



Actualités Neurovasculaires

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Disclosures

Conflits d'intérêt

Company / Name	Honoraria / Expenses	Consulting / Advisory Board	Funded Research	Royalties / Patent	Stock Options	Ownership / Equity position	Employee	Other (please specify)
Boehringer- Ingelheim	X	X						
Bayer	X	X						
Daichi- Sankyo		X						
Bristol Myers Squibb	x							

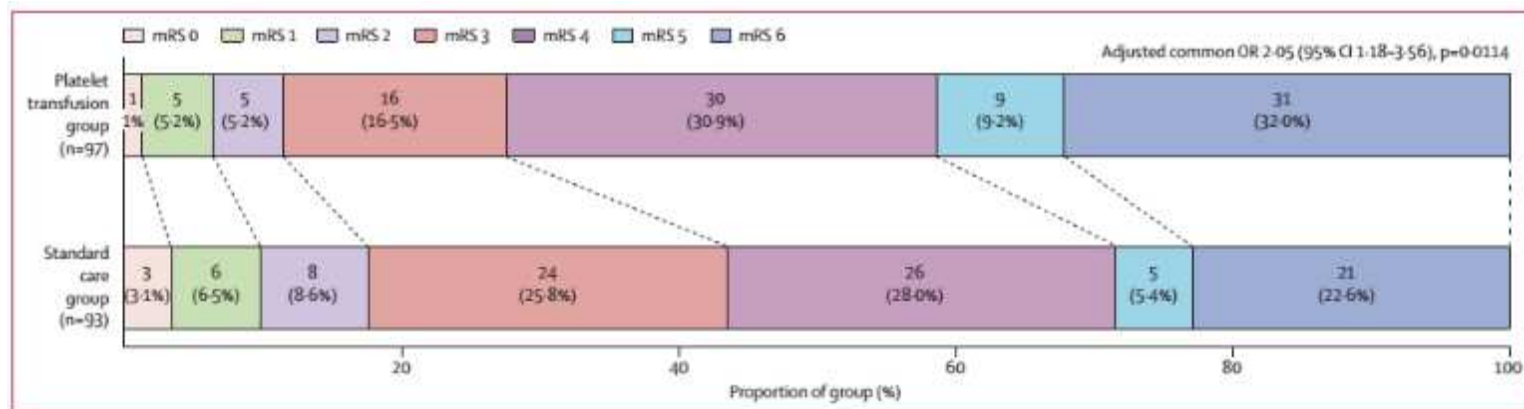
Hématome cérébral sous antiagrégant

Platelet transfusion versus standard care after acute stroke due to spontaneous cerebral haemorrhage associated with antiplatelet therapy (PATCH): a randomised, open-label, phase 3 trial

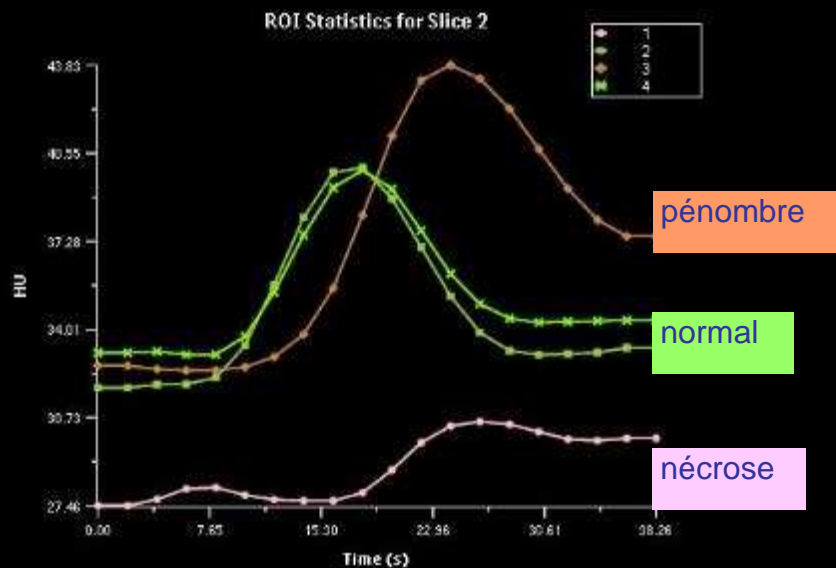
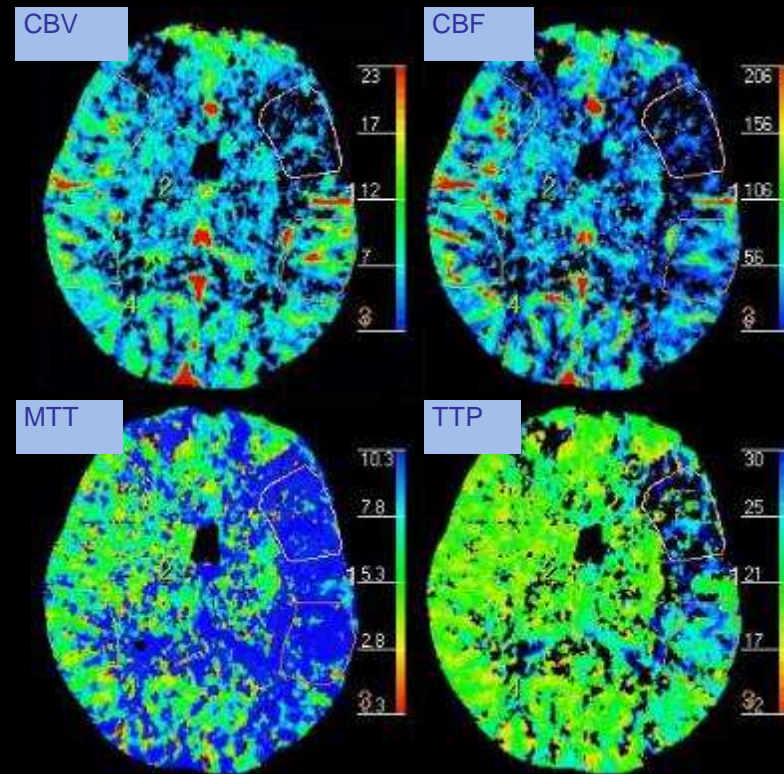
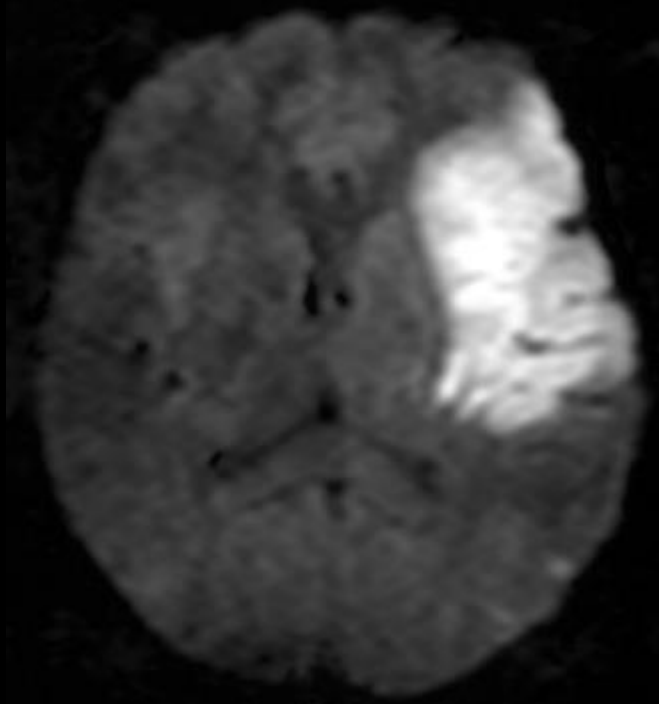
M Irem Baharoglu, Charlotte Cordonnier*, Rustam Al-Shahi Salman*, Koen de Gans, Maria M Koopman, Anneke Brand, Charles B Majoie,*

