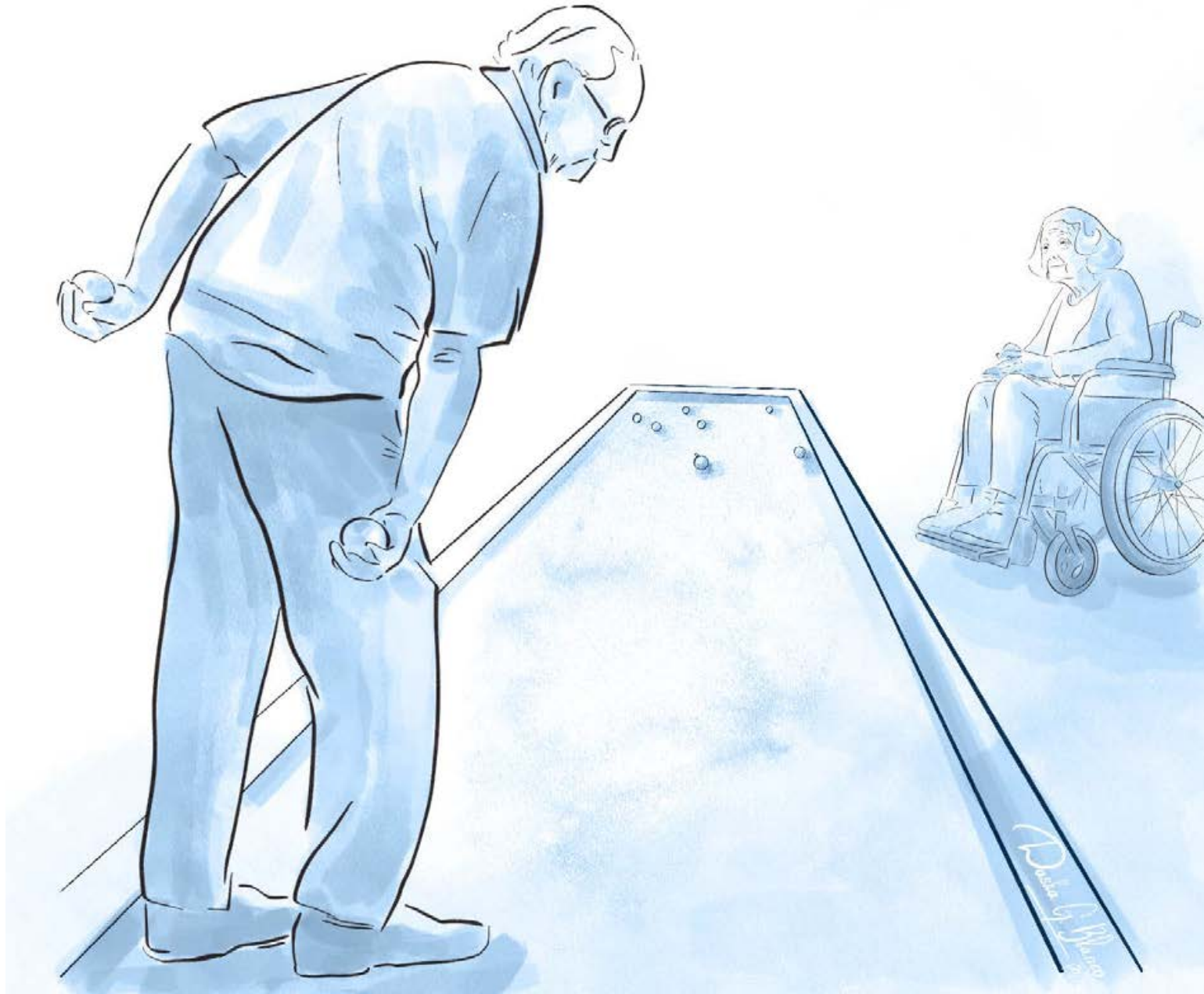




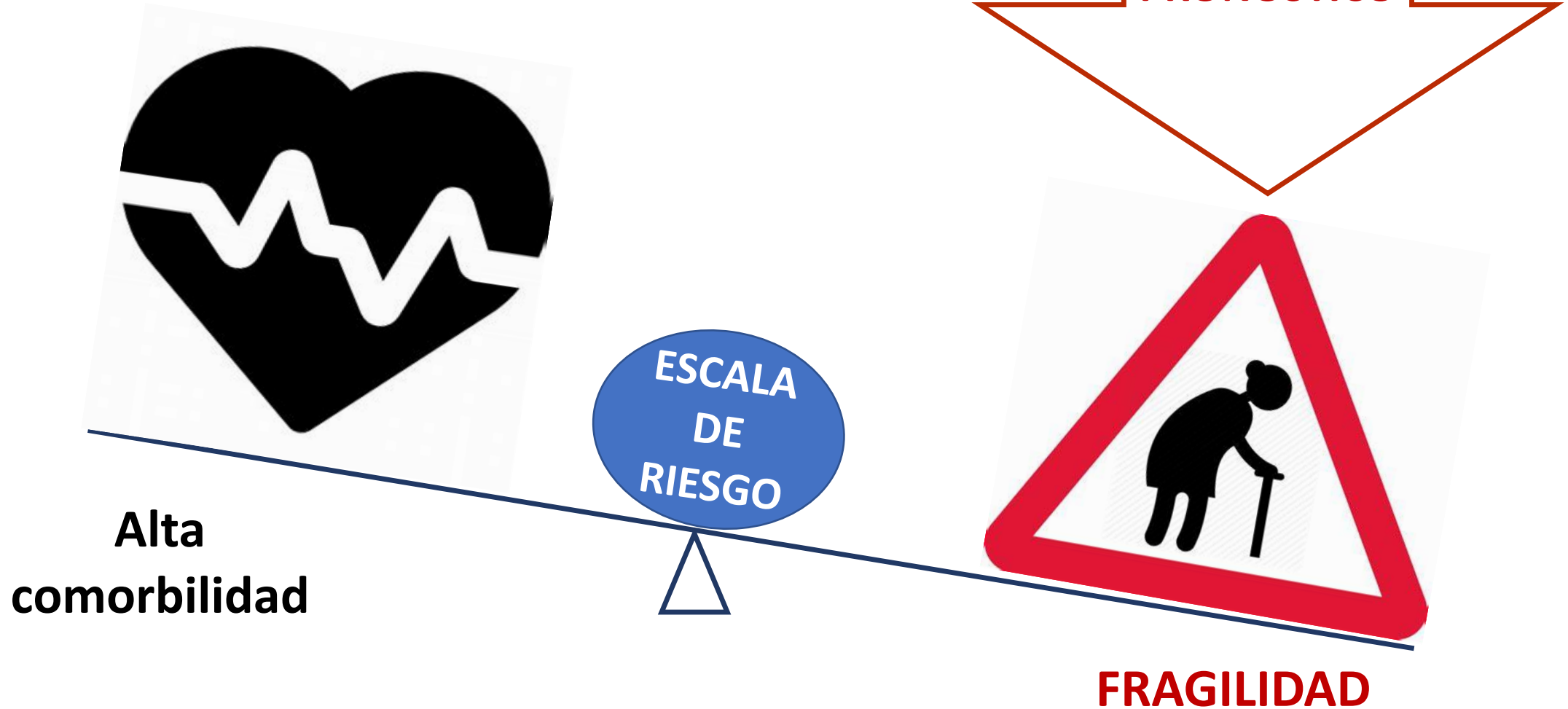
PACIENTE CON FOC ANTIAGREGADO o ANTICOAGULADO

PROTOCOLOS DE RECUPERACION FUNCIONAL Y MEJORA DE RESULTADOS EN MORBIMORTALIDAD

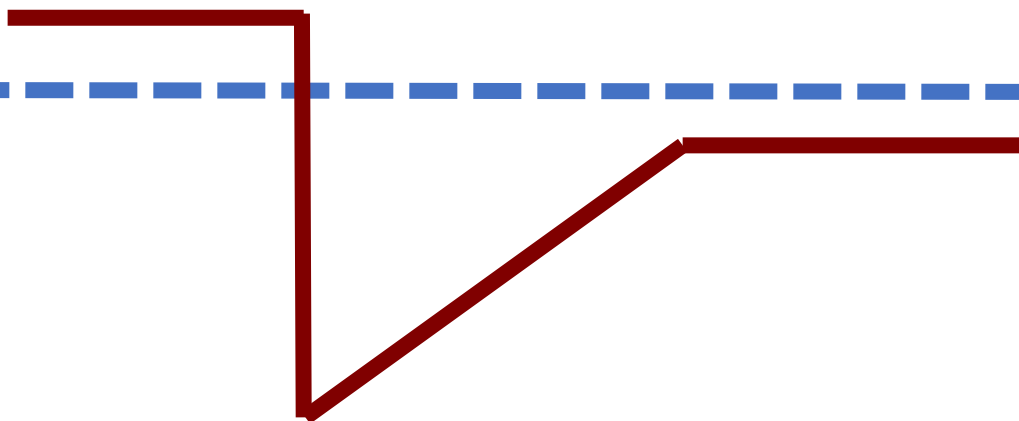
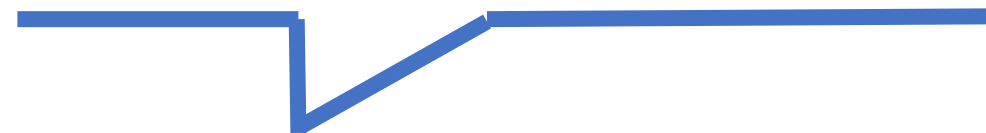
Dra. Concha Cassinello



ANCIANO FRÁGIL



INDEPENDIENTE



DEPENDIENTE

Revista Española de Anestesiología y Reanimación

ARTÍCULO ESPECIAL

Recomendaciones de manejo perioperatorio de antiagregantes plaquetarios en cirugía no cardíaca. Grupo de trabajo de la Sección de Hemostasia, Medicina Transfusional y Fluidoterapia de la Sociedad Española de Anestesiología, Reanimación y Terapéutica del Dolor (SEDAR). Actualización de la Guía de práctica clínica 2018

Recommendations for perioperative antiplatelet treatment in non-cardiac surgery. Working Group of the Spanish Society of Anaesthesiology-Resuscitation and Pain Therapy, Division of Haemostasis, Transfusion Medicine, and Perioperative Fluid Therapy. Update of the Clinical practice guide 2018

P. Sierra^{1,2*}, A. Gómez-Luque³, J.V. Llaur⁴, R. Ferrandis⁵, C. Cassinello⁶ y F. Hidalgo⁷

ESC European Society of Cardiology

2022 ESC Guidelines on cardiovascular assessment and management of patients undergoing non-cardiac surgery

Developed by the task force for cardiovascular assessment and management of patients undergoing non-cardiac surgery of the European Society of Cardiology (ESC)

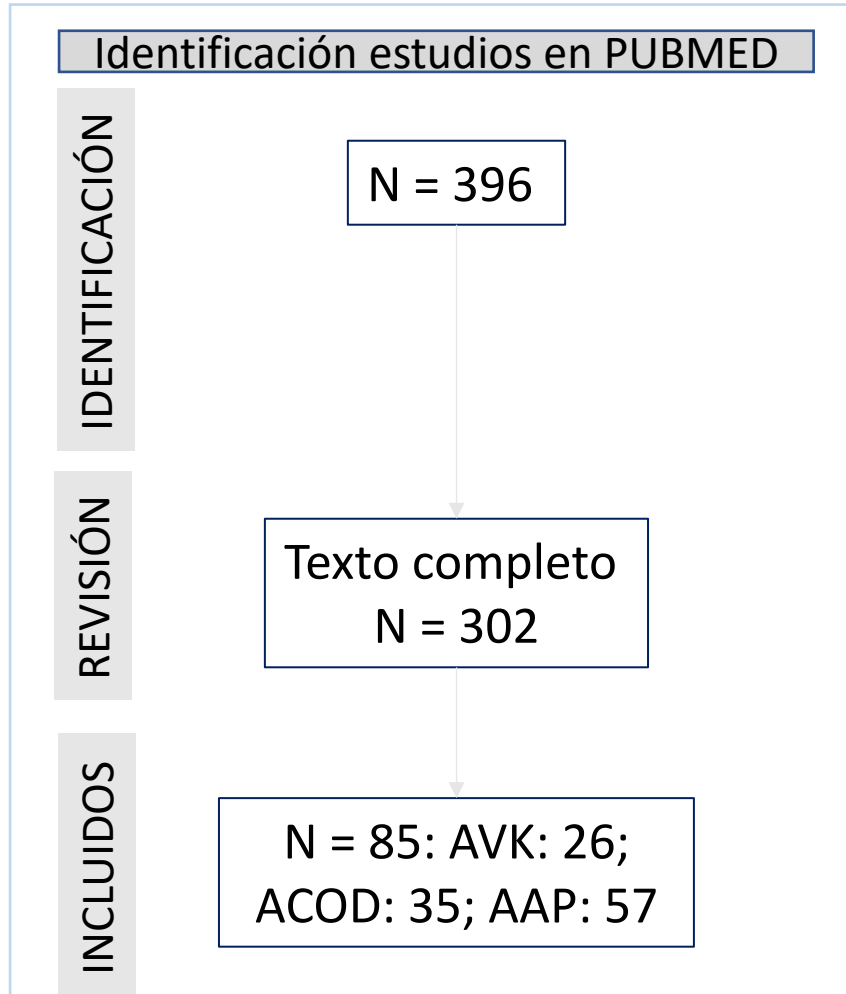
Endorsed by the European Society of Anaesthesiology and Intensive Care (ESAIC)

Authors/Task Force Members: Sigrun Halvorsen^{1*} (Chairperson) (Norway), Juinda Mehilli^{2*} (Chairperson) (Germany), Salvatore Cassese^{3*} (Task Force Coordinator) (Germany), Trygve S. Hall⁴ (Task Force Coordinator) (Norway), Magdy Abdelhamid (Egypt), Emanuele Barbato (Italy/Belgium), Stefan De Hert (Belgium), Ingrid de Laval (Sweden), Tobias Geisler (Germany), Lynne Hinterbuchner (Austria), Borja Ibanez (Spain), Radosław Lenarczyk (Poland), Ulrich R. Mansmann (Germany), Paul McGreavy (United Kingdom), Christian Mueller (Switzerland), Claudio Muneretto (Italy), Alexander Niesner (Austria), Tatjana S. Potpara (Serbia), Arsen Ristic (Serbia), L. Elif Sade (United States of America/Turkey), Henrik Schirmer (Norway), Stefanie Schüpke (Germany), Henrik Sillesen (Denmark), Helge Skutstad (Norway), Lucia Torracca (Italy), Oktay Tutarel (Germany), Peter Van Der Meer (Netherlands), Wojtek Wojakowski (Poland), Kai Zacharowski¹ (Germany), and ESC Scientific Document Group

Arthroplasty Today

Time for an Update? A Look at Current Guidelines for Venous Thromboembolism Prophylaxis After Hip and Knee Arthroplasty and Hip Fracture

Stefano R. Muscatelli, MD¹, Michael A. Charters, MD², Brian R. Hallstrom, MD^{3,4,5,*}



EJA Eur J Anaesthesiol 2022; 39:100–132

PODCAST

GUIDELINES

Regional anaesthesia in patients on antithrombotic drugs

Joint ESAIC/ESRA guidelines

Sibylle Kietaihl, Raquel Ferrandis, Anne Godier, Juan Llau, Clara Lobo, Alan JR Macfarlane, Christoph J. Schlimp, Erik Vandermeulen, Thomas Volk, Christian von Heymann, Morné Wolmarans and Arash Afshari

Perioperative Management of Antithrombotic Therapy

An American College of Chest Physicians Clinical Practice Guideline

James D. Douketis, MD, FCCP; Alex C. Spyropoulos, MD, FCCP; M. Hassan Murad, MD, MPH; Juan I. Arcelus, MD; William E. Dager, PharmD; Andrew S. Dunn, MD, MPH; Ramiz A. Fargo, MD, FCCP; Jerrold H. Levy, MD; C. Marc Samama, MD; Sahrish H. Shah, MBBS; Matthew W. Sherwood, MD; Alfonso J. Tafur, MD; Liang V. Tang, MD; and Lisa K. Moores, MD, FCCP

CHEST 2022; 162(5):e207-e243

Revista Española de Cirugía Ortopédica y Traumatología

REVIEW ARTICLE

[Translated article] International Consensus Meeting on Venous Thromboembolism (ICM-VTE) after orthopedic procedures, any change in our clinical practice?

O. Marín-Peña^{1,2*}, J. Parvizi³, C. Restrepo⁴, A. Castel-Onate⁵

Recommendations from the ICM-VTE: Trauma

The ICM-VTE Trauma Delegates*

Consenso Internacional sobre Tromboembolismo Venoso (ICM-VTE) en COT, ¿cambiará en algo nuestra práctica clínica?

