

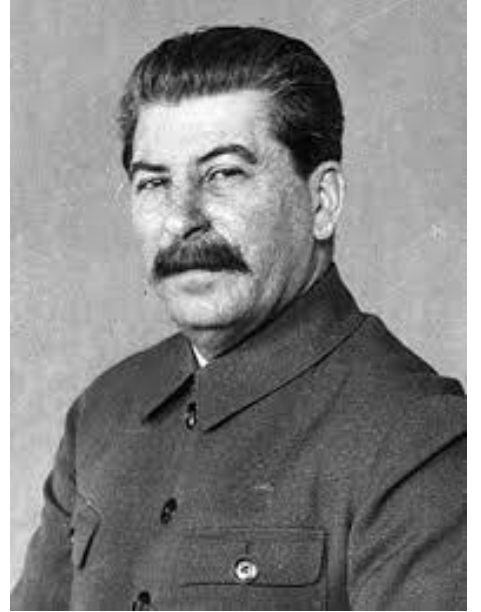
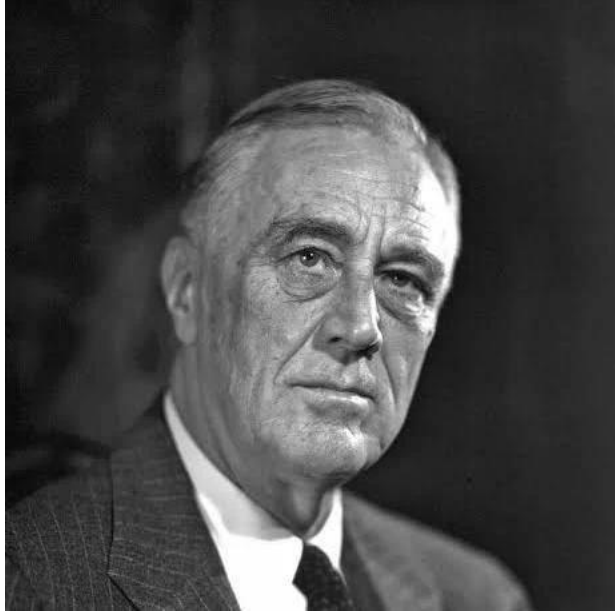


Beroerte



Disclosures

<i>Company Name</i>	<i>Honoraria/ Expenses</i>	<i>Consulting/ Advisory Board</i>	<i>Funded Research</i>	<i>Royalties/ Patent</i>	<i>Stock Options</i>	<i>Ownership/ Equity Position</i>	<i>Employee</i>	<i>Other (please specify)</i>
Bayer		X						
AstraZeneca		X						
Eli Lilly		X						
TrianecT						X		





Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019



GBD 2019 Diseases and Injuries Collaborators^a

Summary

Background In an era of shifting global agendas and expanded emphasis on non-communicable diseases and injuries

