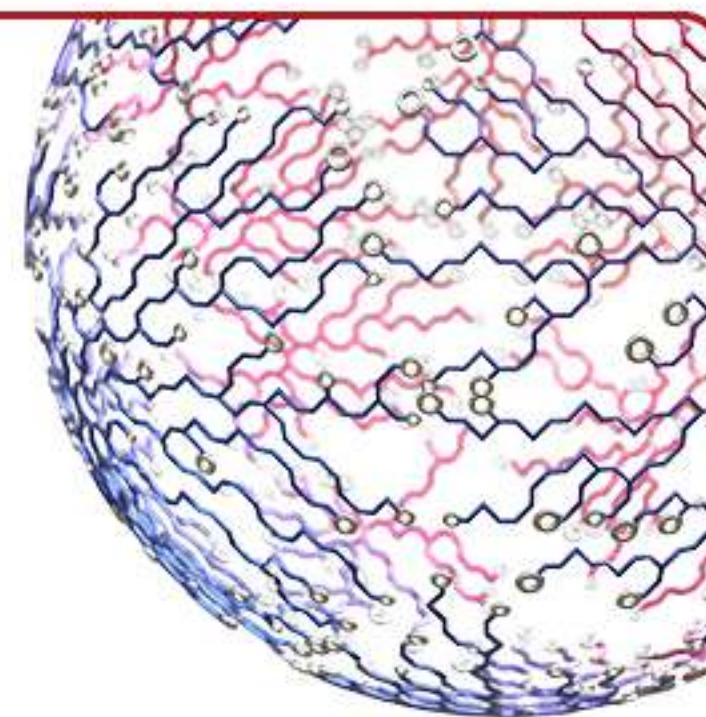


ACACIA-HCM

Aficamten for symptomatic non-obstructive hypertrophic cardiomyopathy



#ESC Congress



Presenter: Ahmad Masri (Oregon Health & Science University Medical Group - Portland, USA)



Conclusion

Aficamten significantly improved symptom burden and exercise capacity vs placebo in patients with symptomatic non-obstructive hypertrophic cardiomyopathy (nHCM).



Implications

This is the first trial to document therapeutic benefit for patients with nHCM.

OBJECTIVE

To determine the effects of aficamten vs placebo on symptom burden and exercise capacity in patients with nHCM.

METHODS

- Symptomatic nHCM



517

patients
randomised 1:1

182 centres worldwide

Aficamten

5–20 mg titrated
at week 2, 4 and 6
based on LVEF



Placebo



72 weeks

RESULTS

Primary endpoints



KCCQ-CSS improvement at 36 weeks

- Aficamten: 11.4
- Placebo: 8.4



p=0.02



pVO₂ change (mL/kg/min) at 36 weeks

- Aficamten: 0.64
- Placebo: -0.03



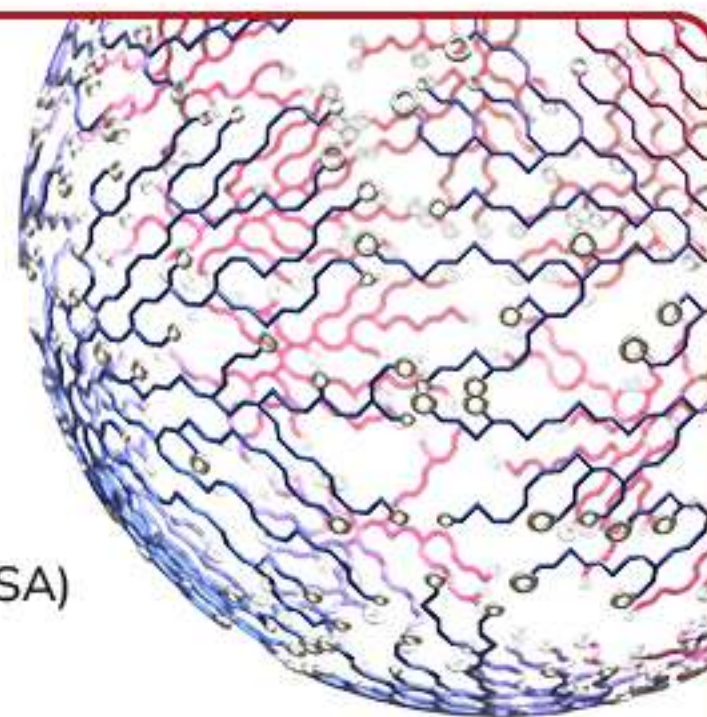
p=0.003

CARDIO-TTRansform

Efficacy and safety of eplontersen in patients with transthyretin amyloid cardiomyopathy (ATTR-CM)



#ESC Congress



Presenter: Mathew Maurer (Columbia University Irving Medical Centre - New York, USA)



Conclusion

Eplontersen did not significantly reduce the primary endpoint of CV mortality and recurrent CV events vs placebo at 140 weeks.



Implications

These findings will inform clinical practice and the evaluation of TTR-lowering treatment strategies in ATTR-CM.

OBJECTIVE

To assess the efficacy and safety of eplontersen in patients with ATTR-CM.

