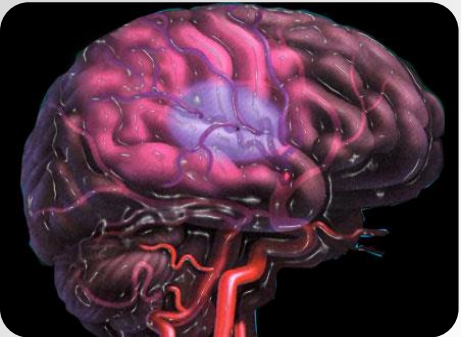




Cuestiones prácticas en el manejo del ictus



Francisco Moniche Álvarez
Unidad de Ictus

Servicio de Neurología. H.U. Virgen del Rocío

35º Congreso Sociedad Andaluza
de Medicina Interna (SADEMI)

6º Encuentro de Enfermería de
Medicina Interna de Andalucía

6-7 de Junio 2019

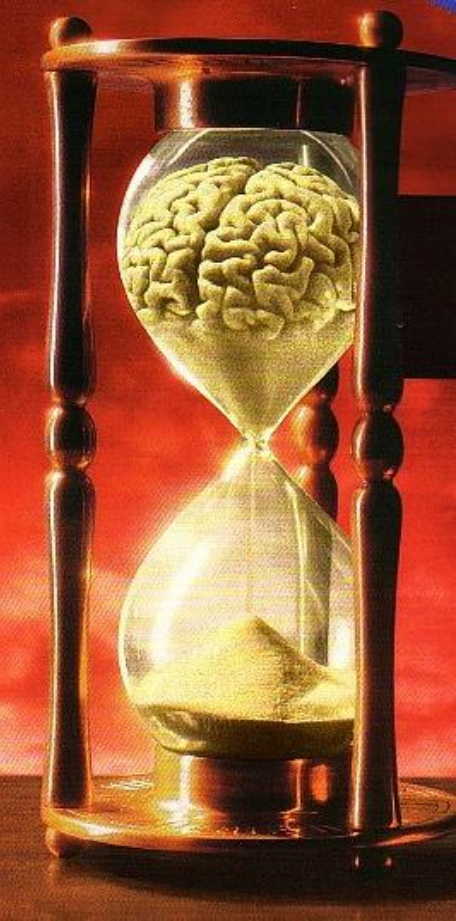
Campus Docente y Hospital S. Juan de Dios del Aljarafe, Bormujos, Sevilla



Sademi
Sociedad Andaluza de Medicina Interna

CONFLICTO INTERESES

- ✓ Investigador principal de RESPECT-ESUS y NAVIGATE-ESUS
- ✓ Ponente: Boehringer, Bayer, Daiichi, Bristol/Pfizer
- ✓ Advisory Board: Boehringer, Bayer



Código Ictus en paciente con ACOD



Crterios de fibrinólisis + ACO



INR <1,7

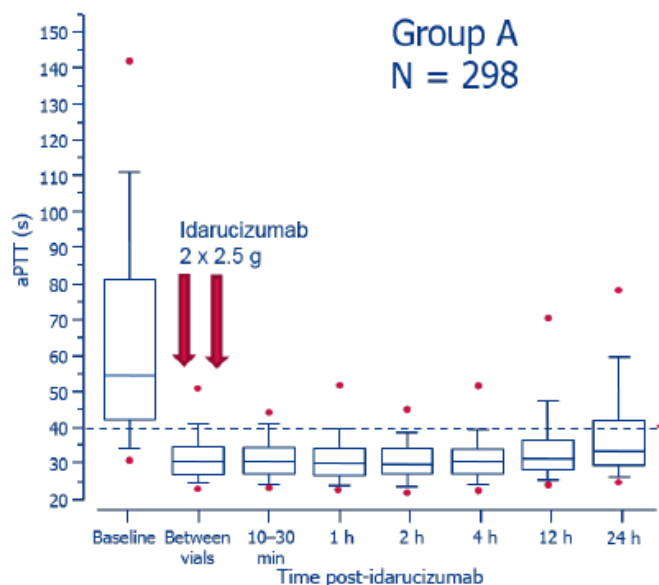


¿¿??



- Al menos 48h + coagulación normal
- Dabigatrán: TTPa-ratio <1,2 excluye efecto anticoagulante
- AntiXa: Determinación antiXa (niveles <0,2 U/mL)

Fibrinólisis + dabigatrán-idarucizumab



Pt no.	Sex	Age, yrs	Dose, mg BID	Indication for OAC	CrCl mL/min
1	M	75	110	NVAF	69.2
2	F	40	110	CMP*	102
3	M	83	110	NVAF	58.4
4	M	76	110	NVAF	75
5	F	67	150	NVAF	NA
6	F	86	110	NVAF	52.2
7	F	86	110	NVAF	NA
8	F	58	150	ESUS*	89
9	M	53	150	NVAF	112
10	F	75	110	NVAF	64
11	M	80	110	NVAF	47
12	F	94	110	NVAF	48.3
13	M	85	150	NVAF	73.5
14	F	78	110	NVAF	52
15	F	84	110	NVAF	112

Pt no.	Sex	Age, yrs	Dose, mg BID	Indication for OAC	CrCl mL/min
16	M	77	110	NVAF	79
17	M	54	150	NVAF	72
18	F	89	110	NVAF	57.5
19	F	90	110	NVAF	64
20	M	62	150	NVAF	82.3
21	M	84	110	NVAF	59.5
22	M	60	150	NVAF	95.6
23	M	74	110	NVAF	75.2
24	M	73	110	NVAF	43
25	F	71	110	NVAF	NA
26	F	73	110	NVAF	69.3
27	F	79	110	NVAF	52.5
28	M	71	110	NVAF	NA
29	M	74	150	NVAF	NA
30	F	72	110	NVAF	55.8

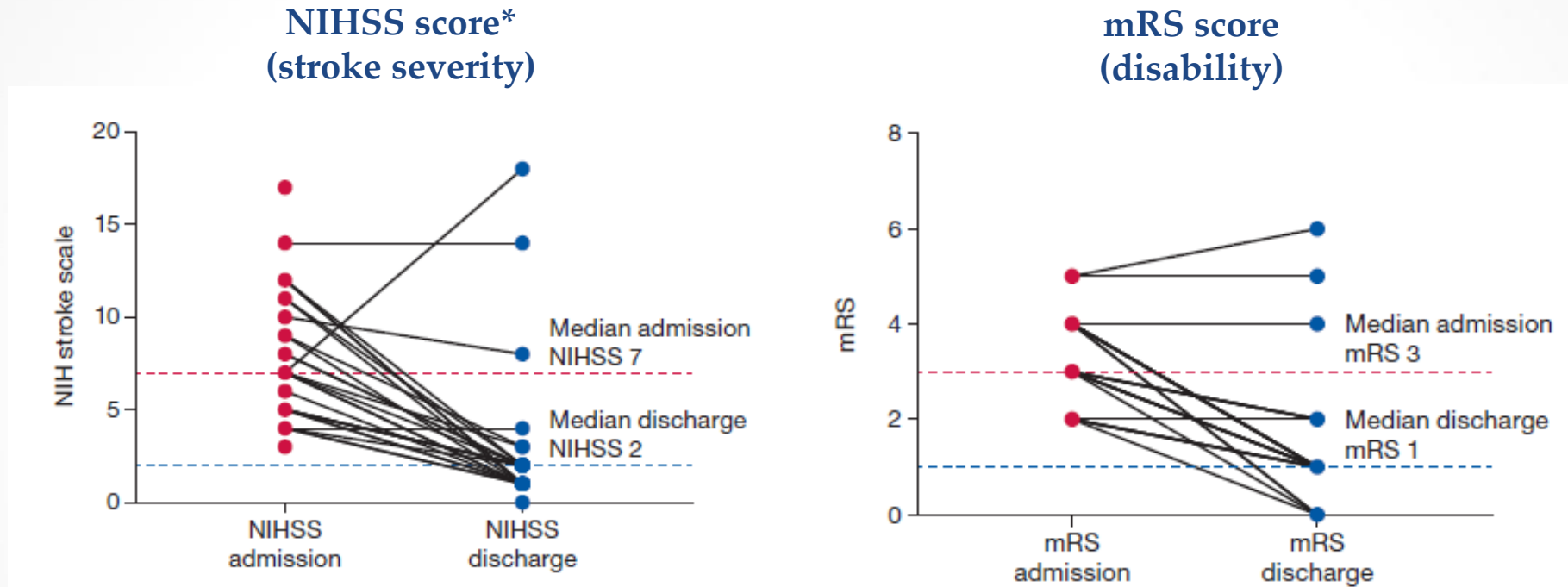
*Off-label indication; CMP, cardiomyopathy; ESUS, embolic stroke of undetermined source; NA, not applicable

Diener H-C et al. ESOC 2017

Moniche F. SADEMI 2019

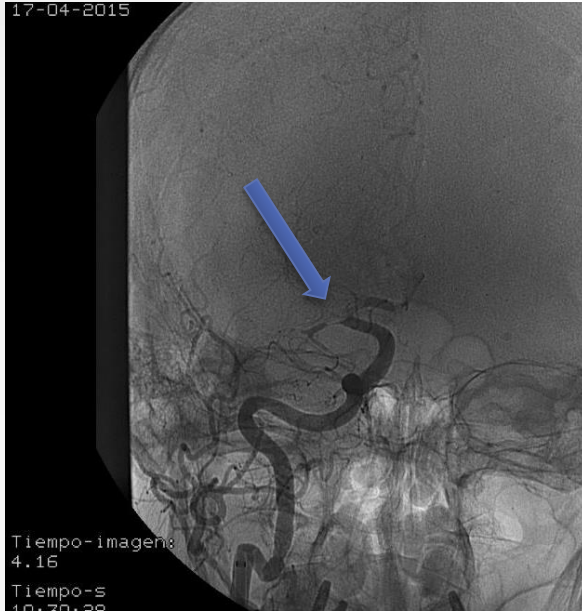
5

Evolución neurológica post-tPA

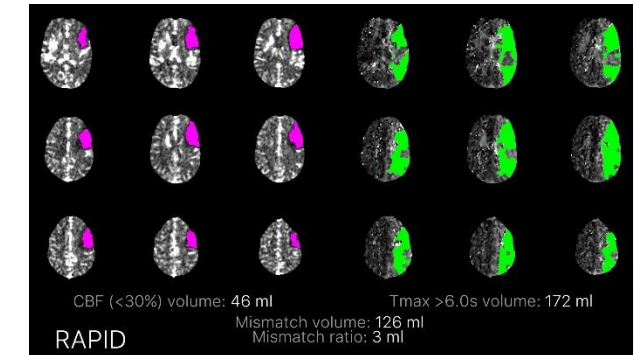
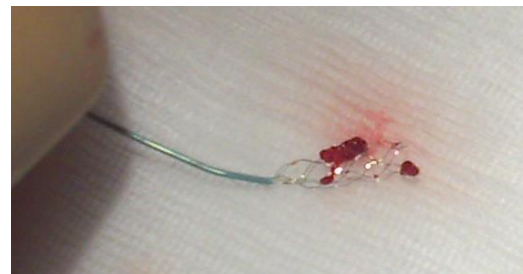


No intracranial bleeding complications occurred and reversal of anticoagulation with idarucizumab allowed patients to benefit from effective thrombolysis