PATCH

- 190 patients / Hématome < 6 h sous antiagrégant
- Transfusion plaquettaire délétère



TDM : AVC ischémique et pénombre



	ROI #	CBV (ml/100g)	CBF (ml/100g/min)	MTT (s)	TTP (s)
	1	0.93	2.36	23.60	30.62
	2	4.08	44.40	5.51	17.94
	3	5.36	22.85	14.06	24.85
	4	4.70	49.85	5.65	18.08

2015...5 études de bridging

A Randomized Trial of Intraarterial Treatment for Acute Ischemic Stroke

Décembre 2014



Endovascular Therapy for Ischemic Stroke
with Perfusion-Imaging Selection

EXTEND -IA

Février 2015

Randomized Assessment of Rapid
Endovascular Treatment of Ischemic Stroke

ESCAPE

Février 2015

ORIGINAL ARTICLE

Thrombectomy within 8 Hours after Symptom Onset in Ischemic Stroke

REVASCAT

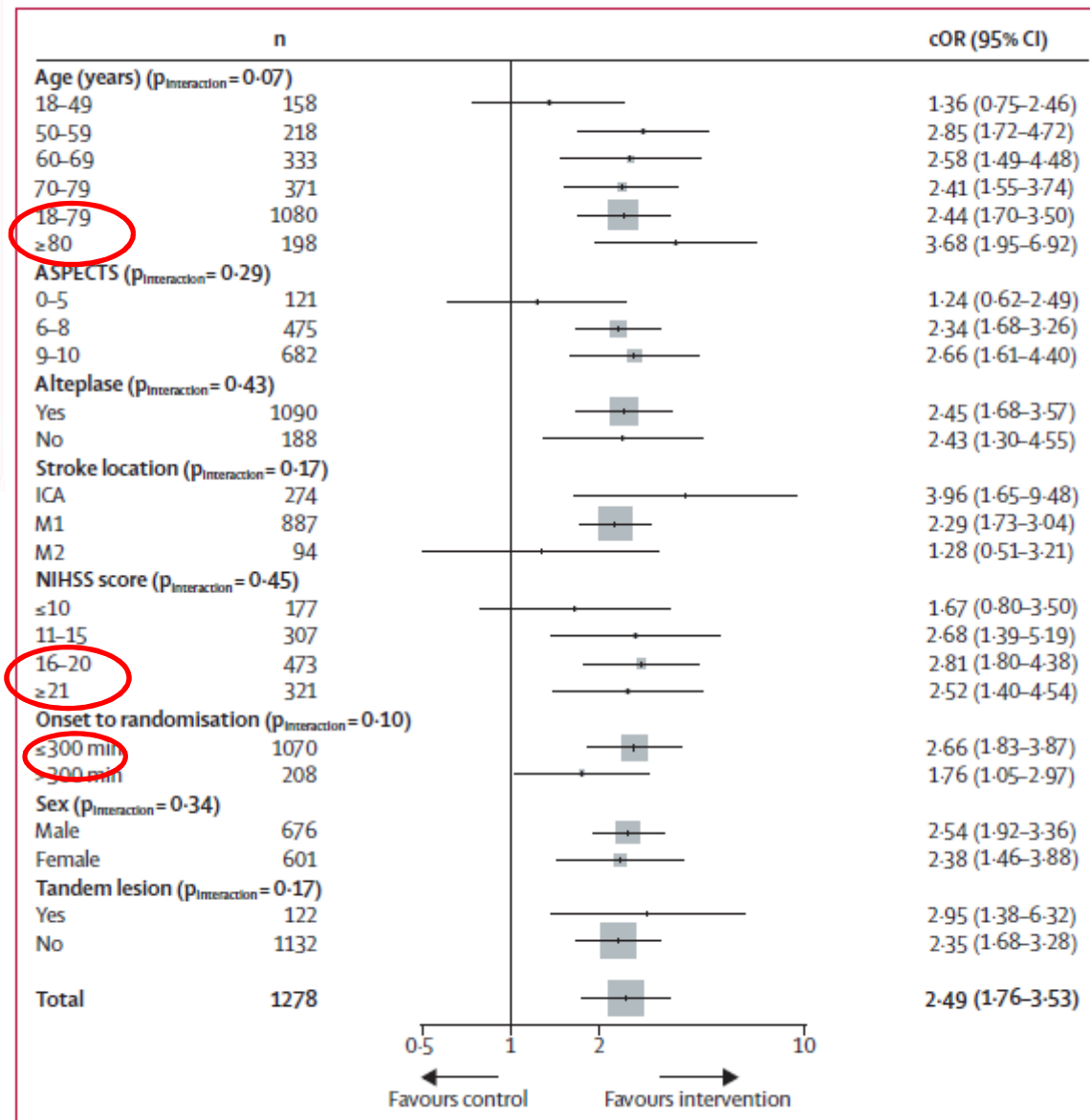
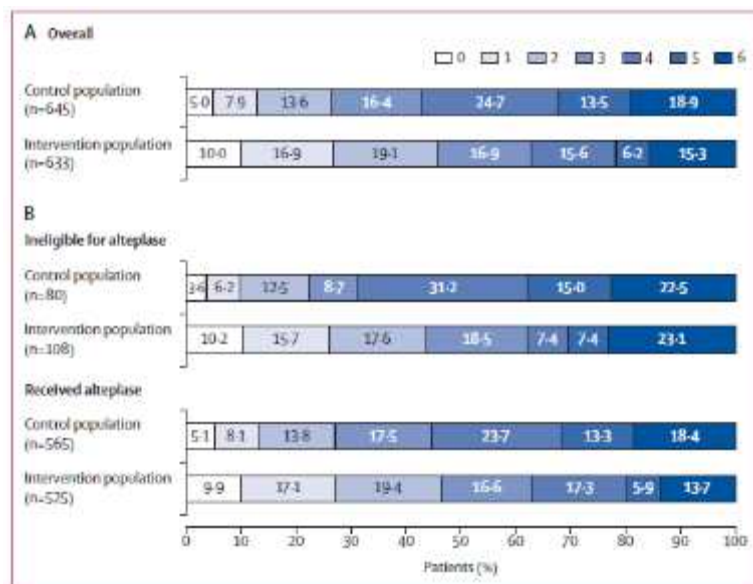
Avril 2015