Demora

Analgesia-Anestesia

Tromboprofilaxis

Anemia

Físico y cognitivo (ejercicio)

Osteomalacia

Nutrición

Osteoporosis

En independientes antes de la FOC

La Independencia puede ↑ desde el 50% al 82%



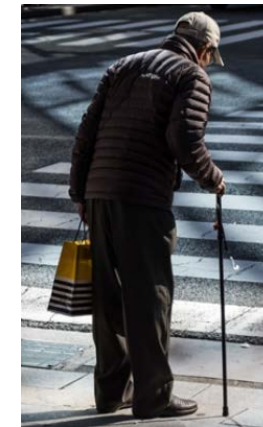
ORIGINAL ARTICLE

Profile and 3-month evolution of geriatric patients after a hip fracture followed-up at a Fracture Liaison Service (FLS)

Debora Moral-Cuesta^{a,b,*}, Alicia Gutiérrez-Misis^{c,d}, Bernardo Abel Cedeño Veloz^{a,b,e},



20%



50%



7%



23%

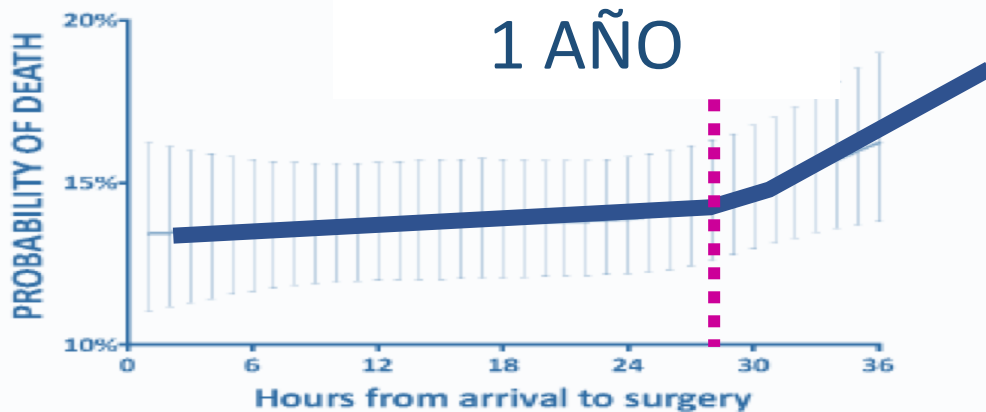
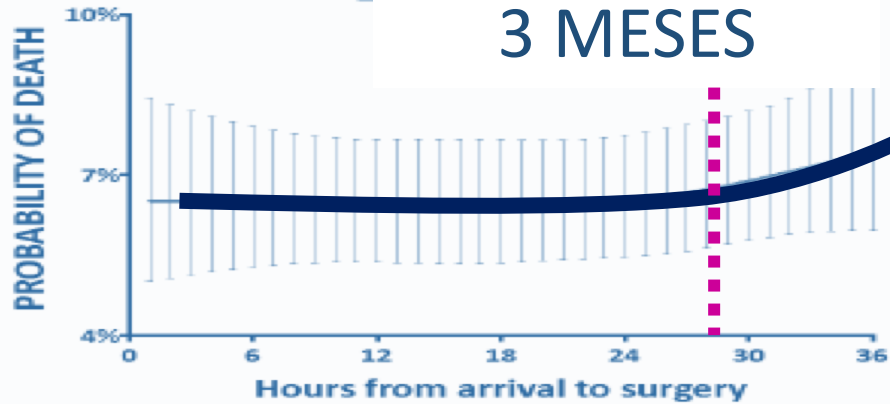
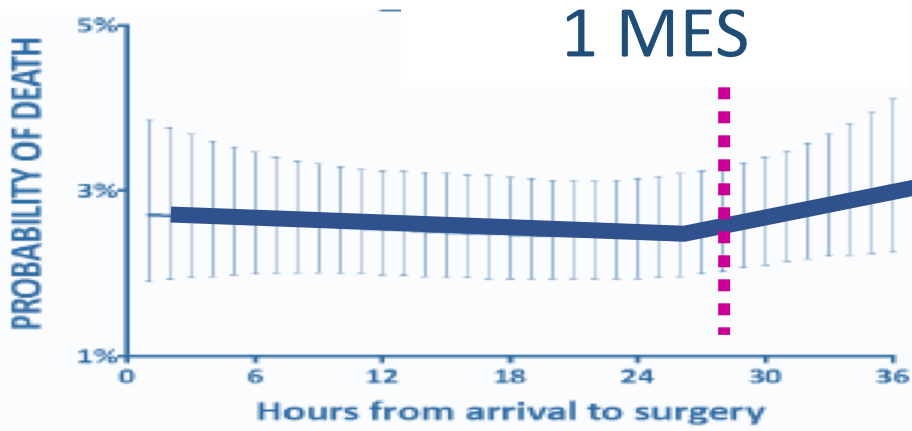


Recommendations for preoperative management of frailty from the Society for Perioperative Assessment and Quality Improvement (SPAQI)



DEMORA ÓPTIMA

AVK / ACOD / AAP



N = 24.000
AAP O ACO

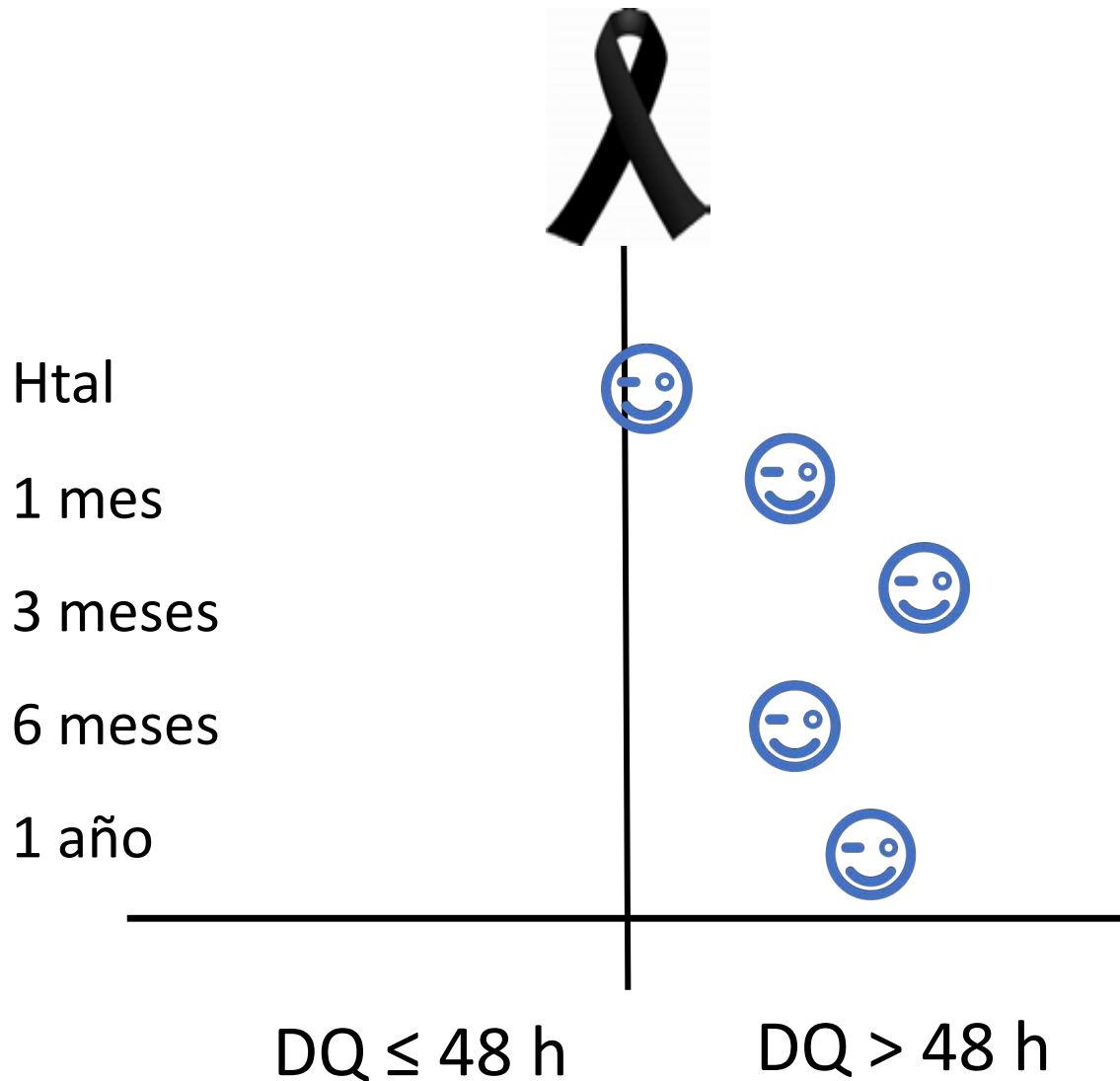


Pincus D, et al. Association Between Wait Time and 30-Day Mortality in Adults Undergoing Hip Fracture Surgery. *JAMA*. 2017;318(20):1994-2003.



Neumonía +TVP + TEP + Muerte	OR ➤ 24 h/ ≤ 24 h
1 m	2,08
3 m	2,2
1 año	2,67

2.330 FOC con AVK, ACOD o AAP



Lu W, Safety of Early Surgery in Hip Fracture Patients Taking Clopidogrel and/or Aspirin: A Systematic Review and Meta-Analysis. J Arthroplasty. 2023 Nov 14:S0883-5403(23)01135-X.

Yang Z, Is hip fracture surgery safe for patients on antiplatelet drugs and is it necessary to delay surgery? A systematic review and meta-analysis. J Orthop Surg Res. 2020 Mar 12;15(1):105.

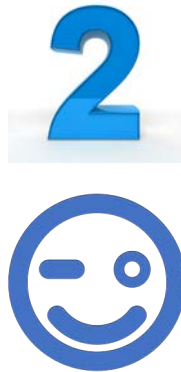
Mas-Atance J, Randomised comparative study of early versus delayed surgery in hip-fracture patients on concomitant treatment with antiplatelet drugs. Determination of platelet aggregation, perioperative bleeding and a review of annual mortality]. Rev Esp Cir Ortop Traumatol. 2013 Jul-Aug;57(4):240-53.

Anaya R, Early Surgery with Neuraxial Anaesthesia in Patients on Chronic Antiplatelet Therapy with a Proximal Femur Fracture: Multicentric Randomised Clinical Trial. J Clin Med. 2021 Nov 18;10(22):5371.

9.000 FOC con AVK, ACOD o AAP

Σ-COMPLICACIONES

1 mes



DQ ≤ 48 h

DQ > 48 h

Lu W, Safety of Early Surgery in Hip Fracture Patients Taking Clopidogrel and/or Aspirin: A Systematic Review and Meta-Analysis. *J Arthroplasty*. 2023 Nov 14:S0883-5403(23)01135-X.

Yang Z, Is hip fracture surgery safe for patients on antiplatelet drugs and is it necessary to delay surgery? A systematic review and meta-analysis. *J Orthop Surg Res*. 2020 Mar 12;15(1):105.

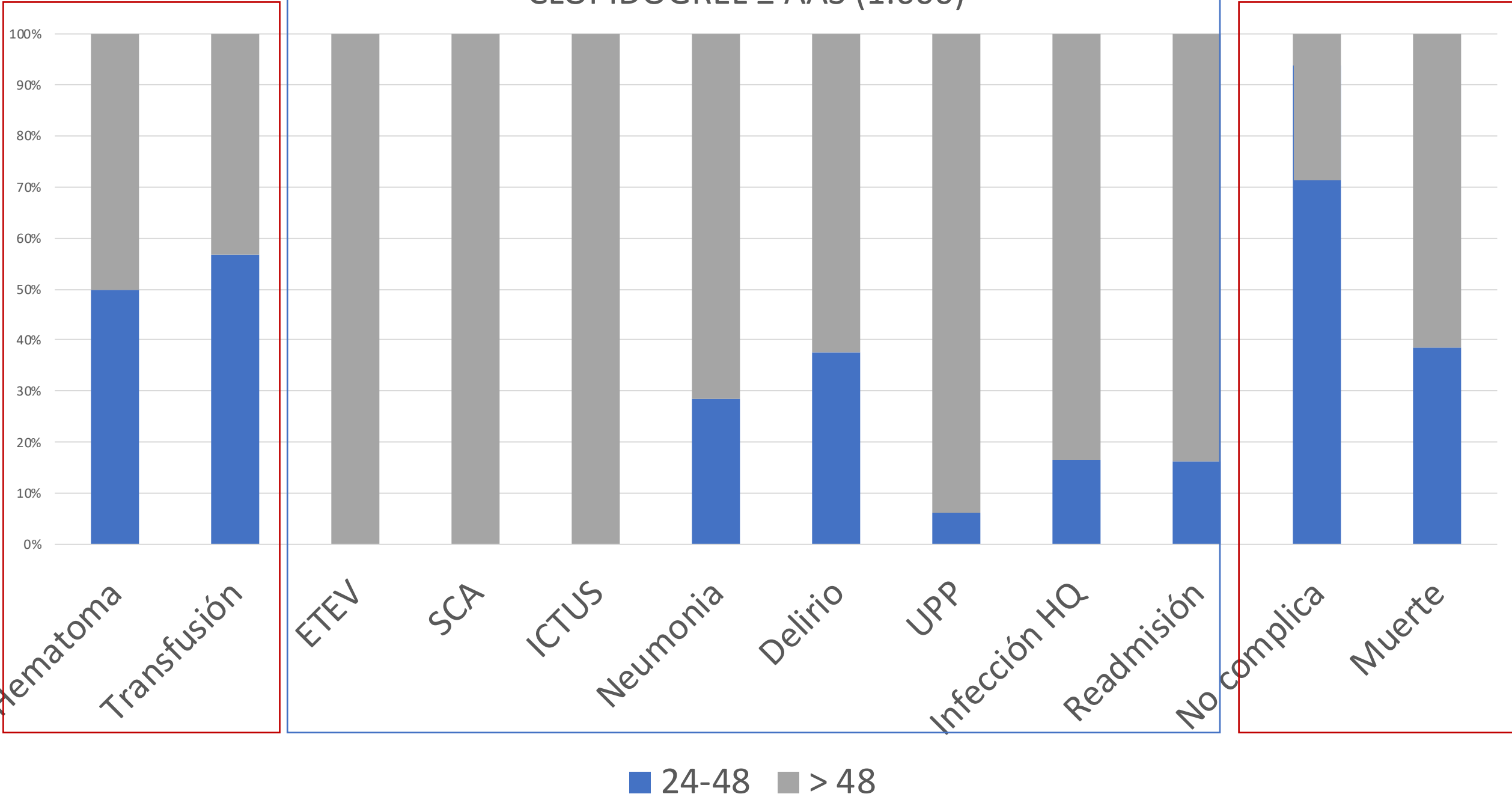
Elete AR, Assessing operative delay and complications in hip fracture patients on anticoagulants and antiplatelets. *SAGE Open Med*. 2023 Mar 23; 11: 20503121231162410.

Tarrant SM, Direct Oral Anticoagulants and Timing of Hip Fracture Surgery. *J Clin Med*. 2020 Jul 12;9(7):2200. doi: 10.3390/jcm9072200

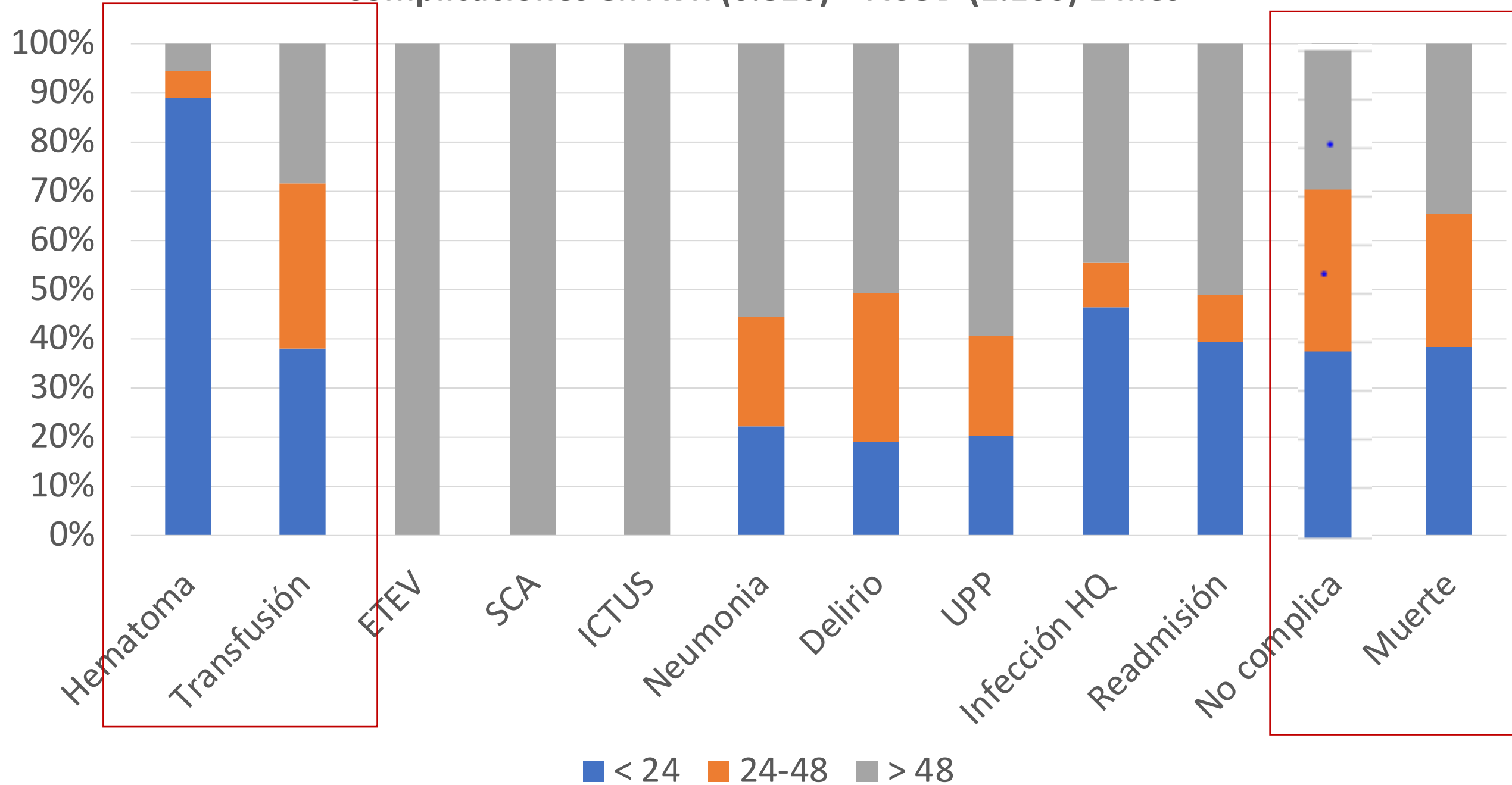
Tarrant SM, Dual Antiplatelet Therapy and Surgical Timing in Geriatric Hip Fracture. *J Orthop Trauma*. 2020 Oct;34(10):559-565.