Ensayos trombectomía



NNT=4 to 5

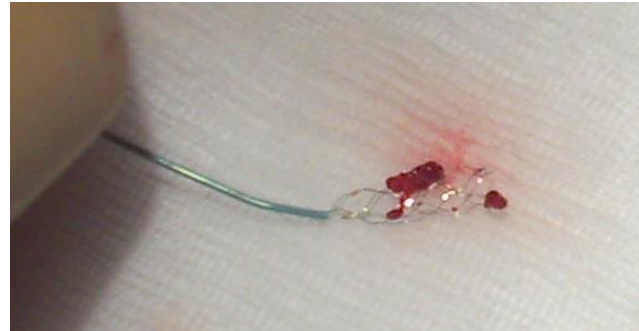


Disminución de mortalidad y discapacidad con el uso de
Trombectomía mecánica – Nivel 1A

Experiencia HUVR

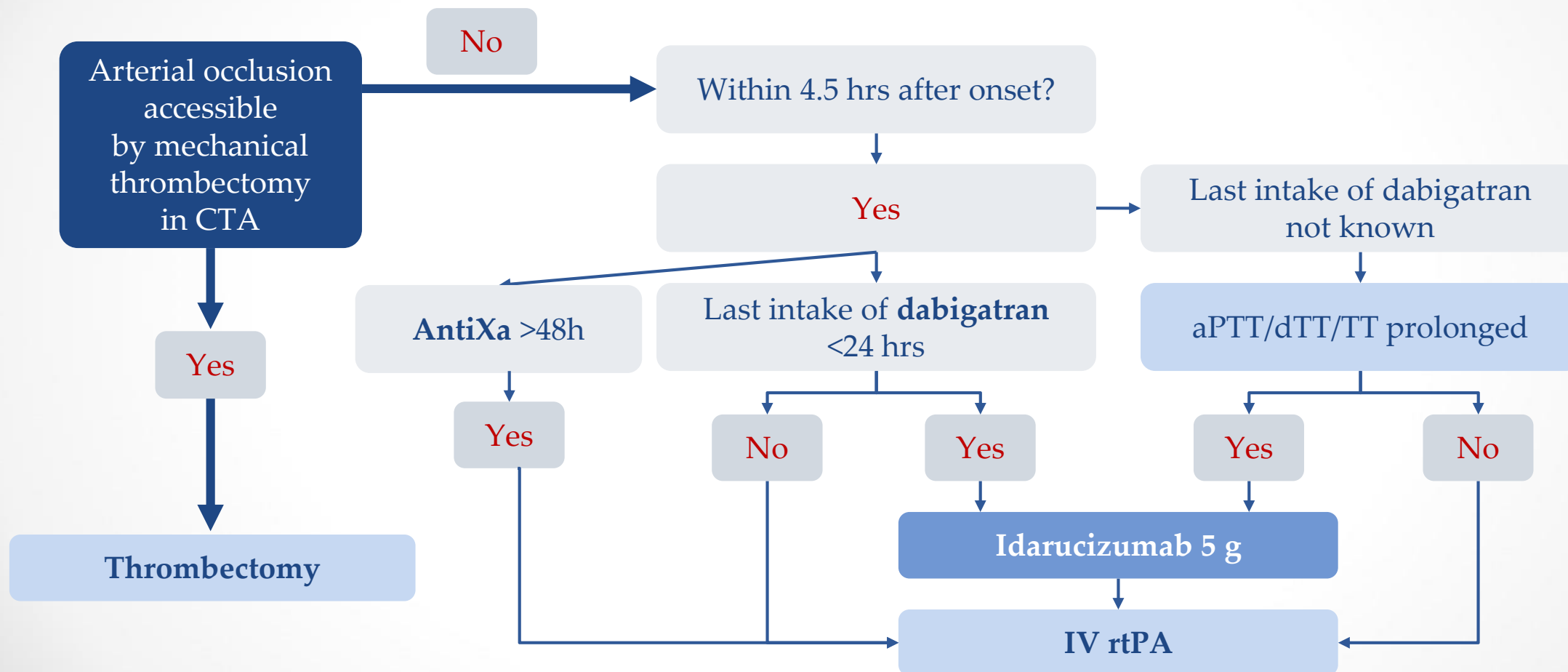
34 trombectomías en ACODs:

- 10 con dabigatran
- 11 con rivaroxaban
- 10 con apixaban
- 3 con edoxaban



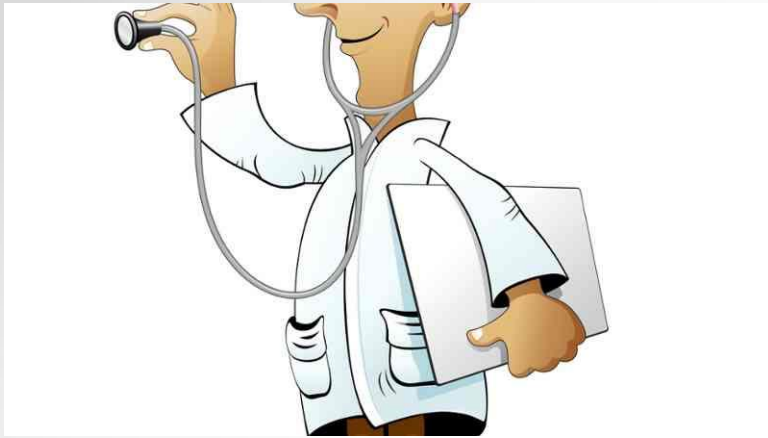
- ✓ 4 Transformaciones hemorrágicas asintomáticas (11,7%)
- ✓ 0% transformaciones hemorrágicas sintomáticas

Algoritmo manejo ACOD



aPTT, activated partial thromboplastin time; CTA, computed tomography angiography; dTT, diluted thrombin time; TT, thrombin time

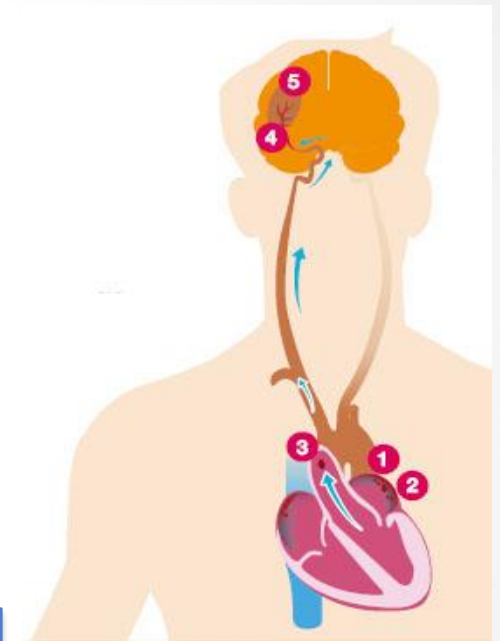
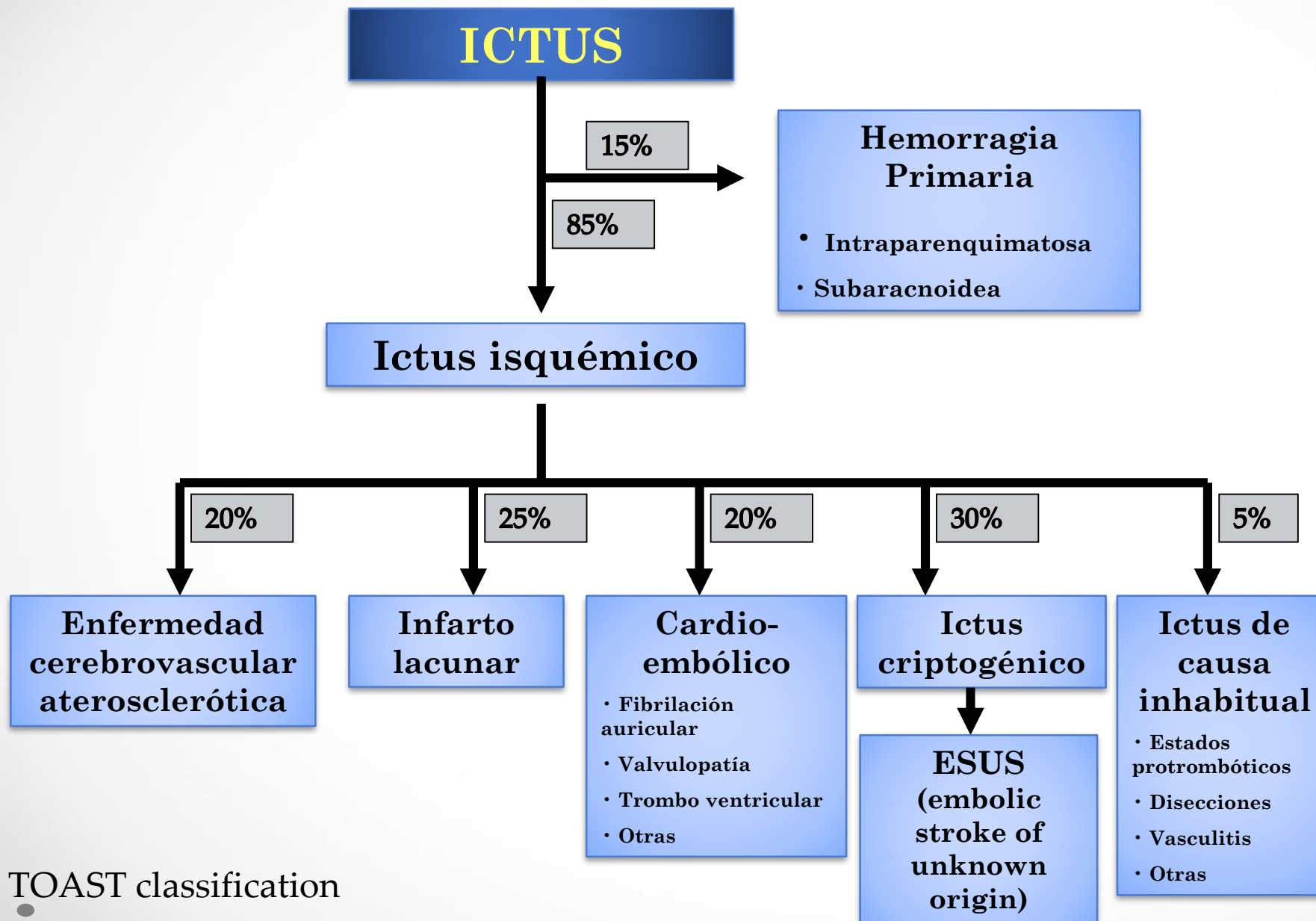
Adaptado de: Diener et al. Int J Stroke 2017