ORIGINAL ARTICLE

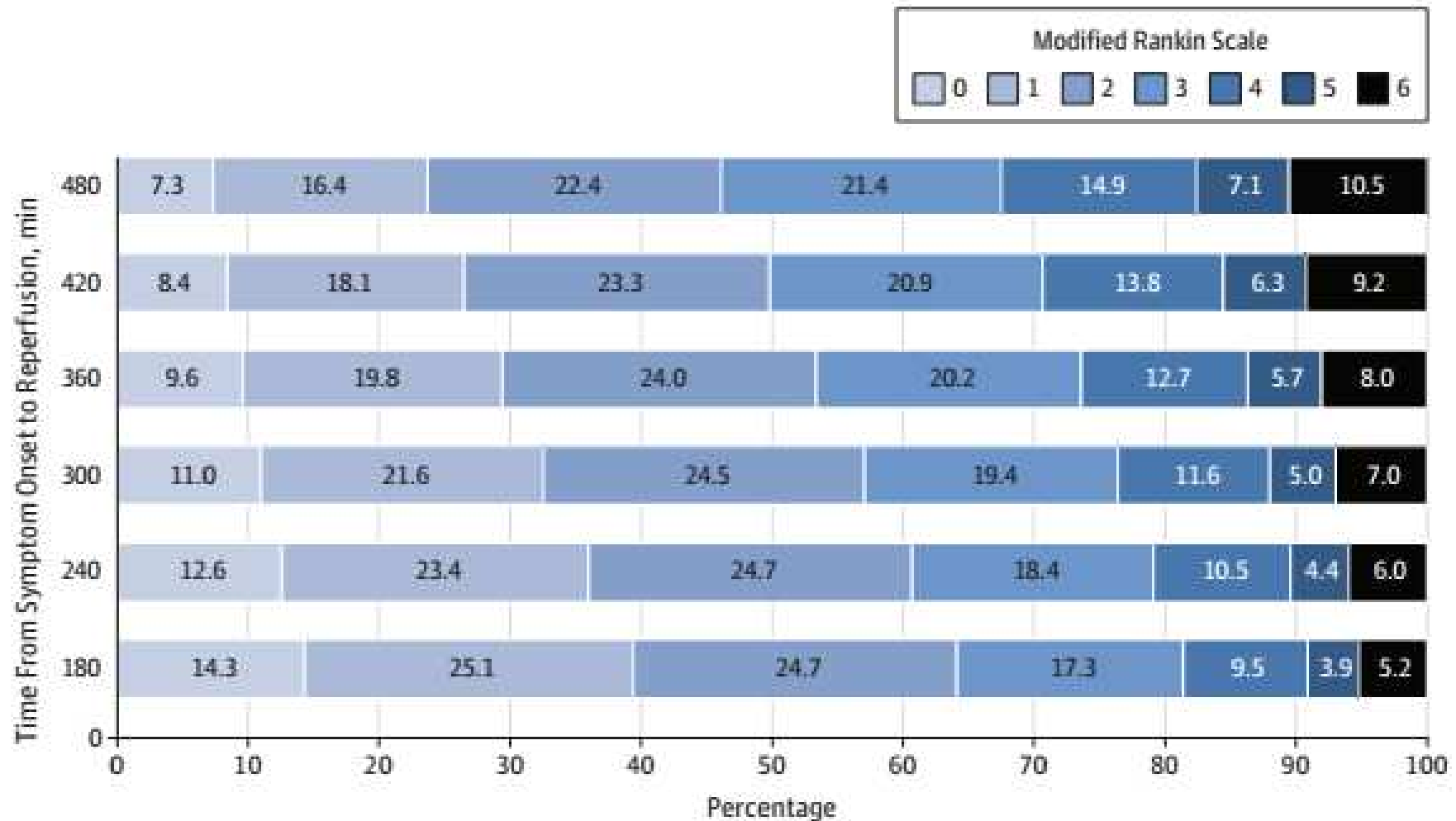
Stent-Retriever Thrombectomy after Intravenous t-PA vs. t-PA Alone in Stroke

SWIFT PRIME

Avril 2015



« Time is Brain » pour la thrombectomie aussi !!!