Anaya R, Early Surgery with Neuraxial Anaesthesia in Patients on Chronic Antiplatelet Therapy with a Proximal Femur Fracture: Multicentric Randomised Clinical Trial. *J Clin Med*. 2021 Nov 18;10(22):5371.

CLOPIDOGREL ± AAS (1.600)



Complicaciones en AVK (6.820) + ACOD (1.160) 1 mes

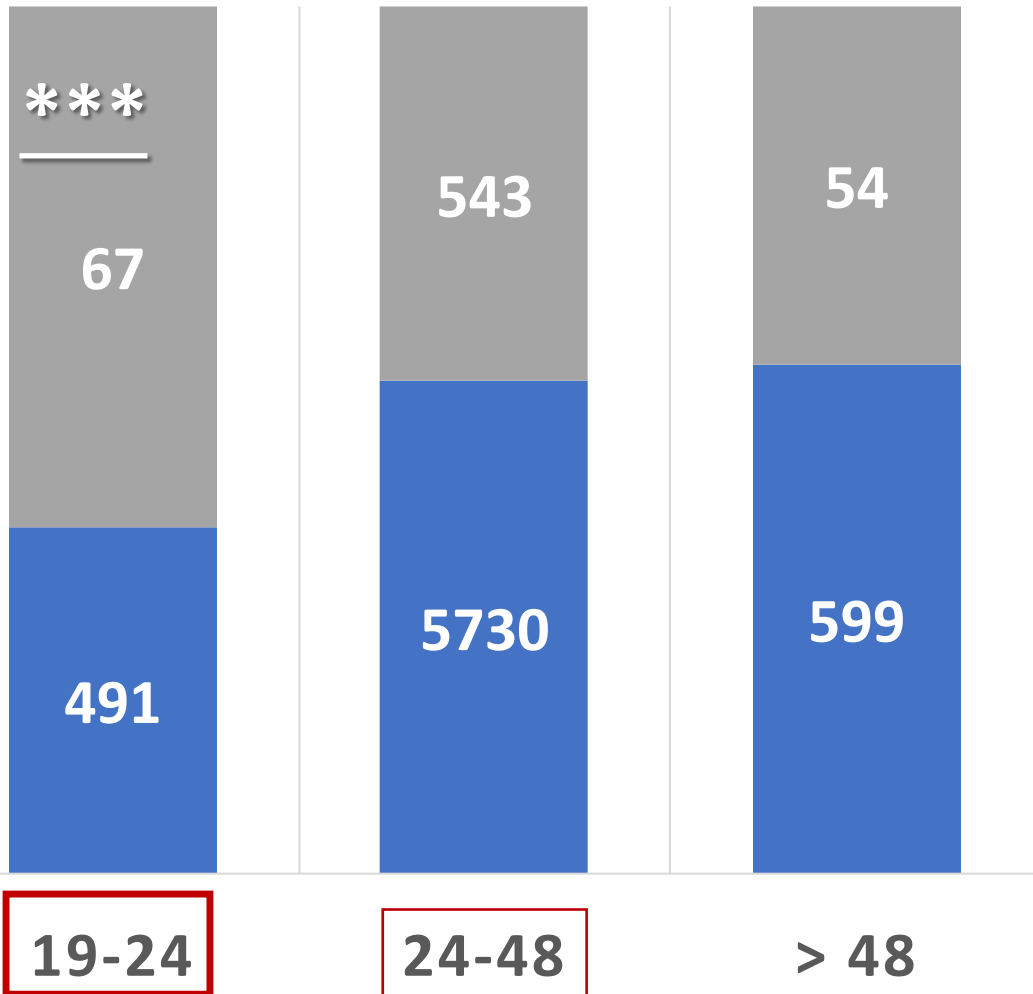


DEMORA Q Y MORTALIDAD

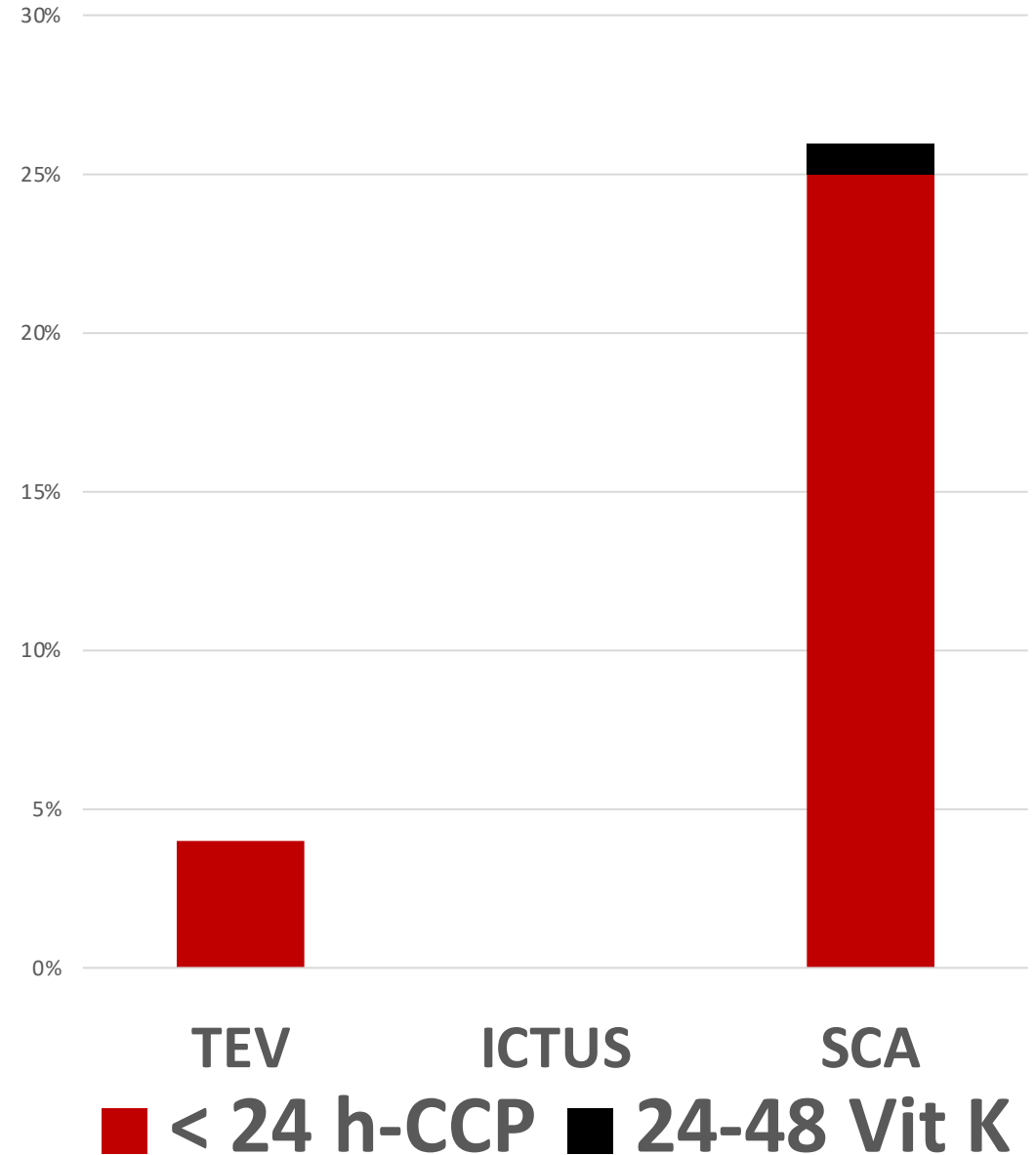
AVK, N = 6.820

1 MES

■ N.º Pacientes ■ N.º muertes

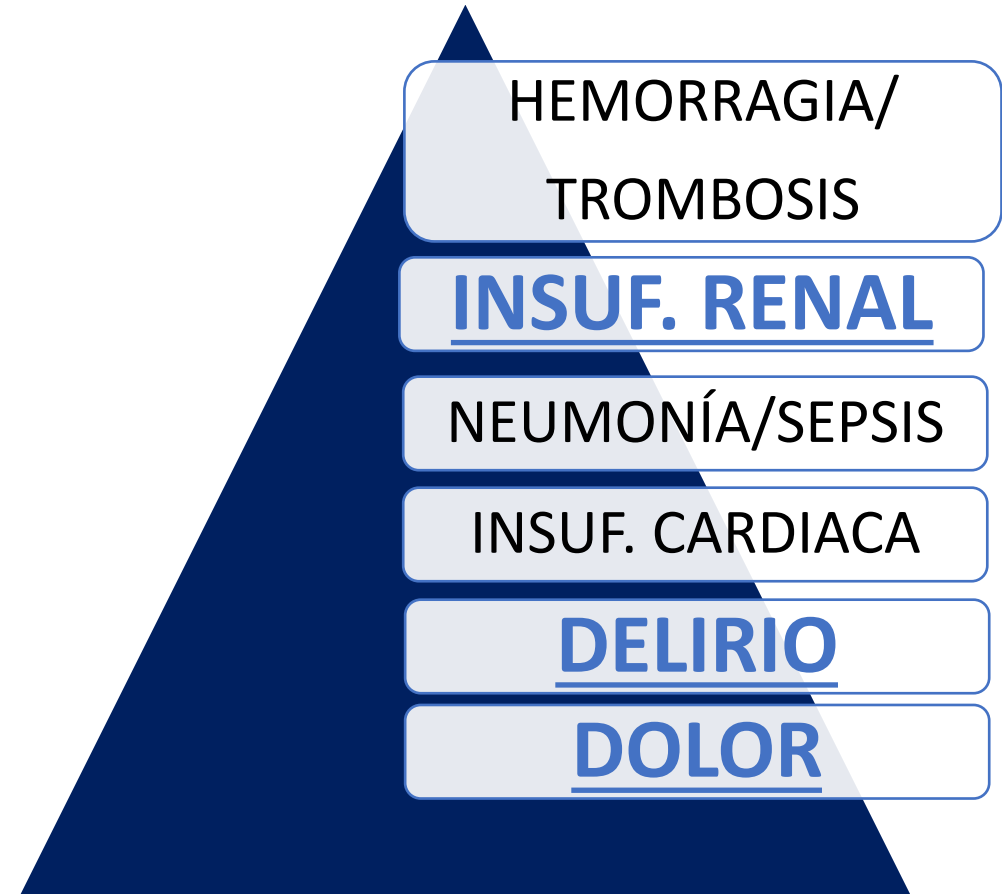


Reversión AVK y DQ



Complicaciones y mortalidad en FOC

↓ ½ con demora de 24-48 h





En las 24-48 h tras el ingreso



≤ 48 h → RNFC



Idealmente en 24 h y sin que pase de 48 h → AAOS



Al día siguiente del ingreso y no después de 36 h → UK

DEMORA QUIRÚRGICA

≤ 48 h



55%



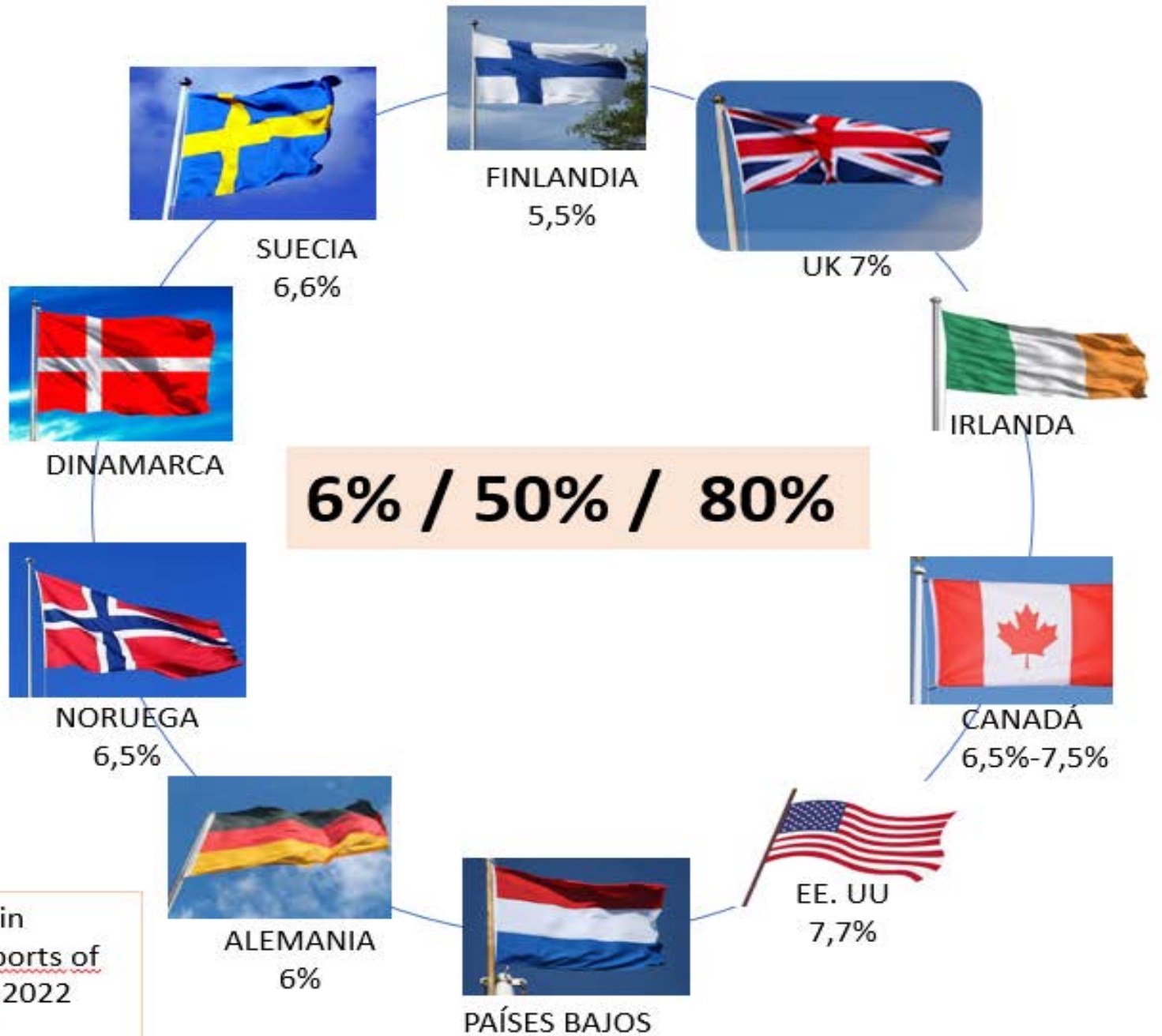
Werner M et al. Differences in hip fracture care in Europe: a systematic review of recent annual reports of hip fracture registries. Eur J Trauma Emerg Surg. 2022 RNFC





96 %

Werner M et al. Differences in hip fracture care in Europe: a systematic review of recent annual reports of hip fracture registries. Eur J Trauma Emerg Surg. 2022
RNFC





ANALGESIA Y ANESTESIA

BNP

AI vs AG

SYSTEMATIC REVIEW

Efficacy of Fascia Iliaca Compartment Blocks in Proximal Femoral Fractures in the Prehospital Setting: A Systematic Review and Meta-Analysis

Sabrina Slade, HBSc, MD;¹ Evan Hanna, CCP;² Josh Pohlkamp-Hartt, PhD;³ David W. Savage, MD,