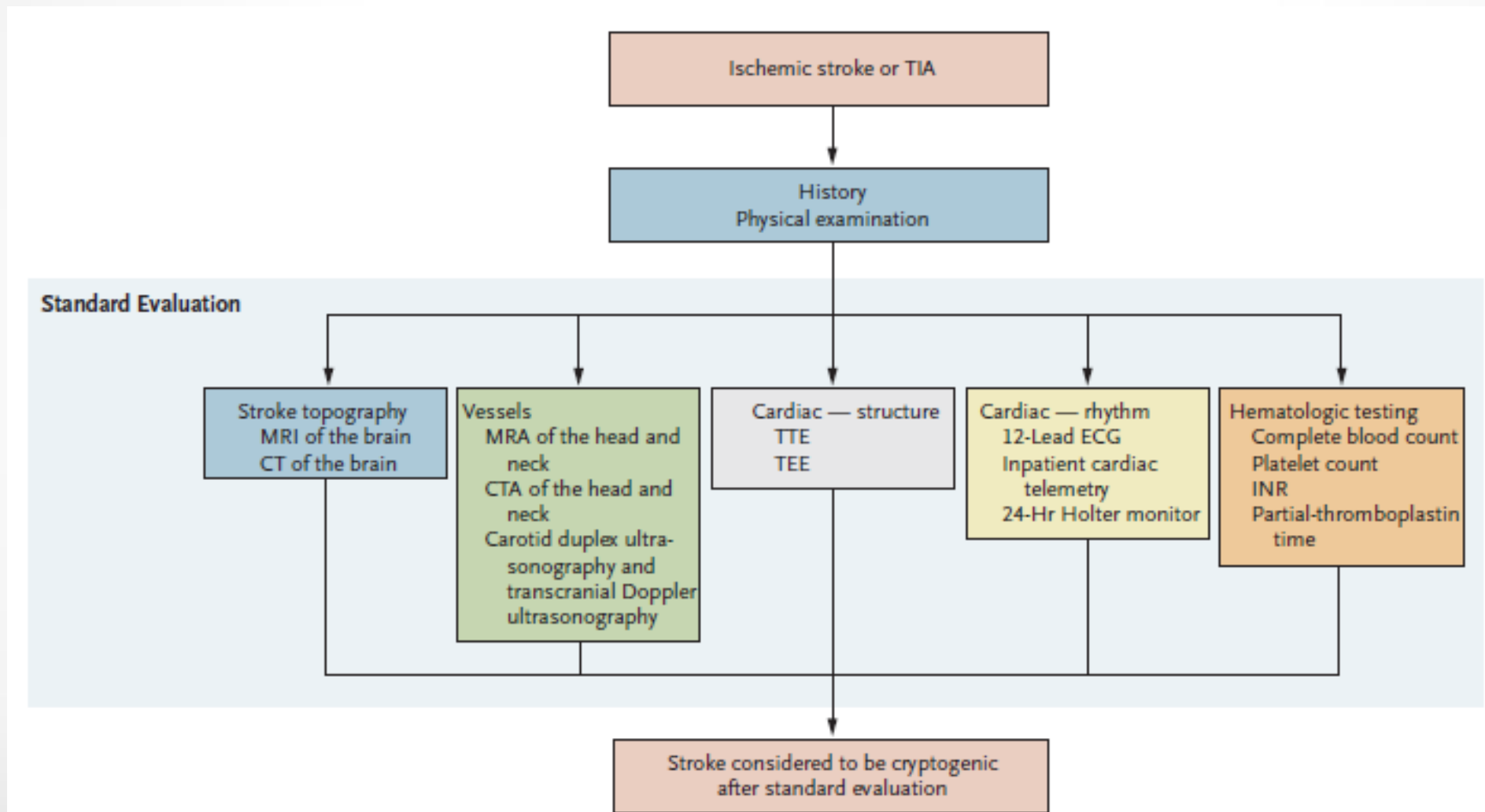
Ictus criptogénico... ¿Estudio & tratamiento?

...

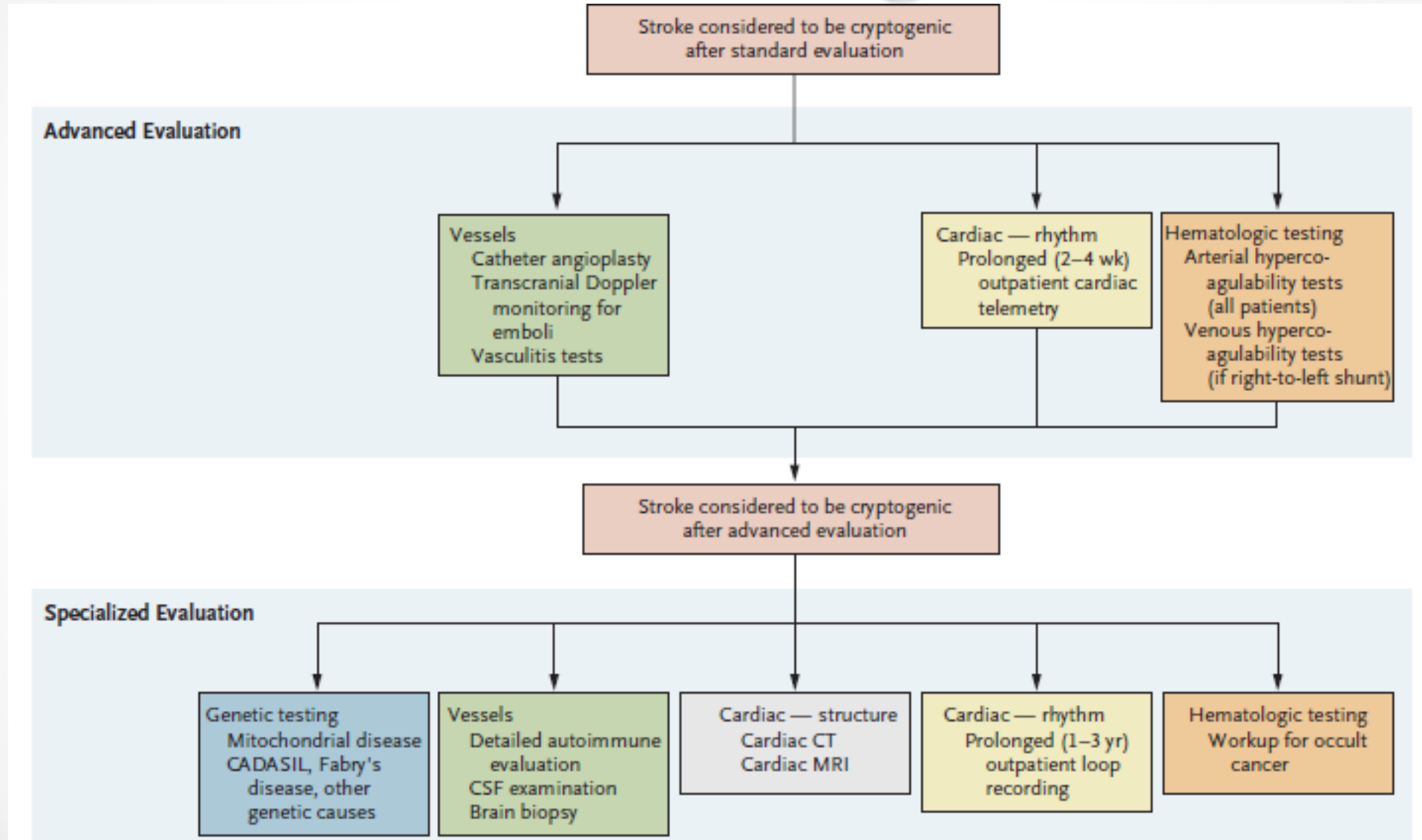




Evaluación diagnóstica

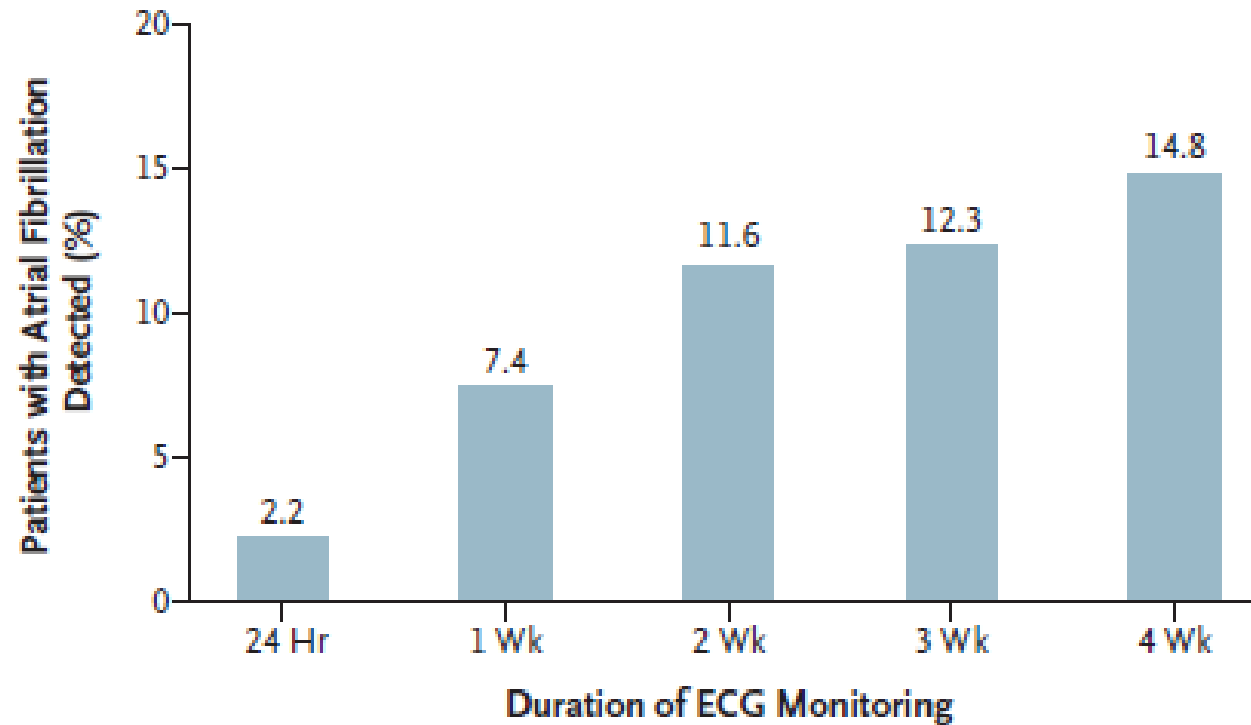
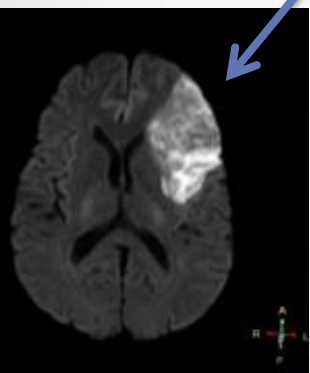


Evaluación diagnóstica



ESUS (embolic stroke of unknown origin)

