IV Thrombolysis

Natan Bornstein & Marta Rubiera
Stroke Neurologists

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ESC Council Stroke

BAYER

Boehringer Ingelheim

Daiichi-Sankyo

Bristol-Myers Squibb

Pfizer

Medtronic
Further, Together

EMS

57 years-old female, hypertensive, who presents with somnolence, deep right hemiplegia and severe aphasia…

Stroke neurologist

WHEN ? Witnessed, 2.5 hours ago…

WHAT ? RACE 8 TACI

WHY NOT?

0:00 1:00

Design and Validation of a Prehospital Stroke Scale to Predict Large Arterial Occlusion

The Rapid Arterial Occlusion Evaluation Scale

TRIAGE

Natalia Pérez de la Ossa, MD, PhD; David Carrera, MD; Montse Gorchs, BD; Marisol Querol, BD; Mònica Millán, MD, PhD; Meritxell Gomis, MD, PhD; Laura Dorado, MD, PhD; Elena López-Cancio, MD, PhD; María Hernández-Pérez, MD; Vicente Chicharro, MD; Xavier Escalada, MD; Xavier Jiménez, MD, PhD; Antoni Dávalos, MD, PhD

(*troke*. 2014;45:87-91.)

CÓDIGO ICTUS

ESCALA RACE

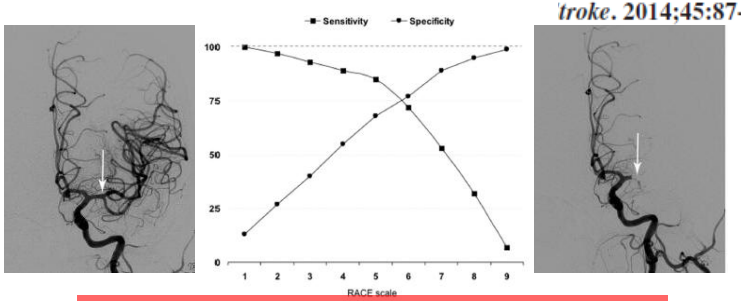
PARESIA HEMICUERPO IZQUIERDO		PARESIA HEMICUERPO DERECHO / AFASIA	
Paresia facial izquierda:		**Paresia facial derecha:**	
Ausente	0	Ausente	0
Ligera	1	Ligera	1
Moderada/Severa	2	Moderada/Severa	2
Paresia del brazo izquierdo:		**Paresia del brazo derecho:**	
Ausente/Ligera (>10seg)	0	Ausente/Ligera (>10seg)	0
Moderada (<10seg)	1	Moderada (<10seg)	1
Severa (no levanta)	2	Severa (no levanta)	2
Paresia de la pierna izquierda:		**Paresia de la pierna derecha:**	
Ausente/Ligera (>5seg)	0	Ausente/Ligera (>5seg)	0
Moderada (<5seg)	1	Moderada (<5seg)	1
Severa (no levanta)	2	Severa (no levanta)	2
Desviación oculo-cefálica a la derecha		**Desviación oculo-cefálica a la izquierda**	
Ausente	0	Ausente	0
Presente	1	Presente	1
Agnosia		**Afasia**	
Ausente	0	Obedece 2 órdenes	0
Asomatognosia o anosognosia	1	Obedece 1 orden	1
Asomatognosia y anosognosia	2	No obedece ninguna orden	2
TOTAL		TOTAL	

Puntuación de 0 – 9

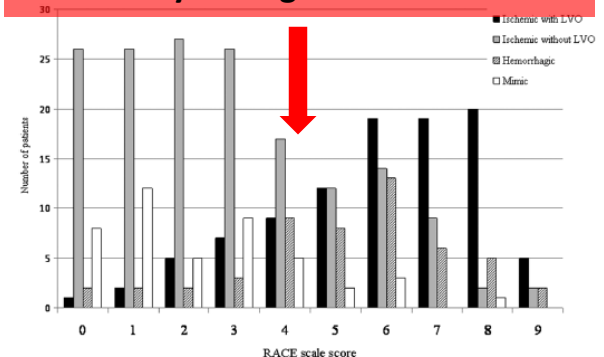
A mayor puntuación, mayor gravedad del ictus

