
ΘΕΡΑΠΕΥΤΙΚΕΣ ΕΞΕΛΙΞΕΙΣ

Αρτηριακή Υπέρταση

Αγγειακά Εγκεφαλικά Επεισόδια

Ε. Μανιός



2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults

Recommendations for BP Treatment Threshold and Use of Risk Estimation* to Guide Drug Treatment of Hypertension

References that support recommendations are summarized in Online Data Supplement 23.

COR	LOE	Recommendations
I	SBP: A	1. Use of BP-lowering medications is recommended for secondary prevention of recurrent CVD events in patients with clinical CVD and an average SBP of 130 mm Hg or higher or an average DBP of 80 mm Hg or higher, and for primary prevention in adults with an estimated 10-year atherosclerotic cardiovascular disease (ASCVD) risk of 10% or higher and an average SBP 130 mm Hg or higher or an average DBP 80 mm Hg or higher (1-9).
	DBP: C-EO	
I	C-LD	2. Use of BP-lowering medication is recommended for primary prevention of CVD in adults with no history of CVD and with an estimated 10-year ASCVD risk <10% and an SBP of 140 mm Hg or higher or a DBP of 90 mm Hg or higher (3, 10-13).

*ACC/AHA Pooled Cohort Equations (<http://tools.acc.org/ASCVD-Risk-Estimator/>) (13a) to estimate 10-year risk of atherosclerotic CVD. ASCVD was defined as a first CHD death, non-fatal MI or fatal or non-fatal stroke.





Catheter-based renal denervation in patients with uncontrolled hypertension in the absence of antihypertensive medications (SPYRAL HTN-OFF MED): a randomised, sham-controlled, proof-of-concept trial

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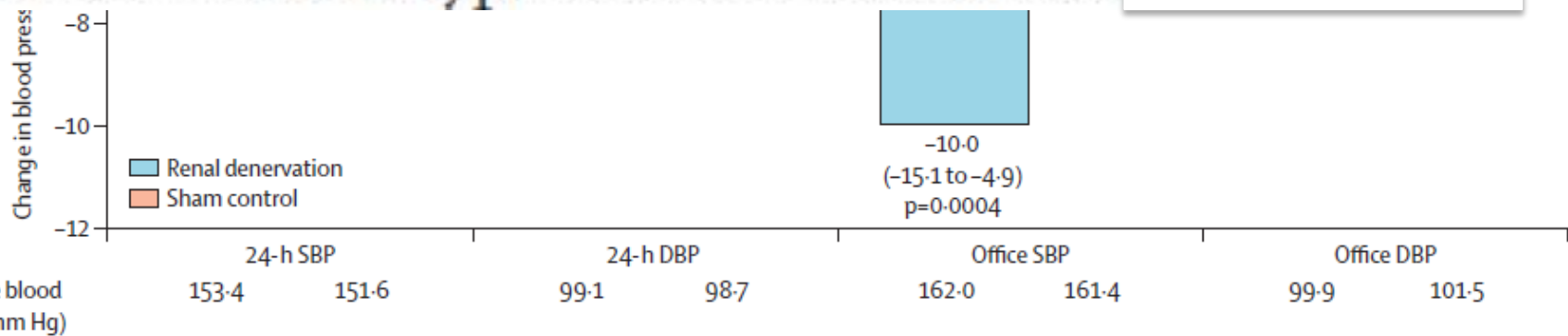
-5.0 (-9.9 to -0.2)
p=0.0414