Ensayos clínicos: monitorización a largo plazo

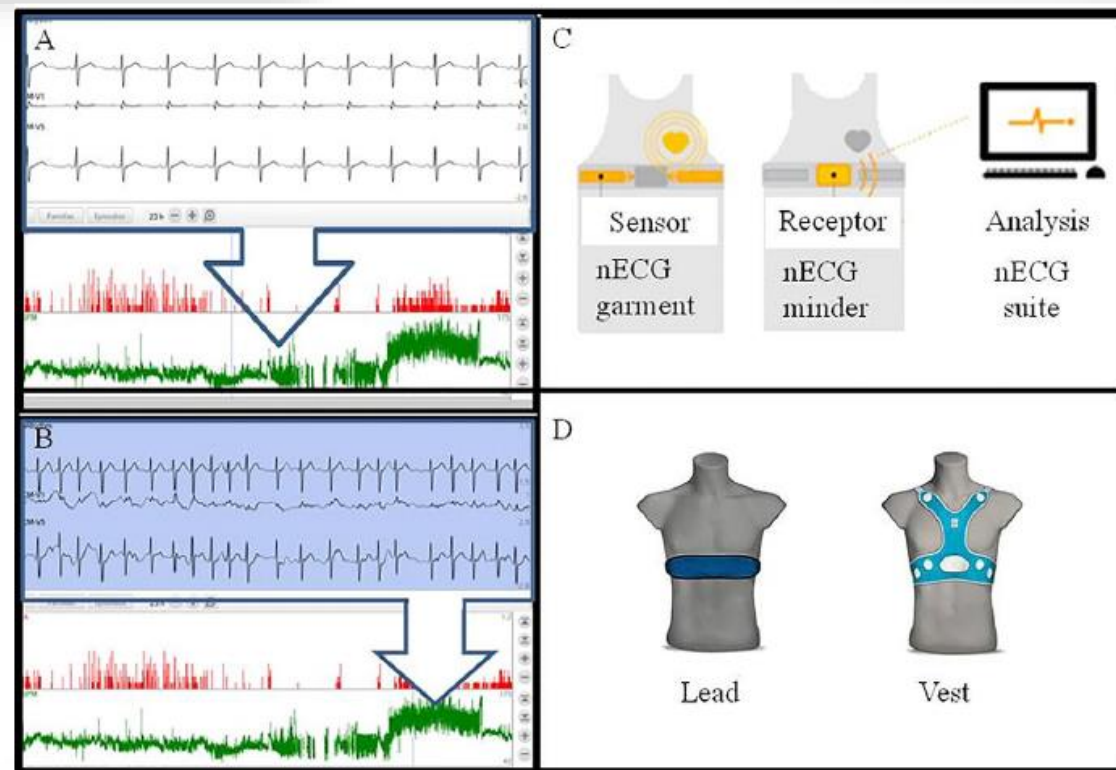
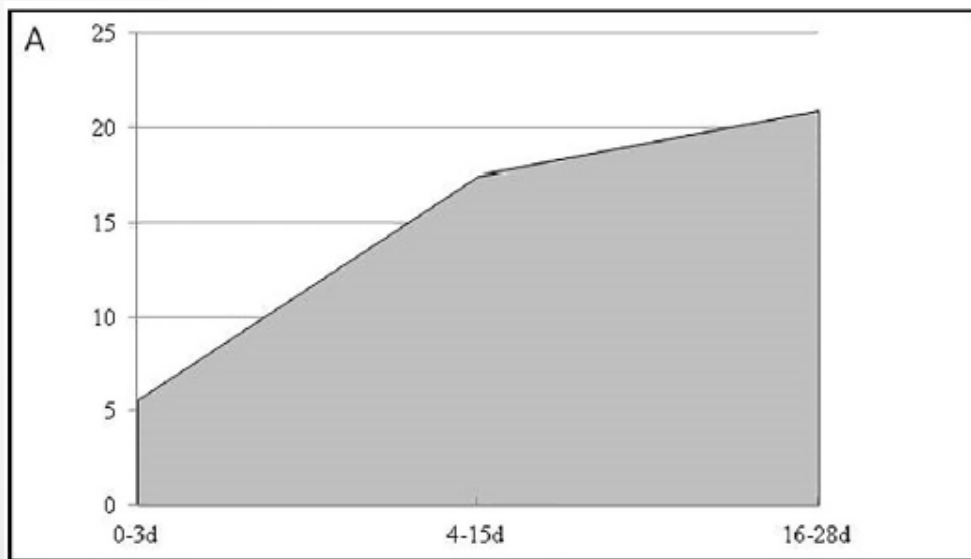


CONCLUSIÓN: Debe considerarse monitorización extendida en pacientes con ictus criptogénico

Yield of atrial fibrillation detection with Textile Wearable Holter from the acute phase of stroke: Pilot study of Crypto-AF registry

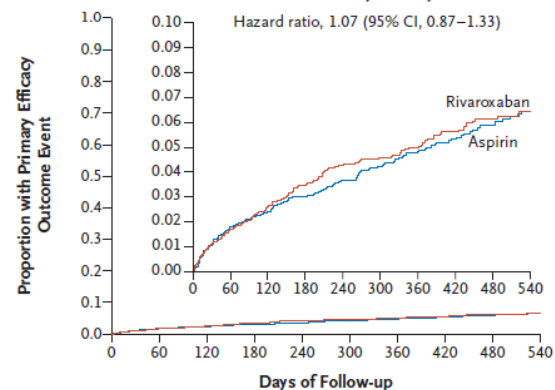


Jorge Pagola ^{a,*,1}, Jesus Juega ^{a,1}, Jaume Francisco-Pascual ^{b,1}, Angel Moya ^{b,1}, Mireia Sanchis ^{a,1}, Alejandro Bustamante ^{c,1}, Anna Penalba ^{c,1}, Maria Usero ^{d,1}, Elisa Cortijo ^{d,1}, Juan F. Arenillas ^{d,1}, Ana I. Calleja ^{d,1}, Maria Sandin-Fuentes ^{e,1}, Jeronimo Rubio ^{e,1}, Fernando Mancha ^{f,1}, Irene Escudero-Martinez ^{f,1}, Francisco Moniche ^{f,1}, Reyes de Torres ^{f,1}, Soledad Pérez-Sánchez ^{f,1}, Carlos E. González-Matos ^{f,1}, Ángela Vega ^{f,1}, Alonso A. Pedrote ^{g,1}, Eduardo Arana-Rueda ^{g,1}, Joan Montaner ^{f,1}, Carlos A. Molina ^{a,1}, On behalf of CryptoAF investigators:



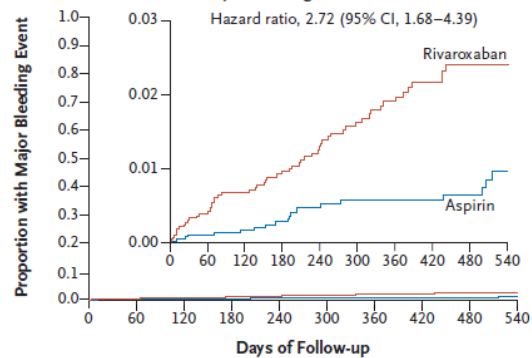
Ensayos ESUS

A Kaplan–Meier Curves for Time to Event in the Primary Efficacy Outcome



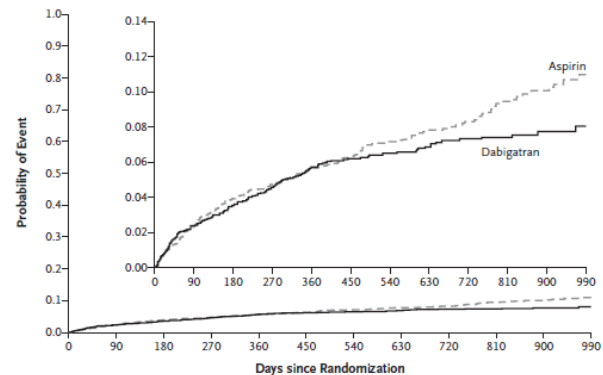
No. at Risk										
Rivaroxaban	3609	3211	2854	2525	2156	1874	1584	1306	1046	786
Aspirin	3604	3205	2858	2531	2166	1880	1579	1319	1036	779

B Kaplan–Meier Curves for Time to Major Bleeding Event



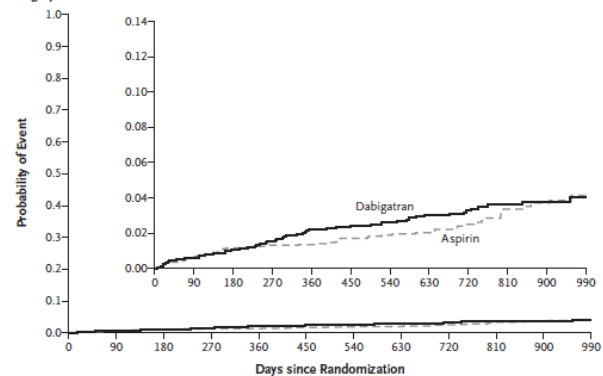
No. at Risk										
Rivaroxaban	3609	3249	2906	2582	2206	1911	1615	1342	1071	807
Aspirin	3604	3254	2918	2597	2231	1939	1637	1371	1083	822

A First Adjudicated Recurrent Stroke



No. at Risk										
Dabigatran	2695	2620	2565	2284	2024	1738	1451	1185	944	712
Aspirin	2695	2617	2549	2297	2033	1738	1452	1163	934	704

B First Major Bleeding Episode



No. at Risk										
Dabigatran	2695	2667	2631	2355	2095	1807	1514	1239	983	736
Aspirin	2695	2662	2618	2376	2120	1815	1526	1232	984	739

- No recomendado anticoagular en ESUS
- Prevención con antiagregación
- ¿Mejor selección pacientes??

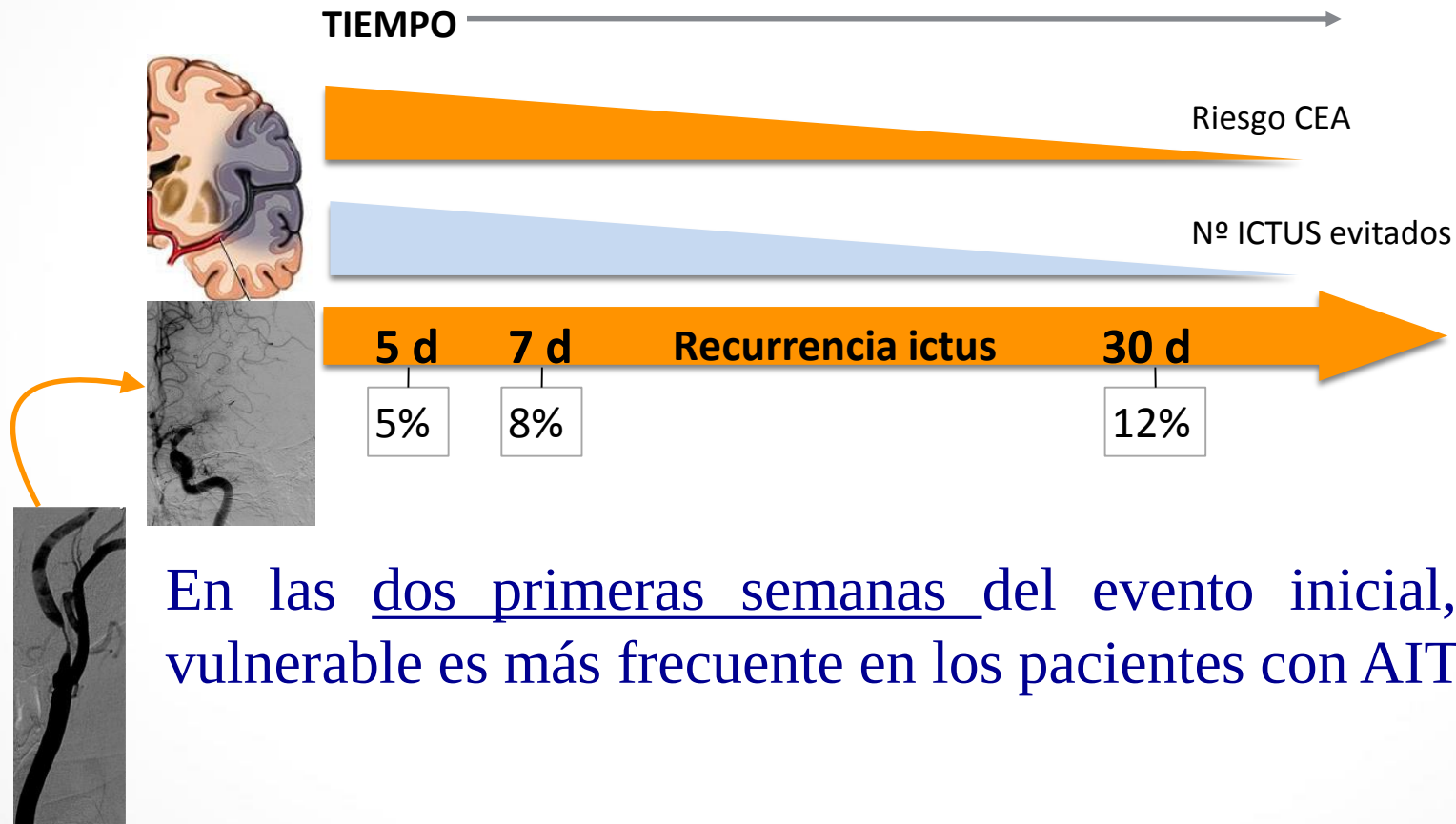
Doble antiagregación en AIT...



...

¿Cuándo? ¿¿¿Siempre???

El riesgo de recidiva de ictus es mayor en las dos primeras semanas tras el evento isquémico inicial.



