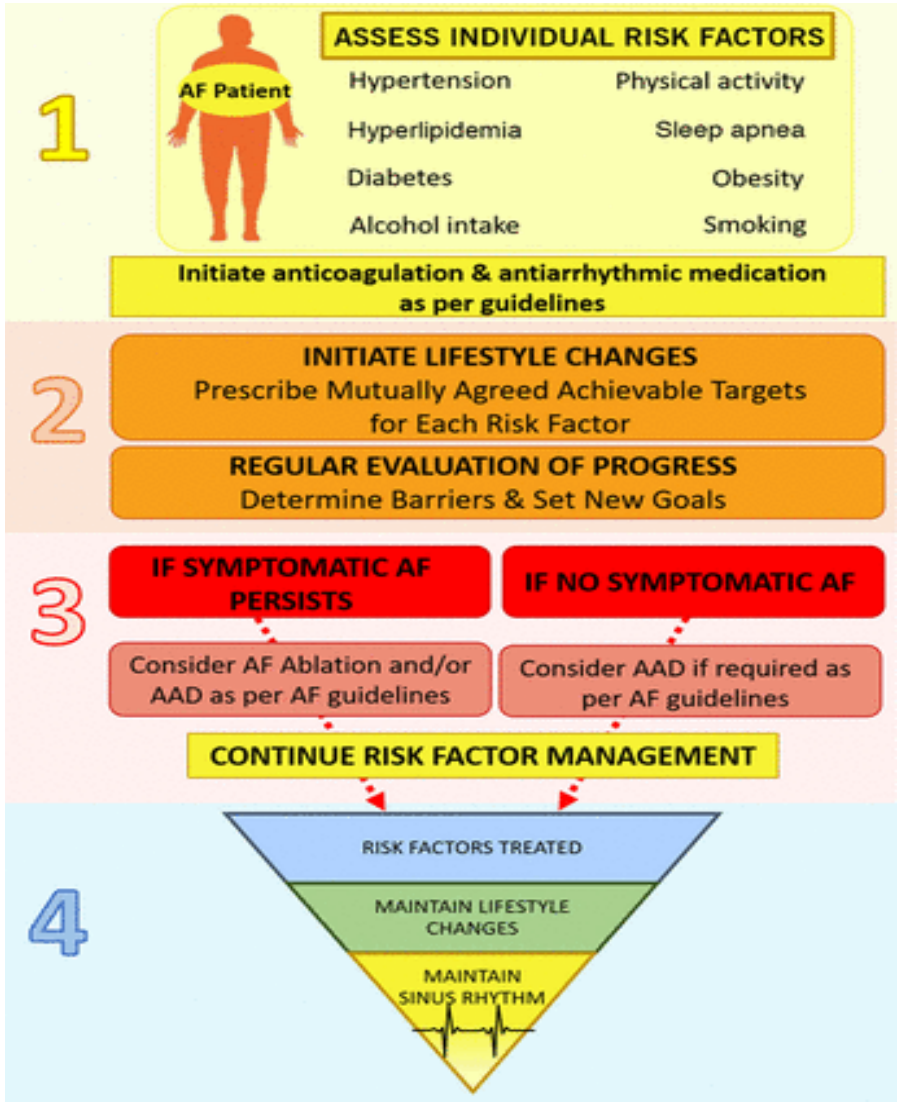
Diğer risk faktörleri

- Sigara bırakma ve alkol tüketiminin azaltılması sağlanmalıdır.
- AF ve kalp yetersizliği yakından ilişkili olabilir. Kalp yetersizliği varlığında kılavuz önerileri doğrultusunda optimum tedavi düzenlemesi yapılmalı, kateter ablasyonu gereksinimi göz önünde bulundurulmalı ve eşlik eden yaşam tarzı ile ilişkili risk faktörlerinin yönetimi sağlanmalıdır
- Hiperlipidemi tedavisi güncel kılavuzlara göre yapılmalıdır. Spesifik ajanların AF yönetimindeki yeri ile ilgili yeterli veri bulunmamamktadır.
- Kafein tüketiminin azaltılması ile AF insidansının düşmesi ile ilgili net veri yoktur.

Circulation. 2020;141:e750–e772.



Mina K. Chung. Circulation. Lifestyle and Risk Factor Modification for Reduction of Atrial Fibrillation: A Scientific Statement From the American Heart Association, Volume: 141, Issue: 16, Pages: e750-e772, DOI: (10.1161/CIR.0000000000000748)



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TEŞEKKÜR EDERİM

Table 6 EHRA symptom scale

Score	Symptoms	Description
1	None	AF does not cause any symptoms
2a	Mild	Normal daily activity not affected by symptoms related to AF
2b	Moderate	Normal daily activity not affected by symptoms related to AF, but patient troubled by symptoms
3	Severe	Normal daily activity affected by symptoms related to AF
4	Disabling	Normal daily activity discontinued

Six symptoms, including palpitations, fatigue, dizziness, dyspnoea, chest pain, and anxiety during AF, are evaluated with regard to how it affects the patient's daily activity, ranging from none to symptom frequency or severity that leads to a discontinuation of daily activities.