-4.4 (-7.2 to -1.6)
p=0.0024

-7.7 (-14.0 to -1.5)
p=0.0155

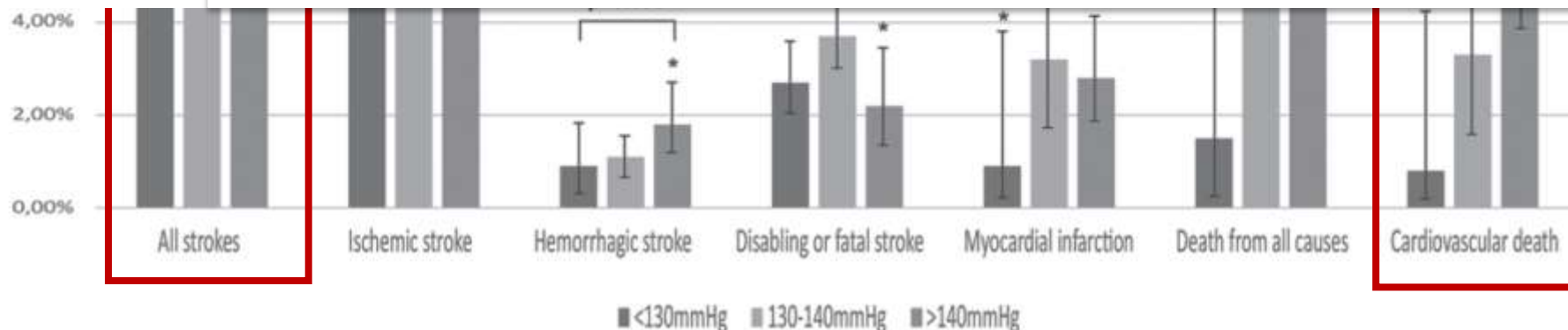
-4.9 (-8.5 to -1.4)
p=0.0077

In conclusion, primary results from the SPYRAL HTN-OFF MED trial provide biological proof of principle for the efficacy of catheter-based renal denervation to reduce blood pressure in patients with hypertension not treated with antihypertensive medications.





The degree of BP reduction is linearly and positively associated with the risk reduction in recurrent stroke and cardiovascular events.



Intensive blood pressure lowering in patients with acute intracerebral haemorrhage: clinical outcomes and haemorrhage expansion. Systematic review and meta-analysis of randomised trials

Gregoire Boulouis,^{1,2,3} Andrea Morotti,^{1,2} Joshua N Goldstein,^{1,2,4} Andreas Charidimou^{1,2}

Conclusions For patients with acute ICH similar to those included in RCTs and without contraindication to acute BP treatment, intensive acute BP lowering is safe, but does not seem to provide an incremental clinical benefit in terms of functional outcomes. The effect of intensive BP lowering on significant haematoma expansion at 24 hours warrants further investigation.



Efficacy and safety of ticagrelor versus aspirin in acute stroke or transient ischaemic attack of atherosclerotic origin: a subgroup analysis of SOCRATES, a randomised, double-blind, controlled trial



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	Ticagrelor (n=6589)*	Aspirin (n=6610)†	Hazard ratio (95% CI)‡	p value	p value for interaction
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In this prespecified exploratory analysis, ticagrelor was superior to aspirin in preventing stroke, myocardial infarction, and death at 90 days in patients with minor ischaemic stroke or high-risk transient ischaemic attack with ipsilateral atherosclerotic stenosis, as opposed to patients without stenosis.

Without ipsilateral extracranial or intracranial stenosis	78 (1.5%)	1.7%	65 (1.3%)	1.3%	1.23 (0.88-1.71)	0.22	..
Net clinical outcome (stroke, myocardial infarction, death, or life-threatening bleeding)	..	..	..	..	..	..	0.046
With ipsilateral extracranial or intracranial stenosis	110 (7.1%)	7.2%	148 (9.6%)	9.5%	0.72 (0.57-0.93)	0.01	..
Without ipsilateral extracranial or intracranial stenosis	347 (6.9%)	6.9%	360 (7.1%)	7.1%	0.97 (0.84-1.12)	0.67	..



	Intensive antiplatelet therapy (n=1556)	Guideline antiplatelet therapy (n=1540)	Adjusted cOR or HR (95% CI)	p value
Bleeding (safety analysis)				
Ordinal bleeding (cOR)	305/1541 (20%)	139/1531 (9%)	2.54 (2.05–3.16)	<0.0001
Fatal ^{po}	8/1541 (1%)	3/1531 (<1%)	3.48 (0.89–13.63)	0.074
Major	31/1541 (2%)	14/1531 (1%)	..	..
Moderate	25/1541 (2%)	13/1531 (1%)	..	..
Mild	241/1541 (16%)	109/1531 (7%)	..	..
None	1236/1541 (80%)	1392/1531 (91%)	..	..

In conclusion, findings from TARDIS show that among patients with acute ischaemic stroke or TIA who were recruited within 48 h after symptom onset, treatment with intensive antiplatelet therapy as compared with guideline antiplatelet therapy did not reduce stroke recurrence or its severity but did increase haemorrhage and its severity.

Major	24/1540 (2%)	13/1530 (1%)	1.71 (0.86–3.38)	0.13
Fatal or major	26/1540 (2%)	13/1530 (1%)	1.89 (0.96–3.71)	0.064
Stroke or major bleeding	87/1540 (6%)	69/1530 (5%)	1.24 (0.90–1.70)	0.19
Death, stroke, myocardial infarction, or major bleeding	102/1540 (7%)	98/1530 (6%)	1.02 (0.77–1.35)	0.88
Serious adverse events* (cOR)	335/1543 (22%)	327/1531 (21%)	1.02 (0.86–1.22)	0.80
Fatal	13/1543 (1%)	22/1531 (1%)	0.52 (0.25–1.05)	0.070
Severe	54/1543 (4%)	39/1531 (3%)	..	..
Moderate	167/1543 (11%)	148/1531 (10%)	..	..
Mild	101/1543 (7%)	118/1531 (8%)	..	..
None	1208/1543 (78%)	1204/1531 (79%)	..	..