Pacientes con RACE ≥5 tienen una alta probabilidad de tener una oclusión de un gran vaso cerebral

El SEM evaluará la escala RACE durante el traslado del paciente y transmitirá la información al centro receptor de ictus en el momento de hacer el pre-aviso



Probability of Large Vessel Occlusion



ESC Council Stroke

57 years-old female, hypertensive, who presents with somnolence, deep right hemiplegia and severe aphasia…

Stroke neurologist

WHEN ? Witnessed, 2.5 hours ago…

WHAT ? RACE 9 TACI

WHY NOT? No contraindications BP 160/98 Glc 122

Coagulation /platelets ??

0:00 1:00

Predicting abnormal coagulation in ischemic stroke: Reducing delay in rt-PA use

Abstract—Normal prothrombin time (PT) and partial thromboplastin time (PTT) are recommended for administration of recombinant tissue-plasminogen activator (rt-PA) in stroke, but waiting for results can delay use. We examined the charts of 365 stroke patients to assess predetermined risk factors associated with elevated PT/PTT. Elevated PT/PTT can be predicted in patients taking warfarin or heparin/heparinoid or on hemodialysis, according to emergency department triage, with 100% sensitivity and 94.7% specificity. These results could be applied to rt-PA candidates and reduce potential delays.

NEUROLOGY 2006;67:1665–1667

Rebecca F. Gottesman, MD; Janice Alt, RN; Robert J. Wityk, MD; and Rafae

PLOS ONE

RESEARCH ARTICLE

Intravenous Tissue Plasminogen Activator Can Be Safely Given without Complete Blood Count Results Back

ir[3], Sarah Parker[3], Jan L. Jahnel[3], Mathews[3], Clayton J. McNeil[3], avid Z. Wang[3]*

3. A limited number of hematologic, coagulation, and biochemistry tests are recommended during the initial emergency evaluation, and only the assessment of blood glucose must precede the initiation of intravenous rtPA (Table 8) *(Class I; Level of Evidence B)*.

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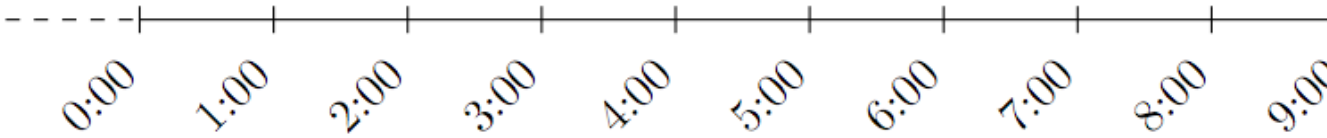
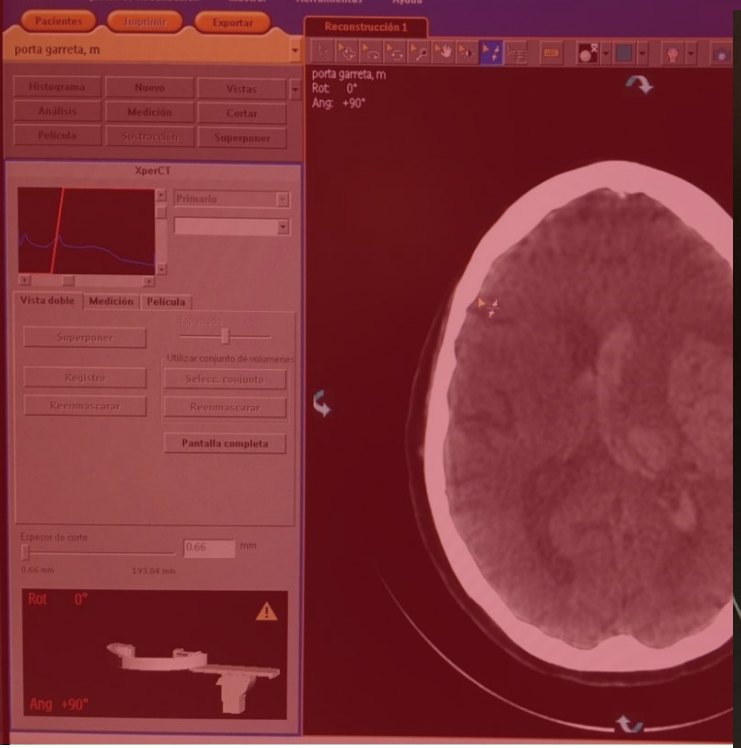
ER CODE