METHODS

- Variant or wild-type ATTR-CM
- Receiving SoC


1,432
patients
randomised 1:1
130 sites in 20 countries

Eplontersen 45 mg SC Q4W

Placebo SC Q4W

RESULTS

Overall	Eplontersen	Placebo	
Primary endpoint CV mortality and recurrent CV events at 140 weeks	381 events in 210 patients	392 events in 231 patients	Rate ratio 0.89 95% CI 0.73–1.09 p=0.277

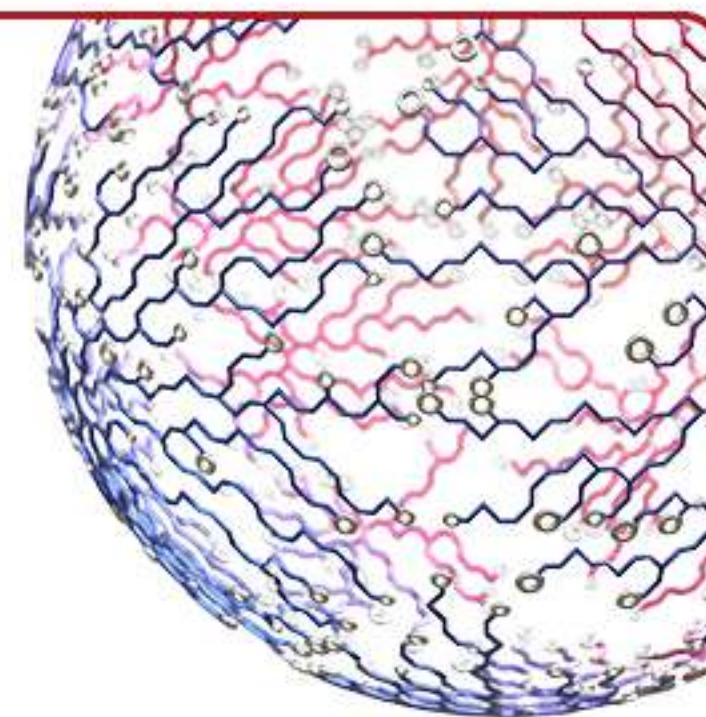
- No clear benefit in patients receiving background stabiliser therapy
- Fewer primary endpoint events with eplontersen vs placebo in patients not receiving a stabiliser

CMR GUIDE

CMR-guided management of mild-moderate left ventricular systolic dysfunction with an ICD



#ESCCongress



Presenter: Joseph Selvanayagam (Flinders University - Adelaide, Australia)



Conclusion

In patients with LVEF 36–50% and myocardial scar, an ICD had no effect on sudden cardiac death (SCD) or haemodynamically significant ventricular arrhythmia (HSVA) overall but did reduce risk in younger patients.



Implications

These data could be used in shared decision-making with patients.

OBJECTIVE

To determine whether ICD therapy guided by the presence of myocardial scar on CMR can reduce rates of SCD or HSVA in patients with LVEF 36–50%.

METHODS

- LVEF 36–50%
- LGE-CMR-defined myocardial scar

353
patients
randomised 1:1
18 sites in 3 countries

Single-chamber
ICD

Implantable loop
recorder (ILR)



Primary endpoint:
SCD or HSVA

Median follow-up:
6 years

RESULTS

Primary endpoint

		ICD	ILR
Overall	0.76; 95% CI 0.37–1.58	7.8%	9.2%

Patients aged <70 years:
Significant 72% reduction

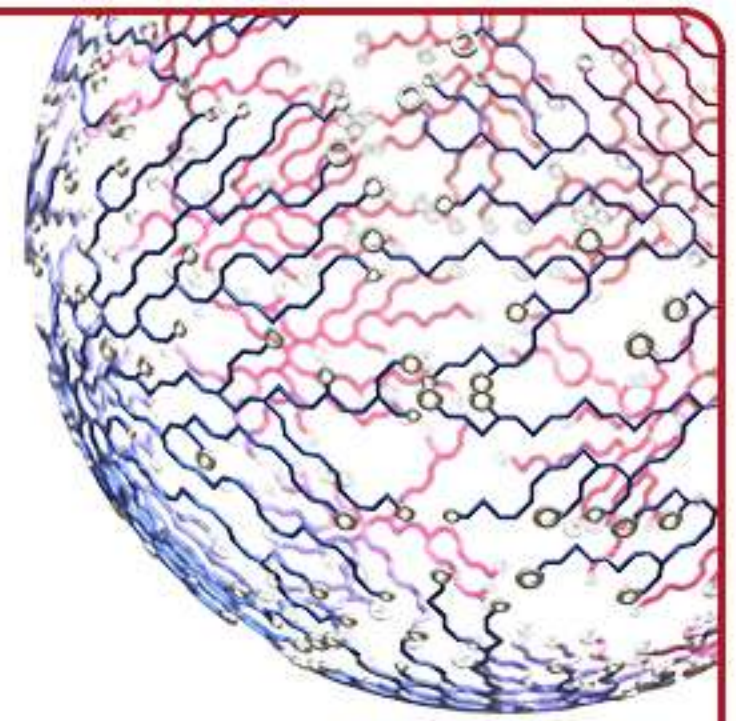
Patients aged ≥70 years:
No benefit

POET-II

Response-tailored duration of antibiotic treatment for infectious endocarditis



#ESCCongress



Presenter: Henning Bundgaard (Rigshospitalet - Copenhagen University Hospital - Copenhagen, Denmark)



Conclusion

A tailored strategy shortened antibiotic duration by 2 weeks vs standard therapy, with no major safety concerns.



Implications

A shorter course of antibiotics has many advantages for patients and for the healthcare system.

OBJECTIVE

To investigate whether tailoring antibiotic therapy in those who have an initial response using the POET criteria safely reduces the duration of antibiotics.