Mechanical Thrombectomy Outcomes With and Without Intravenous Thrombolysis in Stroke Patients

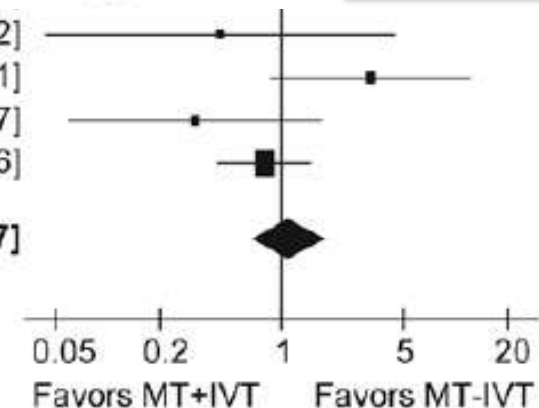
A Meta-Analysis

Our results demonstrated that MT+IVT patients had better functional outcomes, lower mortality, higher rate of successful recanalization, requiring lower number of device passes, and equal odds of sICH compared with MT-IVT patients.

Rai 2017	1/38	3/52	4.0%	0.44 [0.04, 4.42]
Mistry 2017	10/119	3/109	11.8%	3.24 [0.87, 12.11]
Coutinho 2017	2/160	5/131	7.7%	0.32 [0.06, 1.67]
Abilleira 2017	19/567	25/599	44.7%	0.80 [0.43, 1.46]
Total	68/1471	45/1143	100.0%	1.11 [0.69, 1.77]

Heterogeneity: $\text{Tau}^2 = 0.03$; $I^2 = 5\%$

Test for overall summary effect: $Z = 0.43$ ($P = 0.67$)



Patent Foramen Ovale Closure or Anticoagulation vs. Antiplatelets after Stroke

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NEJM 2017;377:1011-21

Long-Term Outcomes of Patent Foramen Ovale Closure or Medical Therapy after Stroke

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for the RESPECT Investigators*

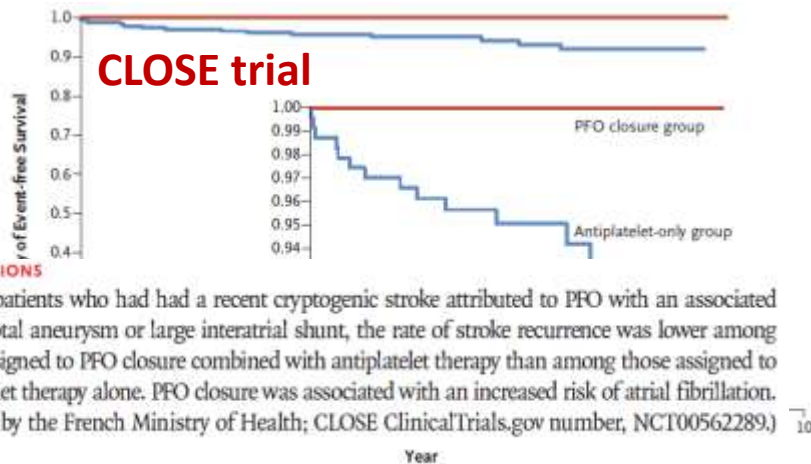
NEJM 2017;377:1022-32

Patent Foramen Ovale Closure or Antiplatelet Therapy for Cryptogenic Stroke

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David Hildick-Smith, M.D., J. David Spence, M.D., and Lars Thomassen, M.D.,
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NEJM 2017;377:1033-42

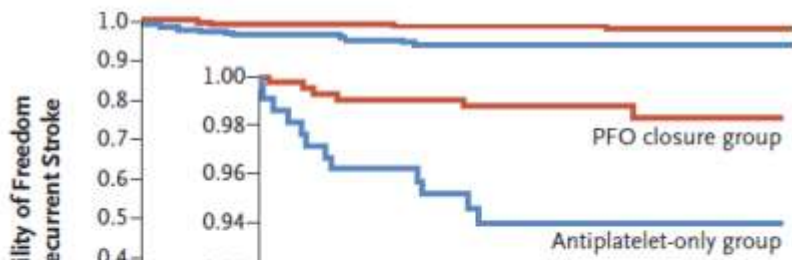




CONCLUSIONS

Among patients who had had a recent cryptogenic stroke attributed to PFO with an associated atrial septal aneurysm or large interatrial shunt, the rate of stroke recurrence was lower among those assigned to PFO closure combined with antiplatelet therapy than among those assigned to antiplatelet therapy alone. PFO closure was associated with an increased risk of atrial fibrillation. (Funded by the French Ministry of Health; CLOSE ClinicalTrials.gov number, NCT00562289.)