To measure treatment effects, QoL and symptom questionnaires should be sensitive to changes in AF burden. The EHRA symptom scale is a physician-assessed tool for quantification of AF-related symptoms that is used to guide symptom-driven AF treatment decisions,[228] and has been related to adverse outcomes in more symptomatic patients (score 3 - 4) versus those with a score of 1 - 2.[228,230] However, it does not consider the symptom dimensions such as anxiety, treatment concerns, and medication adverse effects that are captured by general QoL scales,[230] or the patient-reported symptom-related outcomes. As discrepancies between patient-reported and physician-assessed outcomes are frequently observed,[231] the AF-related treatment decisions also need to be informed by a quantified patient perception of symptoms, but further research is needed to identify optimal tool(s) for capturing this information.

AF = atrial fibrillation; EHRA = European Heart Rhythm Association; QoL = quality of life.

Table 8 CHA_2DS_2-VASc score[334]

CHA_2DS_2-VASc score Risk factors and definitions		Points awarded	Comment
C	**Congestive heart failure** Clinical HF, or objective evidence of moderate to severe LV dysfunction, or HCM	1	Recent decompensated HF irrespective of LVEF (thus incorporating HFrEF or HFpEF), or the presence (even if asymptomatic) of moderate-severe LV systolic impairment on cardiac imaging[335]; HCM confers a high stroke risk[336] and OAC is beneficial for stroke reduction.[337]
H	**Hypertension** or on antihypertensive therapy	1	History of hypertension may result in vascular changes that predispose to stroke, and a well-controlled BP today may not be well-controlled over time.[324] Uncontrolled BP - the optimal BP target associated with the lowest risk of ischaemic stroke, death, and other cardiovascular outcomes is 120 - 129/<80 mmHg.[338]
A	**Age 75 years or older**	2	Age is a powerful driver of stroke risk, and most population cohorts show that the risk rises from age 65 years upwards.[339] Age-related risk is a continuum, but for reasons of simplicity and practicality, 1 point is given for age 65 - 74 years and 2 points for age ≥75 years.
D	**Diabetes mellitus** Treatment with oral hypoglycaemic drugs and/or insulin or fasting blood glucose >125 mg/dL (7 mmol/L)	1	Diabetes mellitus is a well-established risk factor for stroke, and more recently stroke risk has been related to duration of diabetes mellitus (the longer the duration of diabetes mellitus, the higher the risk of thromboembolism[340]) and presence of diabetic target organ damage, e.g. retinopathy.[341] Both type 1 and type 2 diabetes mellitus confer broadly similar thromboembolic risk in AF, although the risk may be slightly higher in patients aged <65 years with type 2 diabetes mellitus compared to patients with type 1 diabetes mellitus.[342]
S	**Stroke**Previous stroke, TIA, or thromboembolism	2	Previous stroke, systemic embolism, or TIA confers a particularly high risk of ischaemic stroke, hence weighted 2 points. Although excluded from RCTs, AF patients with ICH (including haemorrhagic stroke) are at very high risk of subsequent ischaemic stroke, and recent observational studies suggest that such patients would benefit from oral anticoagulation.[343–345]
V	**Vascular disease** Angiographically significant CAD, previous myocardial infarction, PAD, or aortic plaque	1	Vascular disease (PAD or myocardial infarction) confers a 17 - 22% excess risk, particularly in Asian patients.[346–348] Angiographically significant CAD is also an independent risk factor for ischaemic stroke among AF patients (adjusted incidence rate ratio 1.29, 95% CI 1.08 - 1.53).[349] Complex aortic plaque on the descending aorta, as an indicator of significant vascular disease, is also a strong predictor of ischaemic stroke.[350]
A	**Age 65 – 74 years**	1	See above. Recent data from Asia suggest that the risk of stroke may rise from age 50 - 55 years upwards and that a modified CHA_2DS_2-VASc score may be used in Asian patients.[351,352]
Sc	**Sex category (female)**	1	A stroke risk modifier rather than a risk factor.[353]
Maximum score		**9**	

Table 10 Clinical risk factors in the HAS-BLED score[395]

Risk factors and definitions		Points awarded
H	**Uncontrolled hypertension** SBP >160 mmHg	1
A	**Abnormal renal and/or hepatic function** Dialysis, transplant, serum creatinine >200 µmol/L, cirrhosis, bilirubin > × 2 upper limit of normal, AST/ALT/ALP >3 × upper limit of normal	1 point for each
S	**Stroke** Previous ischaemic or haemorrhagic[a] stroke	1
B	**Bleeding history or predisposition** Previous major haemorrhage or anaemia or severe thrombocytopenia	1
L	**Labile INR[b]** TTR <60% in patient receiving VKA	1
E	**Elderly** Aged >65 years or extreme frailty	1
D	**Drugs or excessive alcohol drinking** Concomitant use of antiplatelet or NSAID; and/or excessive[c] alcohol per week	1 point for each
Maximum score		**9**