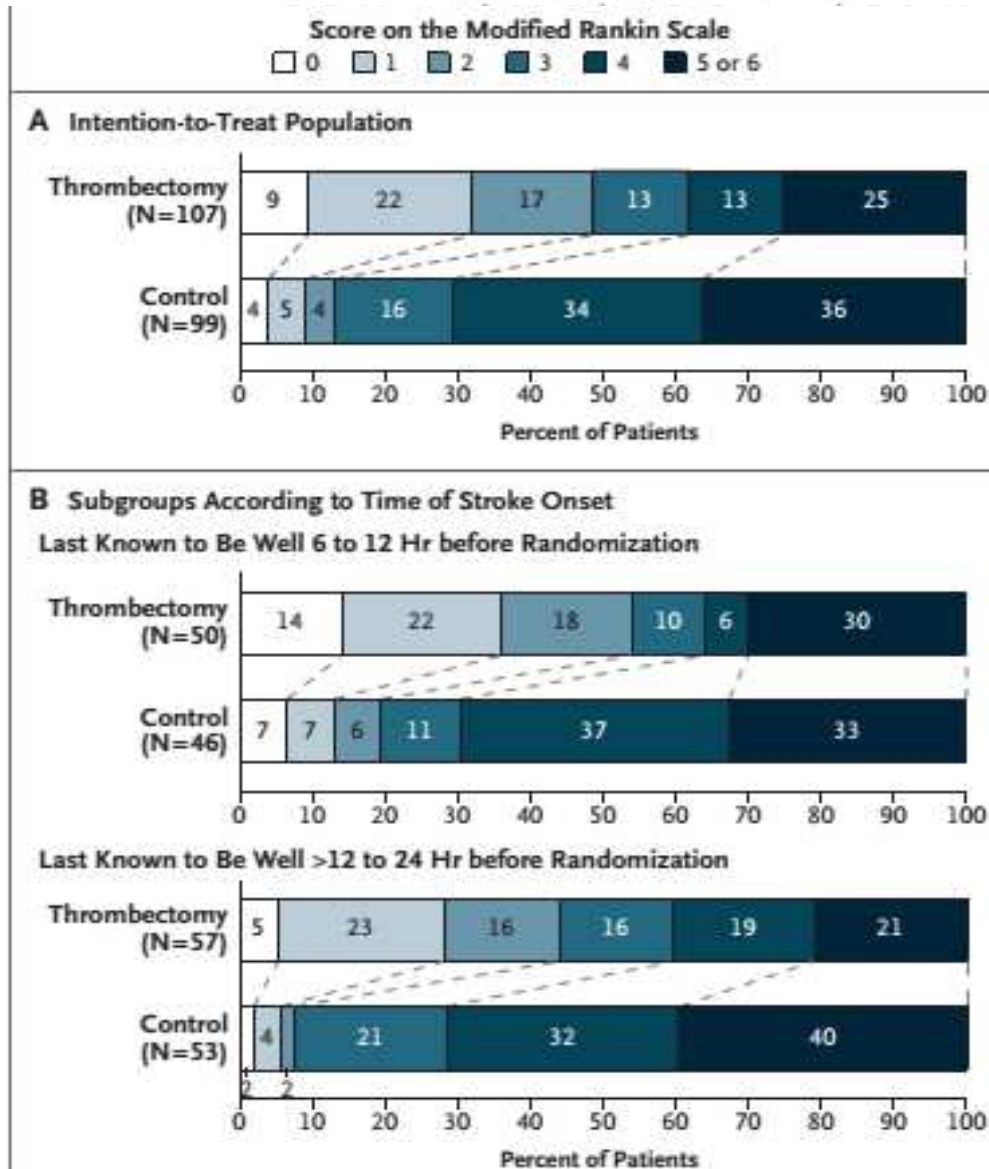


Méta-analyse / 390 patients thrombectomisés

Saver, JAMA 2016

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

R.G. Nogueira, A.P. Jadhav, D.C. Haussen, A. Bonafe, R.F. Budzik, P. Bhuva,



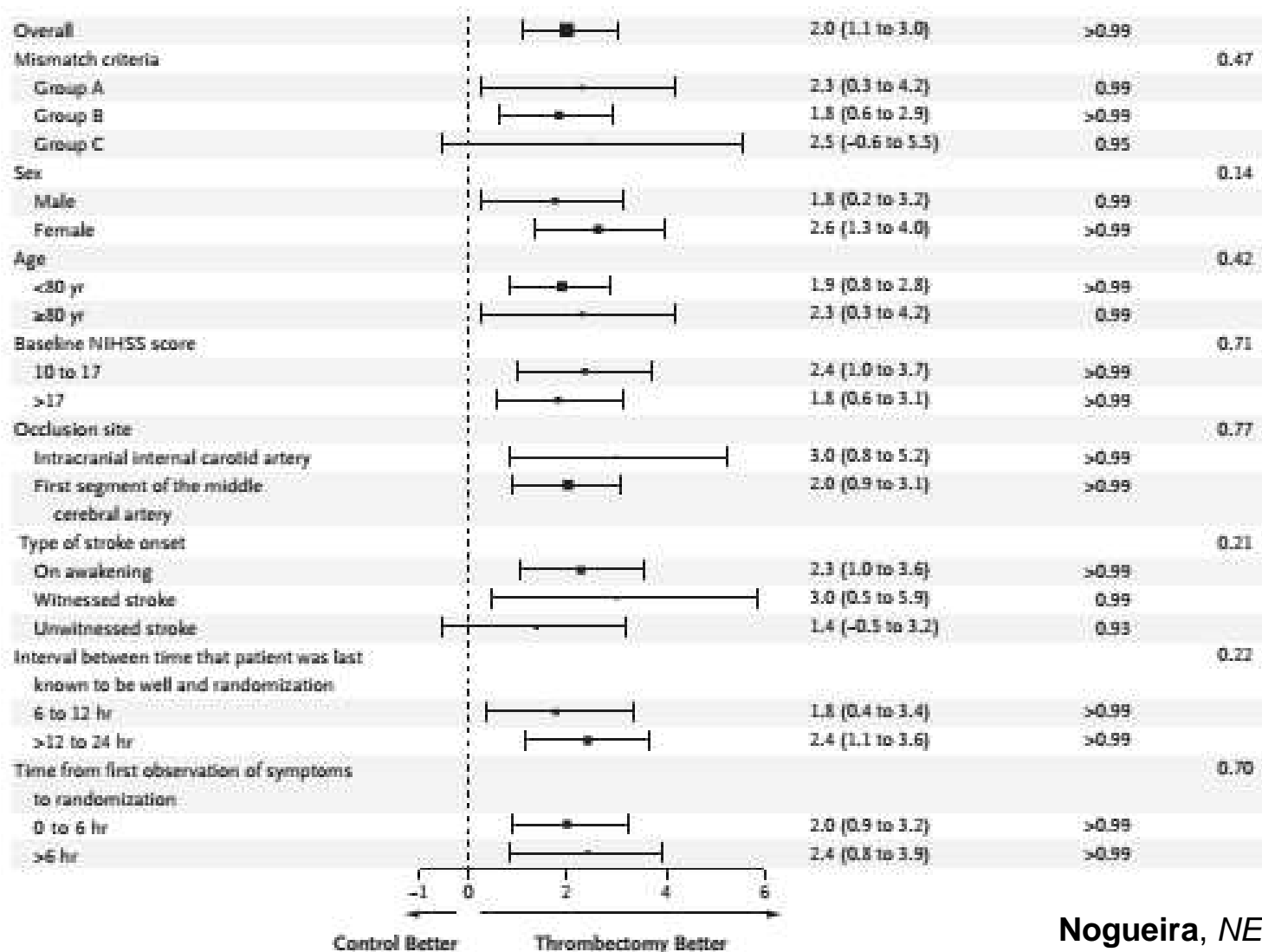
DAWN

- Déficit de 6 à 24h (« vu normal »)?
- 206 patients (70 ans, NIHSS=17, 5-13% rtPA, H12)
- Mismatch radio-clinique
- Thrombectomie bénéfique