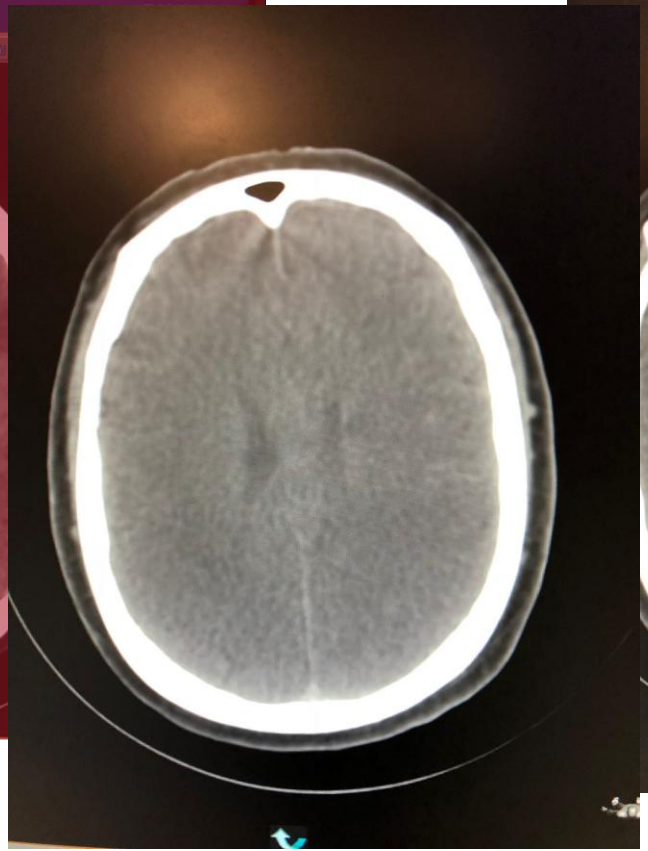
CT CODE

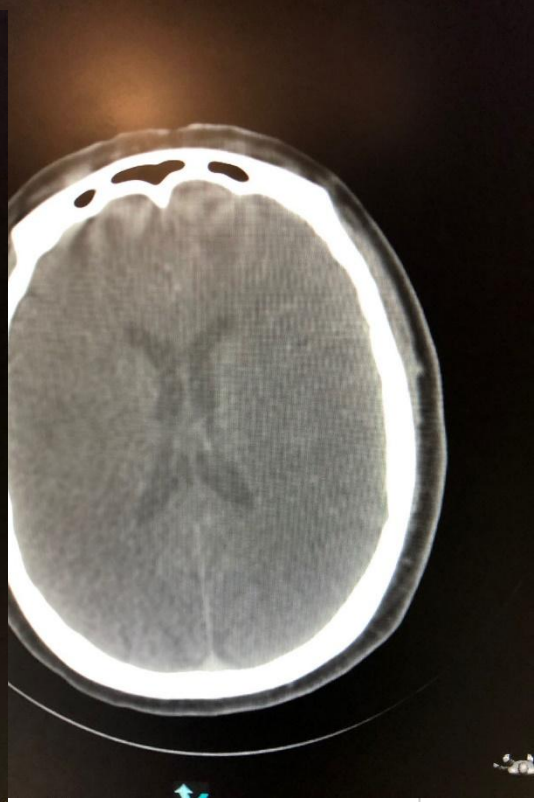
ANGIO CODE

Pre-notification
RACE>4 o NIHSS >10
< 6 hours









9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00

Hypodensity of >1/3 Middle Cerebral Artery Territory Versus Alberta Stroke Programme Early CT Score (ASPECTS) : Comparison of Two Methods of Quantitative Evaluation of Early CT Changes in Hyperacute Ischemic Stroke in the Community Setting

Henry K.F. Mak, Kelvin K.W. Yau, Pek-Lan Khong, Alex S.C. Ching, Pui-Wai Cheng, Paul K.M. Au-Yeung, Peter K.M. Pang, Kenny C.W. Wong and Bernard P.L. Chan

Conclusions—The ⅓ MCA method was more reliable in detecting significant EIC on CT brain within 6 hours of stroke onset in routine clinical practice, whereas ASPECTS was able to detect significant EIC in a higher proportion of these early scans. (*Stroke*. 2003;34:1194-1196.)