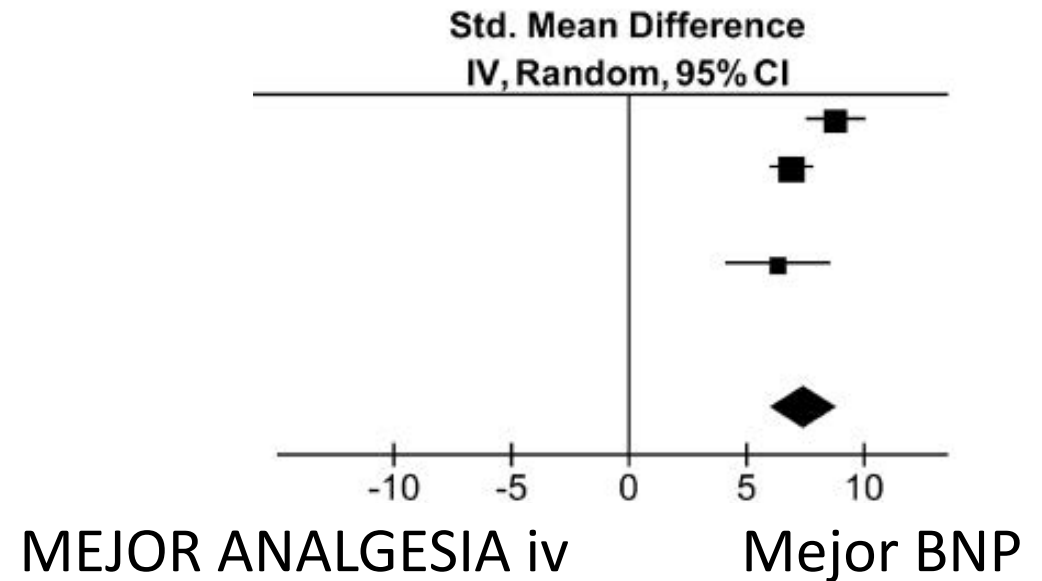
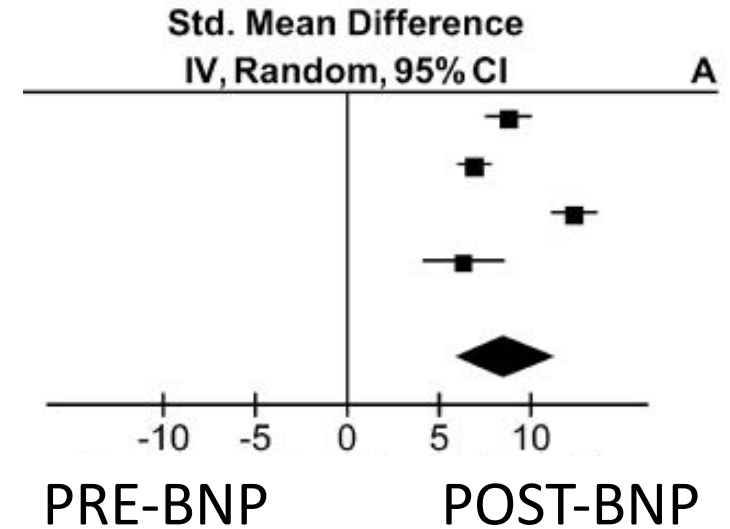


Cochrane Database of Systematic Reviews

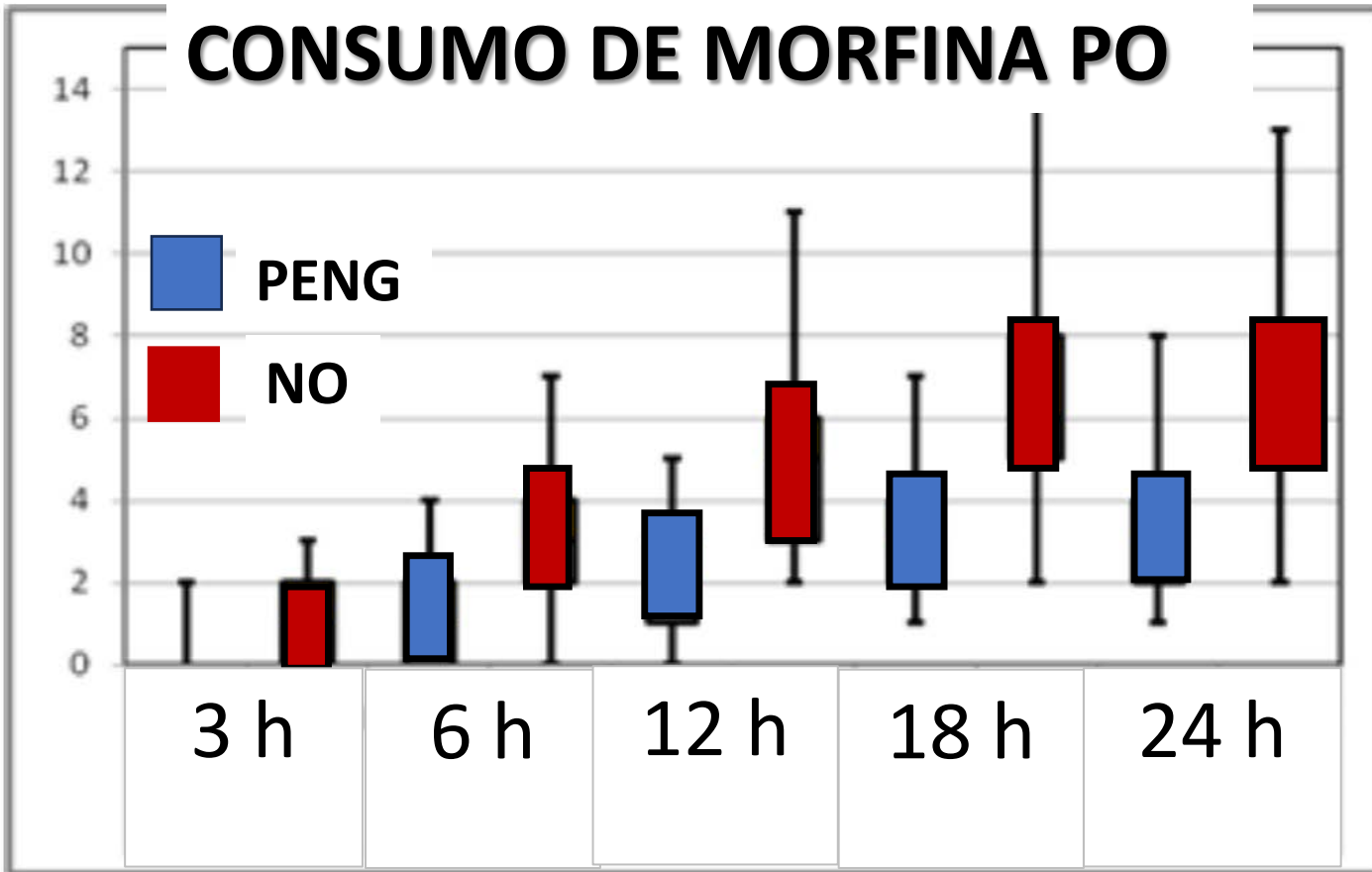
Peripheral nerve blocks for hip fractures in adults (Review)

Guay J, Kopp S

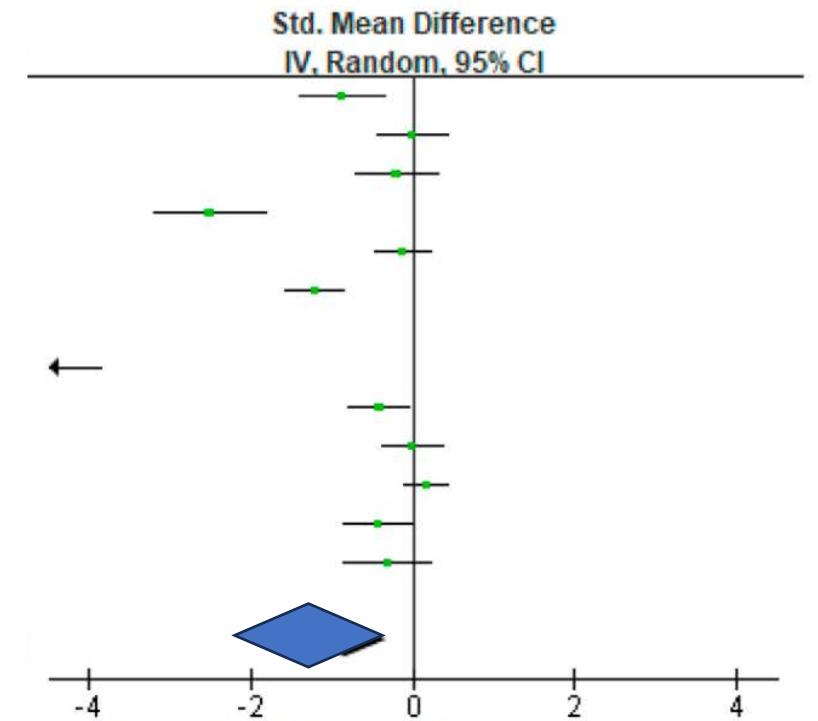
**DOLOR PRE-OP EN MOVIMIENTO
A LOS 30 min DEL BNP vs A iv.**



CONSUMO DE MORFINA PO



BNP Y DOLOR PO



Mejor BNP

Mejor A. iv



Aygun et al. *BMC Anesthesiology* (2023) 23:316
<https://doi.org/10.1186/s12871-023-02245-3> BMC Anesthesiology

RESEARCH Open Access

Effect of ultrasound-guided pericapsular nerve group (PENG) block on pain during patient positioning for central nervous blockade in hip surgery: a randomized controlled trial

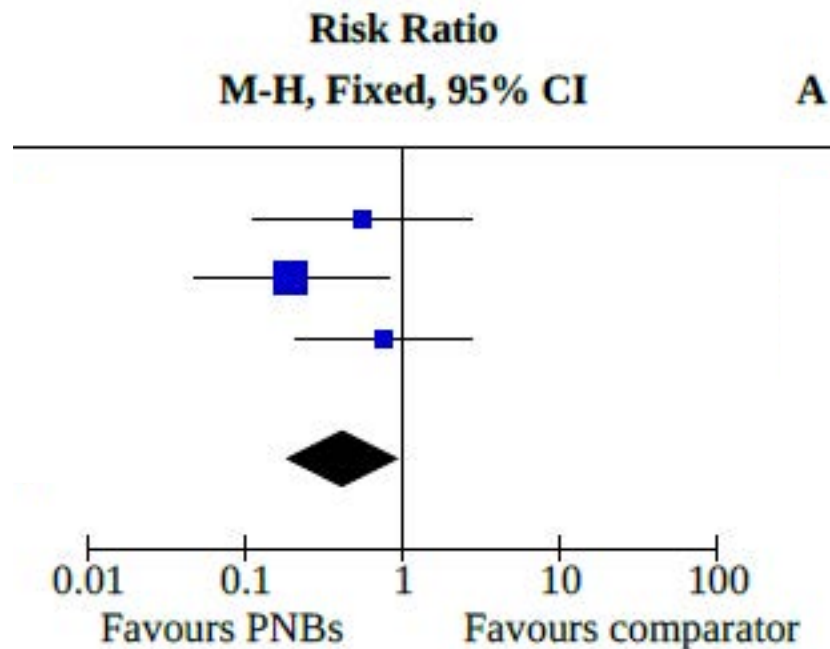
Hakan Aygun¹, Serkan Tulgar², Yavuz Yigit^{3,4*}, Ayşe Tasdemir¹, Cengizhan Kurt⁵, Caner Genc², Sezgin Bilgin⁶.

The Effect of Peripheral Nerve Block on Postoperative Delirium in Older Adults Undergoing Hip Surgery: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Su Yeon Kim , Ha Young Jo, Hyo-Seok Na, Sung-Hee Han, Sang-Hwan Do and Hyun-Jung Shin *

COMPLICACIONES Y FUNCIONALIDAD

NEUMONÍA*



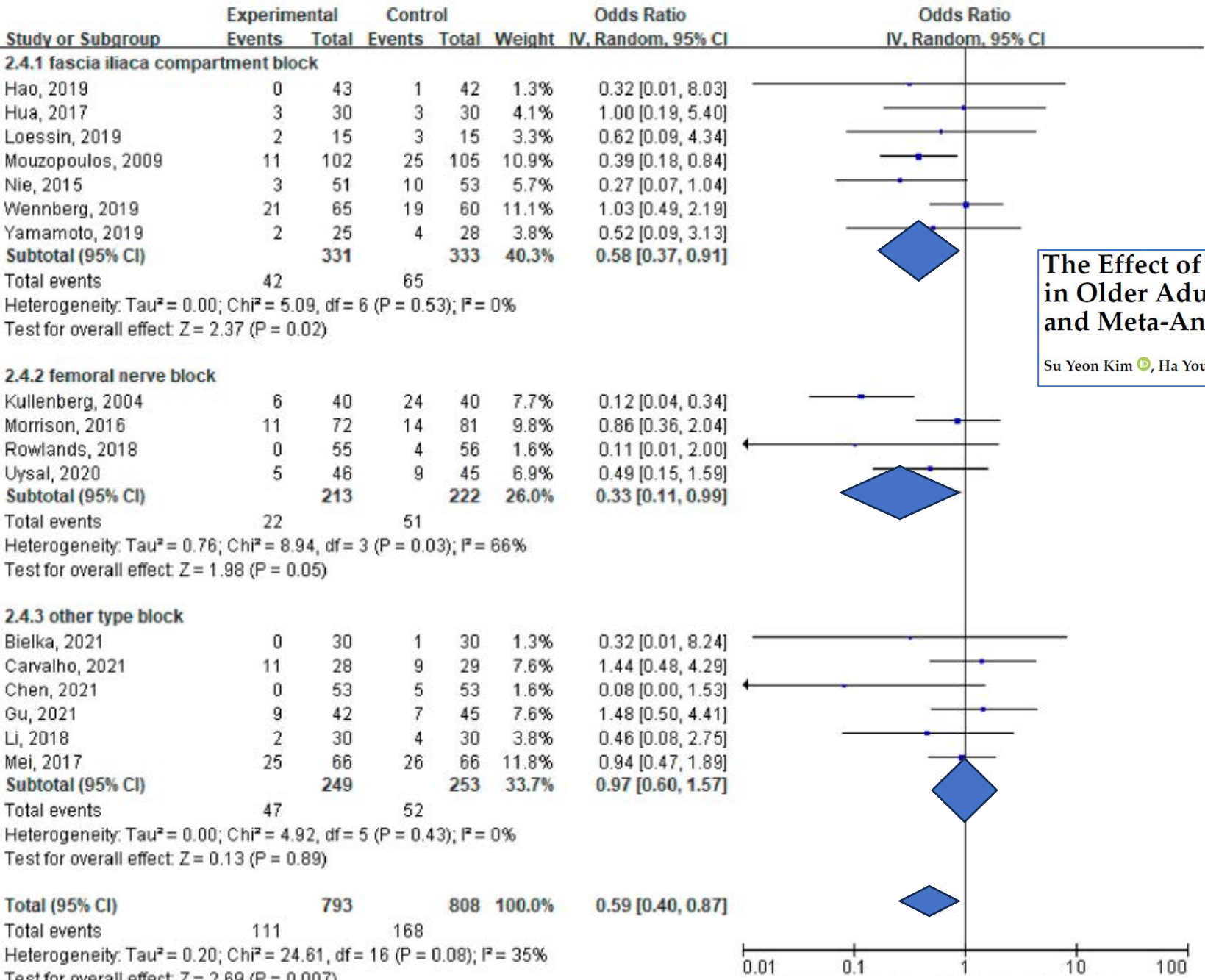
TIEMPO A 1ª PASEO PO*
↓ 10,8 h (8,7 a 12,8)

CALIDAD DE RECUPERACIÓN EN 24 h*
QoR SCORE 15:
Mejor BNP 11,5 (10-15)

BNP Y DELIRIO

The Effect of Peripheral Nerve Block on Postoperative Delirium in Older Adults Undergoing Hip Surgery: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

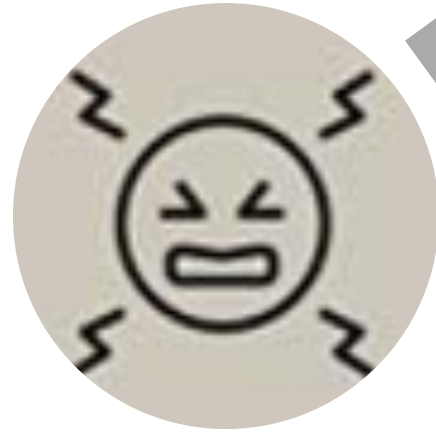
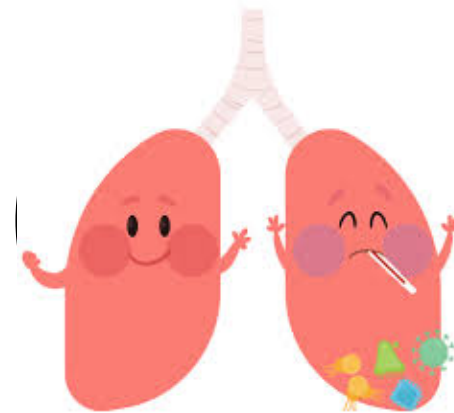
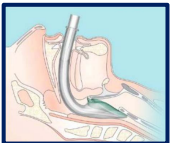
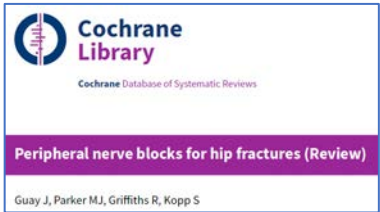
Su Yeon Kim, Ha Young Jo, Hyo-Seok Na, Sung-Hee Han, Sang-Hwan Do and Hyun-Jung Shin



