Quale NAO per il signor Giuseppe?

Dottoressa Maria Milano

Dottor. Emanuele Tizzani

Giuseppe

- 81 anni
- IRC di grado moderato (eGFR 45ml/min)
- Cardiopatia ipertensiva

- ECOCARDIO (sei mesi fa): lieve ipertrofia ventricolare sinistra, FE 65%, non vizi valvolari

- Poli-artrosi diffusa. Morbo di Parkinson. IPB.

- In terapia con:
  - Valsartan 160 mg 1 cpr/die
  - ASA 100 mg 1 cpr/die

15 settembre 2017, visita MMG

- Giuseppe viene in studio con l'ECG prescritto per il monitoraggio dell'ipertensione

<u>Diagnosi di FA ad esordio non databile</u>

- Sintomi: lamenta dispnea da sforzo e tachicardia sintomatica
- ECG: FA con FC 110
- Alla visita: PAOS 140/82, FC 110 bpm, aritmico, restante nn

In base alle caratteristiche del paziente quali NAO pensi che il cardiologo prescriverà e con quale posologia?

Televoto I

1. Pradaxa 150 mg 1 cpr x 2 /die
2. Lixiana 60 mg 1cpr/die
3. Xarelto 15 mg 1 cpr/die
4. Eliquis 5 mg 1 cpr x 2/die
5. No NAO prosegue l'ASA


Pradaxa® 75 mg gélules
Dabigatran etexilate
30 x 1 gélules
Boehringer Ingelheim
Pradaxa® 75 mg gélules
Dabigatran etexilate
10 x 1 gélules
Boehringer Ingelheim
Pradaxa® 110 mg gélules
Dabigatran etexilate
30 x 1 gélules
Boehringer Ingelheim
Pradaxa® 110 mg gélules
Dabigatran etexilate
10 x 1 gélules
Boehringer Ingelheim


Eliquis®
apixaban
5 mg
For oral use
film-coated tablets
Eliquis®
apixaban
2.5 mg
For oral use
film-coated tablets
60 film-coated tablets


Xarelto® 20 mg
film-coated tablets
Rivaroxaban
For oral use.
Open here
28 film-coated tablets


Daiichi-Sankyo
Lixiana® 60 mg
Filmtabletten
edoxaban
98 Filmtabletten
Zum Einnehmen

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 SEPTEMBER 17, 2009 VOL. 361 NO. 12

Dabigatran versus Warfarin in Patients with Atrial Fibrillation

Stuart J. Connolly, M.D., Michael D. Ezekowitz, M.B., Ch.B., D.Phil., Salim Yusuf, F.R.C.P.C., D.Phil., John Eikelboom, M.D., Jonas Oldgren, M.D., Ph.D., Amit Parekh, M.D., Janice Pogue, M.Sc., Paul A. Reilly, Ph.D., Ellison Themeles, B.A., Jeanne Varrone, M.D., Susan Wang, Ph.D., Marco Alings, M.D., Ph.D., Denis Xavier, M.D., Jun Zhu, M.D., Rafael Diaz, M.D., Basil S. Lewis, M.D., Harald Darius, M.D., Hans-Christoph Diener, M.D., Ph.D., Campbell D. Joyner, M.D., Lars Wallentin, M.D., Ph.D., and the RE-LY Steering Committee and Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Rivaroxaban versus Warfarin in Nonvalvular Atrial Fibrillation

Manesh R. Patel, M.D., Kenneth W. Mahaffey, M.D., Jyotsna Garg, M.S., Guohua Pan, Ph.D., Daniel E. Singer, M.D., Werner Hacke, M.D., Ph.D., Günter Breithardt, M.D., Jonathan L. Halperin, M.D., Graeme J. Hankey, M.D., Jonathan P. Piccini, M.D., Richard C. Becker, M.D., Christopher C. Nessel, M.D., John F. Paolini, M.D., Ph.D., Scott D. Berkowitz, M.D., Keith A.A. Fox, M.B., Ch.B., Robert M. Califf, M.D., and the ROCKET AF Steering Committee, for the ROCKET AF Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Apixaban versus Warfarin in Patients with Atrial Fibrillation

Christopher B. Granger, M.D., John H. Alexander, M.D., M.H.S., John J.V. McMurray, M.D., Renato D. Lopes, M.D., Ph.D., Elaine M. Hylek, M.D., M.P.H., Michael Hanna, M.D., Hussein R. Al-Khalidi, Ph.D., Jack Ansell, M.D., Dan Atar, M.D., Alvaro Avezum, M.D., Ph.D., M. Cecilia Bahit, M.D., Rafael Diaz, M.D., J. Donald Easton, M.D., Justin A. Ezekowitz, M.B., B.Ch., Greg Flaker, M.D., David Garcia, M.D., Margarida Geraldes, Ph.D., Bernard J. Gersh, M.D., Sergey Golitsyn, M.D., Ph.D., Shinya Goto, M.D., Antonio G. Hermosillo, M.D., Stefan H. Hohnloser, M.D., John Horowitz, M.D., Puneet Mohan, M.D., Ph.D., Petr Jansky, M.D., Basil S. Lewis, M.D., Jose Luis Lopez-Sendon, M.D., Prem Pais, M.D., Alexander Parkhomenko, M.D., Freek W.A. Verheugt, M.D., Ph.D., Jun Zhu, M.D., and Lars Wallentin, M.D., Ph.D., for the ARISTOTLE Committees and Investigators*

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Edoxaban versus Warfarin in Patients with Atrial Fibrillation

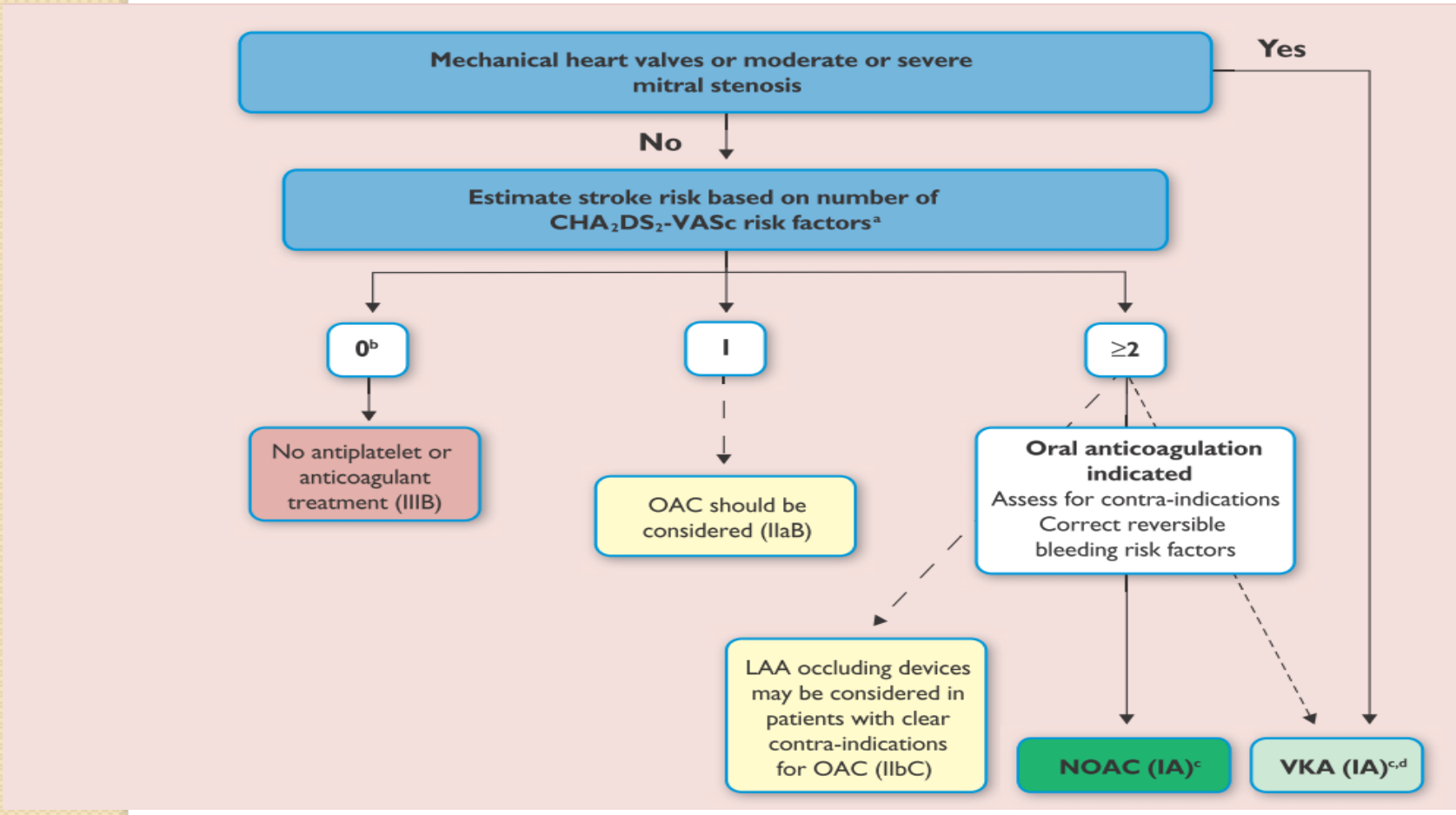
Robert P. Giugliano, M.D., Christian T. Ruff, M.D., M.P.H., Eugene Braunwald, M.D., Sabina A. Murphy, M.P.H., Stephen D. Wiviott, M.D., Jonathan L. Halperin, M.D., Albert L. Waldo, M.D., Michael D. Ezekowitz, M.D., D.Phil., Jeffrey I. Weitz, M.D., Jindřich Špinar, M.D., Witold Ruzyllo, M.D., Mikhail Ruda, M.D., Yukihiro Koretsune, M.D., Joshua Betcher, Ph.D., Minggao Shi, Ph.D., Laura T. Grip, A.B., Shirali P. Patel, B.S., Indravadan Patel, M.D., James J. Hanyok, Pharm.D., Michele Mercuri, M.D., and Elliott M. Antman, M.D., for the ENGAGE AF-TIMI 48 Investigators*