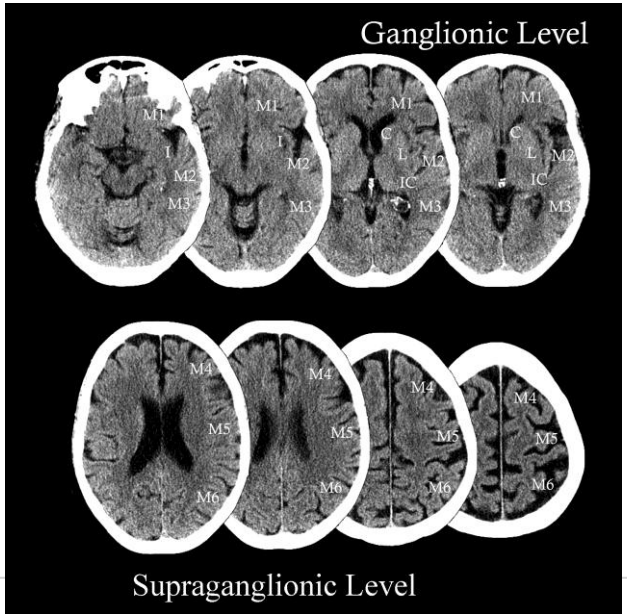


TABLE 3. Studies of Interrater Agreement on Significant Early Ischemic Changes in the Middle Cerebral Artery Territory

CT Method/Study	Time Window	Patient Cohort	Prevalence, %	Overall Agreement, % (no. of raters)	Pairwise Agreement, % (no. of raters)	κ	PABAK
>⅓ MCA							
von Kummer et al[1]	6 h	IV tPA study	8.6	86 (3)	NA	0.36	NA
Dippel et al[5]	24 h (77% 6 h)	Lubeluzole study	22.7	76 (5)	NA	0.37	NA
Grotta et al[4]	3 h	IV tPA study	24	NA	77 (16)	0.39†	0.54
Marks et al[3]	6 h	IV tPA study	30	72 (3)	NA	0.53	NA
ASPECTS[2]	3 h	IV tPA in community	NA	NA	NA	0.59	NA
Mak et al*	6 h	Community	11.4	71 (5)	87 (5)	0.49	0.74
ASPECTS ≤7							
ASPECTS[2]	3 h	IVtPA in community	NA	NA	NA	0.82	NA
Mak et al*	6 h	Community	19.4	42 (5)	72 (5)	0.34	0.44

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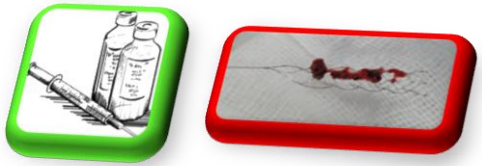
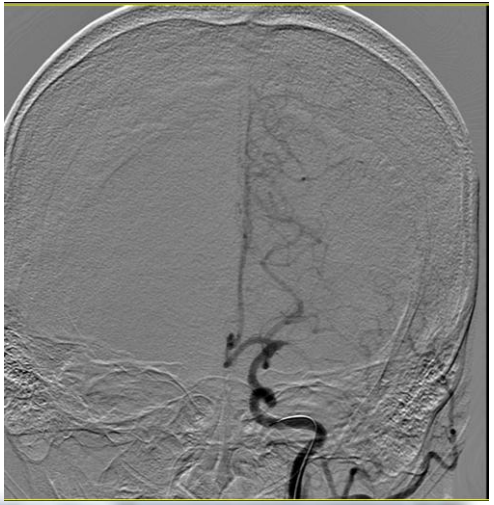
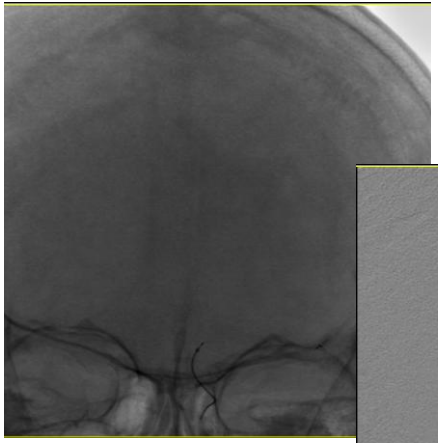
Recommendations
Endovascular Interventions