Nogueira, *NEJM* 2017

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

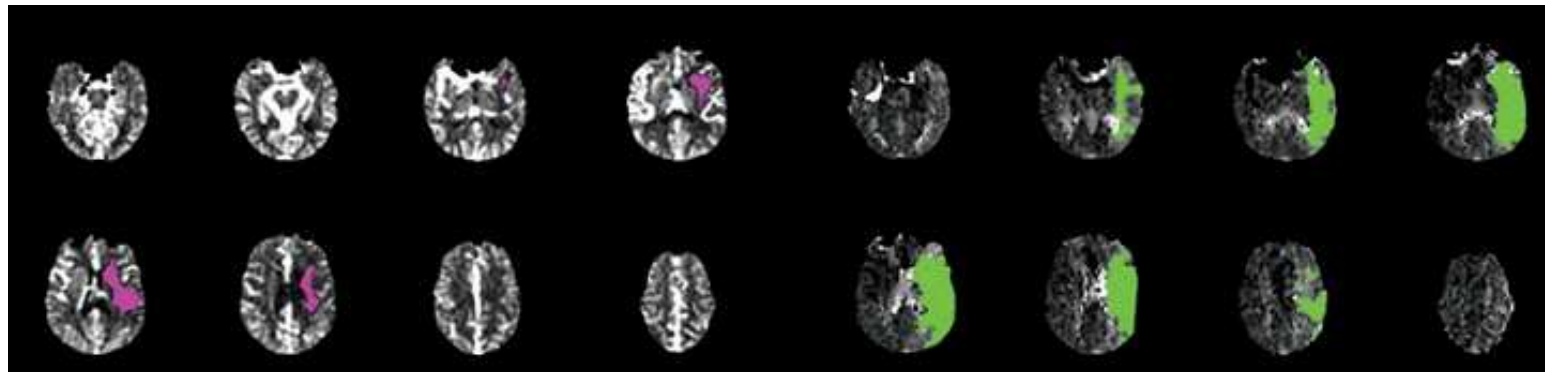
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Nogueira, *NEJM* 2017

Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging

G.W. Albers, M.P. Marks, S. Kemp, S. Christensen, J.P. Tsai, S. Ortega-Gutierrez,



Volume of Ischemic Core, 23 ml

Volume of Perfusion Lesion, 128 ml

Mismatch volume, 105 ml
Mismatch ratio, 5.6

Réveil, NIHSS = 23

DEFUSE 3

- Déficit de 6 à 16h (« **vu normal** »)?
- 182 patients / étude arrêtée (70 ans, NIHSS=16, 8-10% rtPA, H10)
- IRM perfusion ou TDM perfusion
- Infarctus < 70 mL
- Mismatch perfusion (CBF<30% vs MTT ou Tmax): Ischémie / Infarctus > 1.8
- **Thrombectomie bénéfique**

Albers, *NEJM* 2018

Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging

G.W. Albers, M.P. Marks, S. Kemp, S. Christensen, J.P. Tsai, S. Ortega-Gutierrez,