European Heart Journal Advance Access published August 27, 2016

European Heart Journal
doi:10.1093/eurheartj/ehw210

ESC GUIDELINES

2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS



NAO ed età

Età > 80 anni

Ridurre dabigatran a 110 mg 1 cpr x 2

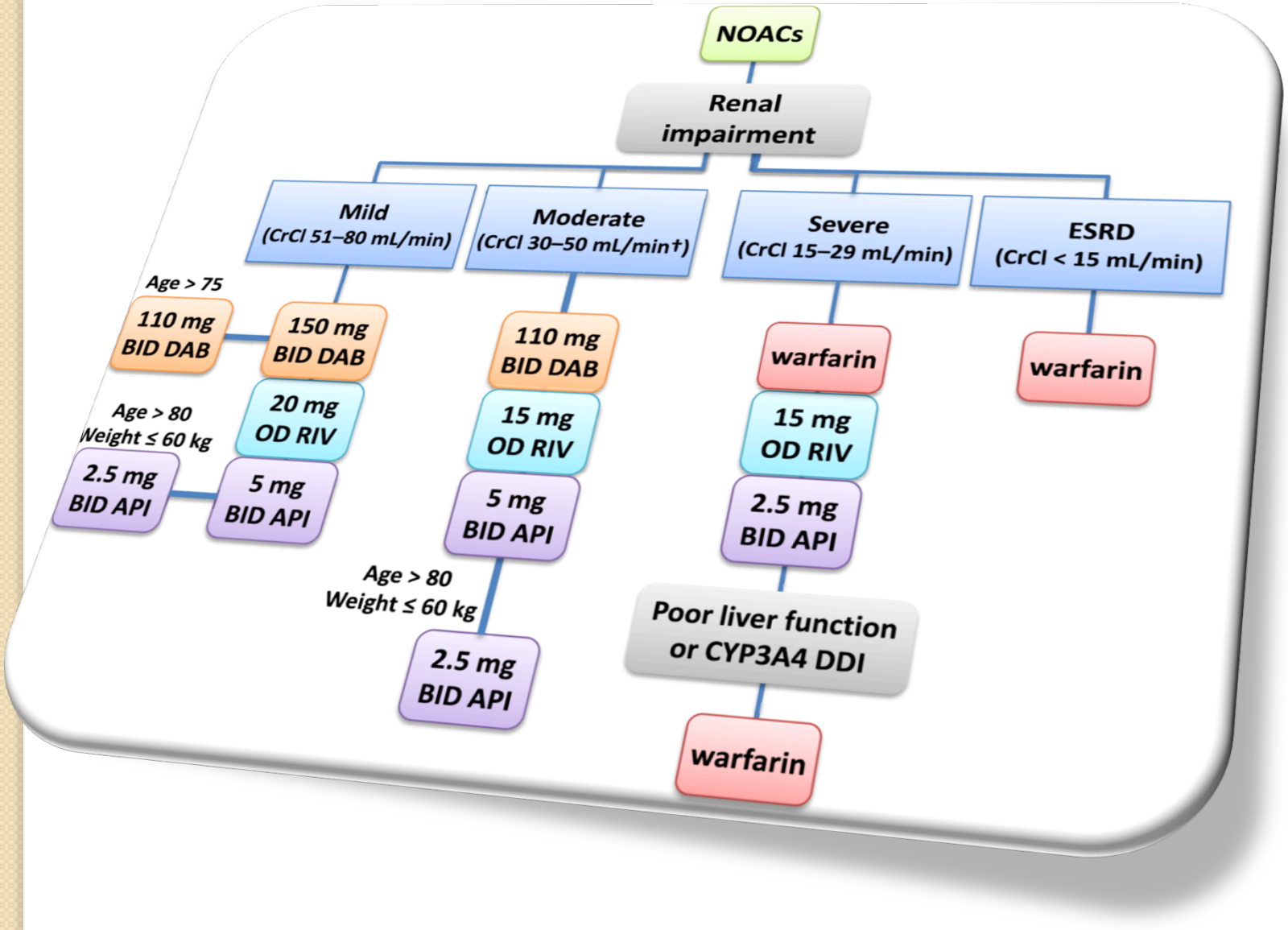
Ridurre apixaban a 2,5 mg 1 cpr x 2 se presente oltre all'età un altro fattore (IRC di grado moderato, peso corporeo <60 kg)

Non riduzione per l'età di rivaroxaban ed edoxaban

DOAC e IRC

	Dabigatran	Apixaban	Edoxaban[a]	Rivaroxaban
Fraction renally excreted of absorbed dose	80%	27%	50%[9]	35%
Bio-availability	3–7%	50%	62%[17]	66% without food Almost 100% with food
Fraction renally excreted of administered dose	4%	14%	37%[9]	33%
Approved for CrCl ≥ ...	≥30 ml/min	≥15 ml/min	Not available	≥15 ml/min
Dosing recommendation	CrCl ≥50 ml/min: no adjustment (i.e. 150 mg bid)	Serum creatinine ≥1.5 mg/dl: no adjustment (i.e. 5 mg bid)	Not available	CrCl ≥50 ml/min: no adjustment (i.e. 20 mg qd)
Dosing if CKD	When CrCl 30–49 ml/min, 150 mg bid is possible (SmPC) but 110 mg bid if 'high risk of bleeding' (SmPC) or 'recommended' (GL update)[2] Note: 75 mg bid approved in US only:[b] • if CrCl 15–30 ml/min • if CrCl 30–49 ml/min and other orange factor Table 5 (e.g. verapamil)	CrCl 15–29 ml/min: 2.5 mg bid Serum creatinine ≥1.5 mg/dl in combination with age ≥80 years or weight ≤60 kg,[SmPC] or with other 'yellow' factor (Table 5): 2.5 mg bid	Not available	15 mg qd when CrCl 15–49 ml/min
Not recommended if	CrCl <30 ml/min	CrCl <15 ml/min	Not available	CrCl <15 ml/min