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ESTABLISHED IN 1812

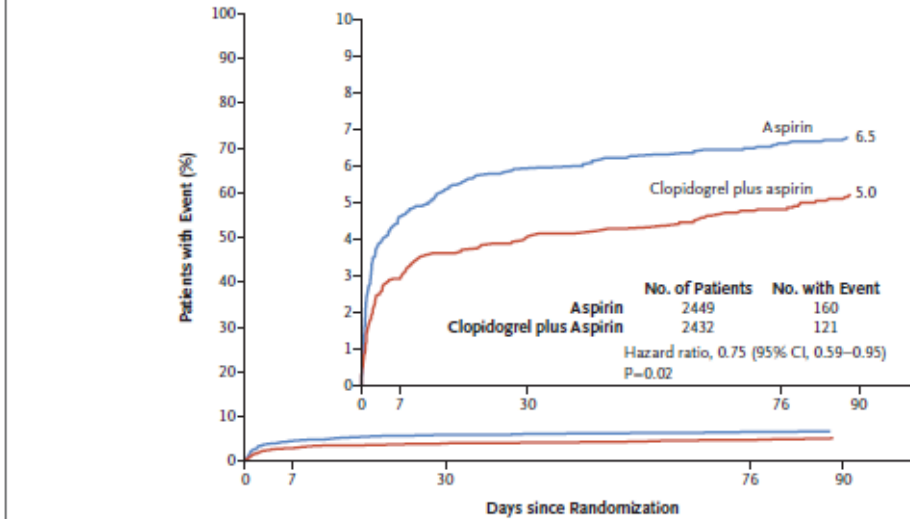
JULY 19, 2018

VOL. 379 NO. 3

Clopidogrel and Aspirin in Acute Ischemic Stroke and High-Risk TIA

S. Claiborne Johnston, M.D., Ph.D., J. Donald Easton, M.D., Mary Farrant, M.B.A., William Barsan, M.D., Robin A. Conwit, M.D., Jordan J. Elm, Ph.D., Anthony S. Kim, M.D., Anne S. Lindblad, Ph.D., and Yuko Y. Palesch, Ph.D., for the Clinical Research Collaboration, Neurological Emergencies Treatment Trials Network, and the POINT Investigators*

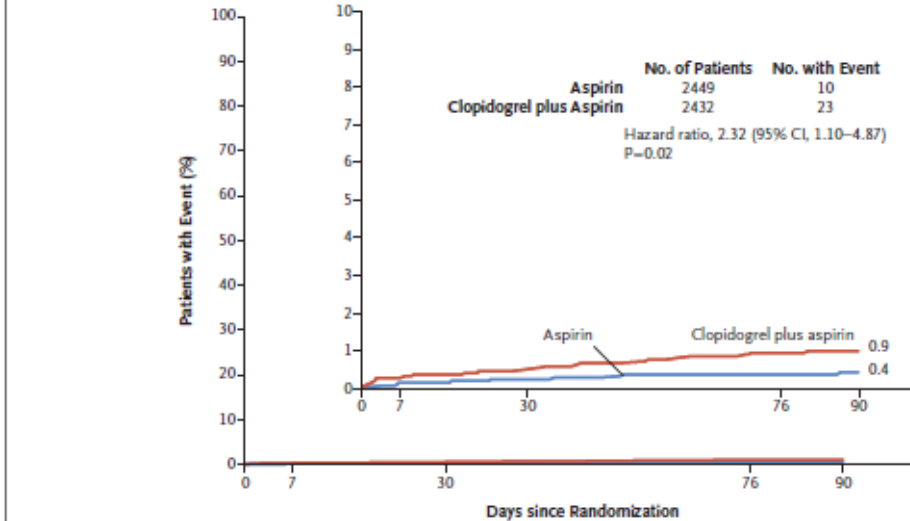
A Primary Efficacy Outcome



No. at Risk

Aspirin	2449	2269	2153	2105	1365
Clopidogrel plus aspirin	2432	2279	2178	2113	1445

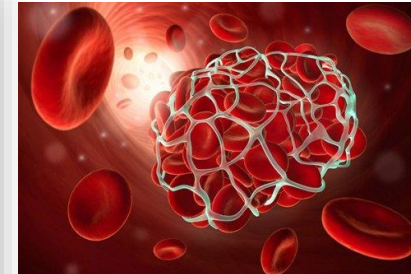
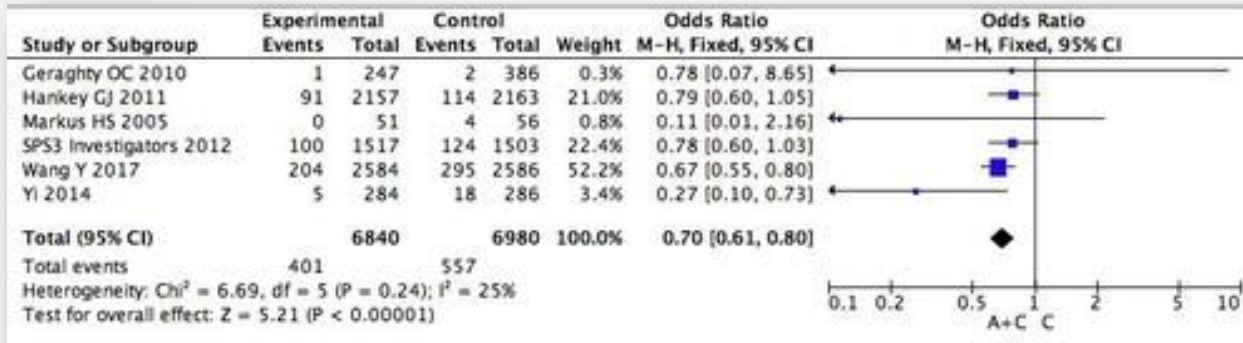
B Primary Safety Outcome: Major Hemorrhage



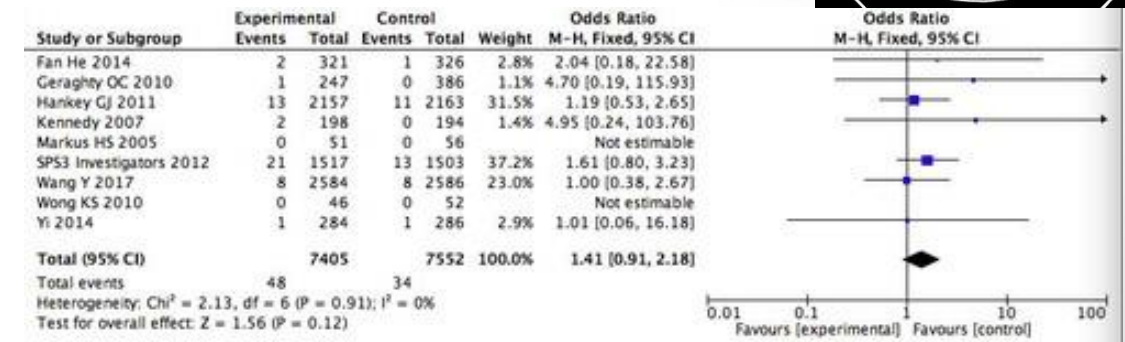
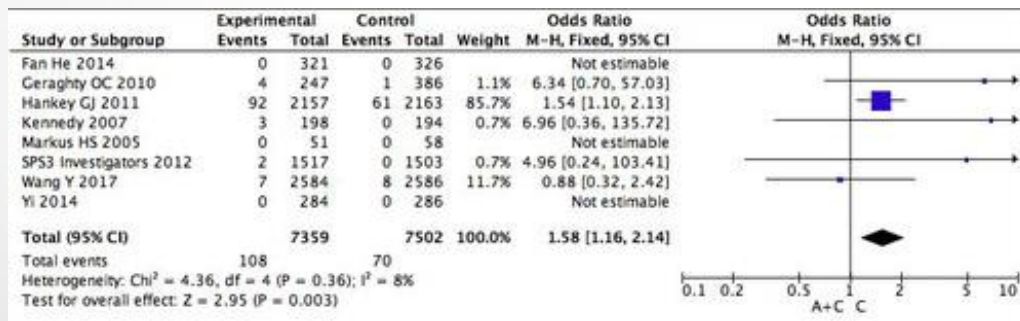
No. at Risk

Aspirin	2449	2372	2271	2230	1448
Clopidogrel plus aspirin	2432	2336	2256	2192	1505

Aspirin plus Clopidogrel *versus* Aspirin Monotherapy for Ischemic Stroke: A Meta-Analysis



Recurrencia ictus



Hemorragia moderada-grave

Hemorragia intracraneal

Recomendaciones actuales

Ictus menor / AIT no cardioembólico



AAS 100mg + Clopidogrel 75mg



AAS 100mg

Especialmente si:

- ✓ Tto previo con AAS
- ✓ Ateromatosis ipsilateral

Otras indicaciones:

- ✓ Estenosis sintomática >50% extracraneal
- ✓ Estenosis sintomática intracraneal: 3 meses
- ✓ Post-stent: 1 mes

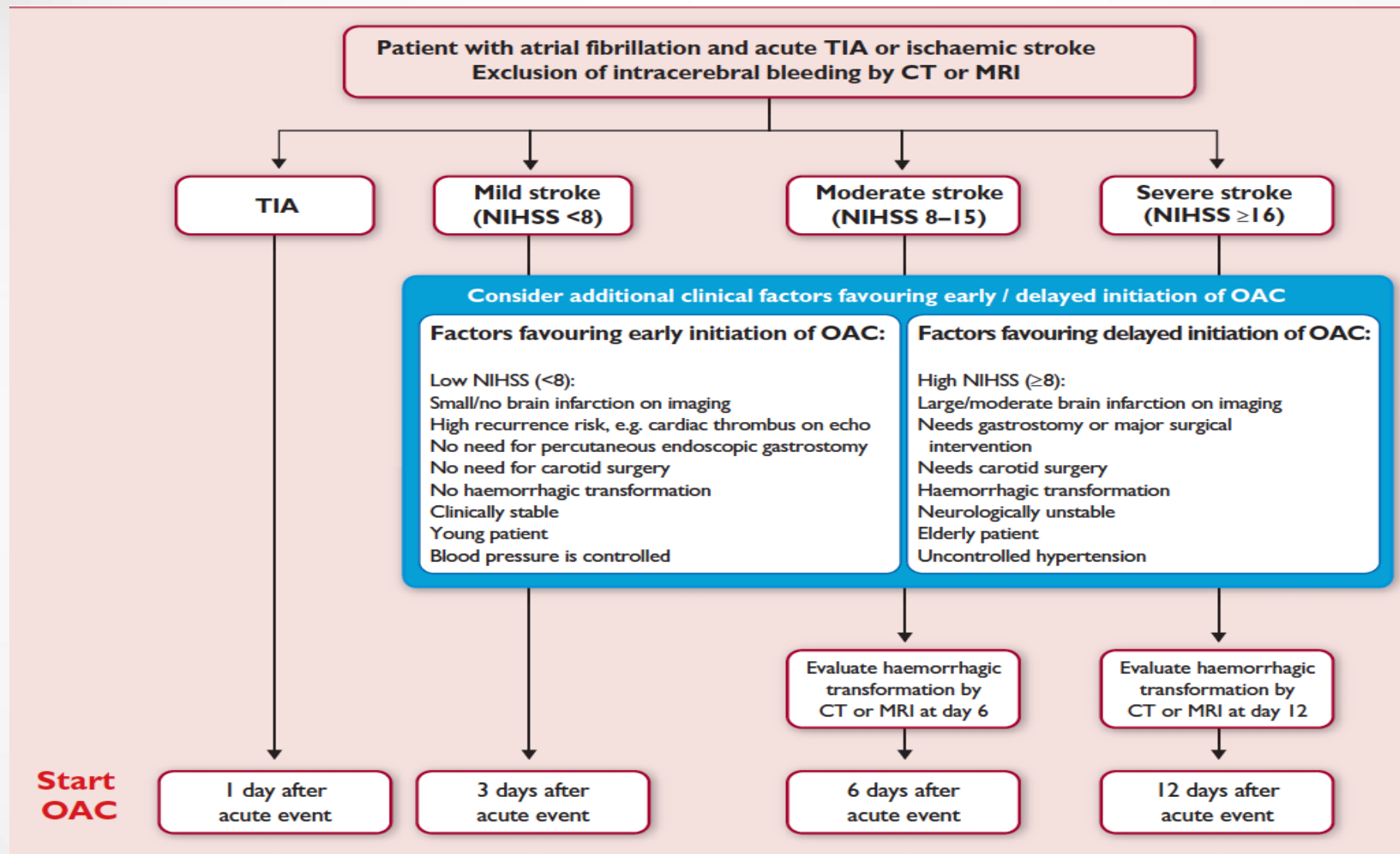
21 días

Permanente

¿Cómo REintroducir la anticoagulación tras un ictus?