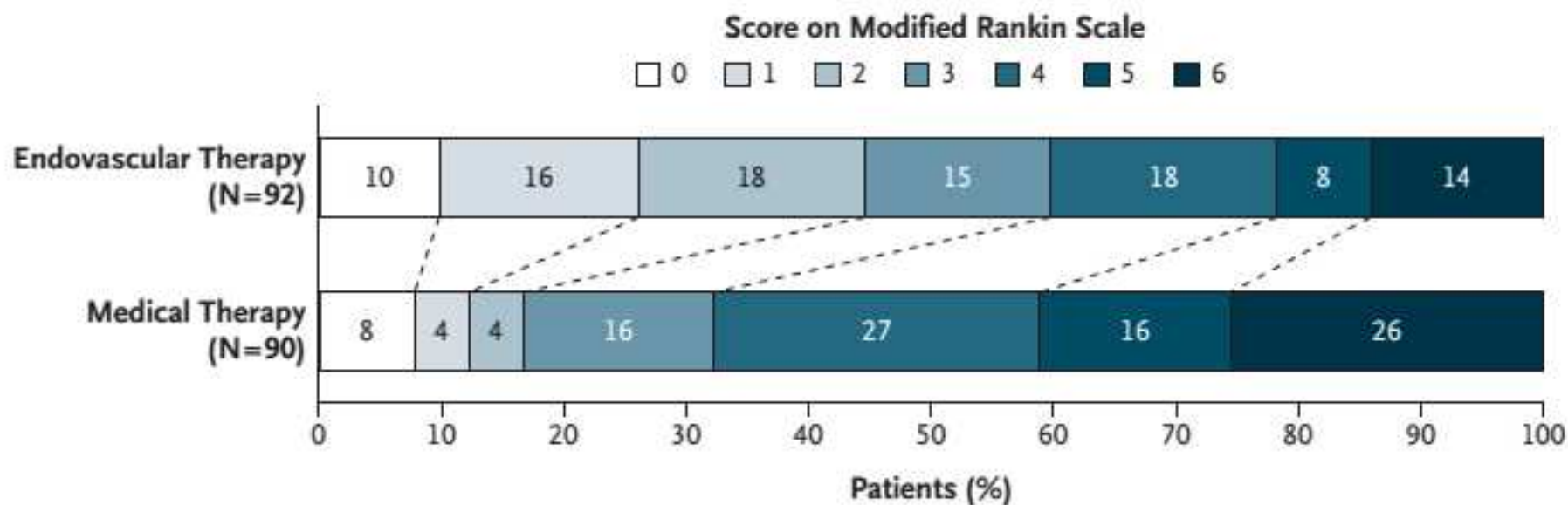


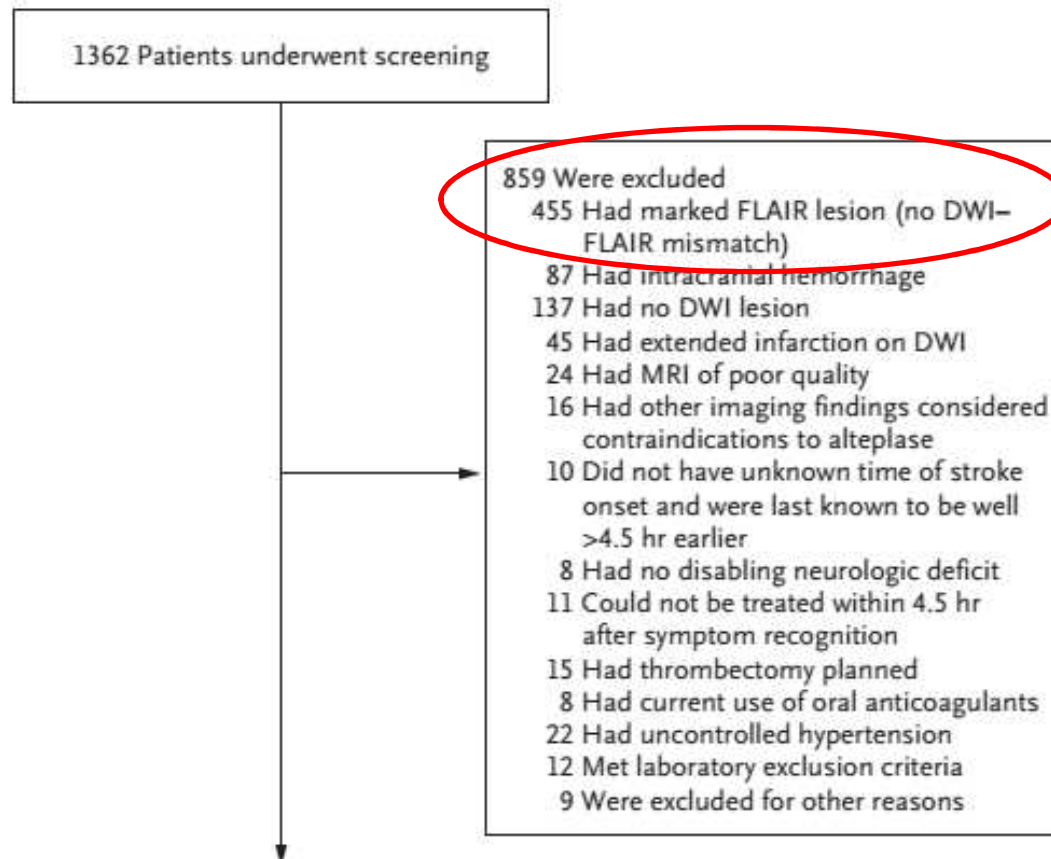
Figure 2. Scores on the Modified Rankin Scale at 90 Days.

MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset

G. Thomalla, C.Z. Simonsen, F. Boutitie, G. Andersen, Y. Berthezene, B. Cheng,

WAKE UP

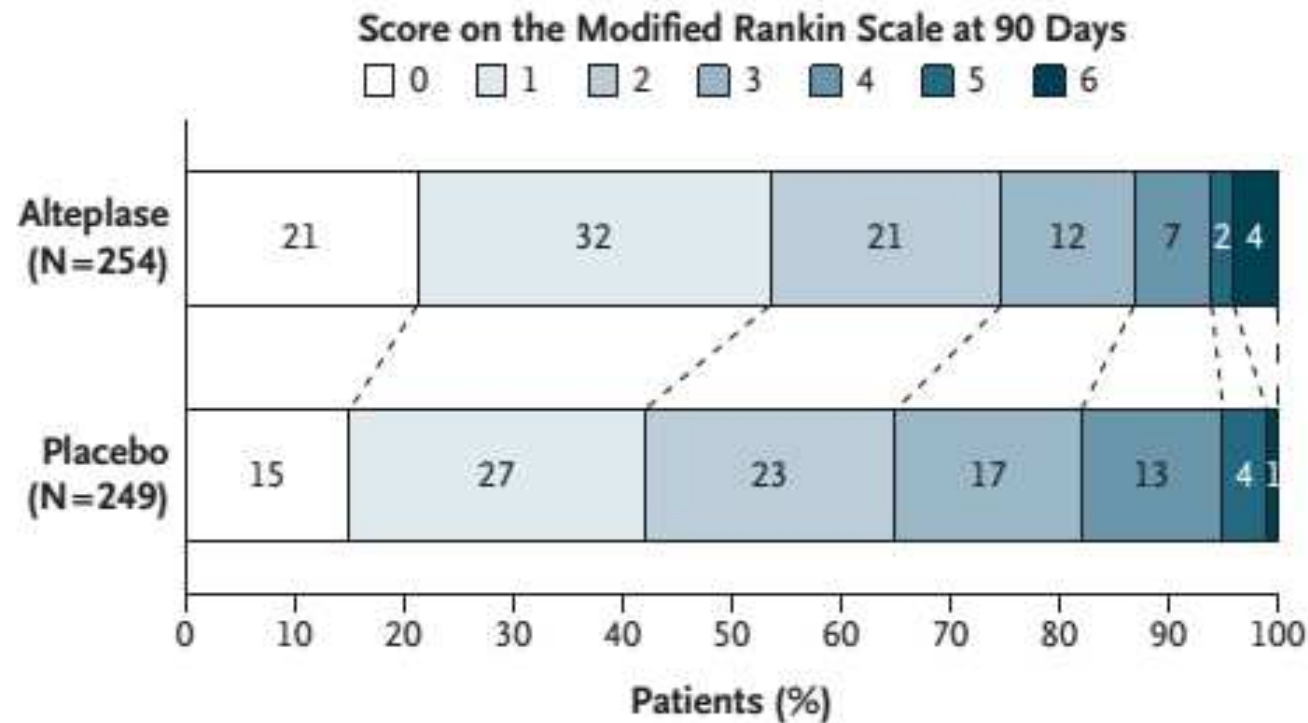
- Déficit d'horaire inconnu (réveil)
- 254 **thrombolyses IV** vs 249 placebo (65 ans, NIHSS=6)
- IRM diffusion positive et FLAIR négatif = lésion < 4,5h