No. at Risk	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
PFO closure group	238	238	232	200	179	141	99	64	20	0	0
Antiplatelet-only group	235	229	223	198	160	130	96	55	19	0	0

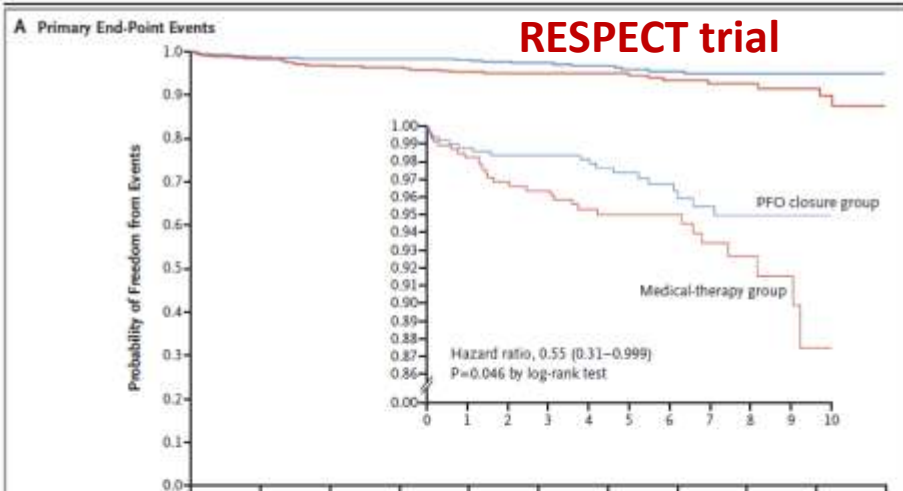


CONCLUSIONS

Among patients with a PFO who had had a cryptogenic stroke, the risk of subsequent ischemic stroke was lower among those assigned to PFO closure combined with antiplatelet therapy than among those assigned to antiplatelet therapy alone; however, PFO closure was associated with higher rates of device complications and atrial fibrillation. (Funded by W.L. Gore and Associates; Gore REDUCE ClinicalTrials.gov number, NCT00738894.)

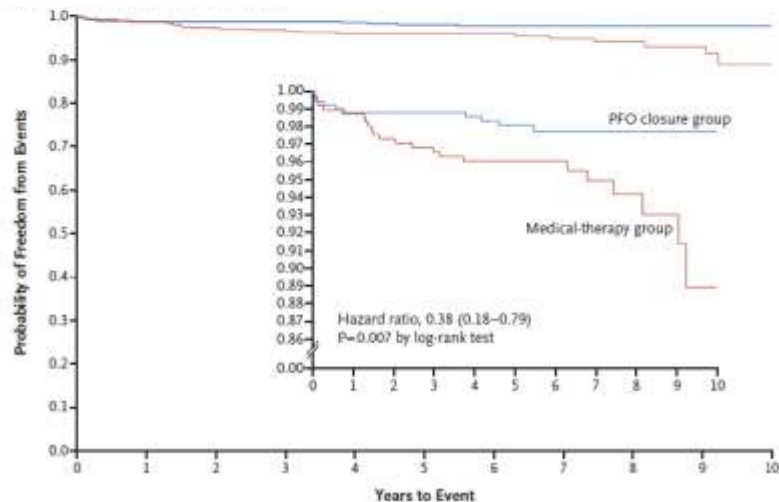
REDUCE trial Follow-up (mo)

No. at Risk	0	1	2	3	4	5	6	7	8	9	10
PFO closure group	441	422	417	398	378	358	338	318	298	278	102
Antiplatelet-only group	223	202	194	173	156	139	122	105	88	71	30



CONCLUSIONS

Among adults who had had a cryptogenic ischemic stroke, closure of a PFO was associated with a lower rate of recurrent ischemic strokes than medical therapy alone during extended follow-up. (Funded by St. Jude Medical; RESPECT ClinicalTrials.gov number, NCT00465270.)



No. at Risk	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
PFO closure group	499	476	464	447	421	352	262	197	128	77	41
Medical-therapy group	481	433	394	380	354	282	218	150	104	59	31