...

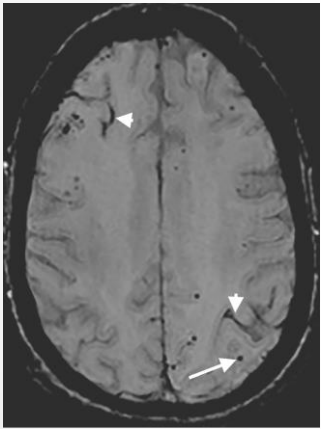




HEMORRAGIA INTRACRANEAL + FA

Retirar anticoagulación >1 mes

Evaluar CHA2DS2-VASc
+
RM cráneo (microsangrados)

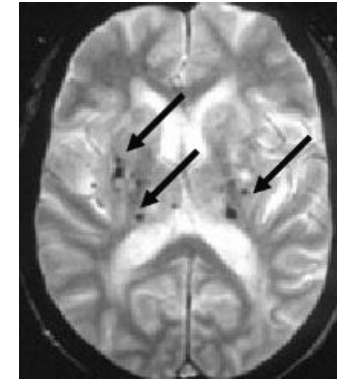


Angiopatía
amiloide
probable

Cierre de orejuela

Sangrado
lobar único

ACOD

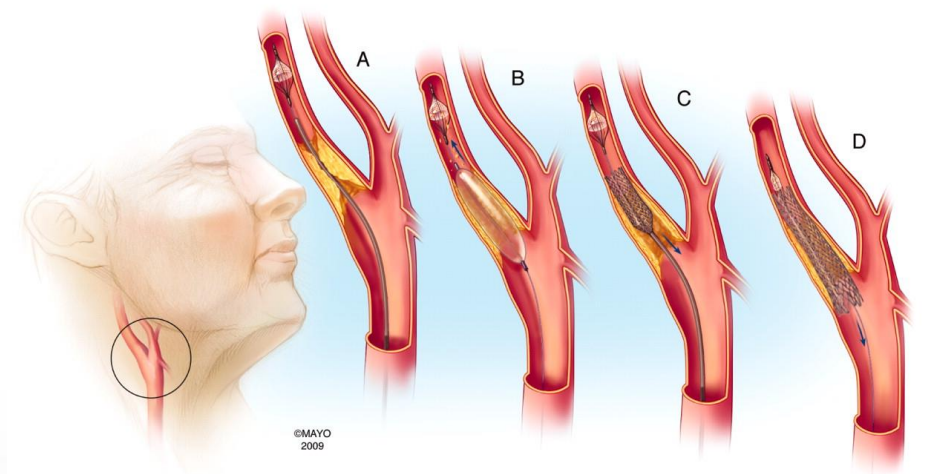


Hematoma
profundo -
Microangiopatía
HTA

Control estricto de TA



Estenosis carotídea... ¿qué hacemos?



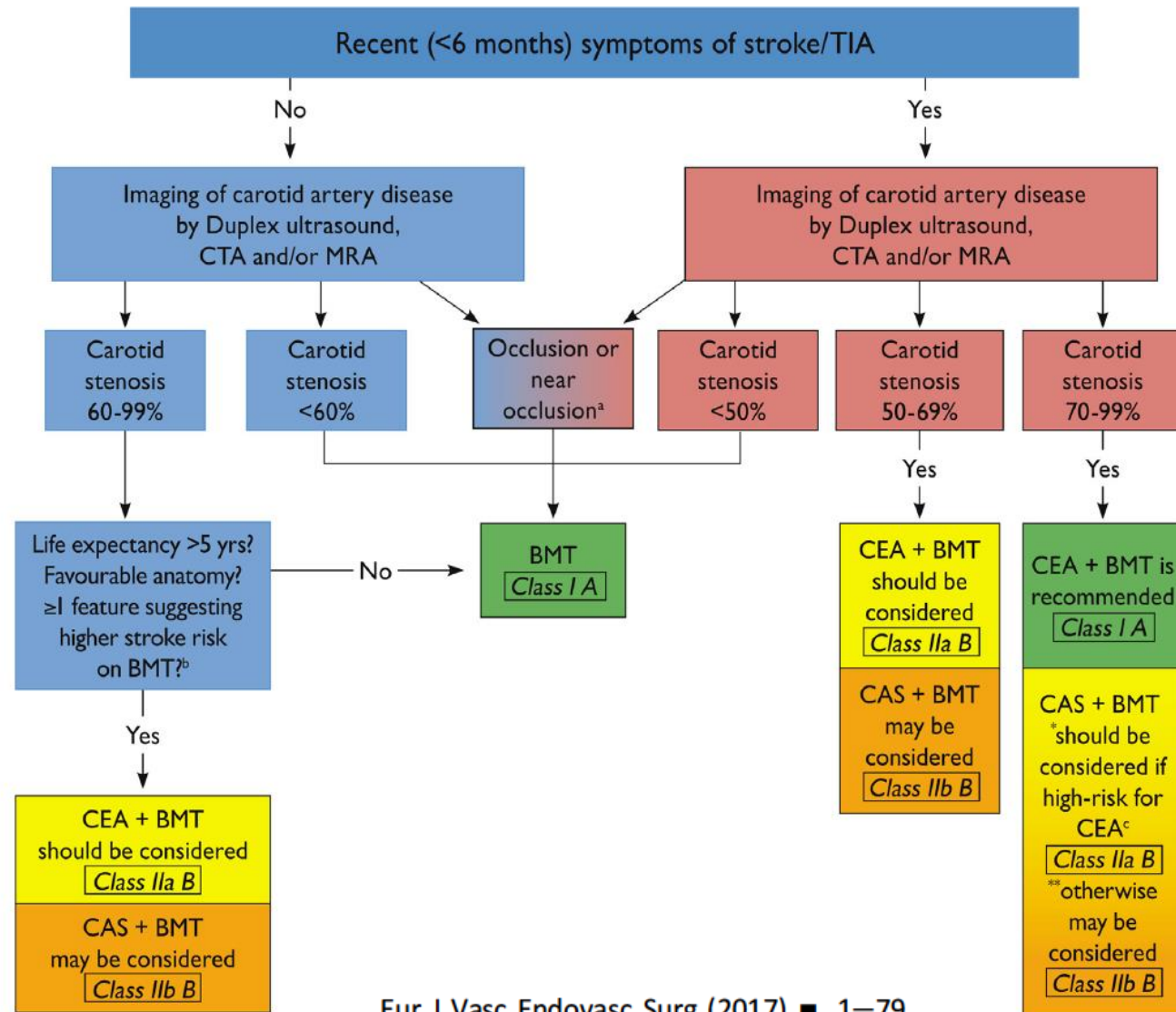
Recomendaciones de tratamiento de estenosis carotídea

- ✓ Tto médico:
AAS/clopidogrel +
estatinas + ...
- ✓ <50%: tto médico
- ✓ >70%: CEA/CAS
- ✓ 50-70%: alto riesgo,
individualizar

- ✓ Sintomáticos: Si morbimortalidad $\leq 6\%$
- ✓ Asintomáticos: Si morbimortalidad $\leq 3\%$



Management of Atherosclerotic Carotid and Vertebral Artery Disease: 2017 Clinical Practice Guidelines of the European Society for Vascular Surgery (ESVS)



Estenosis carotídea asintomática: El problema

Años 80-90

- Tratamiento: AAS
- Riesgo anual de ictus:**

2-2.5%

Año 2019

- Tratamiento: antiagregantes, estatinas, IECAS,...



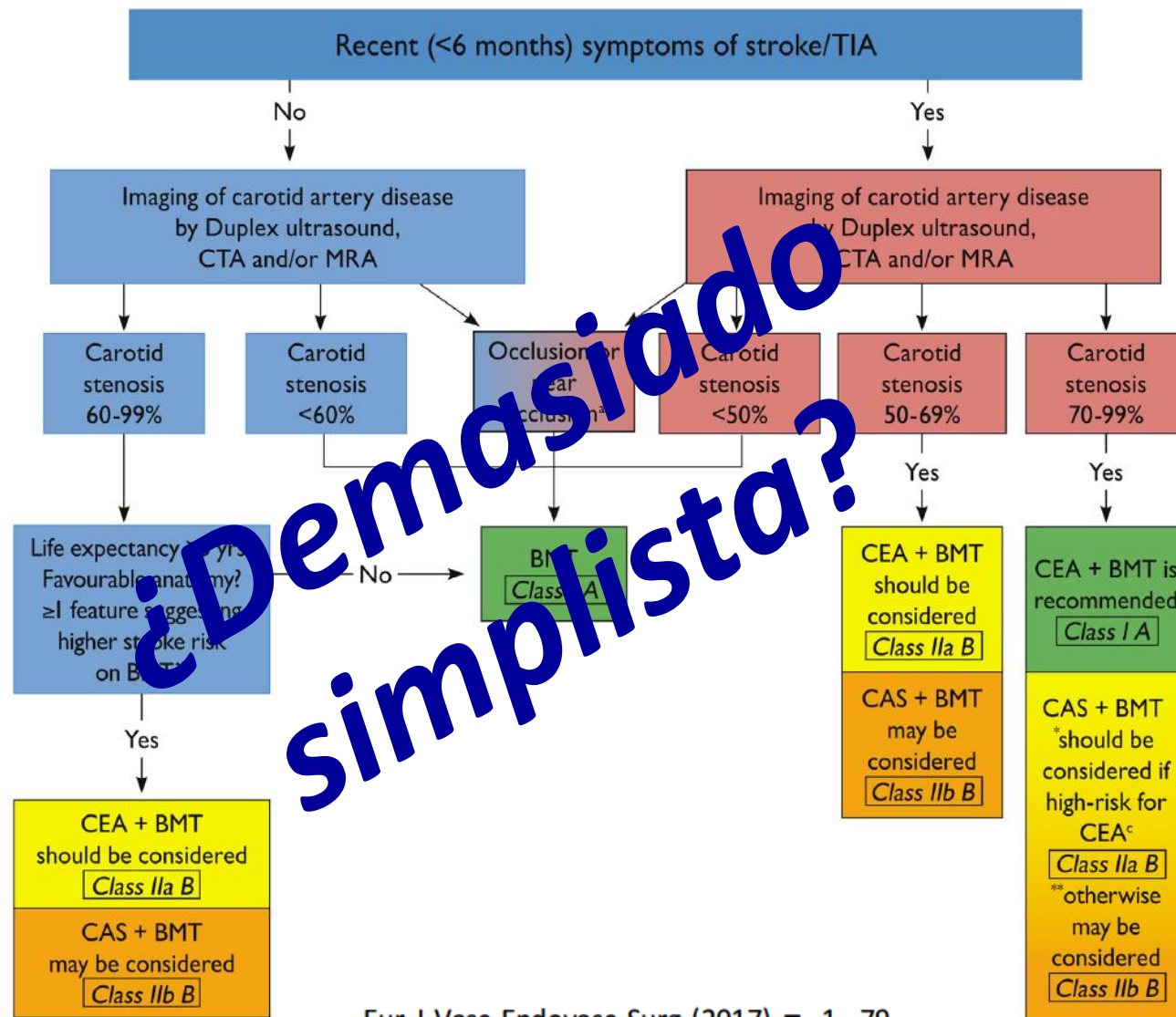
<1%

Indicaciones revascularización en asintomáticos de “alto riesgo”