Importance of Pharmacokinetic Profile and Variability as Determinants of Dose and Response to Dabigatran, Rivaroxaban, and Apixaban

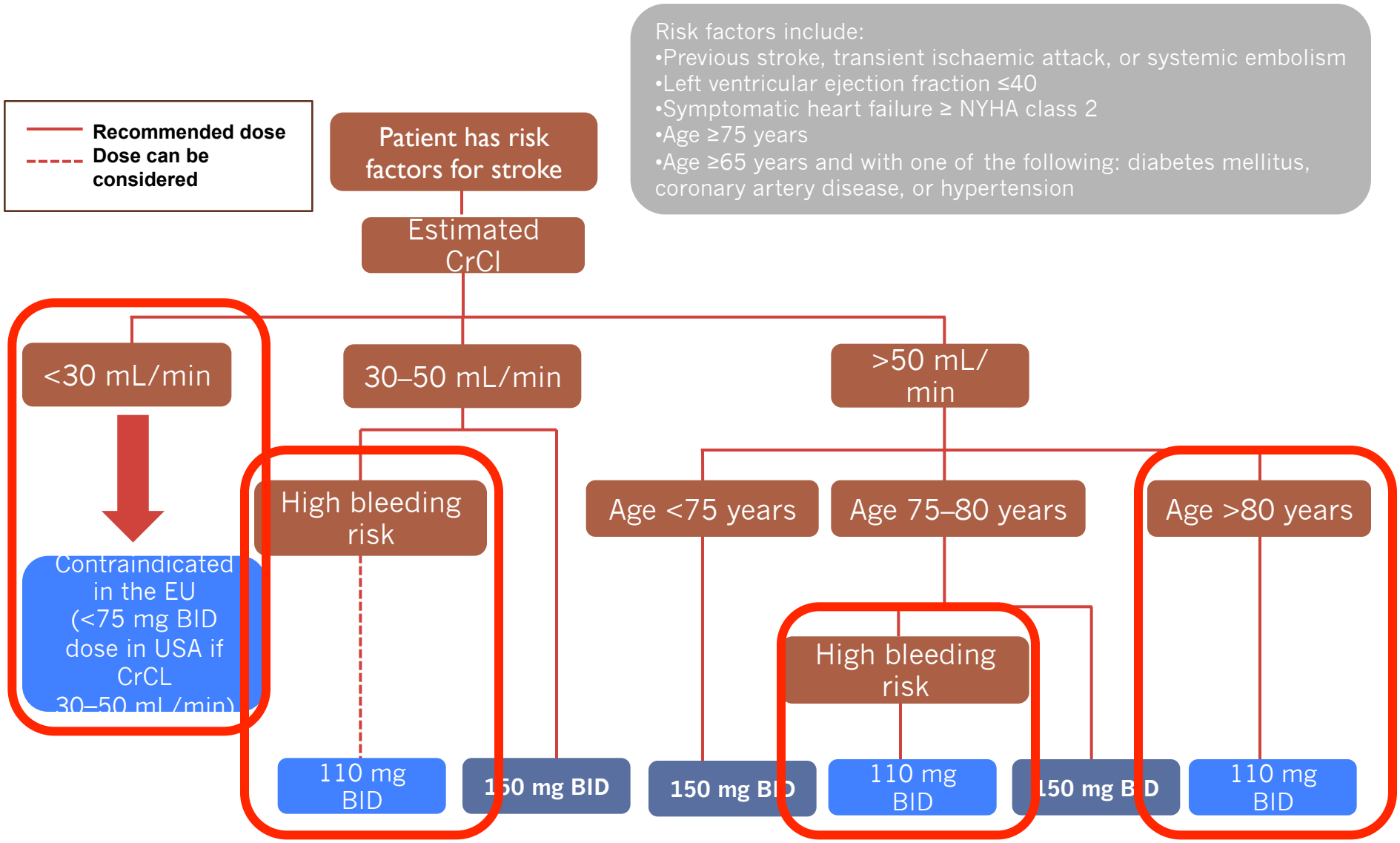


Gong IYet al. Can J Cardiol 2013; 29:S24-33

Edoxaban: dosaggio raccomandato

Riassunto della posologia nella FANV e nel TEV (TVP ed EP)		
Guida riassuntiva per la somministrazione		
Dose raccomandata		60 mg una volta al giorno
Raccomandazione sulla dose per i pazienti con uno o più dei seguenti fattori clinici		
Compromissione renale	Moderata o severa (CrCl 15-50 ml/min)	30 mg una volta al giorno
Basso peso corporeo	≤60 kg	
Inibitori della P-gp	Ciclosporina, dronedarone, eritromicina, ketoconazolo	

Lixiana. Riassunto delle caratteristiche del prodotto.



BID = twice daily; CrCl = creatinine clearance; NYHA = New York Heart Association

Adapted from: Huisman M et al. Thromb Haemost doi:10.1160/TH11-10-0718

NAO e peso corporeo

Peso corporeo < 60 kg

Ridurre edoxaban a 30 mg/die

Ridurre apixaban a 2,5 mg 1 cpr x 2 se presente oltre al basso peso un altro fattore (IRC di grado moderato, età >80 anni)

Non riduzione per basso peso corporeo per dabigatran e rivaroxaban

Interazioni farmacologiche NAO

Farmaco	Dabigratan	Rivaroxaban	Apixaban
Atorvastatina	possibile	possibile	non studiata
Digossina	possibile	possibile	possibile
Verapamil	Possibile con riduzione di dosaggio a 110 mg e assunzione simultanea	possibile con cautela	non studiata
Diltiazem	possibile	possibile con cautela	possibile con cautela
Chinidina	possibile con cautela	possibile con cautela	non studiata
Amiodarone	possibile con cautela	possibile	non studiata
Dronedarone	no	no	non studiata
Itraconazolo	no	no	no
Fluconazolo	non studiata	possibile con cautela	non studiata
Ciclosporina, tacrolimus	no	possibile con cautela	non studiata
Claritromicina, eritromicina	possibile con cautela	possibile con cautela	non studiata
Inibitori proteasi HIV	no	no	no
Rifampicina, Erba di S,. Giovanni, carbamazepima, fenitoina, Fenobarbital	no	possibile con cautela	no
Gastroprotettori (IPP e antiH2)	possibile	possibile	non studiata