Leading causes 2019

Percentage of DALYs 2019

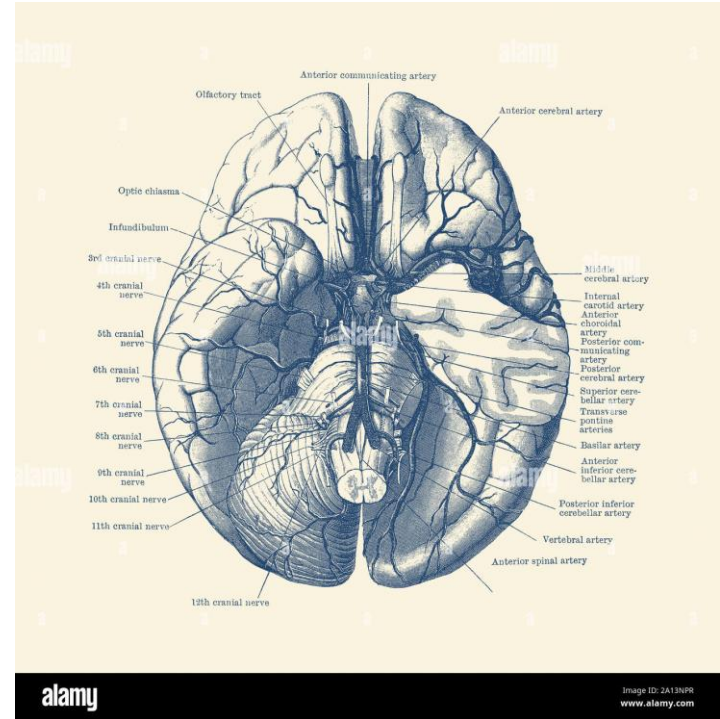
1 Neonatal disorders	7·3 (6·4 to 8·4)
2 Ischaemic heart disease	7·2 (6·5 to 7·9)
3 Stroke	5·7 (5·1 to 6·2)
4 Lower respiratory infections	3·8 (3·3 to 4·3)
5 Diarrhoeal diseases	3·2 (2·6 to 4·0)
6 COPD	2·9 (2·6 to 3·2)
7 Road injuries	2·9 (2·6 to 3·0)
8 Diabetes	2·8 (2·5 to 3·1)
9 Low back pain	2·5 (1·9 to 3·1)
10 Congenital birth defects	2·1 (1·7 to 2·6)
11 HIV/AIDS	1·9 (1·6 to 2·2)
12 Tuberculosis	1·9 (1·7 to 2·0)
13 Depressive disorders	1·8 (1·4 to 2·4)
14 Malaria	1·8 (0·9 to 3·1)
15 Headache disorders	1·8 (0·4 to 3·8)
16 Cirrhosis	1·8 (1·6 to 2·0)
17 Lung cancer	1·8 (1·6 to 2·0)
18 Chronic kidney disease	1·6 (1·5 to 1·8)
19 Other musculoskeletal	1·6 (1·2 to 2·1)
20 Age-related hearing loss	1·6 (1·2 to 2·1)
21 Falls	1·5 (1·4 to 1·7)
22 Self-harm	1·3 (1·2 to 1·5)
23 Gynaecological diseases	1·2 (0·9 to 1·5)
24 Anxiety disorders	1·1 (0·8 to 1·5)
25 Dietary iron deficiency	1·1 (0·8 to 1·5)



Naamgeving

Synoniemen

- Beroerte (van beroeren)
- CVA (cerebrovasculair accident)
- Stroke (slag of stoot; *stroke of God's hand...*)
- Attack (takkenwrijf...)





Verschillende soorten beroertes

Herseninfarct
(TIA)

Hersenbloeding

Subarachnoidale
bloeding

85%

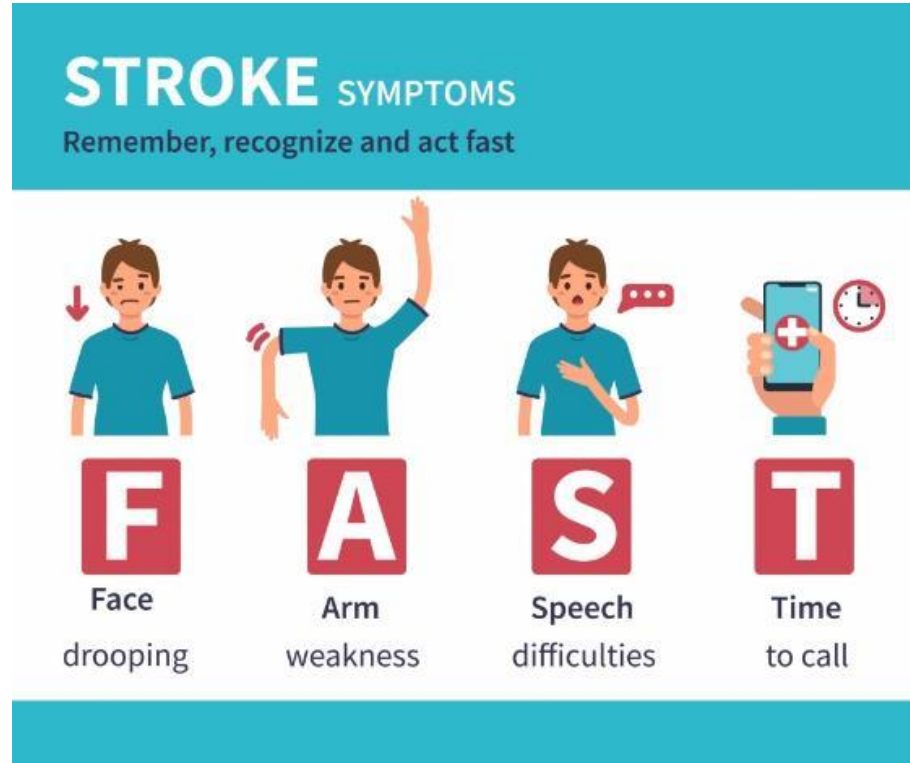
10%

5%



Verschijnselen beroerte (symptomen)

- Verschijnselen ontstaan plotseling
- Bekende verschijnselen (FAST)
- Minder bekende verschijnselen
- Verschijnselen beroerte = 112!