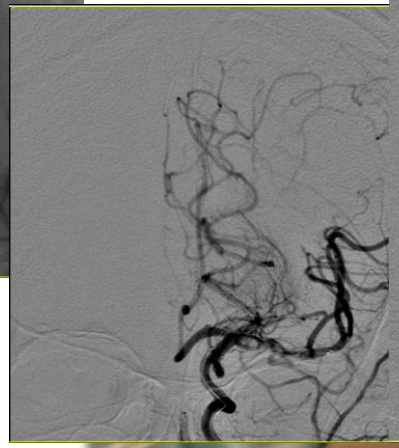


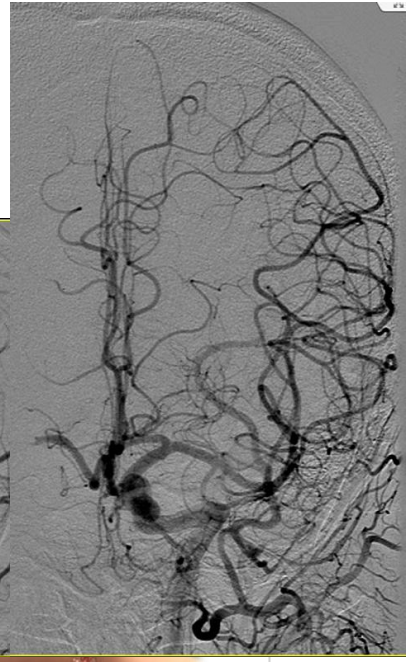
1. **Patients eligible for intravenous r-tPA should receive intravenous r-tPA even if endovascular treatments are being considered *(Class I; Level of Evidence A)*.** (Unchanged from the 2013 guideline)

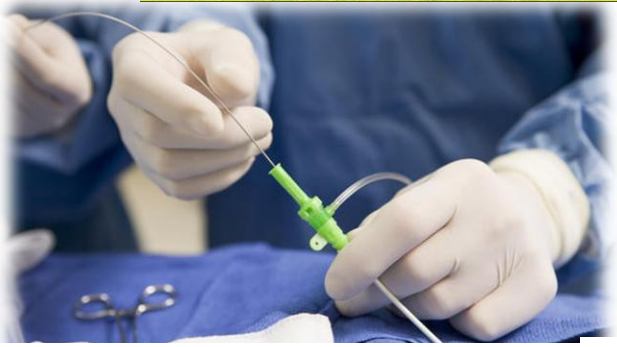
9. **Observing patients after intravenous r-tPA to assess for clinical response before pursuing endovascular therapy is not required to achieve beneficial outcomes and is not recommended. *(Class III; Level of Evidence B-R)*.** (New recommendation)