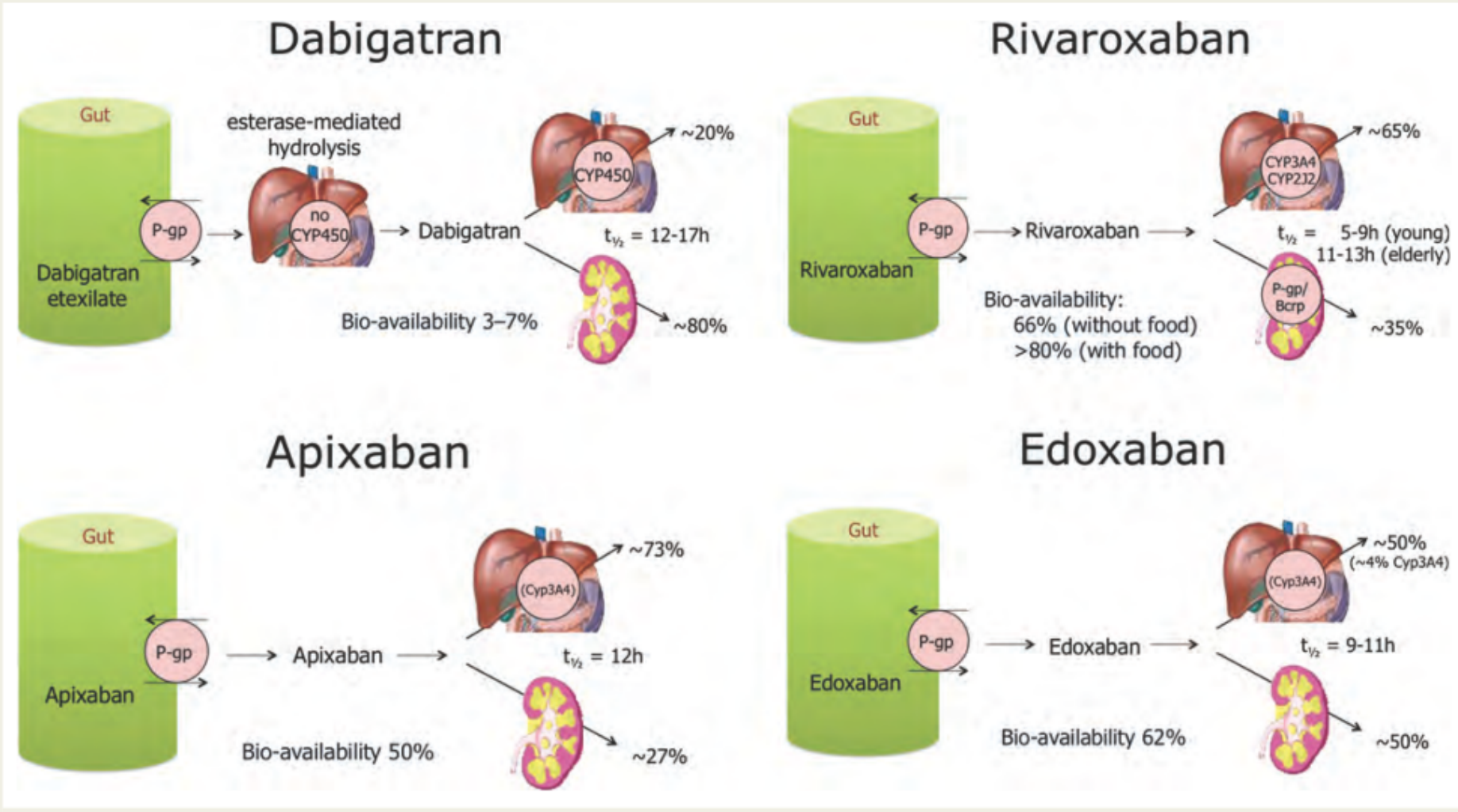
http://www.noacforaf.it/

	Via	Dabigatran	Apixaban	Edoxaban[a]	Rivaroxaban
Atorvastatin	P-gp competition and CYP3A4 inhibition	+18%[29]	No data yet	No effect[30]	No effect[27,31]
Digoxin	P-gp competition	No effect[32]	No data yet	No effect[30]	No effect[27,33]
Verapamil	P-gp competition (and weak CYP3A4 inhibition)	+12–180%[24] (reduce dose and take simultaneously)	No data yet	+53% (SR)[30] (reduce dose by 50%)[a]	Minor effect (use with caution if CrCl 15–50 ml/min)
Diltiazem	P-gp competition and weak CYP3A4 inhibition	No effect[24]	+40%[SmPC]	No data yet	Minor effect (use with caution if CrCl 15–50 ml/min)
Quinidine	P-gp competition	+50%	No data yet	+80%[30] (reduce dose by 50%)[b]	+50%
Amiodarone	P-gp competition	+12–60%[24]	No data yet	No effect[30]	Minor effect (use with caution if CrCl 15–50 ml/min)
Dronedarone	P-gp and CYP3A4 inhibitor	+70–100% (US: 2 × 75 mg)	No data yet	+85% (reduce dose by 50%)[a]	No data yet
Ketoconazole; itraconazole; voriconazole; posaconazole	P-gp and BCRP competition; CYP3A4 inhibition	+140–150% (US: 2 × 75 mg)	+100%[SmPC]	No data yet	Up to +160%[27]
Fluconazole	Moderate CYP3A4 inhibition	No data yet	No data yet	No data yet	+42% (if systemically administered)[27]
Cyclosporin; tacrolimus	P-gp competition	No data yet	No data yet	No data yet	+50%
Clarithromycin; erythromycin	P-gp competition and CYP3A4 inhibition	+15–20%	No data yet	No data yet	+30–54%[26,27]
HIV protease inhibitors (e.g. ritonavir)	P-gp and BCRP competition or inducer; CYP3A4 inhibition	No data yet	Strong increase[SmPC]	No data yet	Up to +153%[27]
Rifampicin; St John's wort; carbamazepine; phenytoin; phenobarbital	P-gp/ BCRP and CYP3A4/CYP2J2 inducers	−66%[34]	−54%[SmPC]	−35%	Up to −50%
Antacids (H2B; PPI; Al-Mg-hydroxide)	GI absorption	−12–30%[22–24]	No data yet	No effect	No effect[21,25]

Un mese dopo Giuseppe torna in studio con il referto della visita urologica: sospetto k prostatico con necessità di biopsia.
Sta assumendo Xarelto 15 mg 1cpr/die: cosa gli prescrivete in previsione della biopsia?

Televoto II

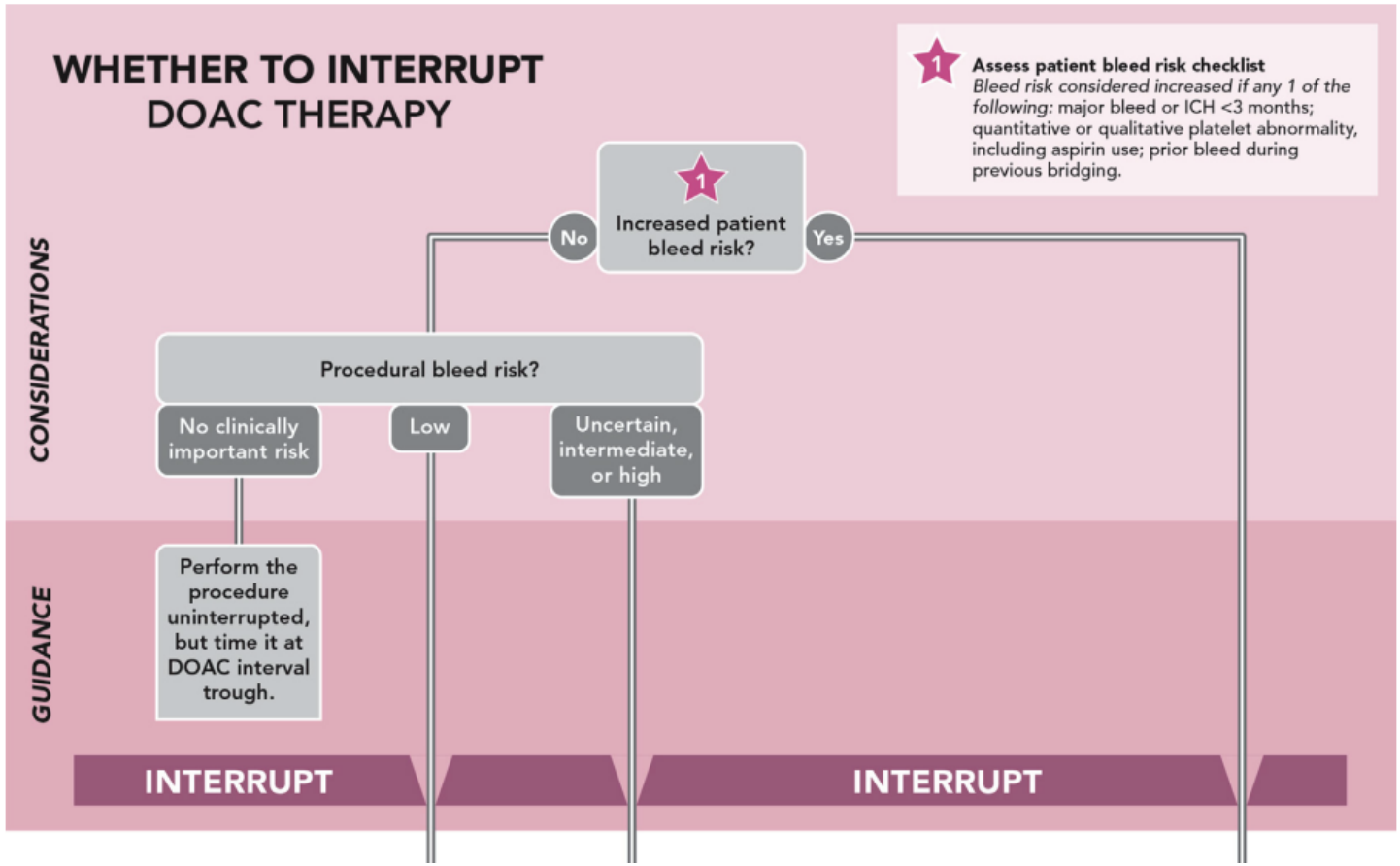
1. Brigde therapy con EBPM
2. Sospensione dello Xarelto 24-48 ore prima
3. Sospensione dello Xarelto 48-72 ore prima
4. Sospensione dello Xarelto1 settimana prima