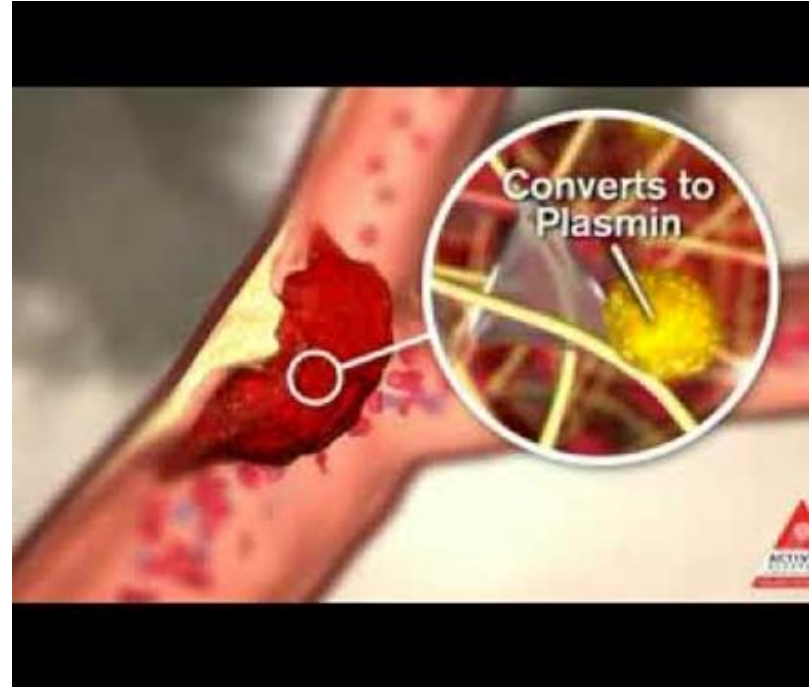
FAST: Time is brain!

	Brain Cells Lost	Number of Years the Brain Ages
Per Stroke	1.2 billion	36 yrs
Per Hour	120 million	3.6 yrs
Per Minute	1.9 million	3.1 weeks
Per Second	32,000	8.7 hrs



Trombolyse

- Medicijn dat stolsels oplost
- Bloedvat dat dichtzit openmaken
- rTPA, alteplase/tenecteplase = plasminogen activator
- Via een infuus