METHODS

- Left-sided infectious endocarditis
- *S. aureus*, *E. faecalis* or streptococci infection
- Stabilised based on the POET criteria


508
patients
randomised 1:1
13 centres in
Denmark, Sweden and US

Tailored

based on response

Antibiotics for
minimum 2–4 weeks



Standard

Antibiotics for 4–6 weeks



RESULTS

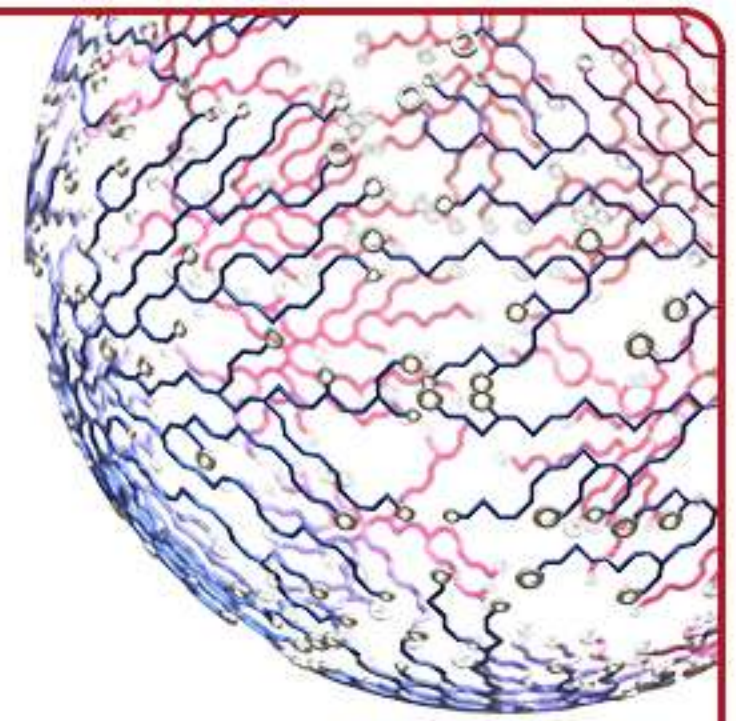
	Tailored duration	Standard duration	
Median duration of antibiotics	26 days ↓	41 days	p<0.001
Primary endpoint Median number of days alive without antibiotic treatment within 6 months after randomisation	183 days ↑	169 days	p<0.001
Safety endpoint All-cause mortality, unplanned heart valve surgery or symptomatic embolic events	8.2% ↔	10.7%	Noninferior

SINGLE-AF

Anticoagulation for atrial fibrillation with intermediate stroke risk



#ESCCongress



Presenter: Boyoung Joung (Yonsei University - Seoul, South Korea)



Conclusion

Among patients with AF and intermediate stroke risk, DOAC therapy lowered the risk of stroke, systemic embolism, major bleeding or CV death at 2 years vs no DOACs.



Implications

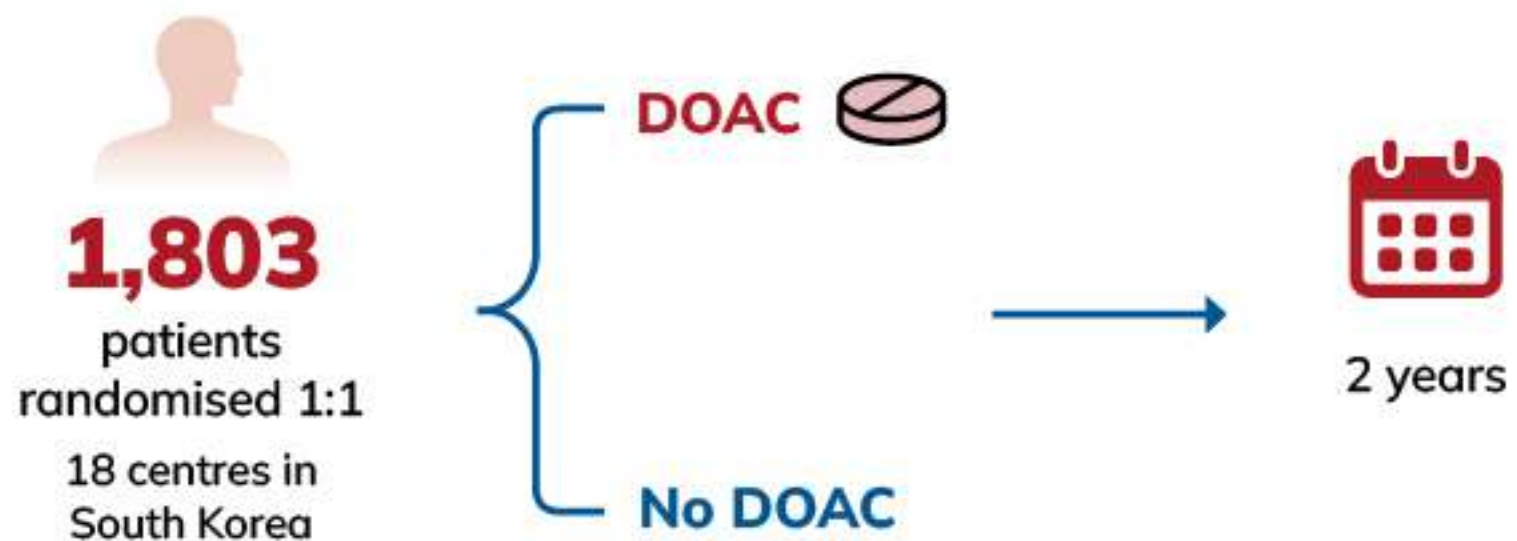
This first randomised trial demonstrates the benefits of DOACs in patients with AF at intermediate stroke risk.

OBJECTIVE

To investigate whether DOACs can reduce adverse clinical events in patients with AF and intermediate stroke risk vs no DOACs.