Dabigatran
Gut
P-gp
Dabigatran etexilate
esterase-mediated hydrolysis
no CYP450
Dabigatran
~20%
$t_{½}$ = 12-17h
~80%
Bio-availability 3–7%
Rivaroxaban
Gut
P-gp
Rivaroxaban
CYP3A4 CYP2J2
~65%
$t_{½}$ = 5-9h (young) 11-13h (elderly)
P-gp/ Bcrp
~35%
Bio-availability: 66% (without food) >80% (with food)
Apixaban
Gut
P-gp
Apixaban
(Cyp3A4)
~73%
$t_{½}$ = 12h
~27%
Bio-availability 50%
Edoxaban
Gut
P-gp
Edoxaban
(Cyp3A4)
~50% (~4% Cyp3A4)
$t_{½}$ = 9-11h
~50%
Bio-availability 62%

EXPERT CONSENSUS DECISION PATHWAY

2017 ACC Expert Consensus Decision Pathway for Periprocedural Management of Anticoagulation in Patients With Nonvalvular Atrial Fibrillation

FIGURE 3 Detailed Algorithm: Whether to Interrupt, and How to Interrupt for DOACs



Europace Advance Access published August 31, 2015

Europace
doi:10.1093/europace/euv309

Updated European Heart Rhythm Association Practical Guide on the use of non-vitamin K antagonist anticoagulants in patients with non-valvular atrial fibrillation

Table 11 Classification of elective surgical interventions according to bleeding risk

Interventions not necessarily requiring discontinuation of anticoagulation
Dental interventions
Extraction of one to three teeth
Paradontal surgery
Incision of abscess
Implant positioning
Ophthalmology
Cataract or glaucoma intervention
Endoscopy without surgery
Superficial surgery (e.g. abscess incision, small dermatologic excisions, etc.)
Interventions with minor bleeding risk (i.e. infrequent or with low clinical impact)
Endoscopy with biopsy
Prostate or bladder biopsy
Electrophysiological study or catheter ablation for right-sided supraventricular tachycardia
Non-coronary angiography (for coronary angiography and ACS: see 'Patient with atrial fibrillation and coronary artery disease' section)
Pacemaker or ICD implantation (unless complex anatomical setting, e.g. congenital heart disease)
Interventions with major bleeding risk (i.e. frequent and/or with high impact)
Catheter ablation of simple left-sided supraventricular tachycardia (e.g. WPW)
Spinal or epidural anaesthesia; lumbar diagnostic puncture
Thoracic surgery
Abdominal surgery
Major orthopaedic surgery
Liver biopsy
Transurethral prostate resection
Kidney biopsy
Extracorporeal shockwave lithotripsy (ESWL)
Interventions with major bleeding risk AND increased thrombo-embolic risk[a]
Complex left-sided ablation (PVI; some VT ablations)

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TABLE 2 Recommended Durations for Withholding DOACs Based on Procedural Bleed Risk and Estimated CrCl When There Are No Increased Patient Bleed Risk Factors

	Dabigatran					Apixaban, Edoxaban, or Rivaroxaban		
CrCl, mL/min	≥80	50-79	30-49	15-29	<15	≥30	15-29	<15
Estimated drug half-life, h	13	15	18	27	30 (off dialysis)	6-15	Apixaban: 17 Edoxaban: 17 Rivaroxaban: 9	Apixaban: 17 (off dialysis) Edoxaban: 10-17 (off dialysis) Rivaroxaban: 13 (off dialysis)
Procedural bleed risk								
Low	≥24 h	≥36 h	≥48 h	≥72 h	No data. Consider measuring dTT and/or withholding ≥96 h.	≥24 h	≥36 h	No data. Consider measuring agent-specific anti Xa level and/or withholding ≥48 h
Uncertain, intermediate, or high	≥48 h	≥72 h	≥96 h	≥120 h	No data. Consider measuring dTT.	≥48 h	No data. Consider measuring agent-specific anti Xa level and/or withholding ≥72 h.	

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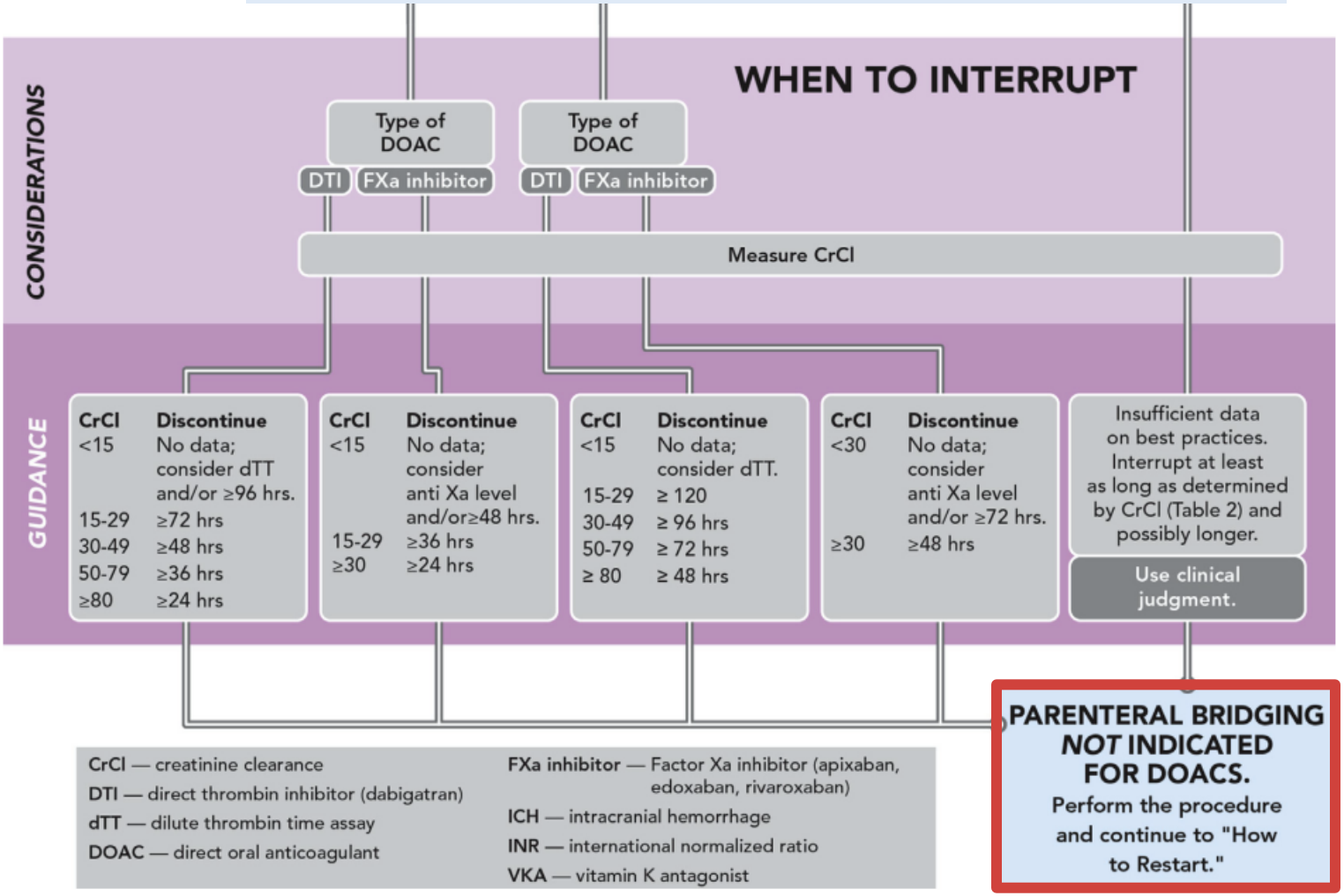