2015: een revolutie in de behandeling van beroerte

The NEW ENGLAND JOURNAL *of* MEDICINE

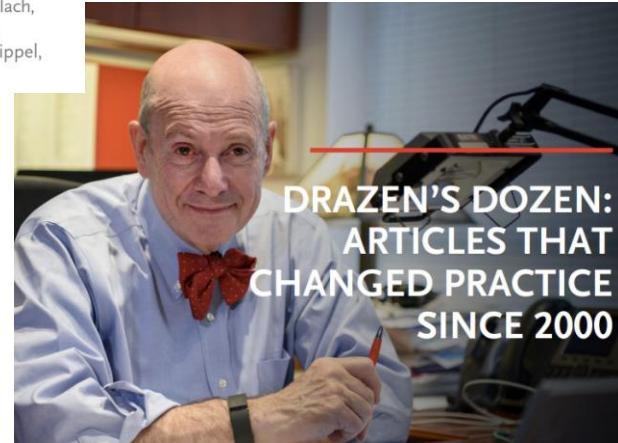
ESTABLISHED IN 1812

JANUARY 1, 2015

VOL. 372 NO. 1

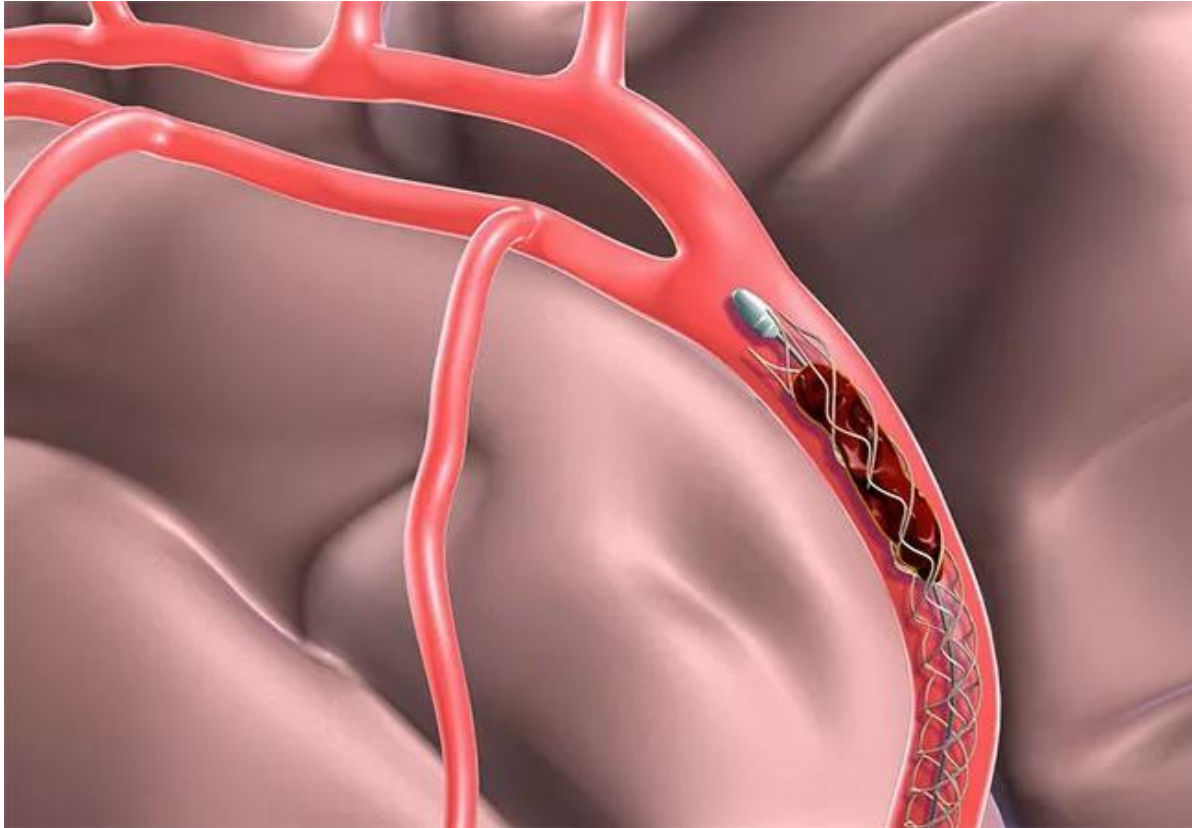
A Randomized Trial of Intraarterial Treatment for Acute Ischemic Stroke

O.A. Berkhemer, P.S.S. Fransen, D. Beumer, L.A. van den Berg, H.F. Lingsma, A.J. Yoo, W.J. Schonewille, J.A. Vos, P.J. Nederkoorn, M.J.H. Wermer, M.A.A. van Walderveen, J. Staals, J. Hofmeijer, J.A. van Oostayen, G.J. Lycklama à Nijeholt, J. Boiten, P.A. Brouwer, B.J. Emmer, S.F. de Bruijn, L.C. van Dijk, L.J. Kappelle, R.H. Lo, E.J. van Dijk, J. de Vries, P.L.M. de Kort, W.J.J. van Rooij, J.S.P. van den Berg, B.A.A.M. van Hasselt, L.A.M. Aerden, R.J. Dallinga, M.C. Visser, J.C.J. Bot, P.C. Vroomen, O. Eshghi, T.H.C.M.L. Schreuder, R.J.J. Heijboer, K. Keizer, A.V. Tielbeek, H.M. den Hertog, D.G. Gerrits, R.M. van den Berg-Vos, G.B. Karas, E.W. Steyerberg, H.Z. Flach, H.A. Marquering, M.E.S. Sprengers, S.F.M. Jenniskens, L.F.M. Beenen, R. van den Berg, P.J. Koudstaal, W.H. van Zwam, Y.B.W.E.M. Roos, A. van der Lugt, R.J. van Oostenbrugge, C.B.L.M. Majoie, and D.W.J. Dippel, for the MR CLEAN Investigators*