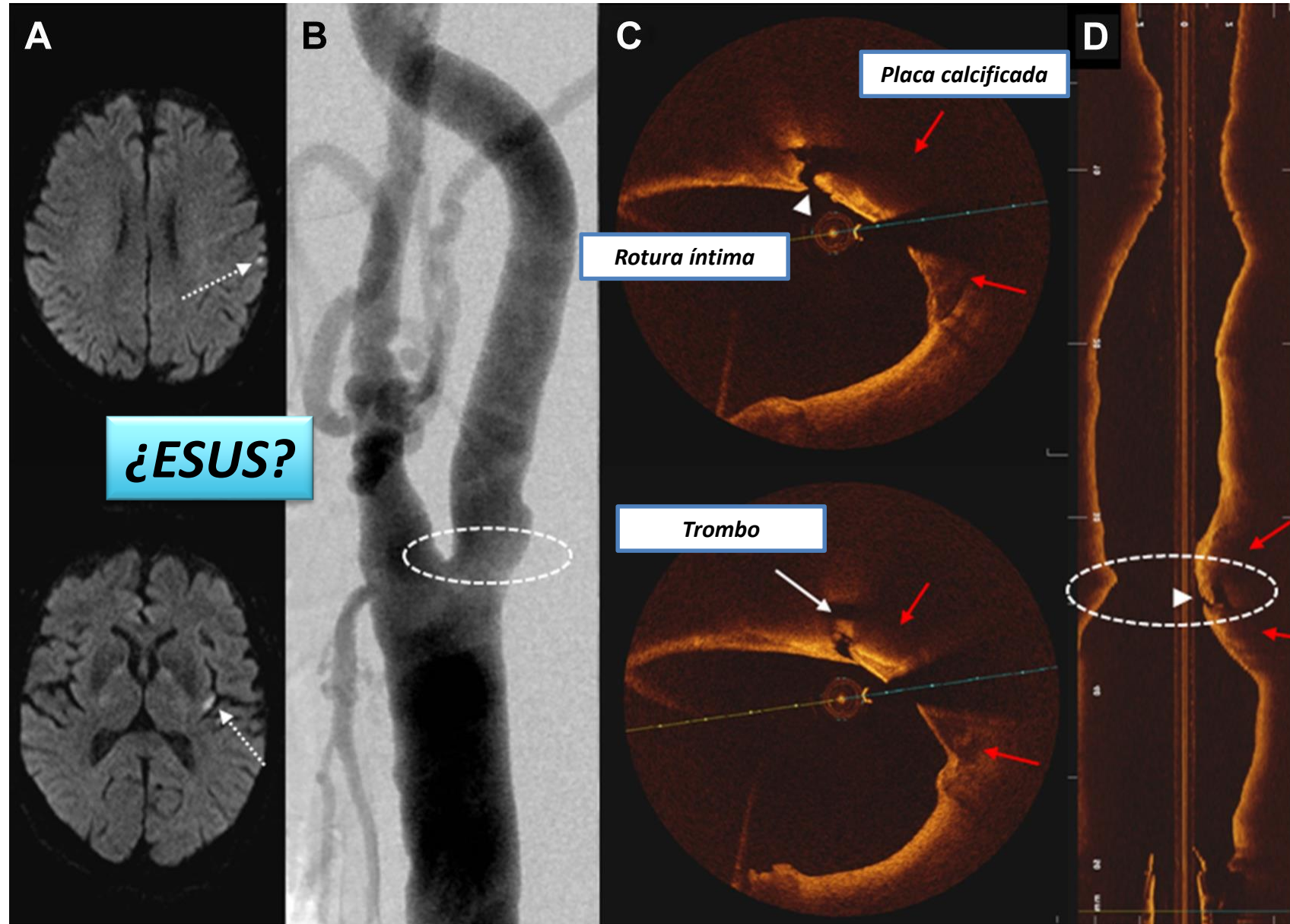
- ✓ Oclusión o estenosis grave contralateral
- ✓ Mala suplencias con vasorreactividad disminuida o exhausta
- ✓ Progresión de la estenosis
- ✓ Presencia de lesiones silentes en neuroimagen
- ✓ Microembolimos en DTC

Especialmente pacientes varones < 75 años

Management of Atherosclerotic Carotid and Vertebral Artery Disease: 2017 Clinical Practice Guidelines of the European Society for Vascular Surgery (ESVS)



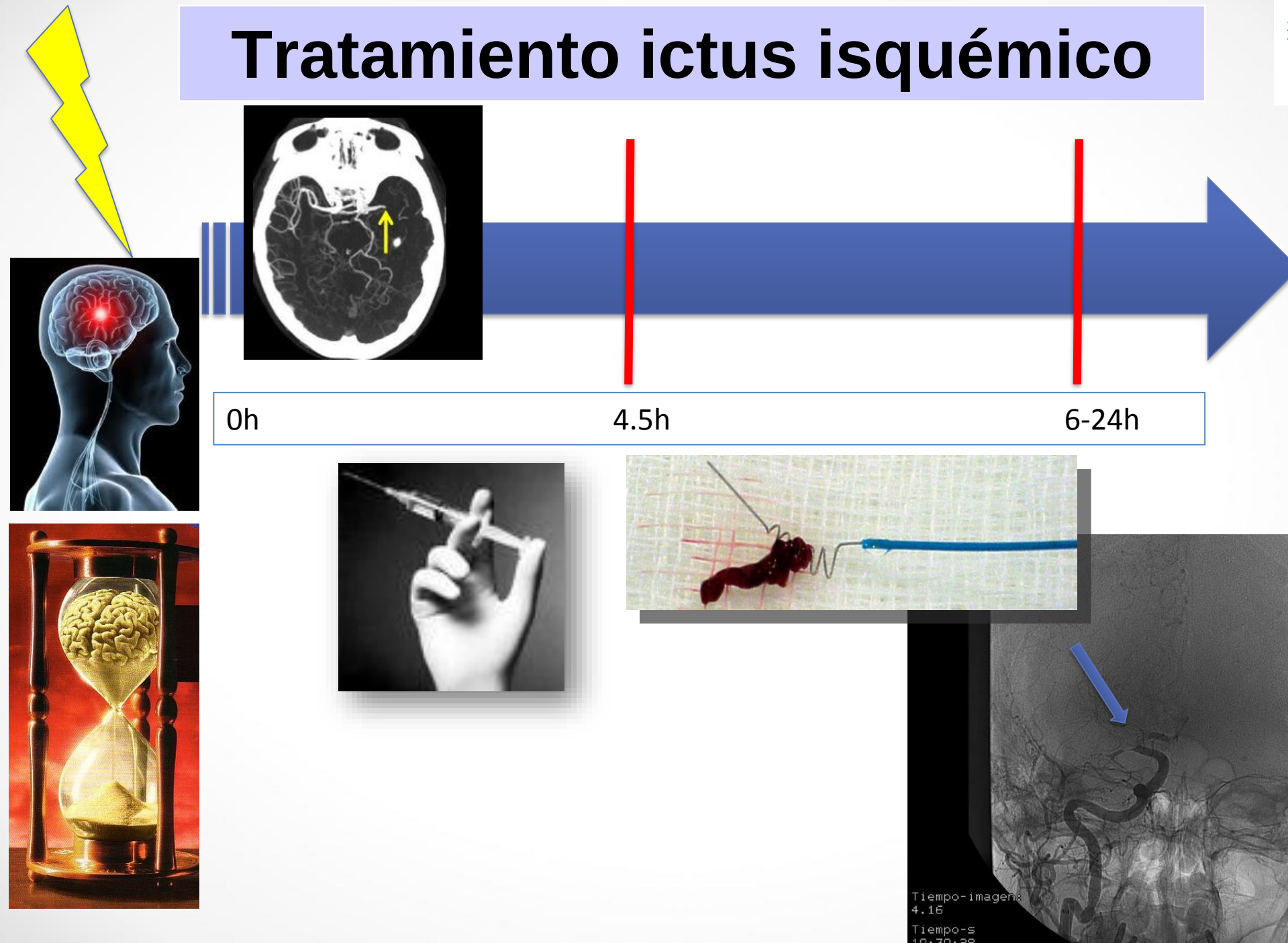
Smooth Non-obstructive Plaque With Type VI Features on Optical Coherence Tomography