CrCl — creatinine clearance
DTI — direct thrombin inhibitor (dabigatran)
dTT — dilute thrombin time assay
DOAC — direct oral anticoagulant
FXa inhibitor — Factor Xa inhibitor (apixaban, edoxaban, rivaroxaban)
ICH — intracranial hemorrhage
INR — international normalized ratio
VKA — vitamin K antagonist

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

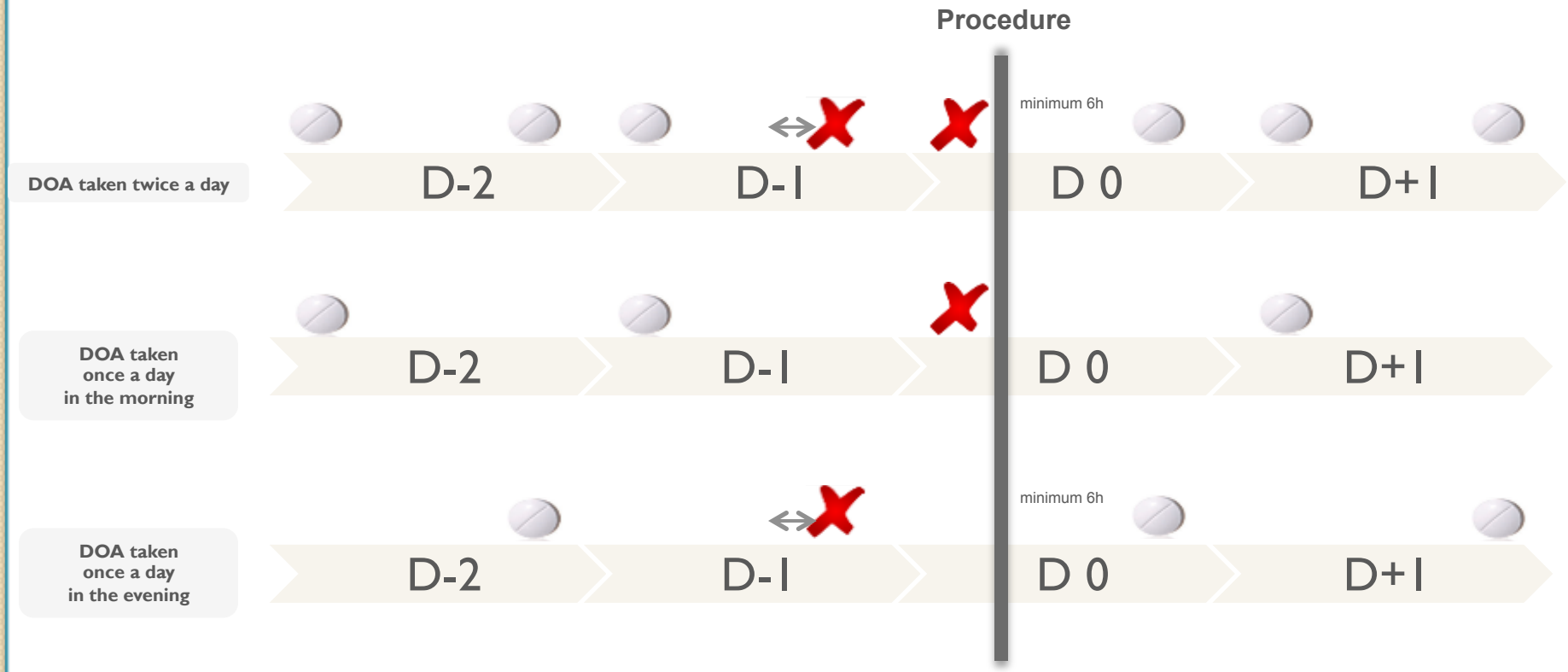
Perioperative Bridging Anticoagulation in Patients with Atrial Fibrillation

James D. Douketis, M.D., Alex C. Spyropoulos, M.D., Scott Kaatz, D.O., Richard C. Becker, M.D., Joseph A. Caprini, M.D., Andrew S. Dunn, M.D., David A. Garcia, M.D., Alan Jacobson, M.D., Amir K. Jaffer, M.D., M.B.A., David F. Kong, M.D., Sam Schulman, M.D., Ph.D., Alexander G.G. Turpie, M.B., Vic Hasselblad, Ph.D., and Thomas L. Ortel, M.D., Ph.D., for the BRIDGE Investigators*

Table 3. Study Outcomes.

Outcome	No Bridging (N=918)	Bridging (N=895)	P Value
	number of patients (percent)		
Primary			
Arterial thromboembolism	4 (0.4)	3 (0.3)	0.01*, 0.73†
Stroke	2 (0.2)	3 (0.3)	
Transient ischemic attack	2 (0.2)	0	
Systemic embolism	0	0	
Major bleeding	12 (1.3)	29 (3.2)	0.005†
Secondary			
Death	5 (0.5)	4 (0.4)	0.88†
Myocardial infarction	7 (0.8)	14 (1.6)	0.10†
Deep-vein thrombosis	0	1 (0.1)	0.25†
Pulmonary embolism	0	1 (0.1)	0.25†
Minor bleeding	110 (12.0)	187 (20.9)	<0.001†

Invasive procedures with low hemorrhagic risk



Management of direct oral anticoagulants in patients undergoing elective surgeries and invasive procedures: updated guidelines from the French Working Group on Perioperative Hemostasis (GIHP) – September 2015 (2016), http://dx.doi.org/10.1016/j.accpm.2016.09.002

La biopsia di Giuseppe è negativa. Deve effettuate una estrazione dentale: come vi comportate con l'anticoagulante?

Televoto III

1. Sospensione dello Xarelto 24-48 ore prima
2. Sospensione dello Xarelto e ripresa di ASA
3. Proseguire Xarelto 15 mg/die
4. Dimezza la dose di Xarelto
5. Sospende Xarelto alcuni giorni prima ed inizio eparina bpm