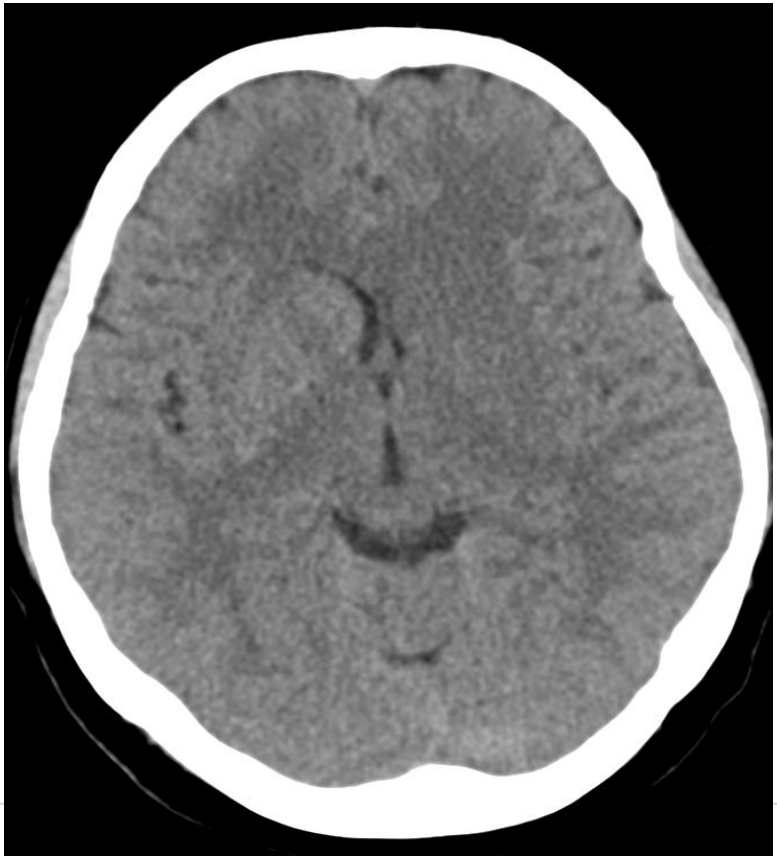


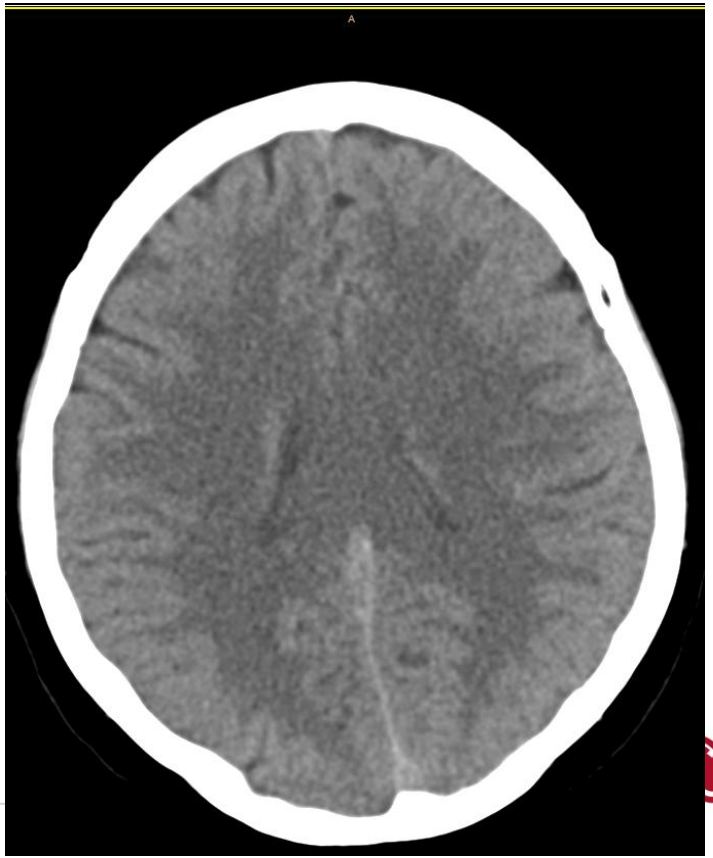




24:00 25:00 26:00 27:00 28:00 45:00 46:00 47:00 48:00

24h NIHSS: 2





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83 years-old male, mRS 2, DM, HTA, who is found at bed with dysarthria and moderate left hemiparesia and heminegligency…

Comarcal neurologist

WHEN ? Last seen normal 12h ago, when he went to bed

WHAT ? RACE 6 TACI

WHY NOT? Last seen normal 12h ago !!

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The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Thrombectomy 6 to 24 Hours after Stroke with a Mismatch between Deficit and Infarct

CONCLUSIONS

Among patients with acute stroke who had last been known to be well 6 to 24 hours earlier and who had a mismatch between clinical deficit and infarct, outcomes for disability at 90 days were better with thrombectomy plus standard care than with standard care alone. (Funded by Stryker Neurovascular; DAWN ClinicalTrials.gov number, NCT02142283.)