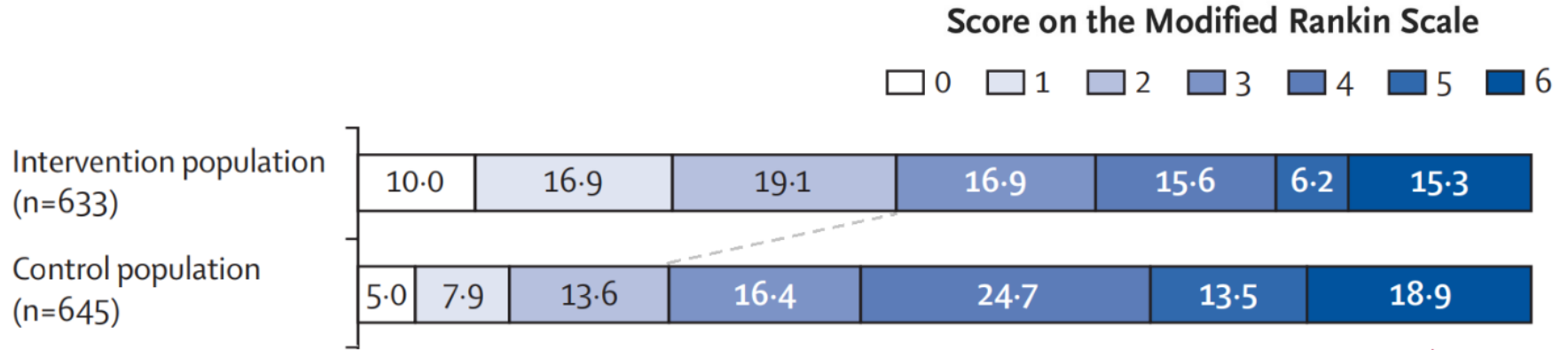


Endovasculaire trombectomie





Endovasculaire thrombectomie

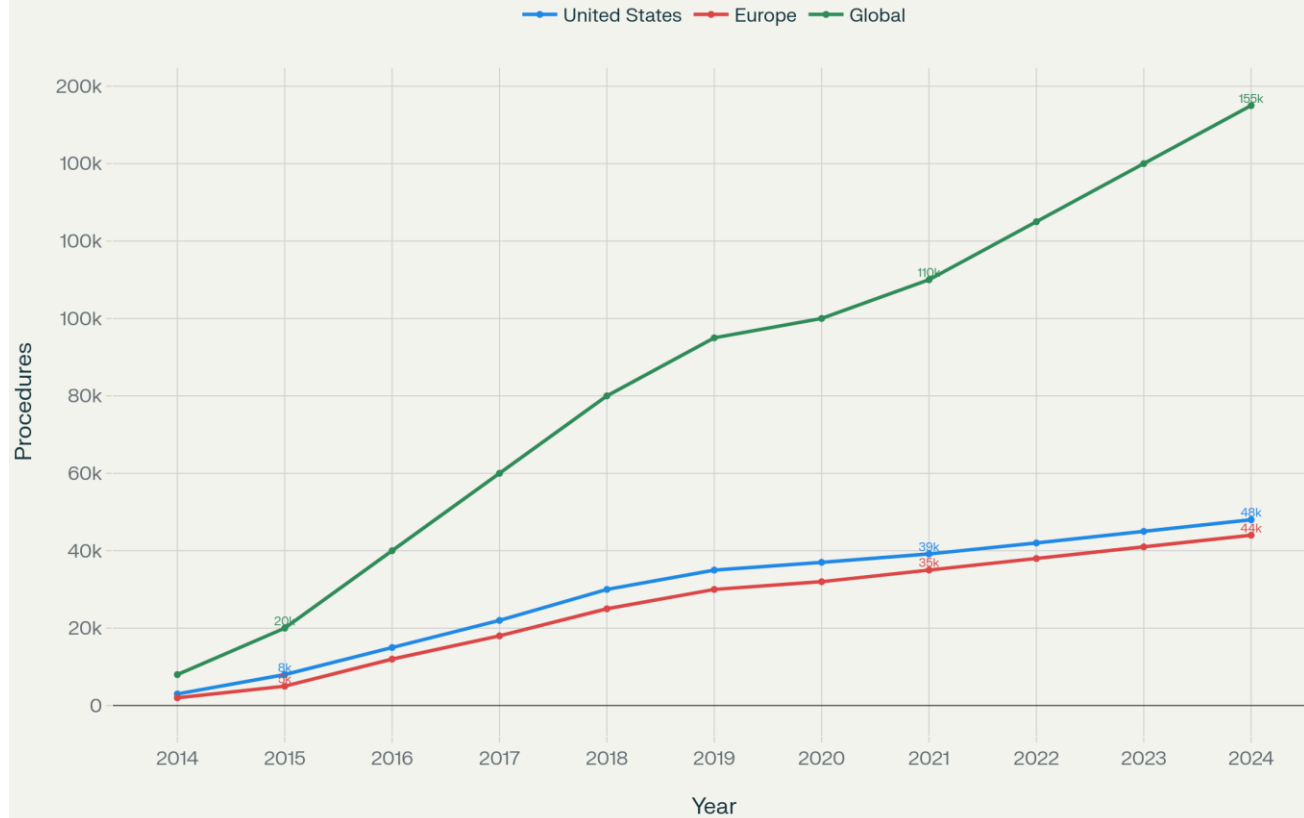


HERMES group. Lancet 2016.

ARR 20%, $p < 0,0001$

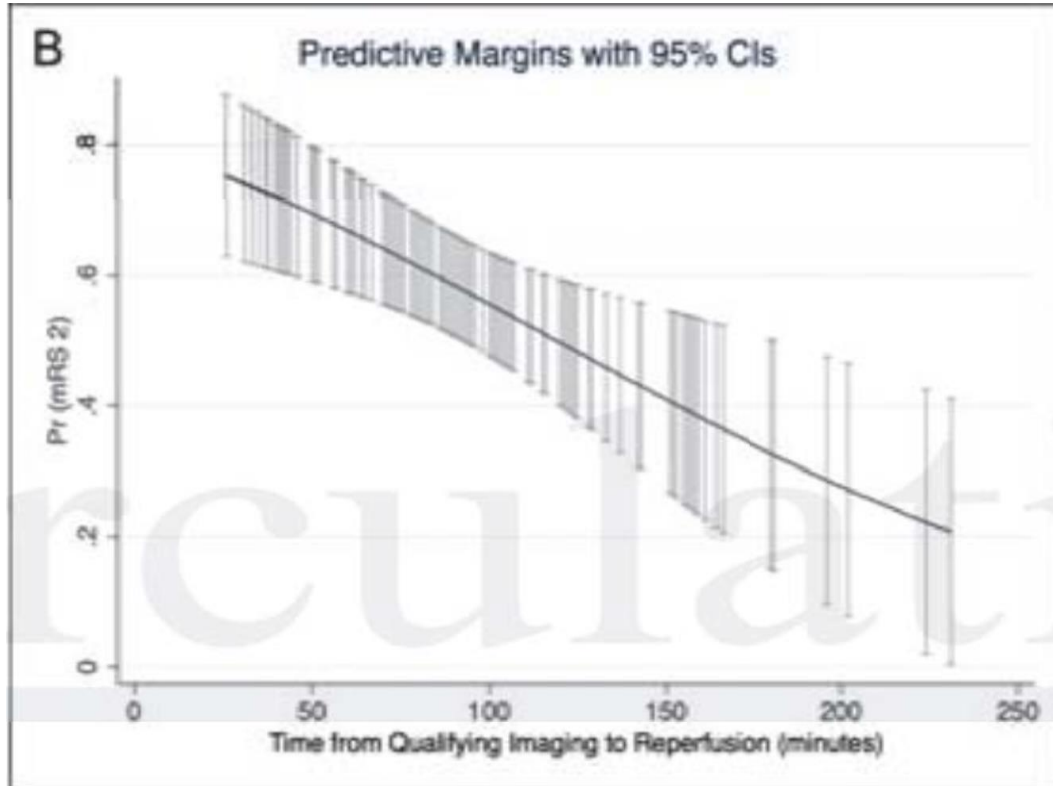


Thrombectomy Growth 2014-2024





The need for speed!



Iedere 30 minuten vertraging verlaagt absolute kans op goede komst na EVT met 8%!

Menon et al. Circulation 2016



Beeldvorming herseninfarct

vroeger en nu

Vroeger (2015)

- Non-contrast CT
- Doel niet om herseninfarct te diagnosticeren...
- Maar om bloeding uit te sluiten

Nu:

- CT-angiografie
- CT-perfusie
- Cardiale CT
- MRI



Kernboodschappen

1. Beroerte is een verzamelterm voor verschillende soorten vaataandoeningen van de hersenen
2. Behandeling van het herseninfarct is sterk verbeterd afgelopen jaren (trombolyse, trombectomie)
3. Time=brain
4. Bel bij verschijnselen van een beroerte altijd direct 112





Acknowledgements

Prof.dr. Jonathan Coutinho

Prof.dr. Yvo Roos