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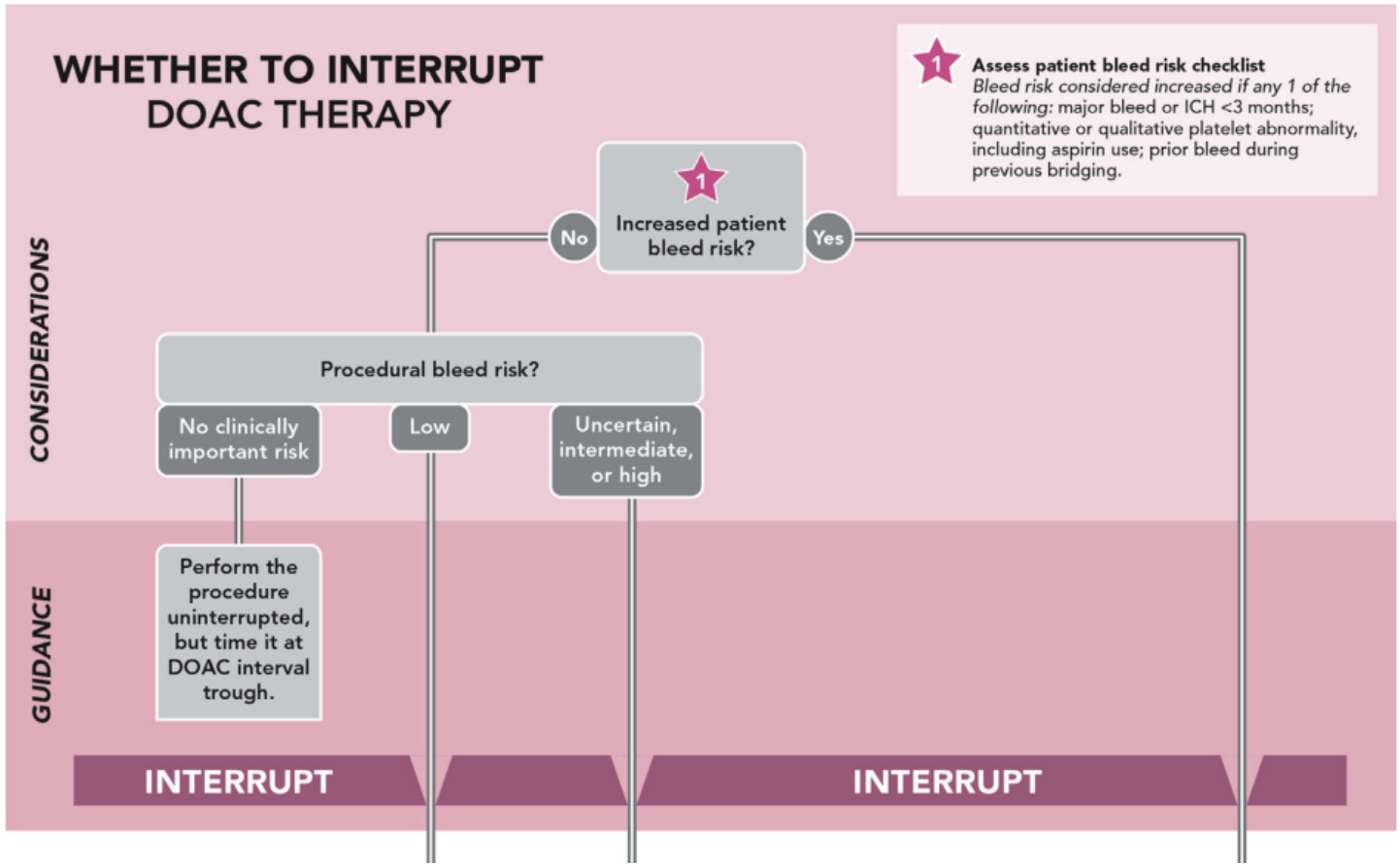

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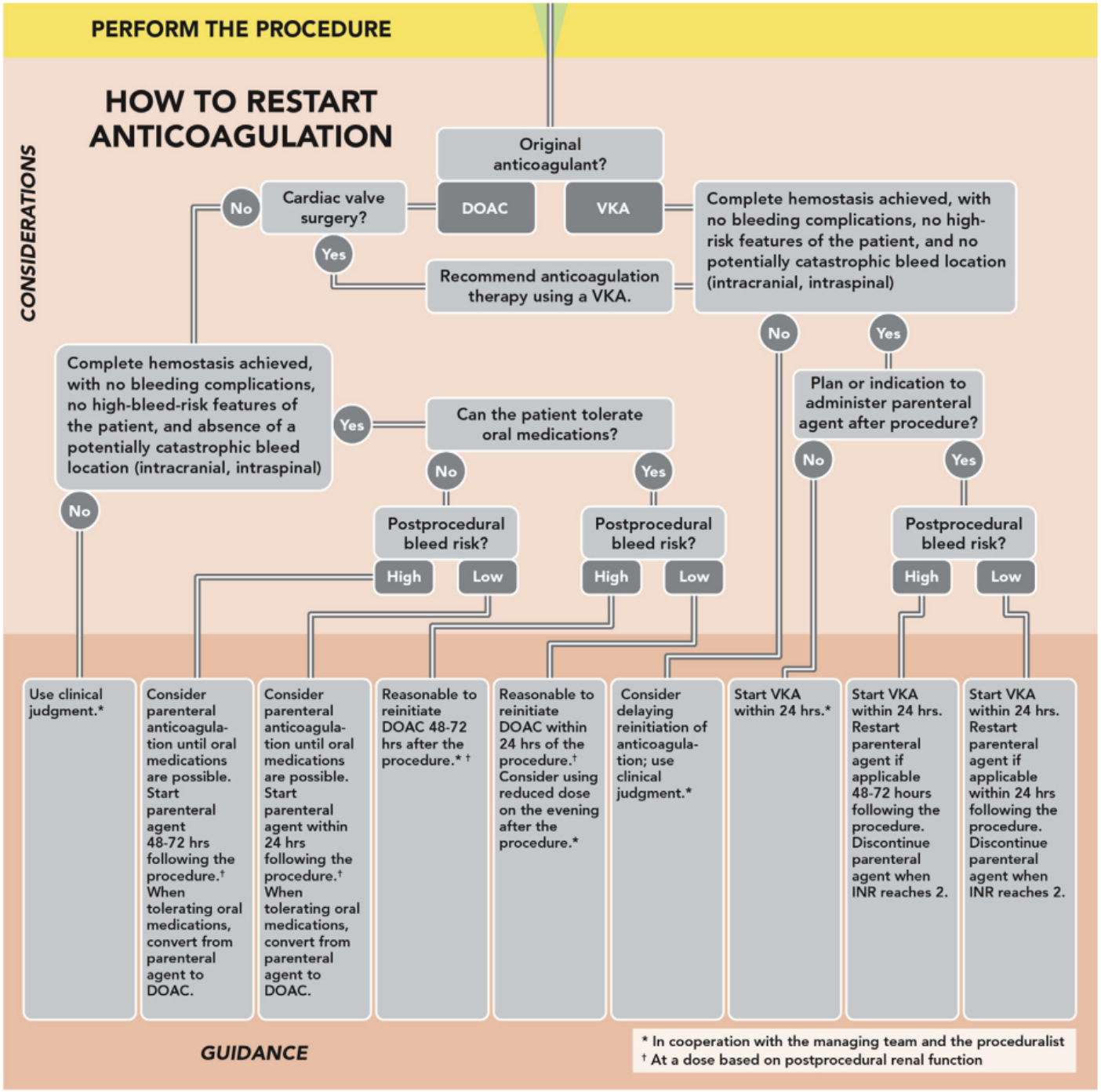
Pulmonary embolism	0	1 (0.1)	0.25†
Minor bleeding	110 (12.0)	187 (20.9)	<0.001†


PERFORM THE PROCEDURE
HOW TO RESTART ANTICOAGULATION
CONSIDERATIONS
Original anticoagulant?
DOAC
VKA
Cardiac valve surgery?
No
Yes
Recommend anticoagulation therapy using a VKA.
Complete hemostasis achieved, with no bleeding complications, no high-risk features of the patient, and no potentially catastrophic bleed location (intracranial, intraspinal)
Complete hemostasis achieved, with no bleeding complications, no high-bleed-risk features of the patient, and absence of a potentially catastrophic bleed location (intracranial, intraspinal)
Yes
No
Can the patient tolerate oral medications?
No
Yes
Plan or indication to administer parenteral agent after procedure?
No
Yes
Postprocedural bleed risk?
High
Low
Postprocedural bleed risk?
High
Low
Postprocedural bleed risk?
High
Low
Use clinical judgment.*
Consider parenteral anticoagulation until oral medications are possible. Start parenteral agent 48-72 hrs following the procedure.† When tolerating oral medications, convert from parenteral agent to DOAC.
Consider parenteral anticoagulation until oral medications are possible. Start parenteral agent within 24 hrs following the procedure.† When tolerating oral medications, convert from parenteral agent to DOAC.
Reasonable to reinitiate DOAC 48-72 hrs after the procedure.* †
Reasonable to reinitiate DOAC within 24 hrs of the procedure.† Consider using reduced dose on the evening after the procedure.*
Consider delaying reinitiation of anticoagulation; use clinical judgment.*
Start VKA within 24 hrs.*
Start VKA within 24 hrs. Restart parenteral agent if applicable 48-72 hours following the procedure. Discontinue parenteral agent when INR reaches 2.
Start VKA within 24 hrs. Restart parenteral agent if applicable within 24 hrs following the procedure. Discontinue parenteral agent when INR reaches 2.
GUIDANCE
* In cooperation with the managing team and the proceduralist
† At a dose based on postprocedural renal function

Fattori clinici per riduzione dose NAO

- Apixaban 2.5 mg x 2 (se concomitante peso corporeo ≤ 60 Kg o creatinina sierica > 1,5 mg/dl)
- Dabigratan 110 mg x 2
- Rivaroxaban 20 mg