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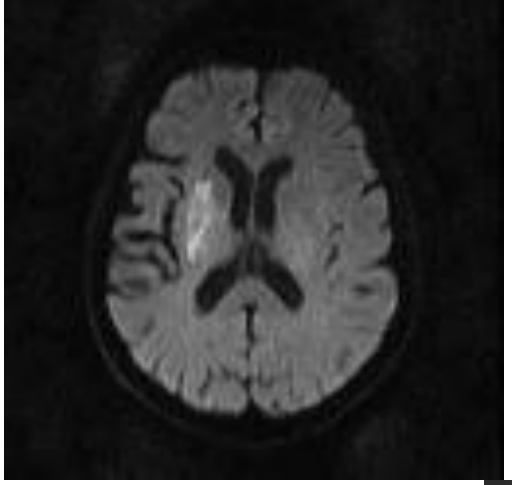

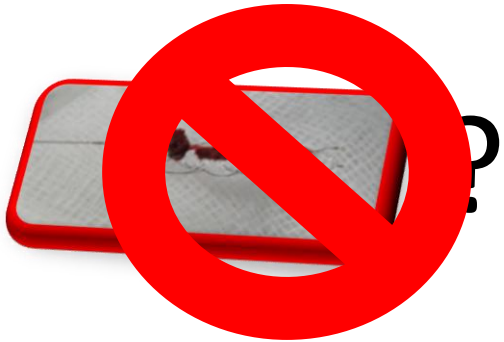

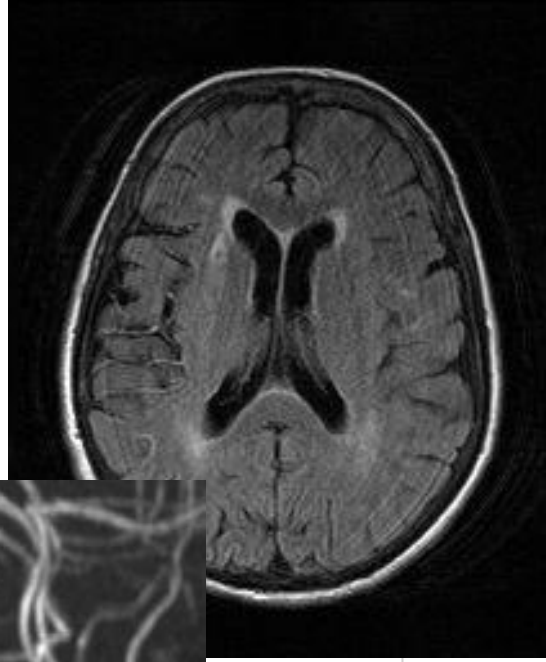

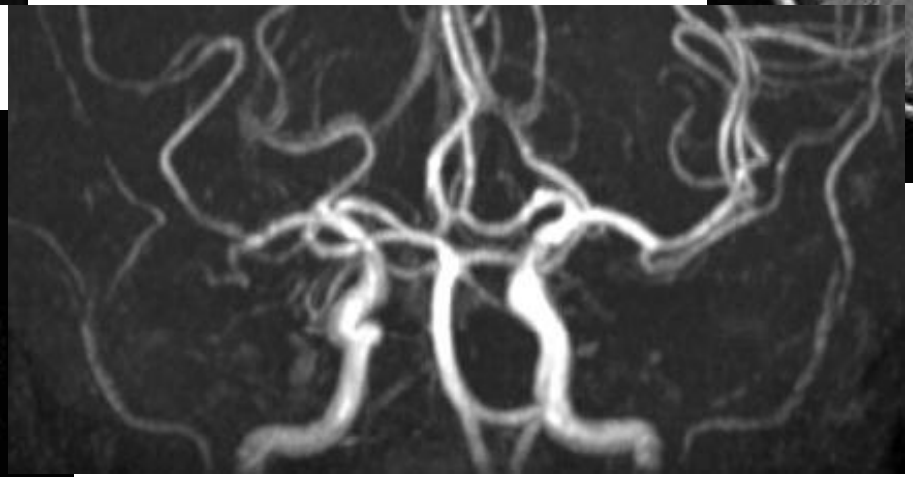

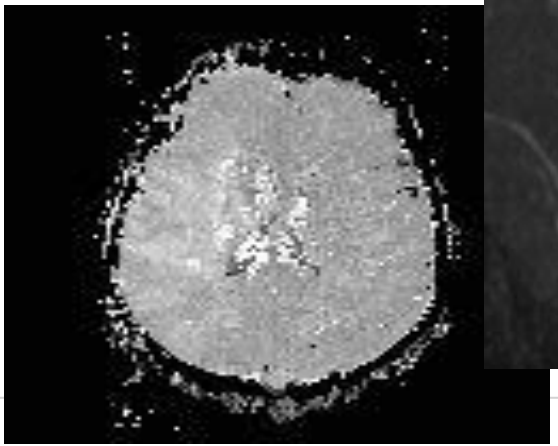

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Intravenous Tissue Plasminogen Activator for Wake-Up Stroke: A Propensity Score-Matched Analysis

James E. Anaissie, BSE, Dominique J. Monlezun, MPH, James E. Siegler, MD, Elizabeth D. Waring, BA, Lauren N. Dowell, MS, Alyana A. Samai, MPH, Alexander J. George, MD, Tara Kimbrough, MD, Jimmy Berthaud, MD, MPH, and Sheryl Martin-Schild, MD, PhD

Table 2. *Primary and secondary outcome measures*

	Control arm n = 369	Treated WUS n = 46	Nontreated WUS n = 154	*P* value*	*P* value†
sICH, %	3	2.2	.7	.758	.362
24-h NIHSS, median (range)	4 (0-42)	4 (0-26)	3 (0-29)	.173	.225
Neurological deterioration at 24 h, %	27.7	30.4	29.2	.699	.874
Change in NIHSS from 0 to 24 h, median (range)	(−)3 (−39 to 36)	(−)2 (−16 to 19)	(−)1 (−13 to 17)	.621	<.001
Discharge mRS, median (range)	3 (0-6)	3 (0-6)	3 (0-6)	.771	.322
Good functional outcome‡, %	49.9	47.8	42.9	.794	.551‖
Favorable discharge disposition§, %	67.5	69.6	71.4	.775	.471
Discharge NIHSS, median (range)	2 (0-42)	3 (2-42)	3 (0-42)	.532	.395
In-hospital mortality, %	6.8	4.4	3.9	.529	.891

J.strokecerebrovascdis. 2016, 25; 11:2063-69

A multicenter, randomized, double-blind, placebo-controlled trial to test efficacy and safety of magnetic resonance imaging-based thrombolysis in wake-up stroke (WAKE-UP)