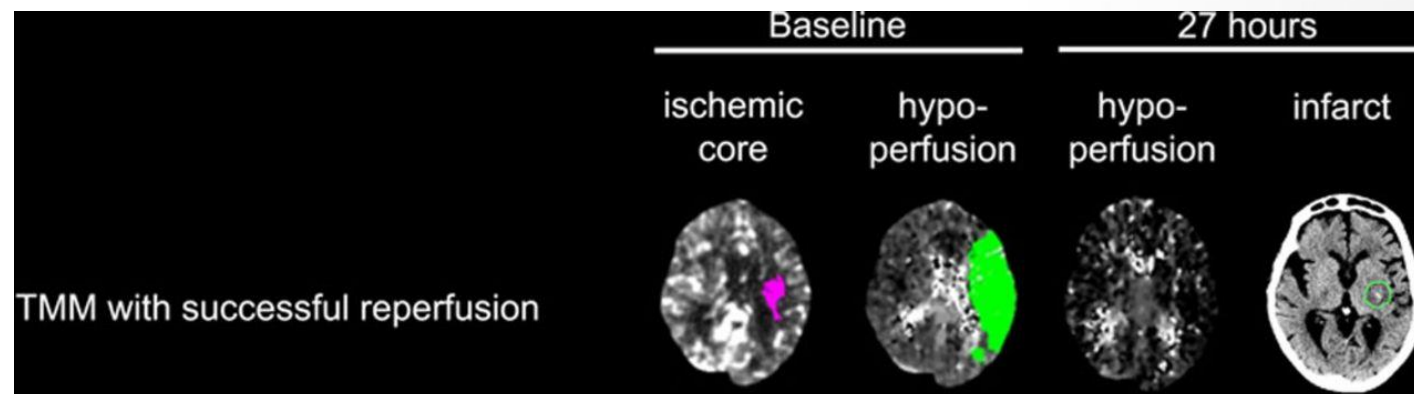
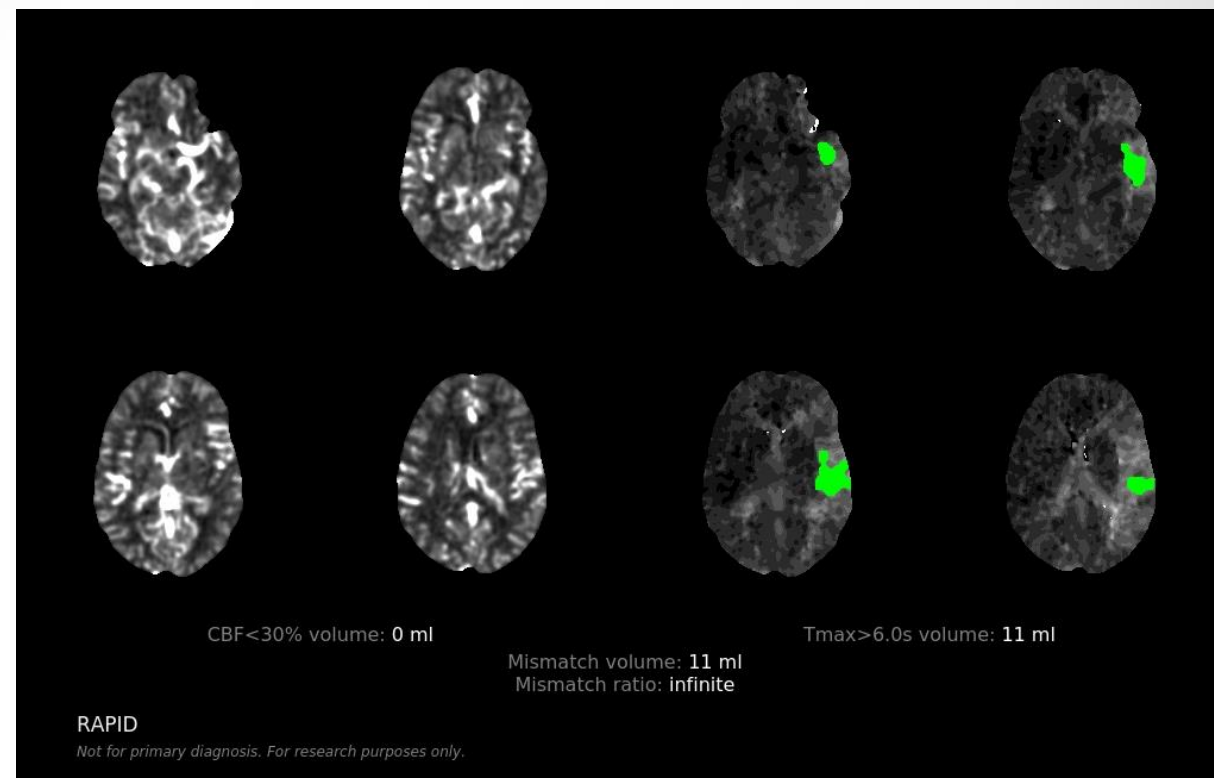
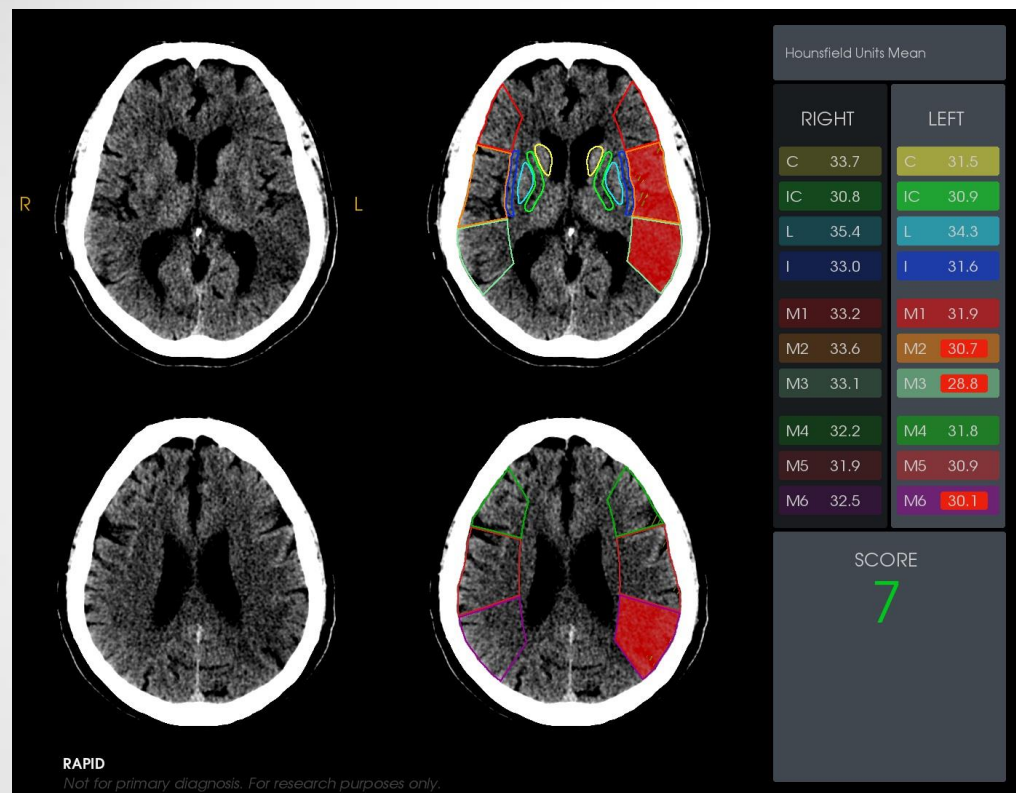


Avances en manejo agudo del ictus

...

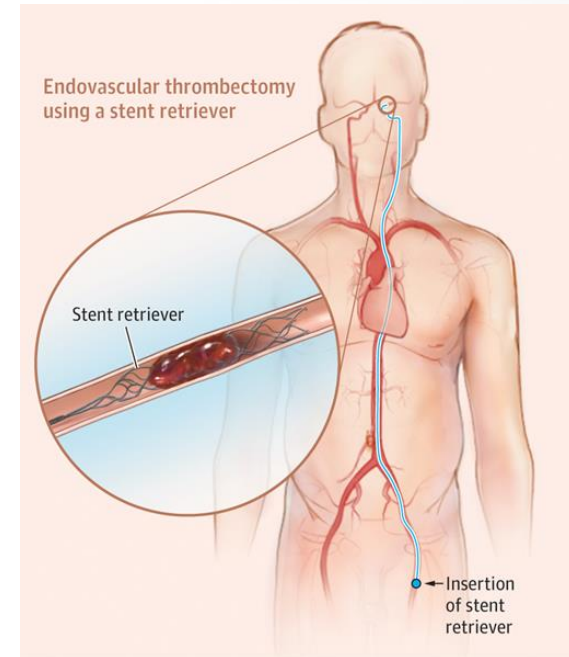
Tratamiento ictus isquémico







6-24 horas
evolución



13% vs 48%
independientes
NNT=3

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ESTABLISHED IN 1812

MAY 9, 2019

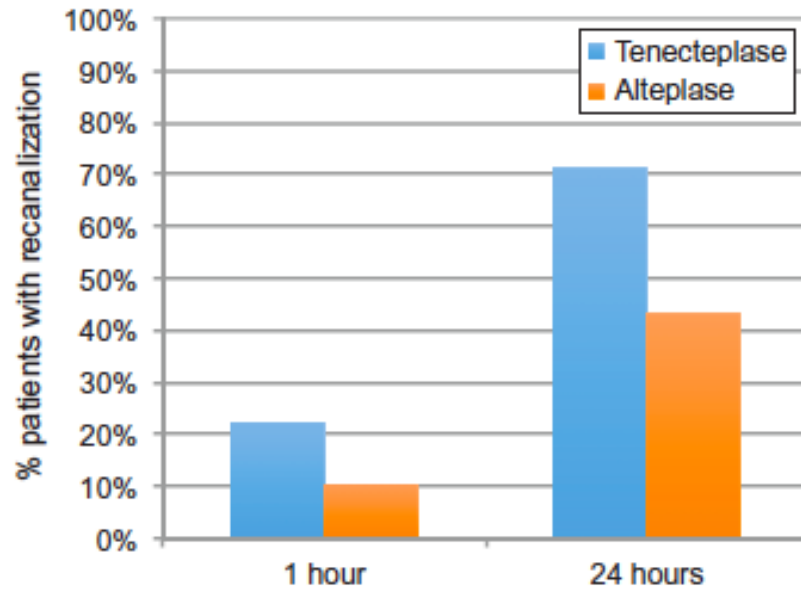
VOL. 380 NO. 19

Thrombolysis Guided by Perfusion Imaging up to 9 Hours after Onset of Stroke

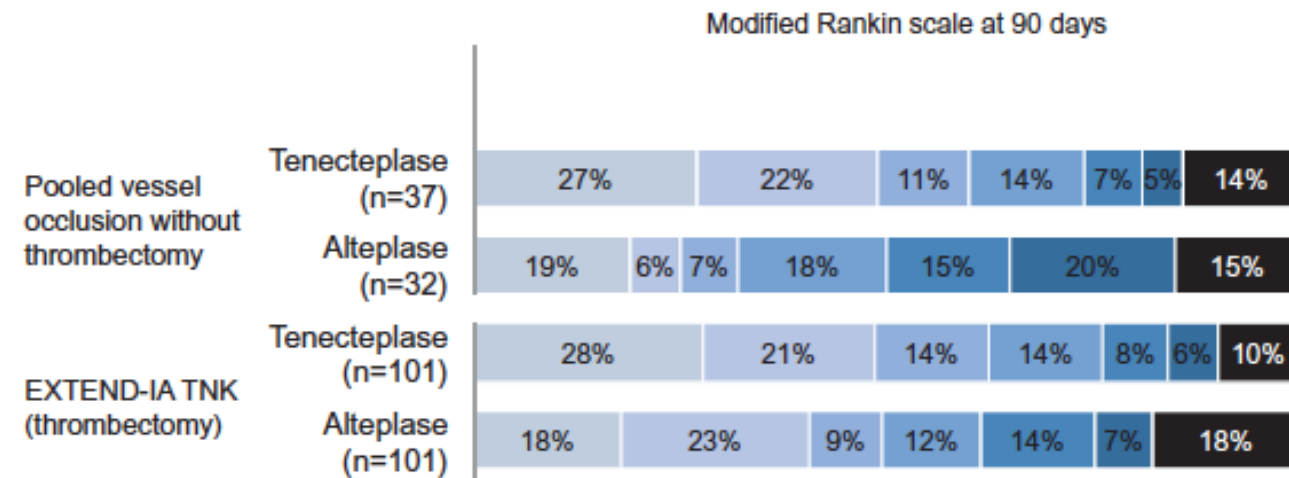
Outcome	Alteplase (N = 113)	Placebo (N = 112)	Adjusted Effect Size (95% CI) [†]	P Value
	no./total no. (%)			
Primary outcome				
Score of 0 to 1 on the modified Rankin scale at 90 days‡	40/113 (35.4)	33/112 (29.5)	1.44 (1.01–2.06)	0.04
Recanalization at 24 hr	72/107 (67.3)	43/109 (39.4%)	1.68 (1.29–2.19)	
Symptomatic intracranial hemorrhage within 36 hr after intervention	7/113 (6.2)	1/112 (0.9)	7.22 (0.97–53.54)	0.053

Tenecteplase versus Alteplase before Thrombectomy for Ischemic Stroke

Figure 1. Recanalization with tenecteplase versus alteplase in patients with baseline vessel occlusion at approximately 1 h post-treatment (22% vs. 10% $p = 0.023$, EXTEND-IA TNK³⁶) and at 24 h post-treatment (71% vs. 43%, $p < 0.001$, pooled analysis³⁷ of ATTEST and Australian TNK trial).



TNK 0.25mg/kg vs tpa 0.9mg/kg



A word cloud featuring the phrase "Thank You" in numerous languages and scripts. The words are arranged in a circular pattern, with "THANK YOU" being the largest and most central. Other languages include Spanish (GRACIAS, ARIGATO), Arabic (SHUKRIYA, SHUKRIA), Hindi (DANKSCHEEN, DANKS), Chinese (TASHAKKUR ATU), Japanese (GOZAIMASHITA, EFCHARISTO), Russian (BOLZIN), French (MERCI), and many others. The words are in different sizes and orientations, creating a dynamic and multicultural visual.