- Apixaban 5 mg x 2
- Dabigratan 110 mg x 2 (considera anche altri fattori: età 75-80 anni, gastrite, esofagite, reflusso gastroesofageo)
- Rivaroxaban 15 mg

- Per clerarance creatinina < 30 ml/m' sono controindicati da linee guida ESC
- Per clerance creatinina ≥ 30 < 50 ml/m'
  - Apixaban 5 mg x 2 (verifica altri fattori clinici)
  - Dabigratan 110 mg x 2 (considera anche altri fattori: età 75-80 anni, alto rischio emorragico, gastrite, esofagite, reflusso gastroesofageo)
  - Rivaroxaban 15 mg

- Apixaban 5 mg x 2
- Dabigratan 110 mg x 2 (considera anche altri fattori: età 75-80 anni, alto rischio emorragico, gastrite, esofagite, reflusso gastroesofageo)
- Rivaroxaban 15 mg

Reviews

Practical Considerations for Using Novel Oral Anticoagulants in Patients With Atrial Fibrillation

Irene Savelieva, MD and A. John Camm, MD
Division of Cardiac and Vascular Sciences, St. George's University of London, London, United Kingdom

Review

Journal of INTERNAL MEDICINE

doi: 10.1111/joim.12360

Choosing the right drug to fit the patient when selecting oral anticoagulation for stroke prevention in atrial fibrillation

A. M. Shields[1] & G. Y. H. Lip[2,3]

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REVIEW

Prevention

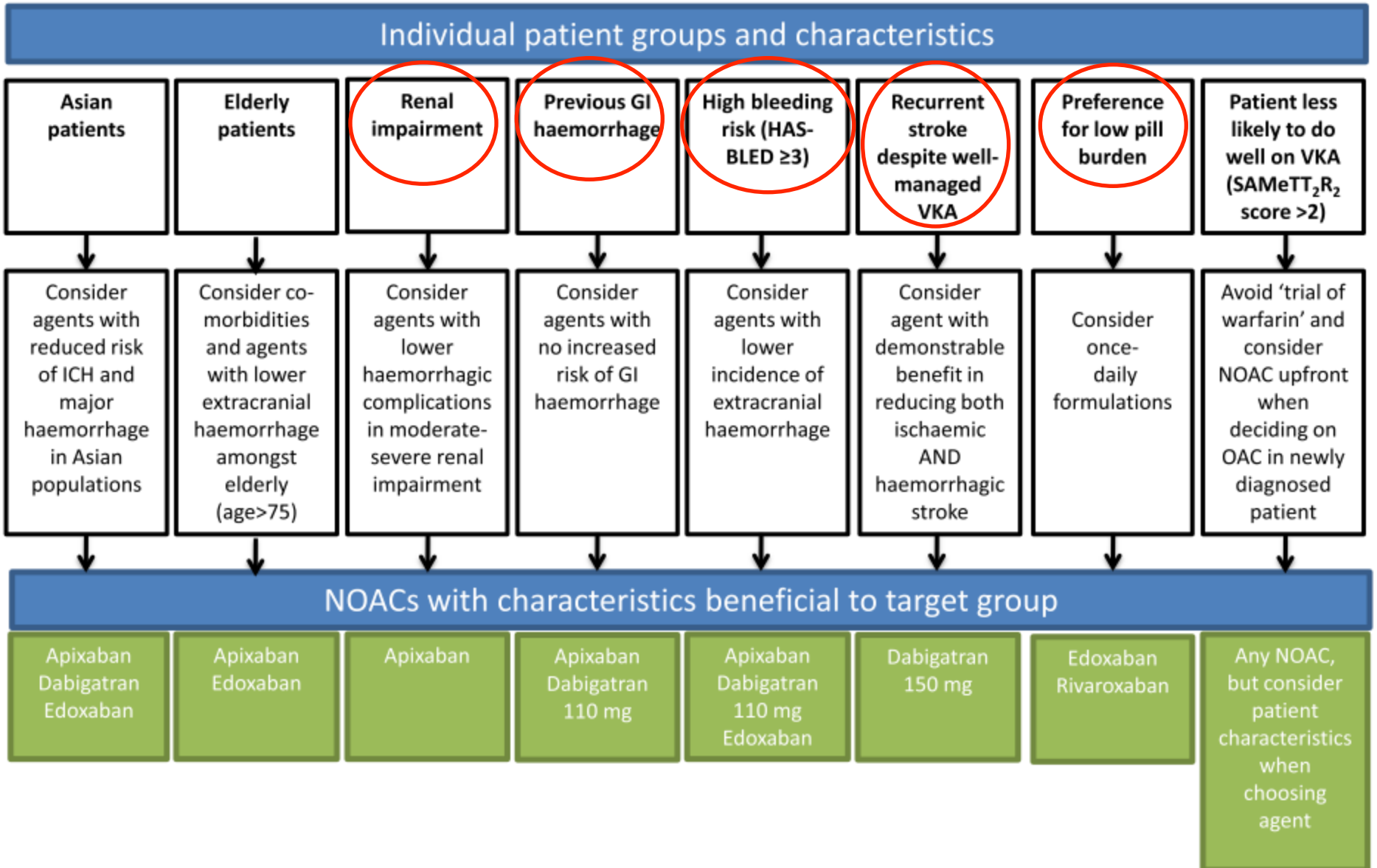
Choosing a particular oral anticoagulant and dose for stroke prevention in individual patients with non-valvular atrial fibrillation: part 1

Hans-Christoph Diener[1]*, James Aisenberg[2], Jack Ansell[3], Dan Atar[4], Günter Breithardt[5], John Eikelboom[6], Michael D. Ezekowitz[7,8,9], Christopher B. Granger[10], Jonathan L. Halperin[11], Stefan H. Hohnloser[12], Elaine M. Hylek[13], Paulus Kirchhof[14,15], Deirdre A. Lane[16], Freek W.A. Verheugt[17], Roland Veltkamp[18], and Gregory Y.H. Lip[19,20]

Prevention

Choosing a particular oral anticoagulant and dose for stroke prevention in individual patients with non-valvular atrial fibrillation: part 2

Hans-Christoph Diener[1]*, James Aisenberg[2], Jack Ansell[3], Dan Atar[4], Günter Breithardt[5], John Eikelboom[6], Michael D. Ezekowitz[7,8,9], Christopher B. Granger[10], Jonathan L. Halperin[11], Stefan H. Hohnloser[12], Elaine M. Hylek[13], Paulus Kirchhof[14,15], Deirdre A. Lane[16], Freek W.A. Verheugt[17], Roland Veltkamp[18], and Gregory Y.H. Lip[19,20]


Individual patient groups and characteristics
Asian patients
Elderly patients
Renal impairment
Previous GI haemorrhage
High bleeding risk (HAS-BLED ≥3)
Recurrent stroke despite well-managed VKA
Preference for low pill burden
Patient less likely to do well on VKA (SAMeTT2R2 score >2)
Consider agents with reduced risk of ICH and major haemorrhage in Asian populations
Consider co-morbidities and agents with lower extracranial haemorrhage amongst elderly (age>75)
Consider agents with lower haemorrhagic complications in moderate-severe renal impairment
Consider agents with no increased risk of GI haemorrhage
Consider agents with lower incidence of extracranial haemorrhage
Consider agent with demonstrable benefit in reducing both ischaemic AND haemorrhagic stroke
Consider once-daily formulations
Avoid 'trial of warfarin' and consider NOAC upfront when deciding on OAC in newly diagnosed patient
NOACs with characteristics beneficial to target group
Apixaban Dabigatran Edoxaban
Apixaban Edoxaban
Apixaban
Apixaban Dabigatran 110 mg
Apixaban Dabigatran 110 mg Edoxaban
Dabigatran 150 mg
Edoxaban Rivaroxaban
Any NOAC, but consider patient characteristics when choosing agent

Quale anticoagulante scegliere?

- Caratteristiche del paziente
- Costo?


GRAZIE PER L'ATTENZIONE