Götz Thomalla[1]*, Jochen B. Fiebach[2], Leif Østergaard[3], Salvador Pedraza[4], Vincent Thijs[5,6,7], Norbert Nighoghossian[8], Pascal Roy[9], Keith W. Muir[10], Martin Ebinger[2,11], Bastian Cheng[1], Ivana Galinovic[2], Tae-Hee Cho[8], Josep Puig[4], Florent Boutitie[9], Claus Z. Simonsen[12], Matthias Endres[2,11,13], Jens Fiehler[14], Christian Gerloff[1], and WAKE-UP investigators

THrombolysis for Acute Wake-up and unclear-onset Strokes with alteplase at 0·6 mg/kg (THAWS) Trial

Masatoshi Koga[1]*, Kazunori Toyoda[2], Kazumi Kimura[3], Haruko Yamamoto[4], Makoto Sasaki[5], Toshimitsu Hamasaki[6], Takanari Kitazono[7], Junya Aoki[3], Kenta Seki[2], Kazunari Homma[2], Shoichiro Sato[2], and Kazuo Minematsu[2], on behalf of the THAWS investigators

NIH U.S. National Library of Medicine

ClinicalTrials.gov

Home > Search Results > Study Record Detail

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Trial record **4 of 39** for: Tenecteplase | Stroke

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Tenecteplase in Wake-up Ischaemic Stroke Trial (TWIST)

⚠ The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Know the risks and potential benefits of clinical studies and talk to your health care provider before participating. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT03181360

Recruitment Status : Recruiting
First Posted : June 8, 2017
Last Update Posted : July 19, 2017

See Contacts and Locations

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