METHODS

- AF
- CHA2DS2-VASc:
men=1
women=2



RESULTS

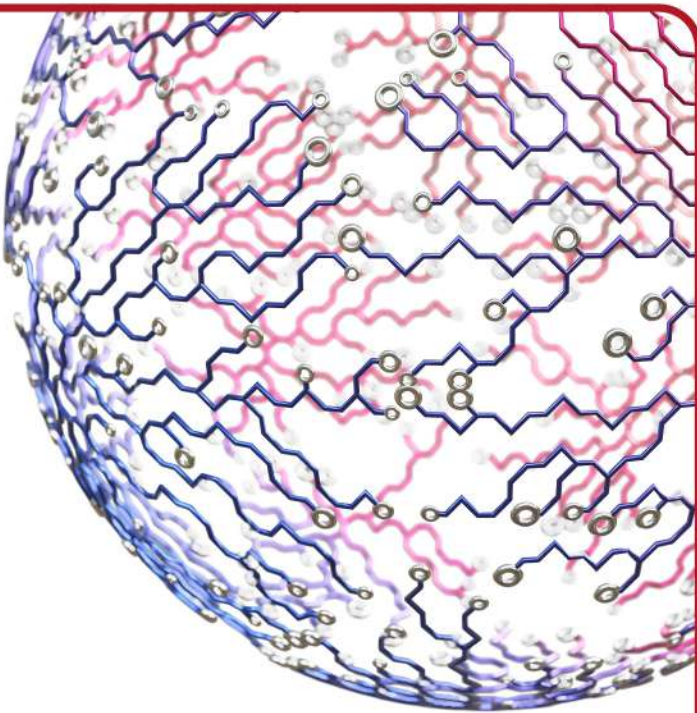
	DOAC	No DOAC
Primary endpoint at 2 years Stroke, systemic embolism, major bleeding or CV death	0.5%	1.5%
	HR 0.31 95% CI 0.10–0.94 p=0.028	
Major bleeding at 2 years	0.3%	0.5%

AMUNDSEN

Evolocumab before PCI for acute MI



#ESCCongress



Presenter: Gilles Montalescot (Sorbonne University - Paris, France)



Conclusion

Evolocumab administered before PCI improved LDL-C goal attainment but did not significantly reduce the main clinical CV outcome at 1 year.



Implications

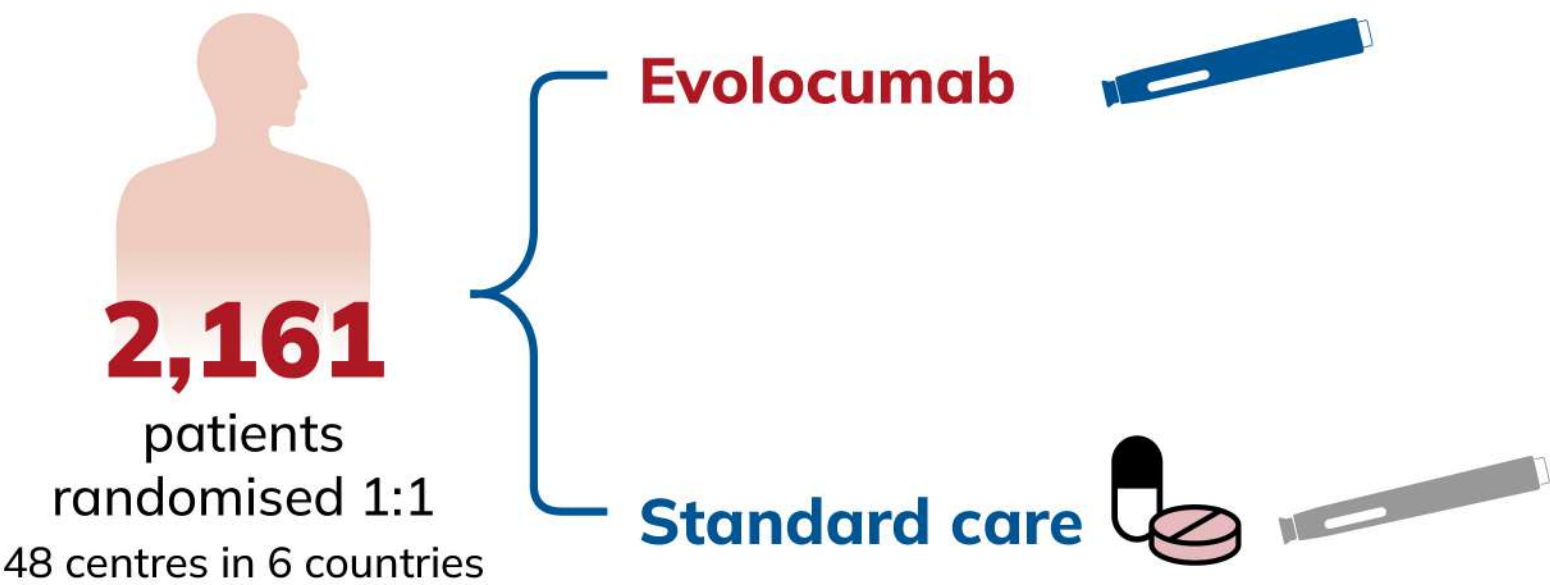
Additional strategies are needed to reduce recurrent CV events after MI.

OBJECTIVE

To compare evolocumab prior to PCI vs standard care in high-risk patients admitted to hospital with an MI.