Mejor BNP

Mejor A. iv

BNP

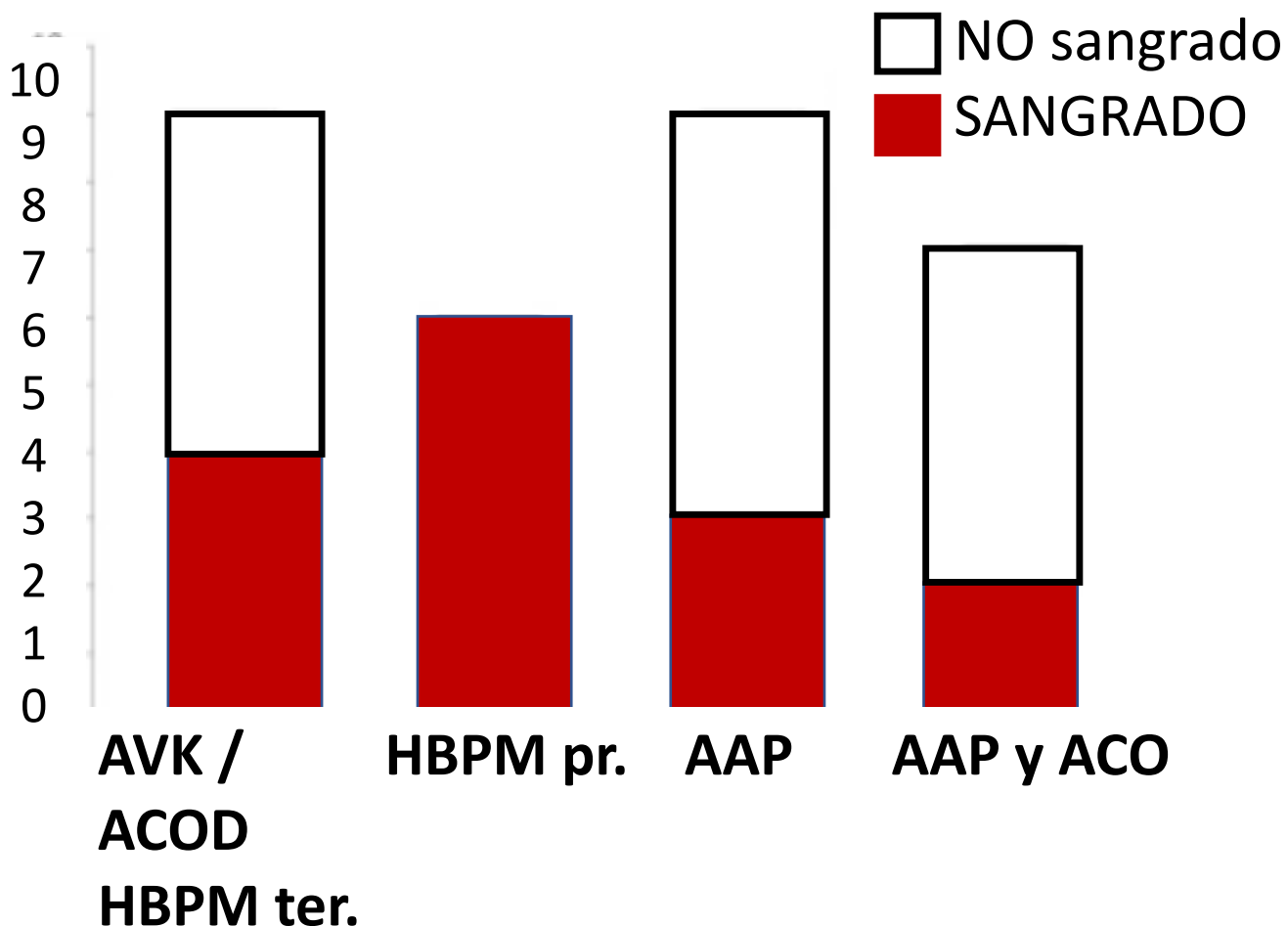


PRE
INTRA
POST



Joubert F. Bleeding complications following peripheral regional anaesthesia in patients treated with anticoagulants or antiplatelet agents: A systematic review. *Anaesth Crit Care Pain Med.* 2019;38(5):507-516.

9.738 BNP 80 SANGRADOS
50 CASOS-15 SANGRADOS
1978-2018



~~Plexo lumbar posterior~~



c. hemorrágicas leves (1/100)
c. graves (4/10.000)

ESAIC: Se pueden realizar BNP superficiales con ATT

Los BNP superficiales no requieren interrumpir los ATT

Los BNP profundos requieren = interrupción que la A intradural

EJA

Eur J Anaesthesiol 2022; **39**:100–132

PODCAST

GUIDELINES

Regional anaesthesia in patients on antithrombotic drugs

Joint ESAIC/ESRA guidelines

Sibylle Kietabl, Raquel Ferrandis, Anne Godier, Juan Llau, Clara Lobo, Alan JR Macfarlane,

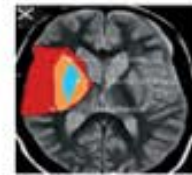
Joubert F. Bleeding complications following **peripheral regional anaesthesia in patients treated with anticoagulants or antiplatelet agents**: A systematic review. *Anaesth Crit Care Pain Med.* 2019;**38**(5):507-516.

BNP Superficiales	BNP Profundos
Fascia Iliaca	PENG
3 en 1	Plexo lumbar
Femorocutáneo	Paravertebral lumbar
Erector de la espina	Cuadrado lumbar
Obturador superf.	Sacro

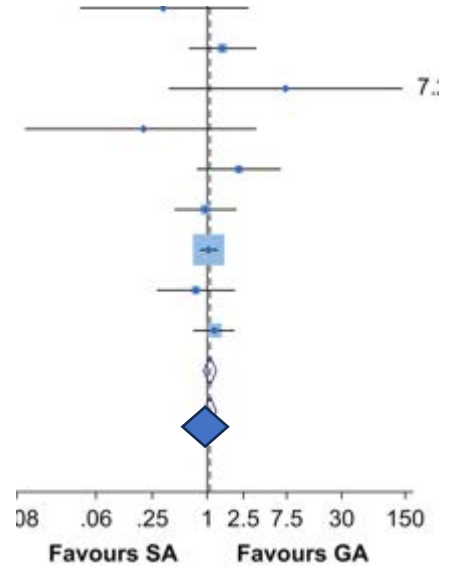
2016
2022
2023



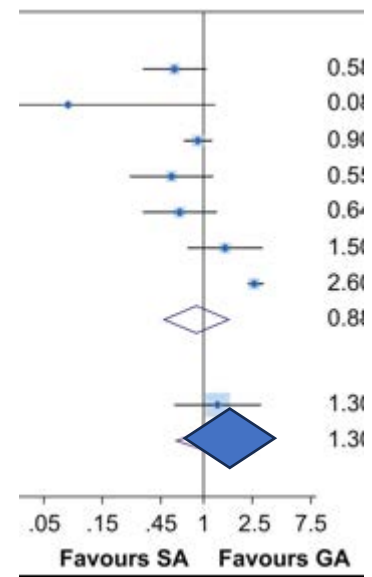
1 mes



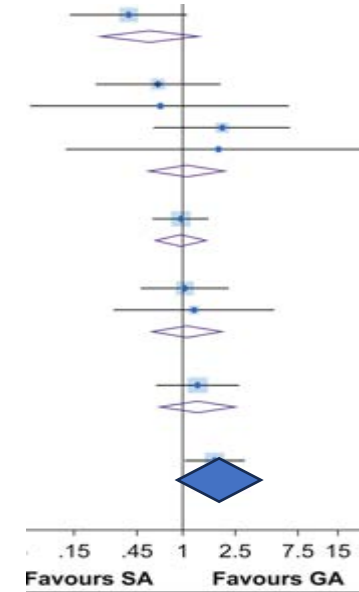
DELIRIUM



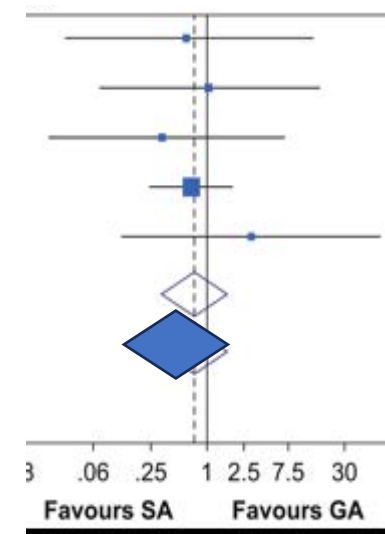
HIPOTENSIÓN



MORTALIDAD



SCA



INSUF. RENAL AGUDA: 4 ECR

OR: 0.58; IC 95%: 0.39–0.88; < 0.01

BJA
British Journal of Anaesthesia, 129 (5): 788–800 (2022)
doi: 10.1016/j.bja.2022.07.035
Advance Access Publication Date: 28 September 2022
Review Article

REGIONAL ANAESTHESIA

Clinical effectiveness and safety of spinal anaesthesia compared with general anaesthesia in patients undergoing hip fracture surgery using a consensus-based core outcome set and patient-and public-informed outcomes: a systematic review and meta-analysis of randomised controlled trials

Setor K. Kunutsor^{1,2}, Pravakar B. Hamal³, Sara Tomassini¹, Joyce Yeung^{3,4}

Review
INTERNATIONAL JOURNAL OF SURGERY
OPEN

Comparison of risk of complication between neuraxial anaesthesia and general anaesthesia for hip fracture surgery: a systematic review and meta-analysis

Xi Chen, MD^a, Hairui Li, MD^b, Songlin Li, MD^c, You Wang, MD^d, Ruichen Ma, MD^e, Wenwei Qian, MD^{a,*}

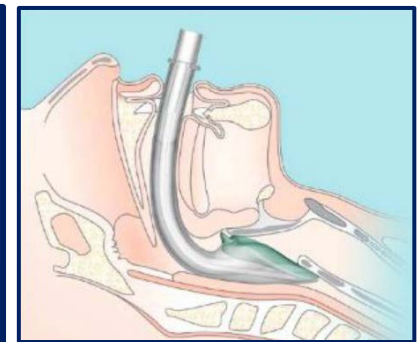
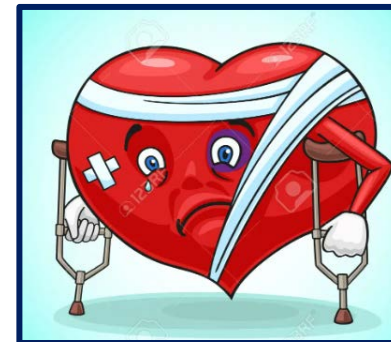
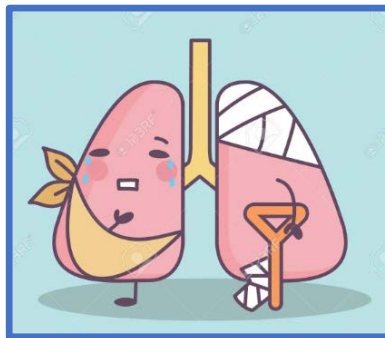


Article

Effect of General vs. Regional Anesthesia on Mortality, Complications, and Prognosis in Older Adults Undergoing Hip Fracture Surgery: A Propensity-Score-Matched Cohort Analysis

Guolei Zhang ^{1,2,†}, Huihui Chen ^{3,†}, Junpu Zha ^{1,2}, Jingtao Zhang ^{1,2}, Jun Di ^{1,2}, Xiaoqing Wang ¹, Xin Hu ^{1,2}, Xin Xu ^{4,5,6,*} and Junfei Guo ^{1,2,*}

COMPLICACIONES FOC	AG N = 808	AI N = 808	P
CARDIACAS	<u>18%</u>	23%	0,01
RESPIRATORIAS	12%	<u>8,4%</u>	0,02



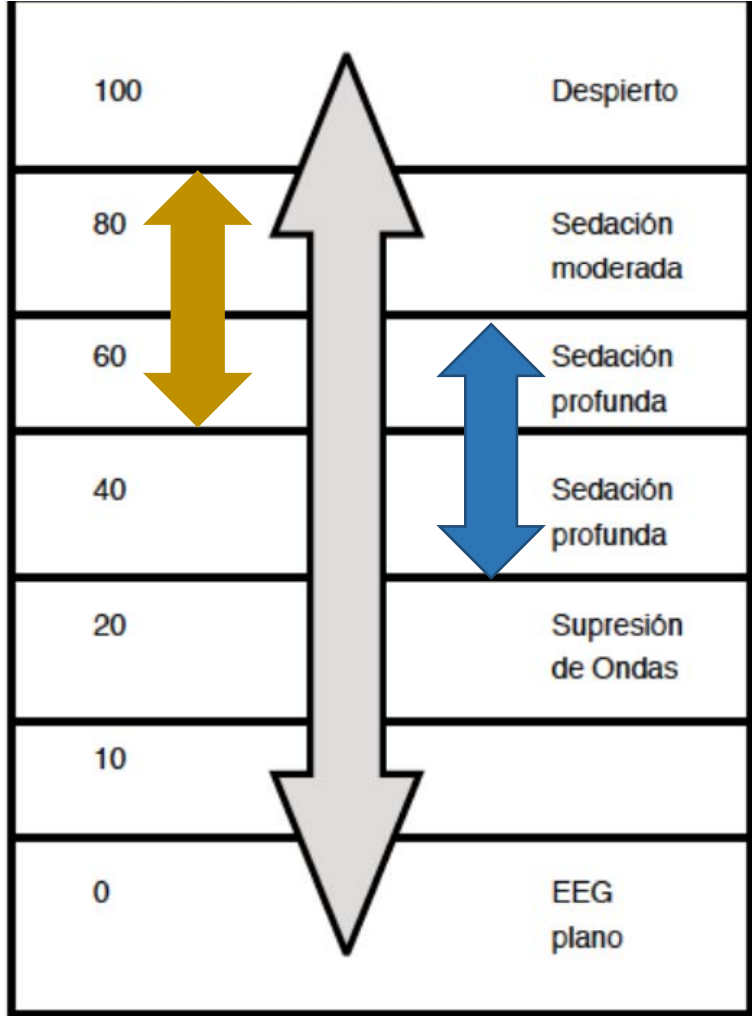
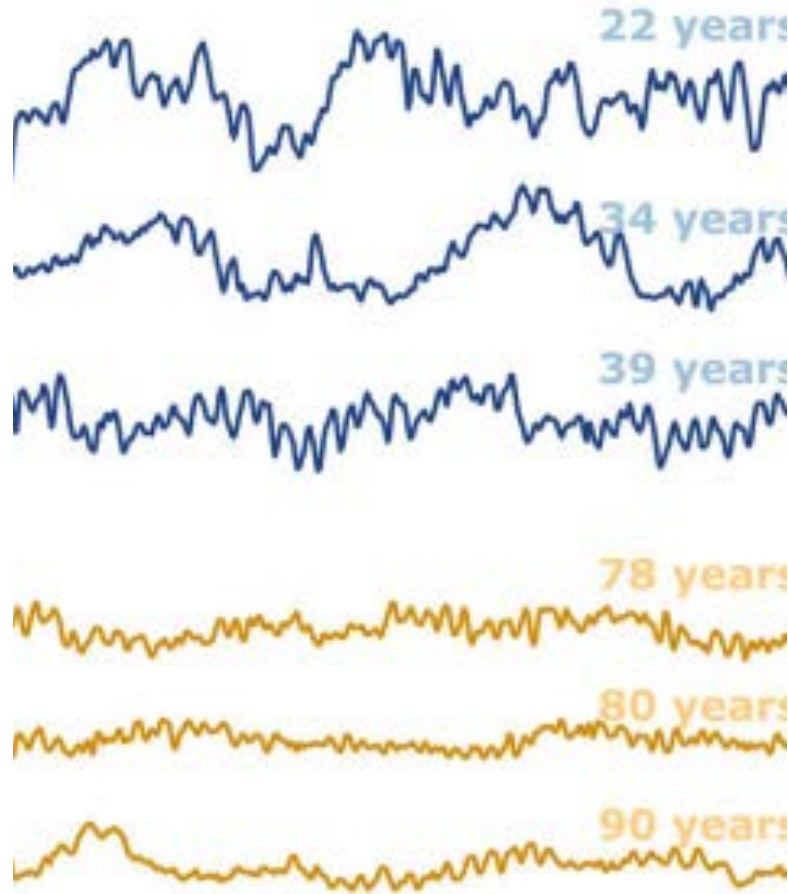


Figura 1. Rangos del Índice BIS.