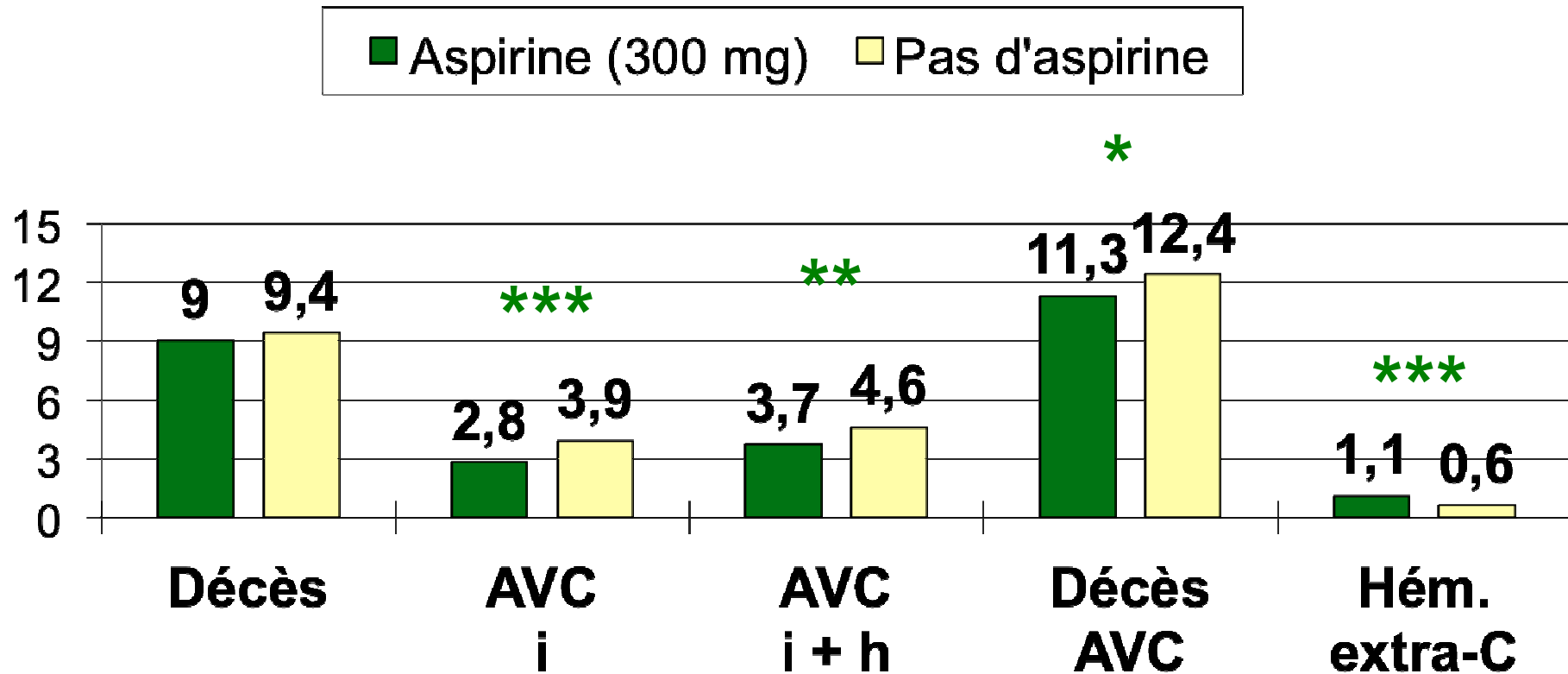
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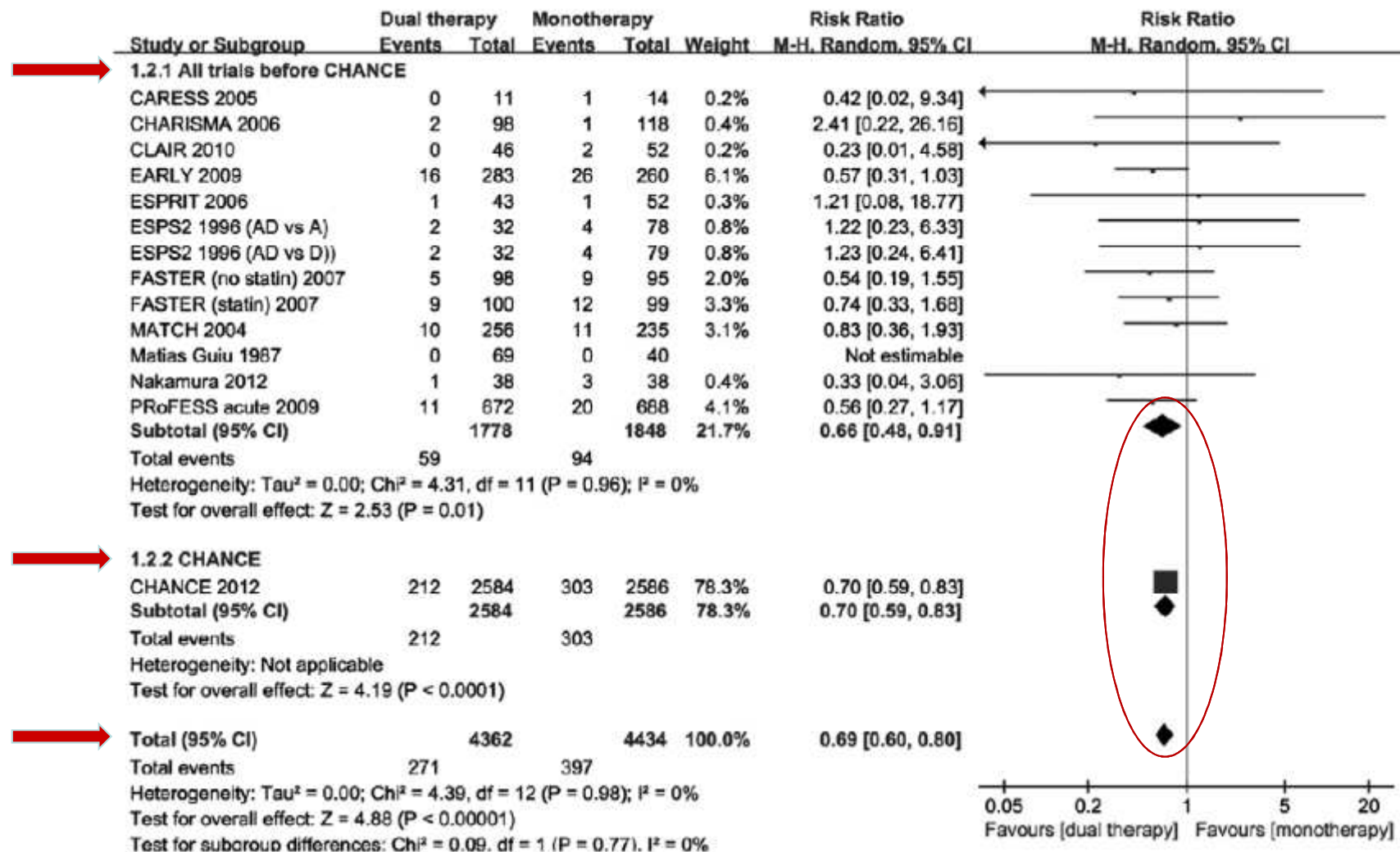