METHODS

- STEMI undergoing primary PCI or NSTEMI indicated for PCI
- ≥ 1 high-risk characteristic



RESULTS

At 12 months	Evolocumab	Standard care	
Primary endpoint LDL-C reduction $\geq 50\%$ and < 55 mg/dL	82.0%	40.0%	$p < 0.001$
Main clinical endpoint All-cause death or unplanned CV hospitalisations	14.6%	15.4%	

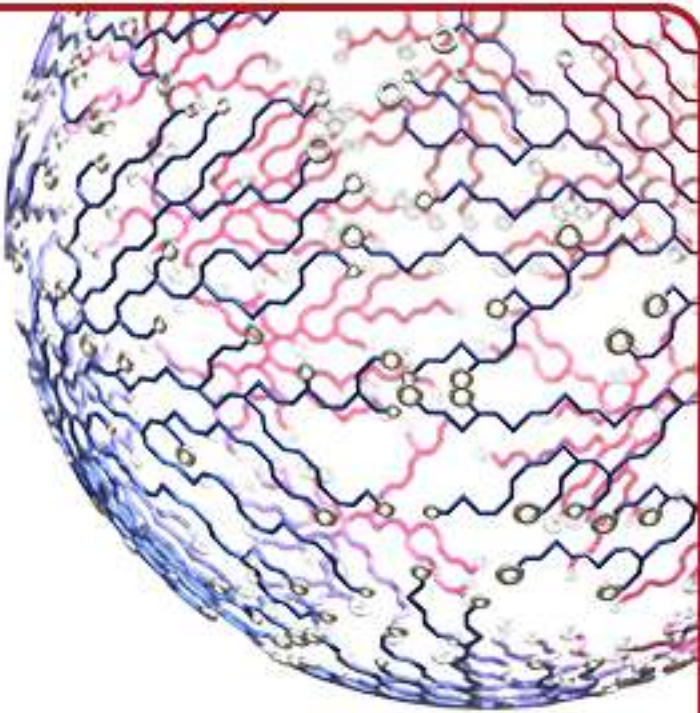
DAN-RSV

RSV prefusion F protein-based vaccine (RSVpreF) for preventing cardiorespiratory hospitalisations

Presenter: Tor Biering-Sorensen (Gentofte University Hospital - Copenhagen, Denmark)



#ESCCongress



Conclusion

Vaccination against respiratory syncytial virus (RSV) reduced RSV-related and cardiorespiratory hospitalisations during the first RSV season after vaccination.



Implications

These findings provide randomised evidence supporting RSVpreF vaccination for preventing severe RSV-related disease and suggest broader benefits for cardiorespiratory health.

OBJECTIVE

To evaluate the effectiveness of a bivalent RSV prefusion F protein-based vaccine (RSVpreF) in preventing RSV-related hospitalisations among adults.

METHODS

- Ongoing pragmatic trial
- Conducted using integrated public healthcare registries in Denmark and Spain


513,358
adults
randomised 1:1



RESULTS

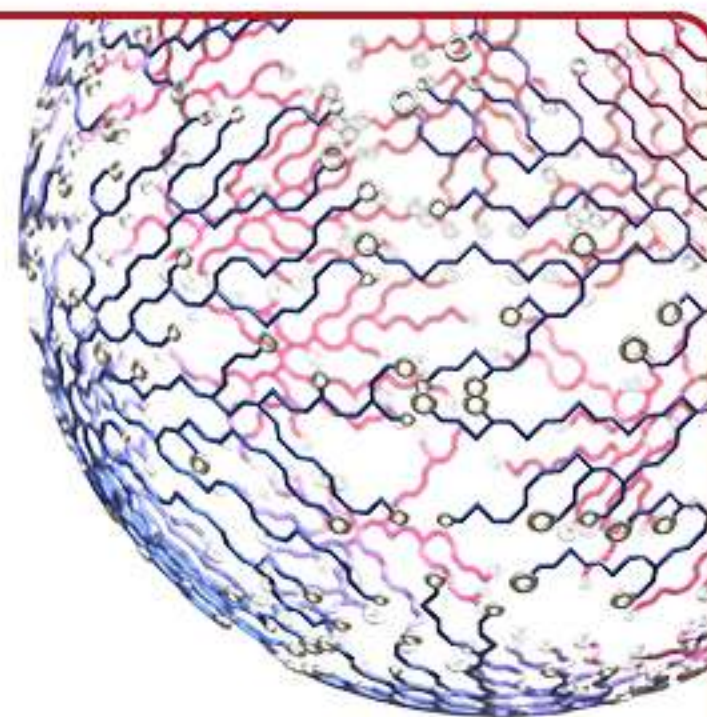
	RSVpreF	No vaccine	Vaccine effectiveness
Hospitalisations for RSV-related respiratory tract disease per 1,000 PY	0.2	0.6	70.3%
Hospitalisations for any cardiorespiratory disease per 1,000 PY	23.4	24.9	6.2%

ENRICH-AF

Edoxaban in intracranial haemorrhage survivors with AF



#ESCCongress



Presenter: Ashkan Shoamanesh (McMaster University - Hamilton, Canada)



Conclusion

Edoxaban did not reduce stroke or systemic embolism and increased major bleeding in AF patients with prior intracranial haemorrhage.



Implications

Safer stroke-prevention strategies are required in this vulnerable population.

OBJECTIVE

To evaluate the efficacy and safety of oral anticoagulation in high-risk patients with AF and prior intracranial haemorrhage.