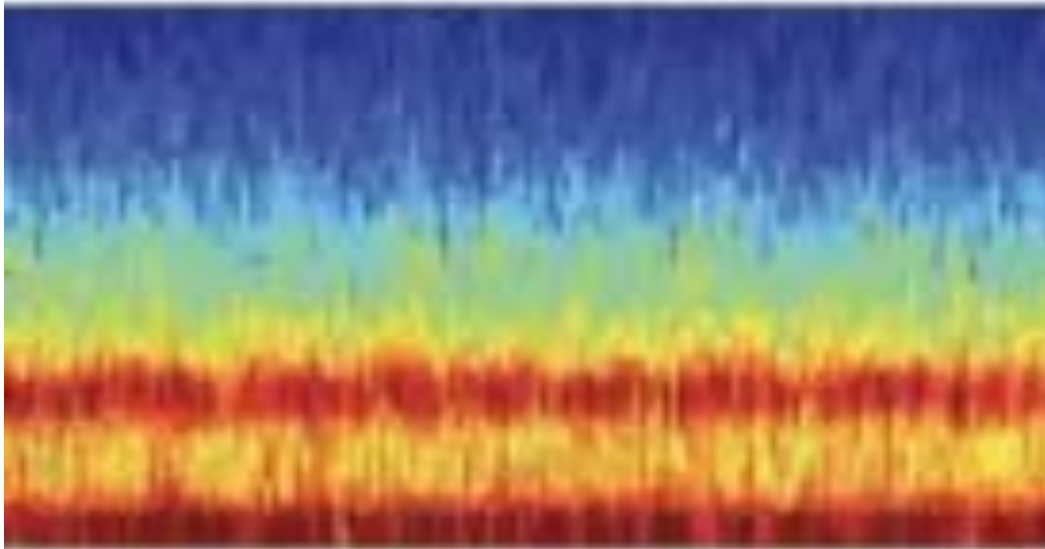
**OBJETIVO:
60-80**

**1ºS ESTUDIOS
BIS EXCLUYERON
ANCIANOS**

PROPOFOL

BIS Objetivo: 60-80

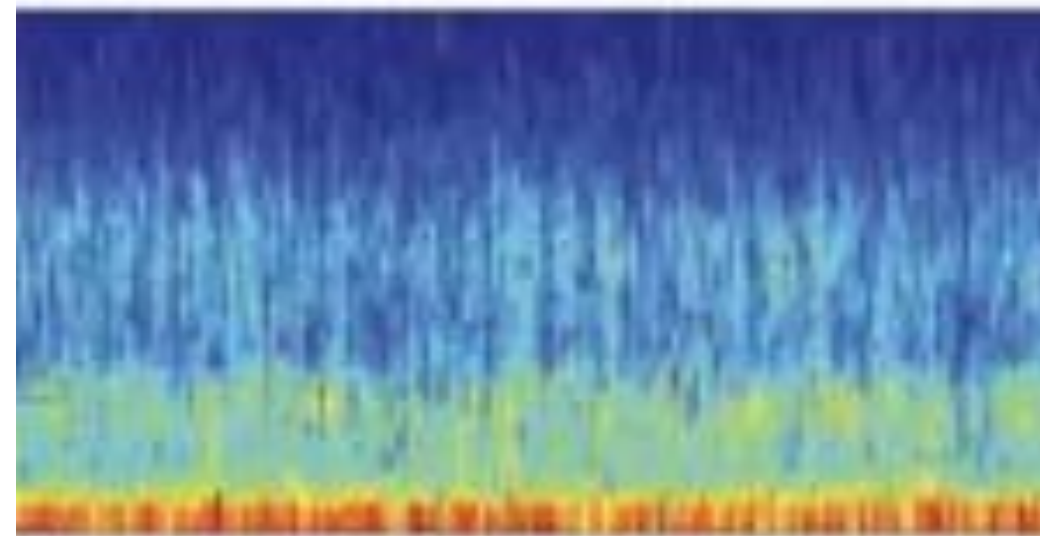
26 años



10 minutes



86 años

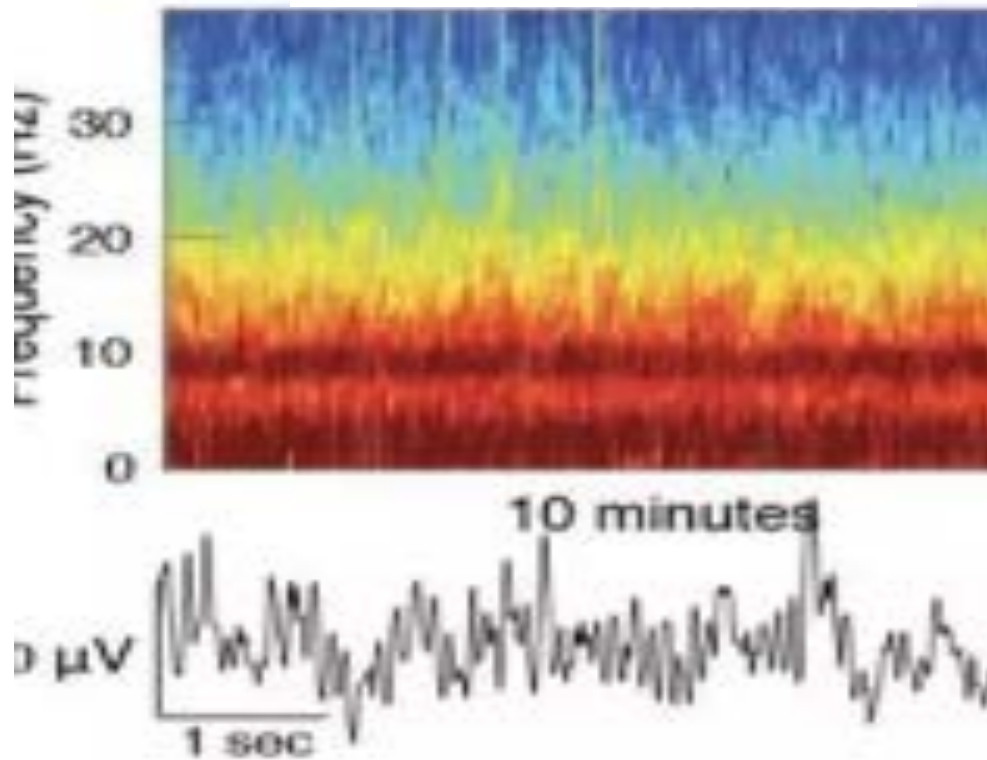


10 minutes



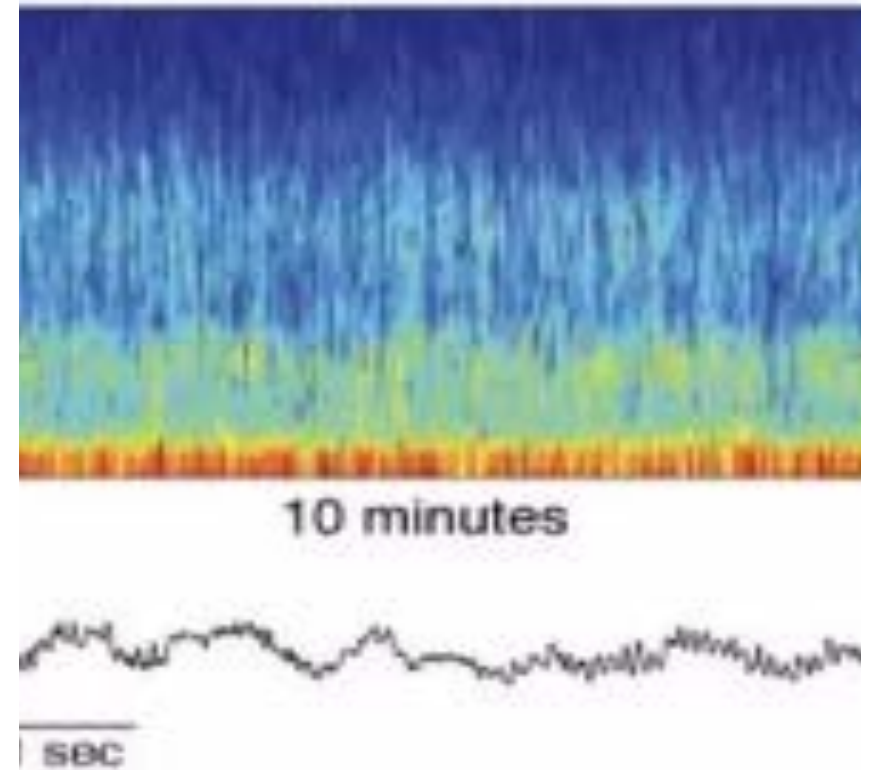
SEVOFLURANO

26 años



BIS Objetivo: 60-80

86 años





BJA Education, 20(5): 142–149 (2020)

doi: 10.1016/j.bjoe.2020.02.003

Advance Access Publication Date: 23 March 2020

Anaesthesia for hip fracture repair

C. Shelton^{1,2,*} and S. White³

¹Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester, UK, ²Lancaster Medical School, Lancaster University, Lancaster, UK and ³Brighton and Sussex University Hospitals NHS Trust, Brighton, UK

*Corresponding author: cliff.shelton@nhs.net



AI ↓70% la
IRA

Demora
AI vs AG



DEMORA > 48 h

DUPLICA
 Σ
Complicación



ANESTESIA INTRADURAL

48 H Y 72 H

INR ≤ 1,25

INR ≤ 1,5*

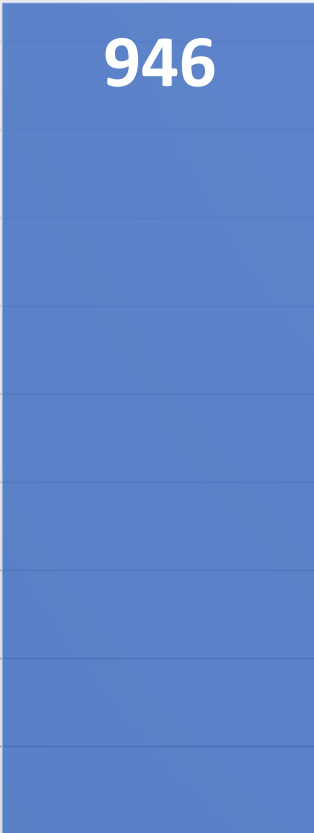
Dabigatran + FGe > 80

Xabanes + FGe > 30

> 150.000 PLQ***

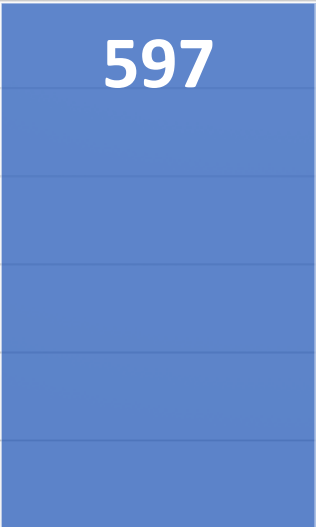


Pruebas de función
plaquetaria Normal*



946

AVK



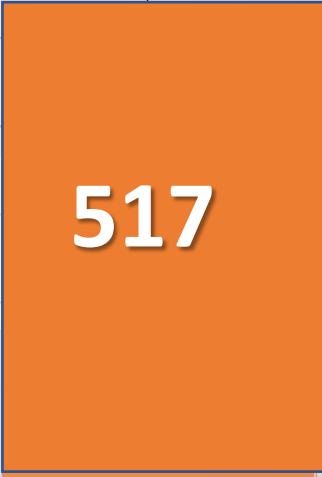
597

ACOD



172

CLOPI



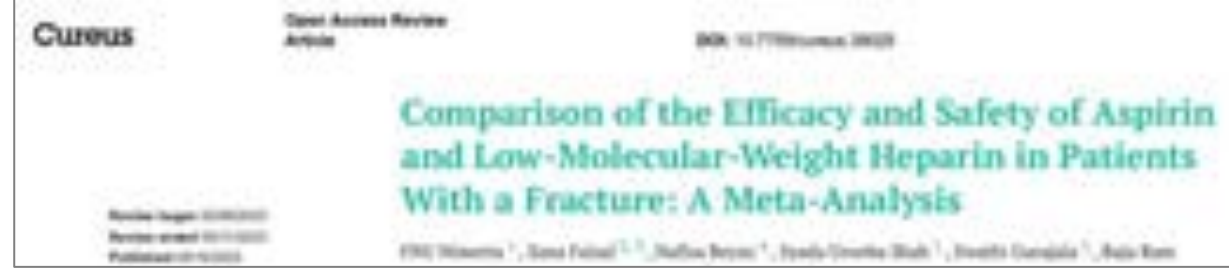
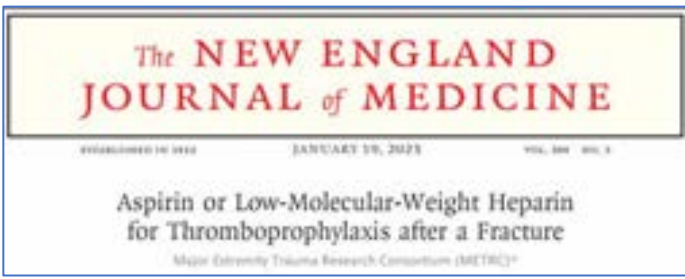
517

■ 48 h ■ 72 h

A 3D medical illustration of a blood vessel. The vessel lumen is shown in blue, and the vessel wall is in red. A large, dark red thrombus (blood clot) is attached to the vessel wall, partially obstructing the flow. Numerous red blood cells, depicted as red biconcave discs, are scattered throughout the lumen. The text 'TROMBOPROFILAXIS' is overlaid in white, and 'HBPM / AAS / ACOD' is overlaid in light blue below it.

TROMBOPROFILAXIS

HBPM / AAS / ACOD



ERC, multicéntrico

Fx: 6.100 AAS / 6.100 Enoxaparina 30mg/12 h

Metaanálisis 2 ERC + 1 EO

Fx: 6.450 AAS / 6.450 Enoxa

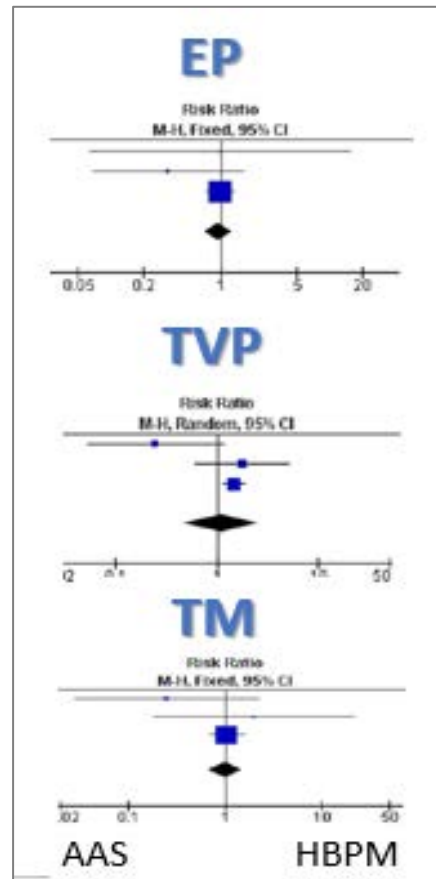
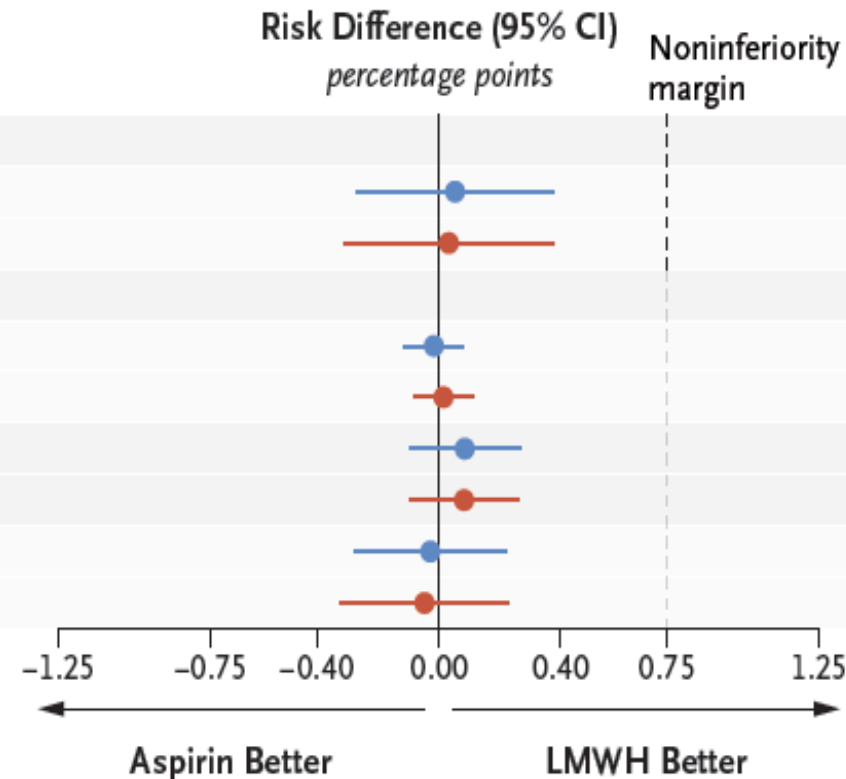
Outcome of Death According to Analysis Population

Primary outcome

- Death from any cause, intention-to-treat population
- Death from any cause, per-protocol population

Secondary outcome

- PE-related death, intention-to-treat population
- PE-related death, per-protocol population
- Possible PE-related death, intention-to-treat population
- Possible PE-related death, per-protocol population
- Unlikely PE-related death, intention-to-treat population
- Unlikely PE-related death, per-protocol population



Injury 53 (2022) 1169–1176

Contents lists available at ScienceDirect



Injury

journal homepage: www.elsevier.com/locate/injury



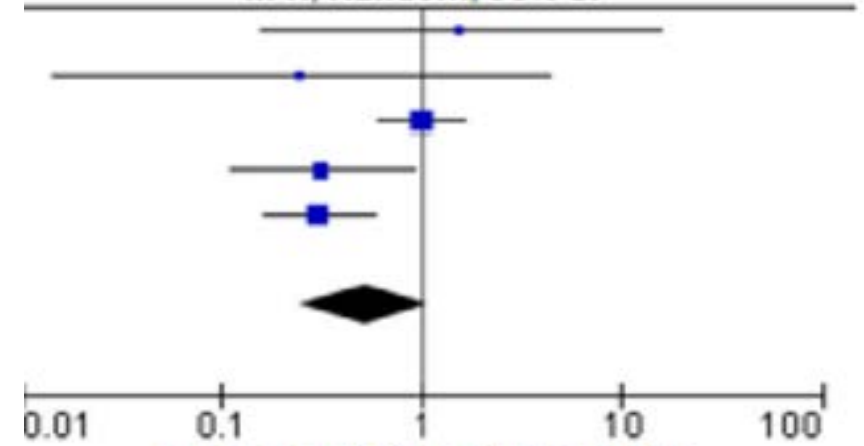
Equivalence of DOACS and LMWH for thromboprophylaxis after hip fracture surgery: Systematic review and meta-analysis[☆]