Antiagrégant après AIT / infarctus



Bi-antiagrégation après AIT / infarctus mineur (ASA 75 + CLO 300 puis 75)

Wong, *Circulation* 2013

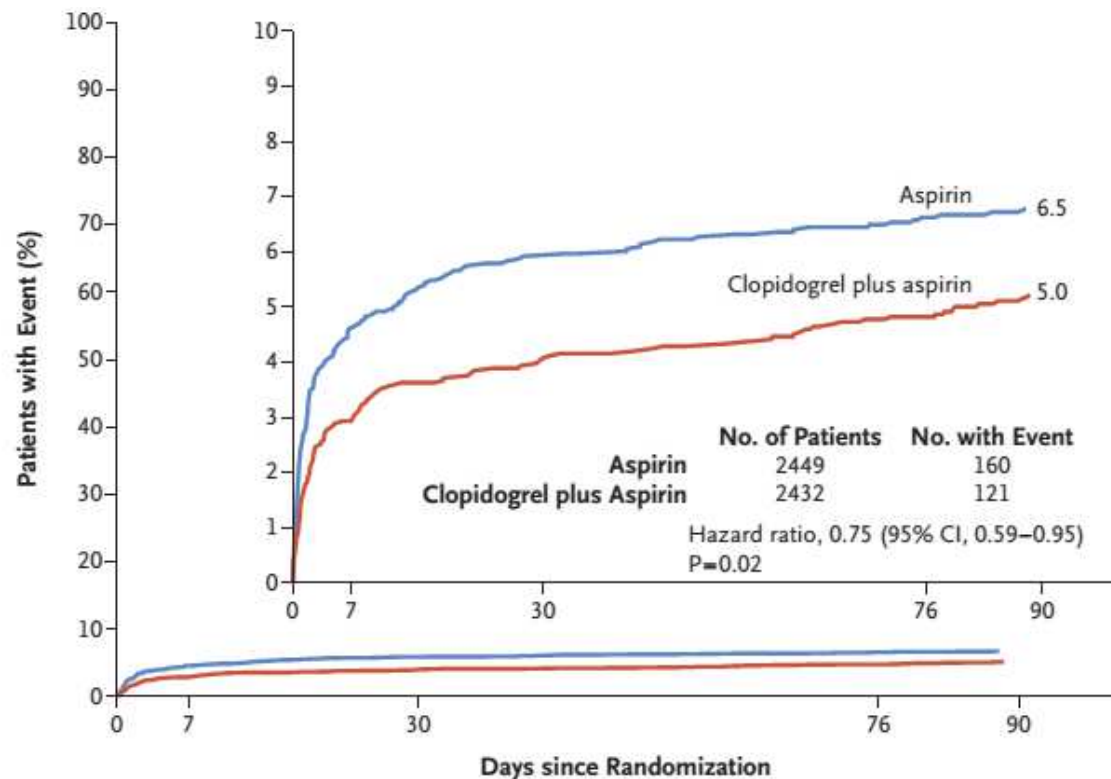


Clopidogrel and Aspirin in Acute Ischemic Stroke and High-Risk TIA

S. Claiborne Johnston, M.D., Ph.D., J. Donald Easton, M.D., Mary Farrant, M.B.A.,

POINT

- 4881 patients AIT (score ABCD2 = 5) / infarctus mineur
- Clopidogrel 300 puis 75 + Aspirine 50-325 vs Aspirine seul
- **Bénéfice marqué sur 1 mois** (3 semaines dans essai CHANCE)



Safety and efficacy of multipotent adult progenitor cells in acute ischaemic stroke (MASTERS): a randomised, double-blind, placebo-controlled, phase 2 trial

David C Hess, Lawrence R Wechsler, Wayne M Clark, Sean I Savitz, Gary A Ford, David Chiu, Dileep R Yavagal, Ken Uchino, David S Liebeskind, Alexander P Auchus, Souvik Sen, Cathy A Sila, Jeffrey D Vest, Robert W Mays

- Dose-escalation, 3 groups (400 or 1200 million MAPC), randomized vs placebo
- 33 centers (USA, UK)
- **IV injection of allogenic** MAPC (*from bone marrow*), 24h-48h post-stroke
- **Objective: safety and efficacy**
- **Inclusion:** 18 to 83 yo / **Ischemic stroke (NIHSS = 8 - 20)**
- Non inclusion: splenectomy
- **8 patients (safety) + 129 patients** (2011 to 2015)
- Safety at 7 days and efficacy at 3 months (NIHSS, Rankin, Barthel) / 1-year follow-up
- **No cell related adverse events**
- Trend for benefit ? Decrease of infection (at 1 year)

AHA/ASA Guideline

2018 Guidelines for the Early Management of Patients With Acute Ischemic Stroke

**A Guideline for Healthcare Professionals From the American Heart
Association/American Stroke Association**

*Reviewed for evidence-based integrity and endorsed by the American Association of Neurological
Surgeons and Congress of Neurological Surgeons*

Endorsed by the Society for Academic Emergency Medicine

Dernière version: 2013
Pré-hospitalier → J15 post-AVC
Adultes uniquement

- Info Grand Public
 - **On-scene time = 15 min** + préalerte
 - **Pas d'échelle préhospitalière** pour prédire occlusion de gros tronc (NIHSS > 10 meilleur)
 - **Certification** des UNV (ANGELS en cours) + **registre**
 - Door-to-needle < 45min pour >50%
 - Door-in-door-out (transport primo-secondaire) < 30min ?
 - Télé-AVC pour thrombolyse et **triage**
 - **Avis téléphonique** « raisonnable » pour thrombolyse (Briançon, Papeete...)
 - Imagerie multimodale : vasculaire, perfusion **< 20min (à préciser < ou > 6h?)**
-
- **Tenecteplase 0,4mg/kg en bolus IV unique possible**
 - **Thombectomie distale (M2, M3) « raisonnable » : à anticiper pour nos filières !!!**
 - Hémicraniectomie après 60 ans à discuter
 - **Revascularisation carotide sténosée symptomatique de 2 à 7 jours**
 - Dépister les troubles de déglutition
 - Nutrition et soins bucco-dentaires
 - **Pas de bas de contention !**
 - **Limitation thérapeutique et directives anticipées**
 - Echocardiogramme, IRM, bilan lipidique pas en routine ???
-
- **Formation codifiée** des « neuro... » interventionnels
 - **Formation en UNV des urgentistes** (DES, séniors...)