METHODS

- High-risk AF
- Prior intracranial haemorrhage



948

patients
randomised 1:1
174 sites in
20 countries

Edoxaban



No anticoagulation



Average follow-up:
28 months

RESULTS

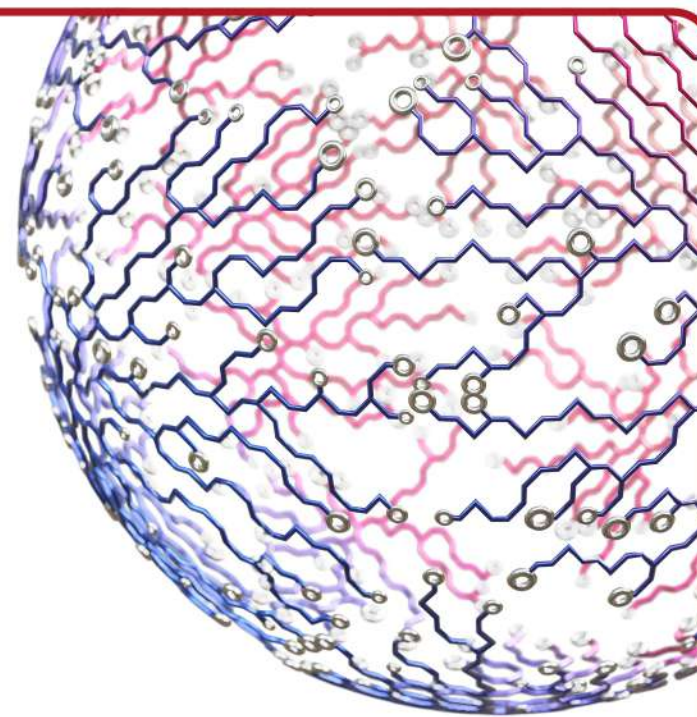
Primary endpoints	Edoxaban	No anticoagulation	
Efficacy: Stroke or systemic embolism	11.8%	12.8%	p=0.48
Safety: ISTH major bleeding	11.6%	5.2%	p<0.001

REACT

Prevalence of silent atherosclerosis across adult life



#ESCCongress



Presenter: Henning Bundgaard (Rigshospitalet - Copenhagen University Hospital - Copenhagen, Denmark)



Conclusion

Silent atherosclerosis was detected in young adults without known ASCVD and increased in prevalence in a sigmoid curve to very high levels in older individuals.



Implications

Early imaging-based detection of atherosclerosis may help to improve targeting of primary prevention.

OBJECTIVE

To create a large-scale atlas of silent atherosclerosis using different imaging modalities in multiple vascular beds, across the adult lifespan.

METHODS

- 18–70 years old
- No known ASCVD

16,808
individuals
4 sites in Denmark
4 sites in Spain

Imaging

Vascular ultrasound of carotid and femoral arteries



Presence of silent atherosclerosis



Coronary CT angiography



RESULTS

Presence of silent atherosclerosis

All participants

57.1%



By age

~8%

18–29
year olds



>90%

With multiterritorial involvement

60–70
year olds

By sex

63.4%



Increased from third decade in men

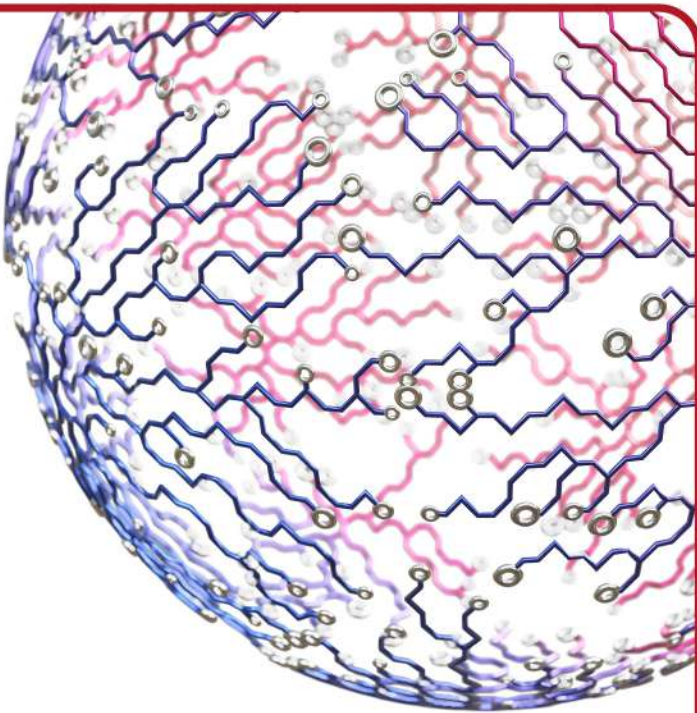
50.9%



Increased after 40 years in women

STAREE

Statins for reducing events in the elderly



Presenter: Sophia Zoungas (Monash School of Public Health and Preventive Medicine - Melbourne, Australia)



Conclusion

Atorvastatin significantly reduced major CV events but did not significantly improve disability-free survival vs placebo in older people without known CVD, diabetes and dementia.



Implications

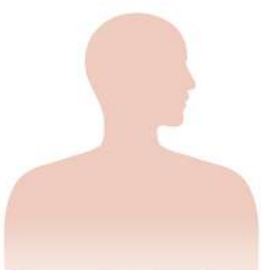
These data may inform guidelines to help improve CV risk management in older people.

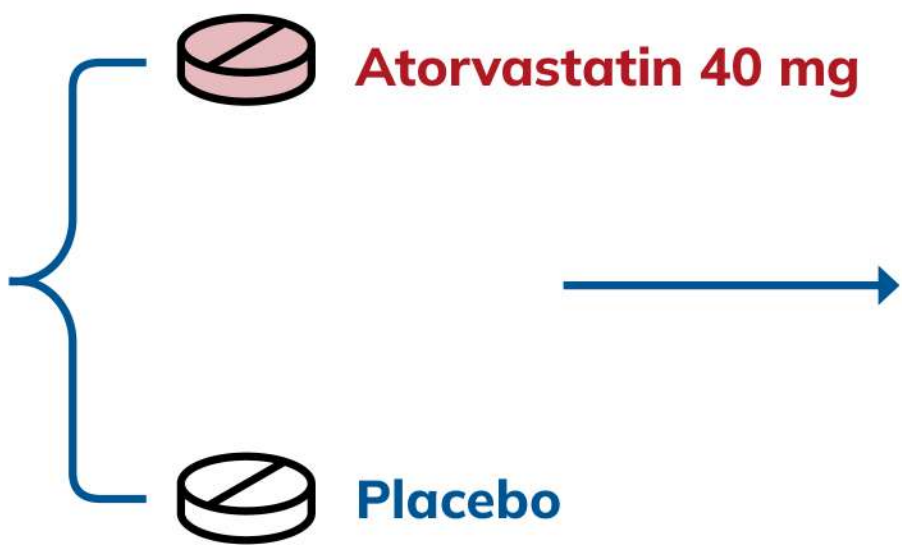
OBJECTIVE

To assess the use of atorvastatin for primary prevention in older individuals.