Charlie J. Nederpelt^{a,b,*}, Quinten Bijman^a, Pieta Krijnen^a, Inger B. Schipper^a



TVP

Odds Ratio
M-H, Random, 95% CI

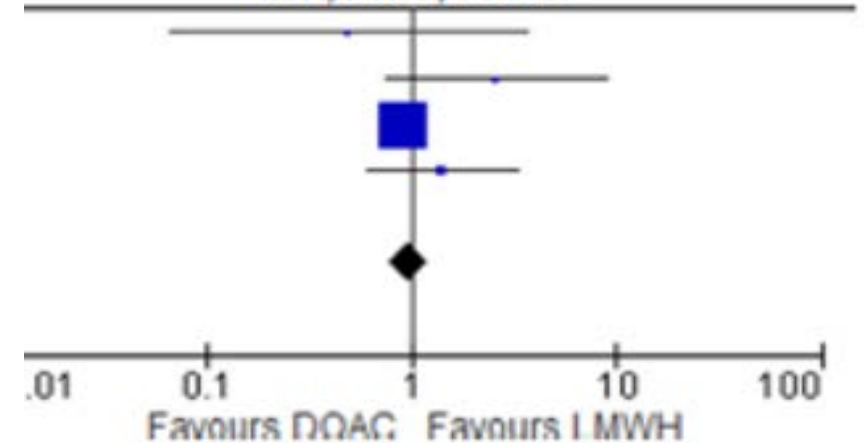


Mejor ACOD

Mejor HBPM

SANGRADO

Odds Ratio
M-H, Fixed, 95% CI

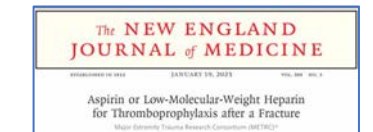
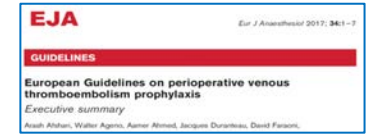
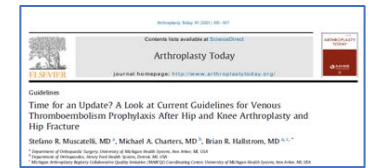


Favours DOAC Favours LMWH

Tromboprofilaxis óptima en ATT y FOC

Se recomiendan

- Profilaxis mecánica y farmacológico.
- **La AAS es eficaz y segura**
- Preoperatoria:
 - sí **DEMORA > 48 h**
 - **AVK**: Cirugía en 24-36 h con INR $\leq 1,7$
 - **ACOD y AAP**: Cirugía en 24-48 h
- Postoperatoria: > 12 horas después del cierre
- LMWH, UFH, AVK, **AAS**, **ACOD**





ANEMIA: HEMORRAGIA Y TRANSFUSIÓN

PBM

¿CÓMO GESTIONAMOS LA HEMORRAGIA, ANEMIA Y TRANSFUSIÓN?



1.5
g/dL

3,5
g/dL

3.5
g/dL

6-9
g/dL

Hansson Pins



Prosthesis [©]



2-hole DHS



4-hole DHS



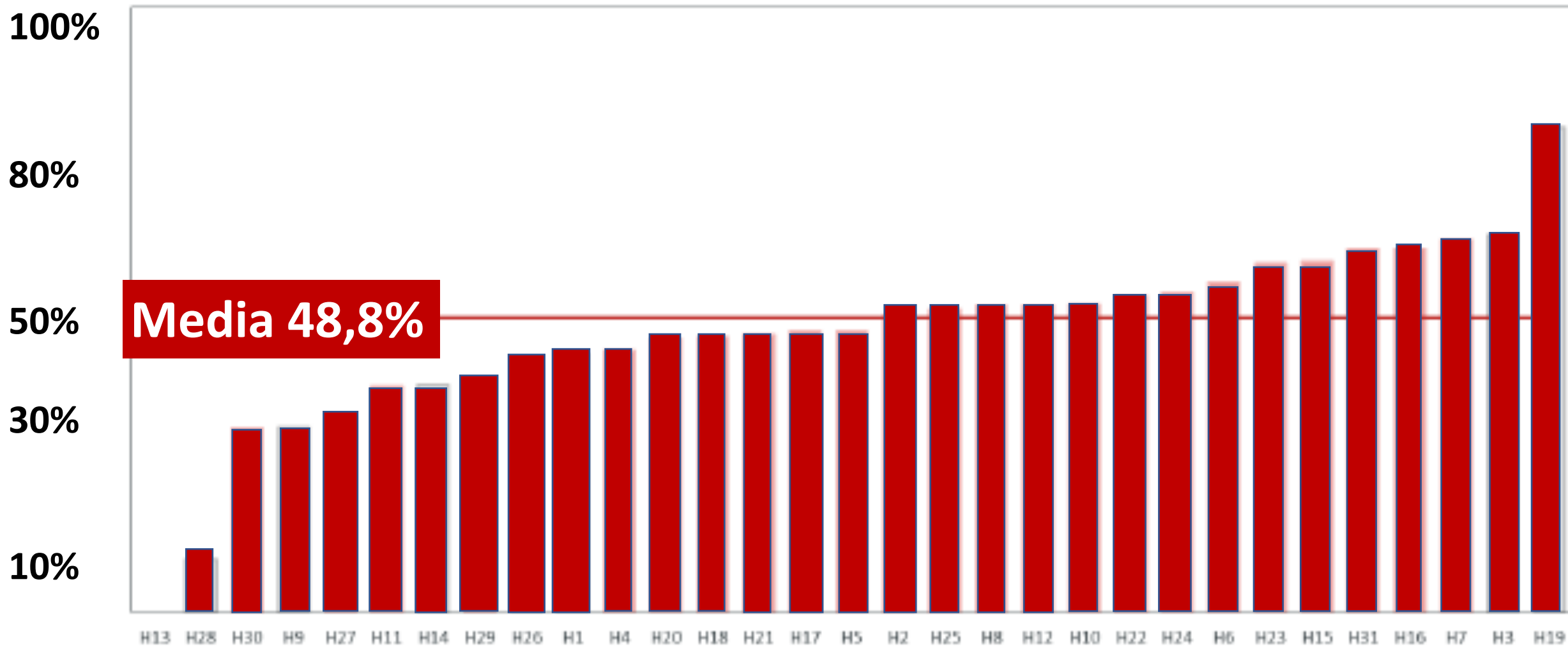
IMHS [©]



Potter LJ, Doleman B, Moppett IK. A systematic review of pre-operative anaemia and blood transfusion in patients with fractured hips. *Anaesthesia* 2015;70(4):483-500.

Quijada JL. Factores que incrementan el riesgo de transfusion en los pacientes con fractura de cadera. *Rev Ortp Traumatol* 2011; 55: 35-38

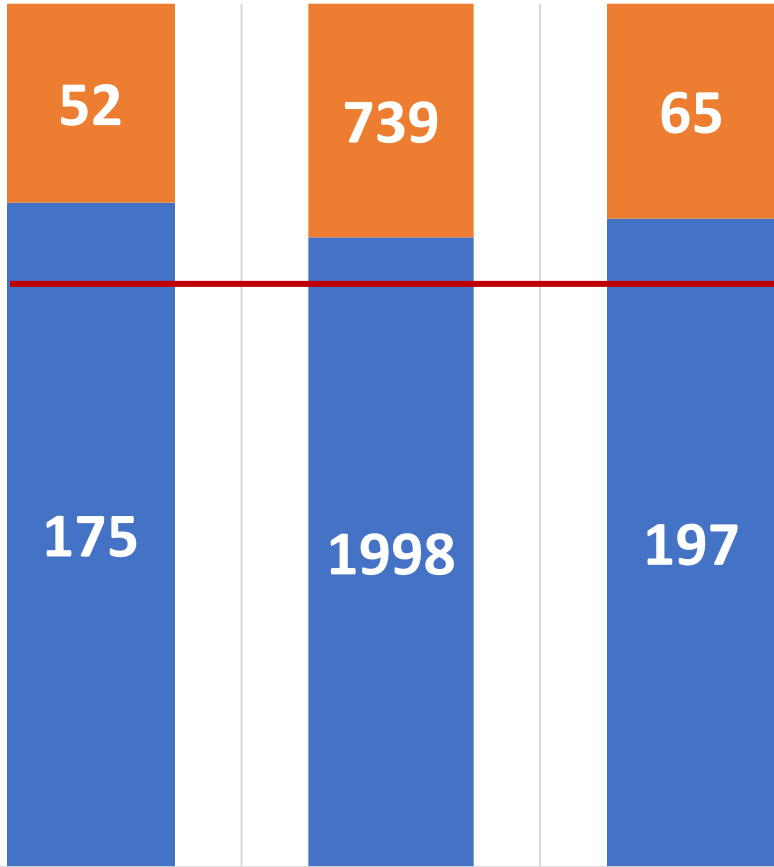
Transfusión en pacientes con fractura de cadera en España



ACOD, N = 2370

DEMORA -TRANSFUSIÓN

■ Pacientes ■ transfundidos



< 24

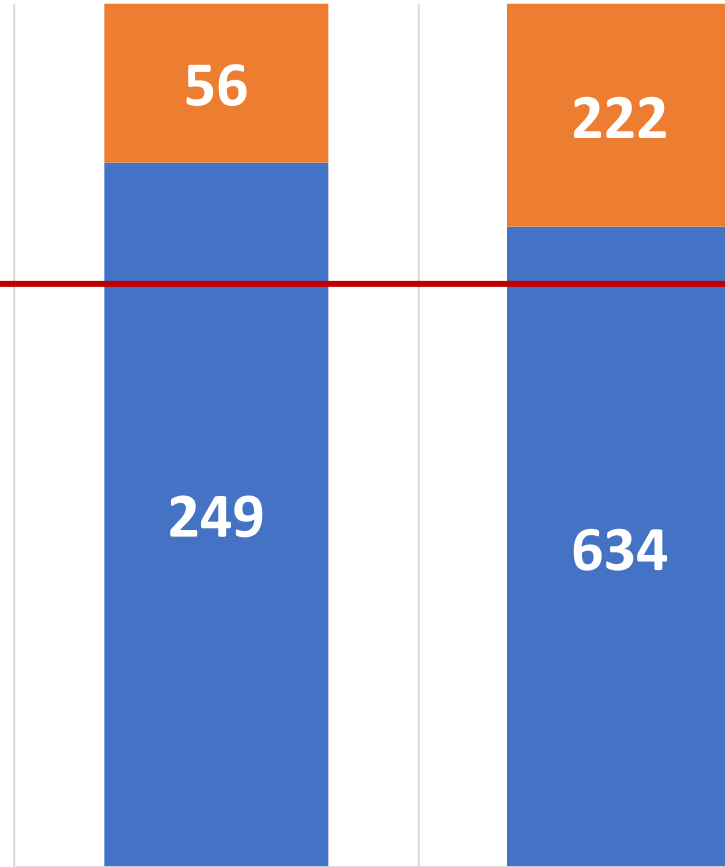
24-48

> 48

AVK, N = 883

DEMORA-TRANSFUS.

■ Pacientes ■ transfundidos ■ pacientes ■ transfundidos



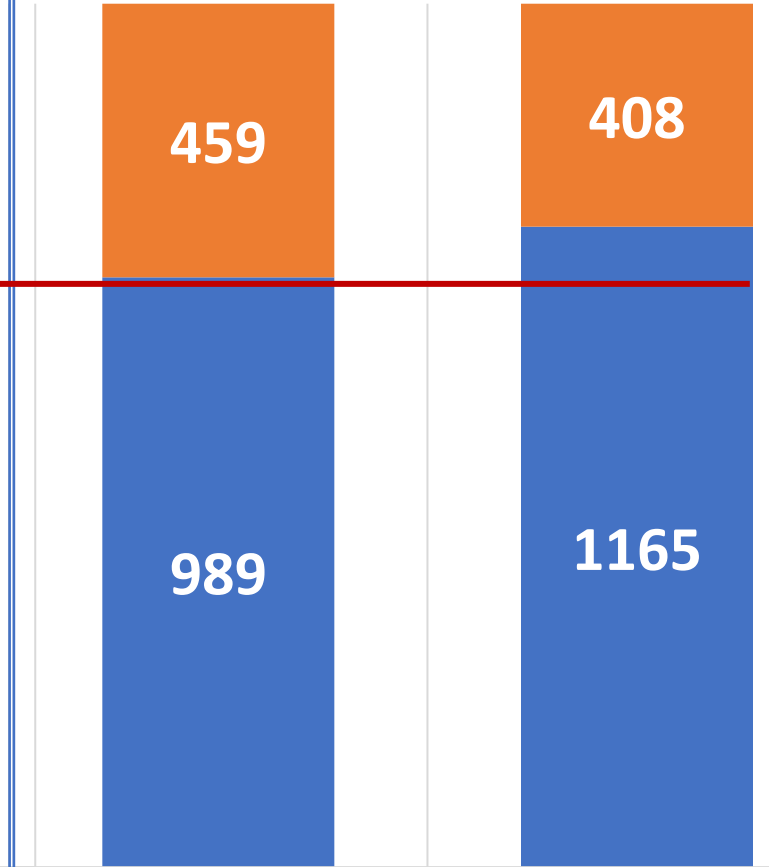
< 24

24-48

CLOPID./AAS, N = 2154

DEMORA-TRANSFUSIÓN

■ pacientes ■ transfundidos

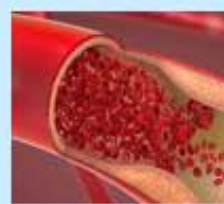


24-48

> 48

**NINGÚN AAP NI ACO JUSTIFICA UN
RETRASO > 48 H DE LA CIRUGÍA DE FOC**

**COMO LA TRANSFUSIÓN SE ASOCIA CON COMPLICACIONES Y MORTALIDAD
PARA AUMENTAR LA SEGURIDAD DEL PACIENTE
SE DEBEN IMPLANTAR TODAS LAS MEDIDAS DE PBM**



Hemorragia intra y PO



ATX: ↓ 200 ml

Hemorragia intraOP



ATX: ↓ 30 ml

Tasa transfusional



ATX: ↓ 40-60%

HB +1día PO



ATX: ↑ 0,6 g/dL

HB + 3 días PO



ATX: ↑ 0,7 g/dL

Estancia Hospitalaria



ATX: ↓ 1,4 días

2021

Population Pharmacokinetics of Intra-articular and Intravenous Administration of Tranexamic Acid in Patients Undergoing Total Knee Replacement

Aránzazu González Osuna¹ · Luisa Fernanda Rojas² · Claudia Lamas^{1,6} · Xavier Aguilera Roig^{1,6} · Francesc Pla-Junca² · Sebastián Videla^{3,4} · M^a José Martínez-Zapata² · Marta Valle² · FARMATX study group

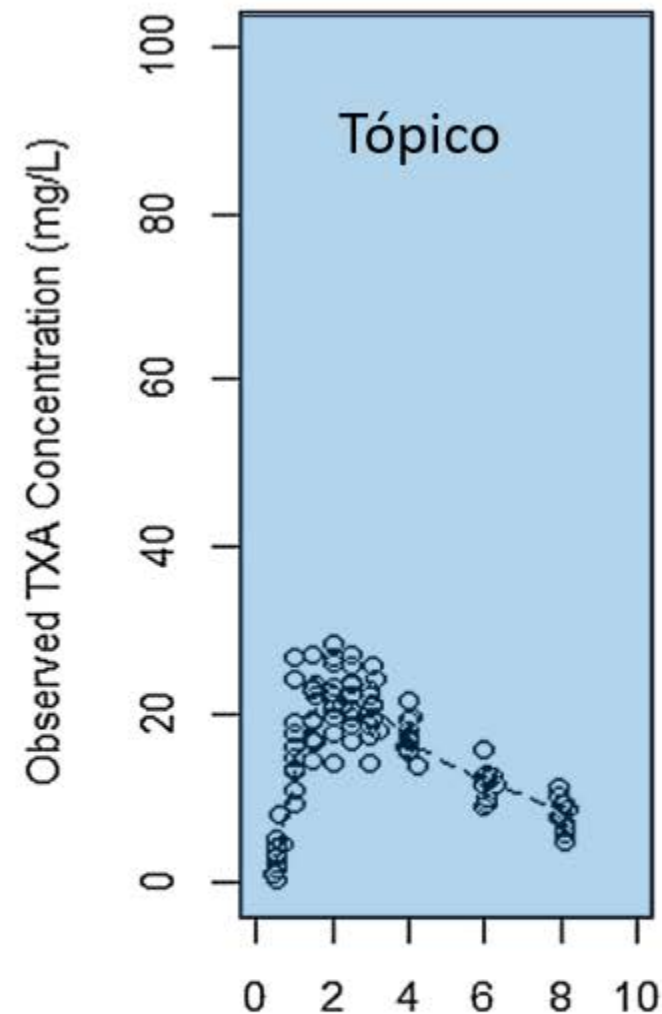
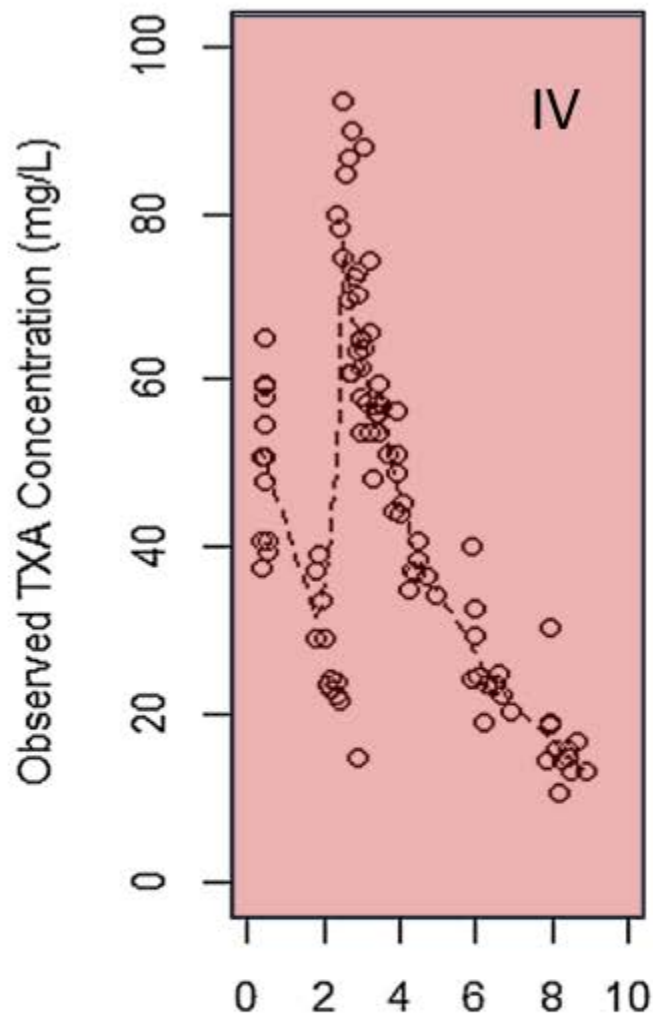
Accepted: 28 May 2021
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Tranexamic Acid for Acute Hemorrhage: When Is Enough Evidence Enough?