METHODS

- ≥ 70 years of age
- No known CVD, diabetes and dementia


9,971
patients
randomised 1:1
GP practices in Australia




Median follow-up:
5.9 years

RESULTS

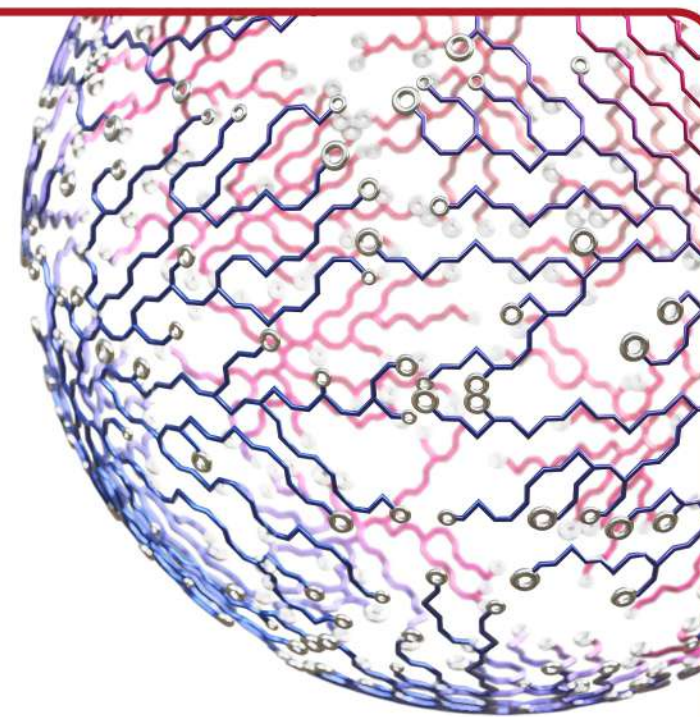
Primary endpoints	Atorvastatin	Placebo	
CV death, nonfatal MI, stroke or coronary revascularisation	6.0% 	8.3%	HR 0.70 95% CI 0.61–0.82
Death, dementia or persistent physical disability	12.8% 	13.6%	HR 0.94 95% CI 0.84–1.05

TRANQUILITY

Pacibekitug (IL-6 ligand mAb) in patients with CKD and high CV risk



#ESCCongress



Presenter: Deepak Bhatt (Icahn School of Medicine at Mount Sinai - New York City, USA)



Conclusion

Pacibekitug caused sustained decreases in hsCRP up to day 180 with no clear dose-related safety signals observed.



Implications

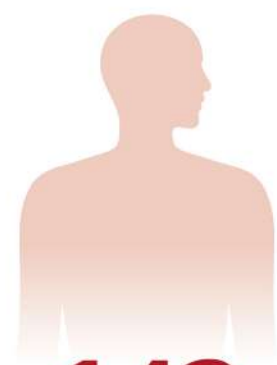
The results of this phase II trial support clinical evaluation of pacibekitug in a CV outcomes trial.

OBJECTIVE

To evaluate the long-acting anti-IL-6 mAb pacibekitug in patients with CKD and elevated hsCRP.

METHODS

- Stage 3 or 4 CKD
- Elevated hsCRP (2 to <15 mg/L)



143
patients
randomised 1:1:1:1
49 centres in USA

Pacibekitug SC 25 mg every 90 days

Pacibekitug SC 50 mg every 90 days

Pacibekitug SC 15 mg every 30 days

Placebo SC



RESULTS

Primary endpoint:
Time-averaged percent change from baseline in hsCRP to day 180



Pacibekitug 25 mg
every 90 days



Pacibekitug 50 mg
every 90 days



Pacibekitug 15 mg
every 30 days



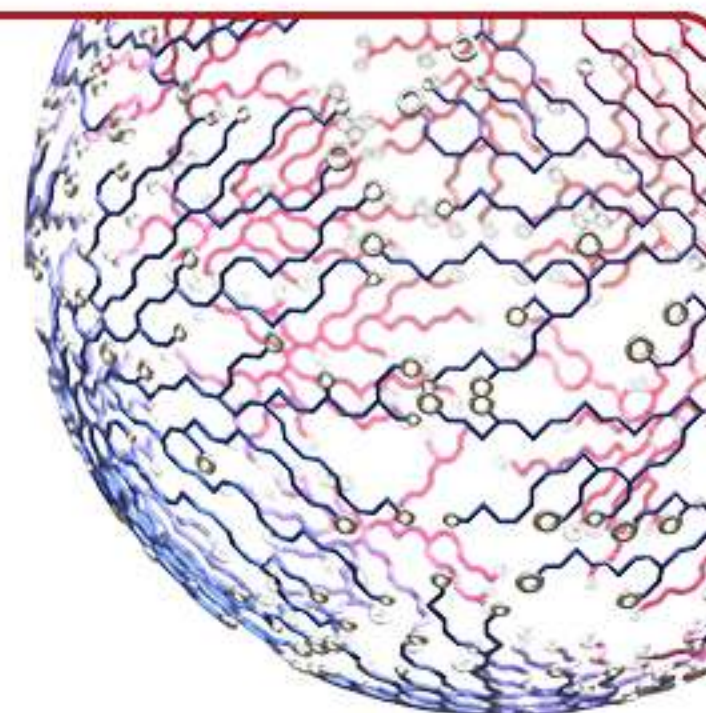
Placebo

A-CLOSE

Clopidogrel vs extended DAPT after high-risk PCI



#ESCCongress



Presenter: Byeong-Keuk Kim (Severance Cardiovascular Hospital, Yonsei University College of Medicine - Seoul, South Korea)



Conclusion

Among high-risk patients 12 months after PCI with DES, clopidogrel monotherapy lowered bleeding risk while DAPT lowered ischaemic risk.