2019

David Faraoni, MD, PhD, FAHA,* and Jerrold H. Levy, MD, FAHA, FCCI

ESTUDIO FARMATX



Las dosis iv y tópicas se basan en que una concentración de 20 a 50 mg/L podría inhibir completamente la fibrinolisis, y podría asociar eventos trombóticos, pero no se ha demostrado

Tan pronto como posible
 Fe⁺⁺/P: 20 mg/kg iv
 ATX iv: 1g + 1g en 8 h o Cir y PO

**30%
 AAP/ACO**

P-ATX
 P-Fe⁺⁺

ATX
 P-Fe⁺⁺

206
 P-Fe⁺⁺

103

P-ATX
 Fe⁺⁺

ATX
 Fe⁺⁺

207
 Fe⁺⁺

206
 P-ATX

207
 ATX

413 p

Open access Protocol
BMJ Open Study protocol for a multicentre, 2x2 factorial, randomised, controlled trial evaluating the interest of intravenous iron and tranexamic acid to reduce blood transfusion in hip fracture patients (the HiFIT study)
 Sigismund Lasocki¹, Thibault Loupec², Elsa Parot-Schinkel³, Bruno Vielle³

Ferric derisomaltose and tranexamic acid, combined or alone, for reducing blood transfusion in patients with hip fracture (the HiFIT trial): a multicentre, 2x2 factorial, randomised, double-blind, controlled trial
Lancet Haematol 2023
 Sigismund Lasocki, Xavier Capdevila, Bruno Vielle, Benjamin Bijok, Maria Lahlou-Casull, Vincent Coll **10: e747-55**

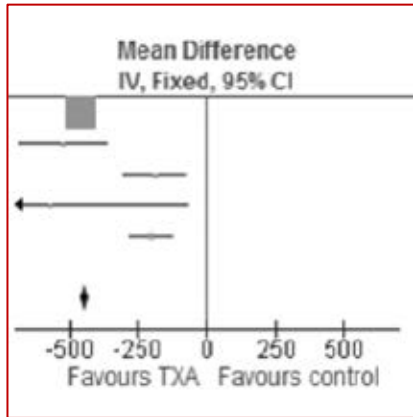


P-ATX-P-Fe: **30%**; HB < 8 >> frecuente
 Fe⁺⁺: 26%
 ATX: 27%

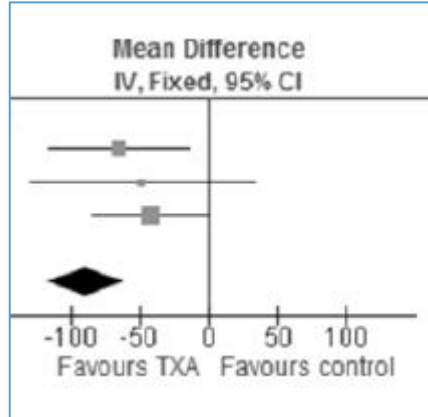
ATX + Fe: 15% OR:0,51;IC 98%: 0,27-0,97

Effect of tranexamic acid use on blood loss and thromboembolic risk in hip fracture surgery: systematic review and meta-analysis

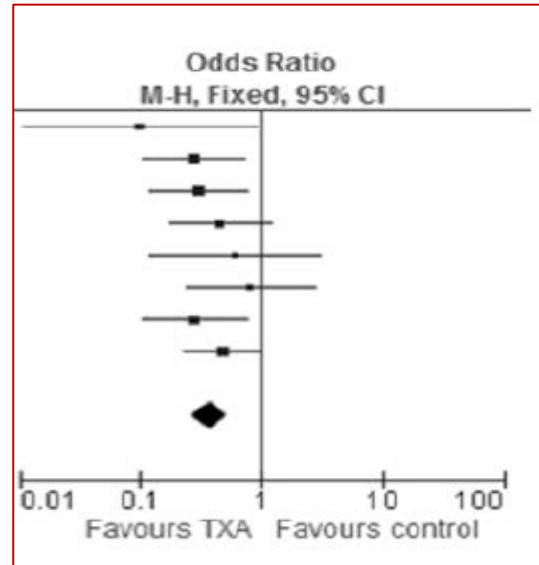
Dinnish Baskaran¹, Syed Rahman², Yousuf Salmasi³, Saied Froghi⁴, Onur Berber⁵, Marc George⁵



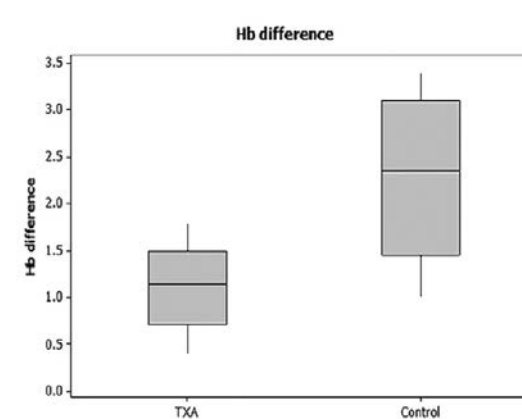
Hemorragia total



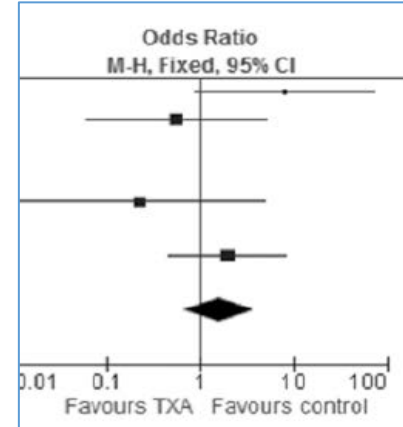
Hemorragia quirúrgica



N.º Transfusiones



↓ HB*
1,2 vs 2,5



TVP / TEP



ANTIAGREGANTES



C. \leq 48 h

AAP: Sustituir
x AAS 100,
Suspender
otros AAP

**NO HBPM
preoperatoria
en AAP ni ACO**

C. $>$ 48 h

AAP:
AAS 100/12 h

ACO:
HBPM Prof.

**Si Válvula card. Mec.
Stent F $<$ 6 m
FR Trombotico \uparrow
CIR $<$ 48 H**

ANTICOAGULANTES

Tiempo desde última dosis de AAP a cirugía

REINICIO Y TROMBOPROFI.



INGRESO

24 H

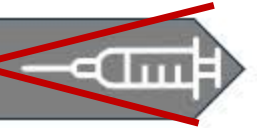
48 H

72 H*

BNPS + AG



~~12 H~~



AAS / Disgren



Cilostazol ± AAS
DIPIRIDAMOL ±
AAS



CLOPIDOGREL ±
TICAGRELOR ±
PRASUGREL ±
± AAS



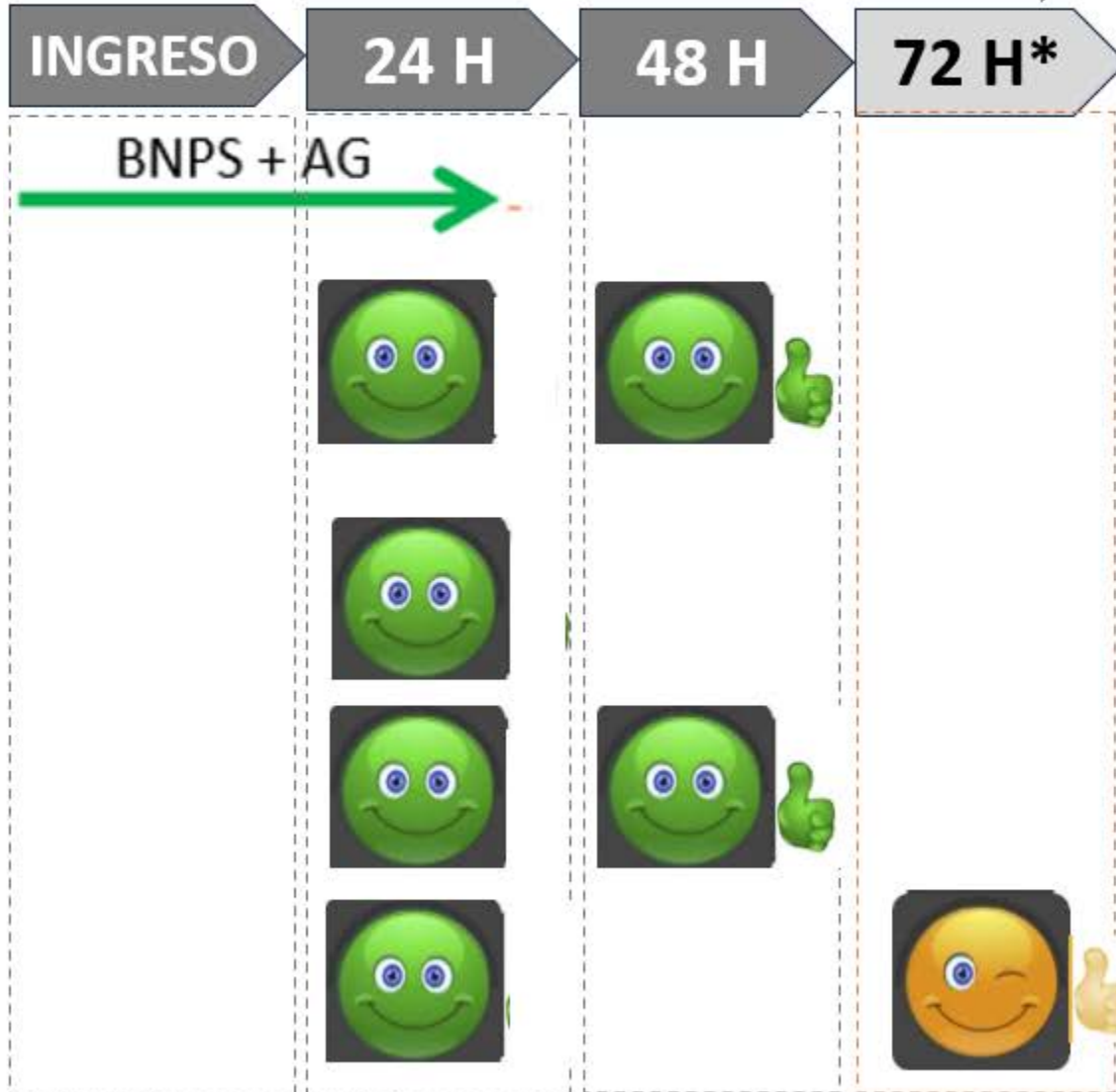
12 h PO

AAS 100/12 h

24 h PO
± clopi 24 h

24-72 h
Prasu/Ticagr

Tiempo desde última dosis a cirugía



DABIGATRAN
FGe > 80

DABIGATRAN
FGe > 50

XABANES
FGe > 30

XABANES FGe < 30
Dabigatran F < 50

**REINICIO Y
TROMBOPROFI.**

~~8-12 H~~

12-24 H
ACOD Prof.

24 -48 H
ACOD
previo

Tiempo desde última dosis a cirugía



INGRESO 24 H 48 H 72 H*

BNPS + AG →

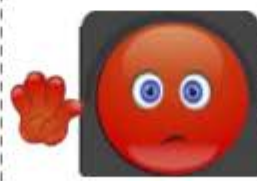
INR ≤ 1,5



INR ≤ 1,7



INR > 1,7

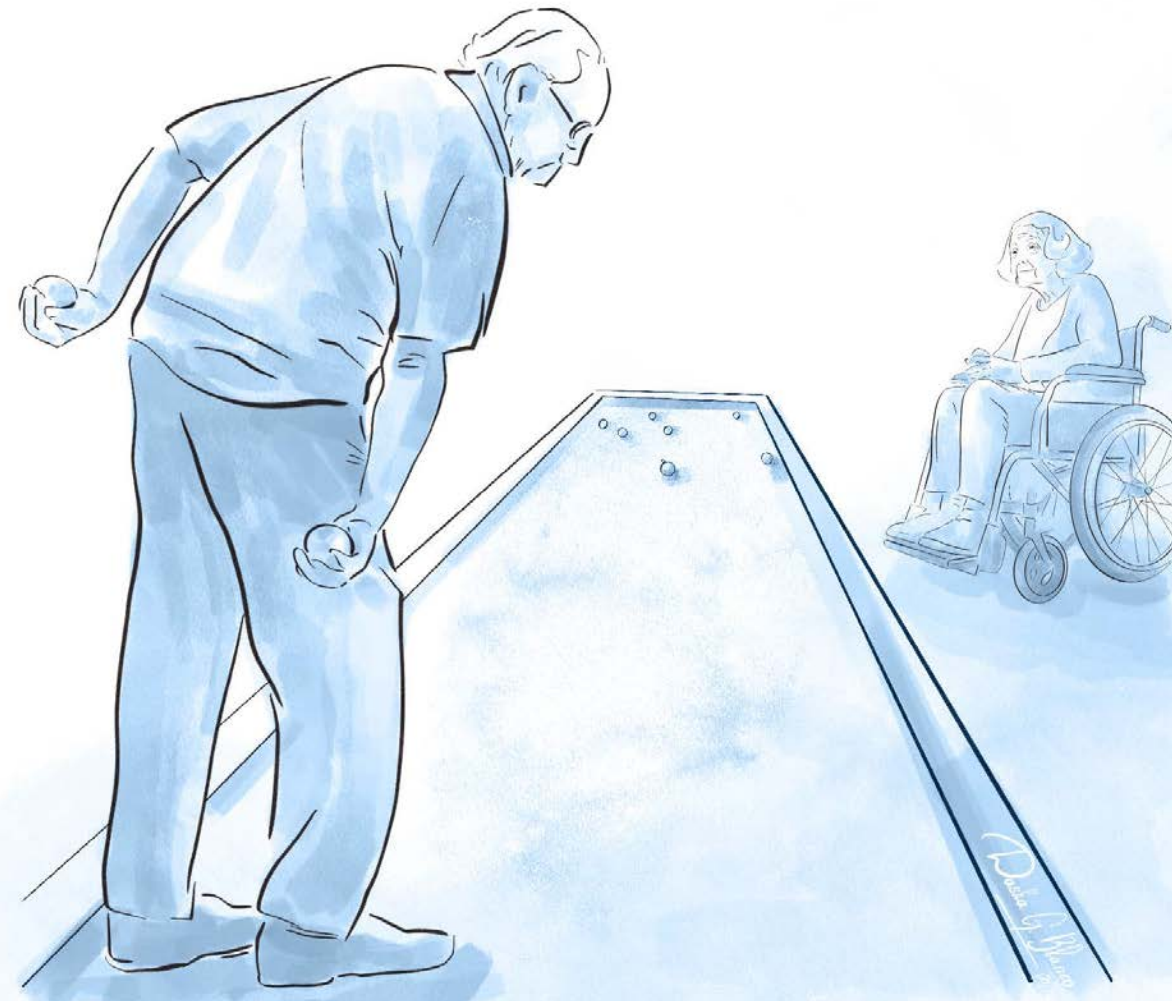


REINICIO Y TROMBOPROFI.

12 H

24-48 H
AVK +

INR ≥ 2
AVK



D emora ≤ 48 h

A BNP (pre + AG vs AI /PO)

T romboprof: **AAS / AVK / ACOD**

A nemia: **Fe ++ /ATX / T de 1 en 1**

F isico y cognitivo: **BNP/BIS 60-80**

O steomalacia: **Vitamina D**

N utrición: **Hiperproteicos**

O steoporosis: **Tto**



20%

50%

7%

23%

Dra. Concha Cassinello



MUCHAS GRACIAS Y FELIZ NAVIDAD

Dra. Concha Cassinello