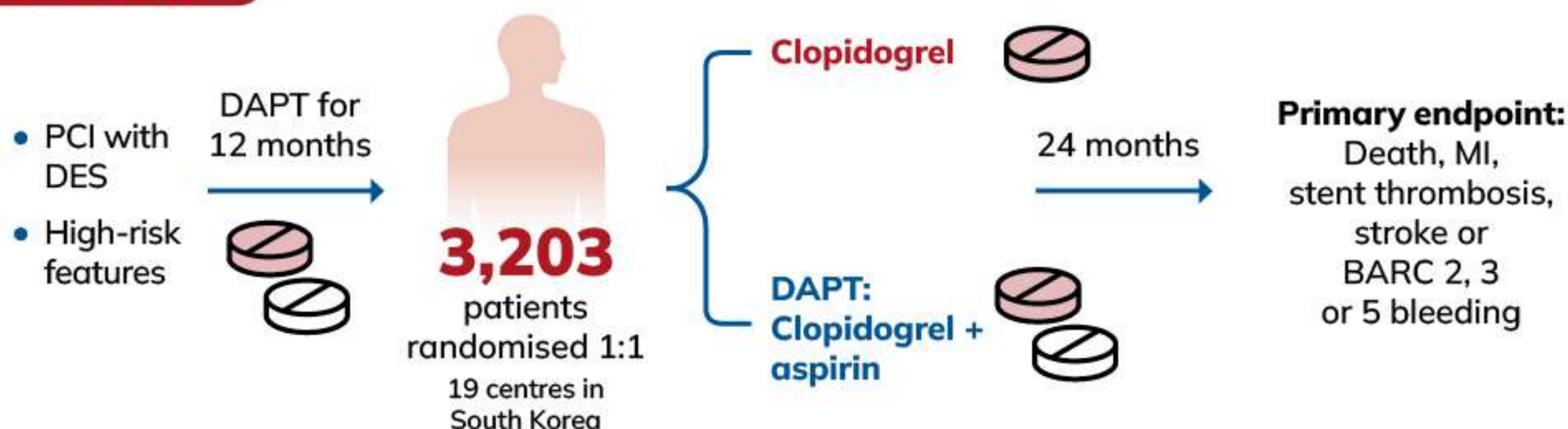
Implications

An individualised approach to long-term antiplatelet therapy is warranted.

OBJECTIVE

To evaluate whether clopidogrel monotherapy is noninferior to extended DAPT for ischaemic and bleeding events over 24 months.

METHODS



RESULTS

Clopidogrel vs DAPT

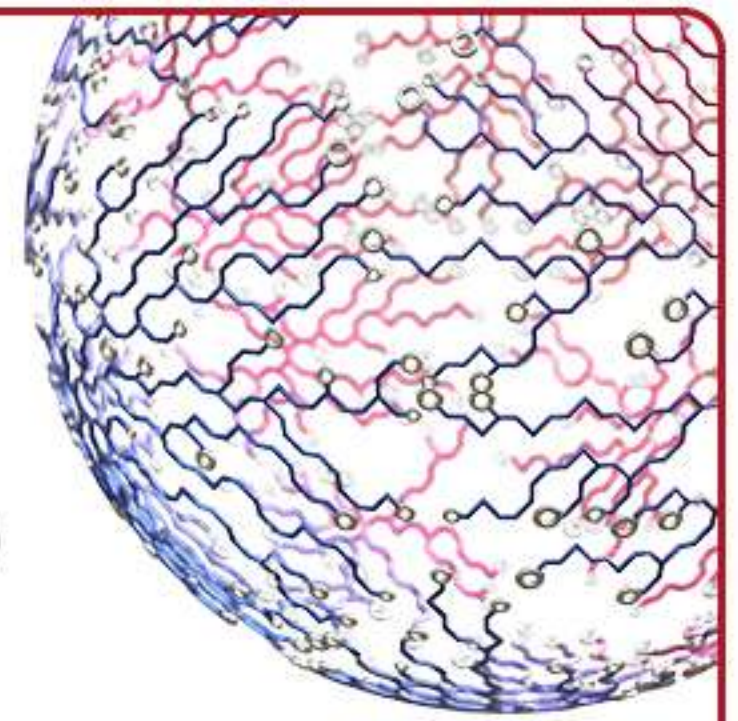
Primary endpoint after 24 months	5.0% vs 5.1%	↔	p=0.001 for noninferiority
Ischaemic components	3.7% vs 1.6%	↑	p<0.001
Bleeding components	1.8% vs 4.1%	↓	p<0.001

EPIDAURUS

Escalated P2Y12 inhibition in ACS and AF



#ESCCongress



Presenter: Konstantinos D Rizas (Ludwig Maximilians University - Munich, Germany)



Conclusion

Escalated P2Y12-inhibition was associated with higher bleeding rates, with no evidence of reduced ischaemic events.



Implications

The trial was stopped early due to safety concerns.

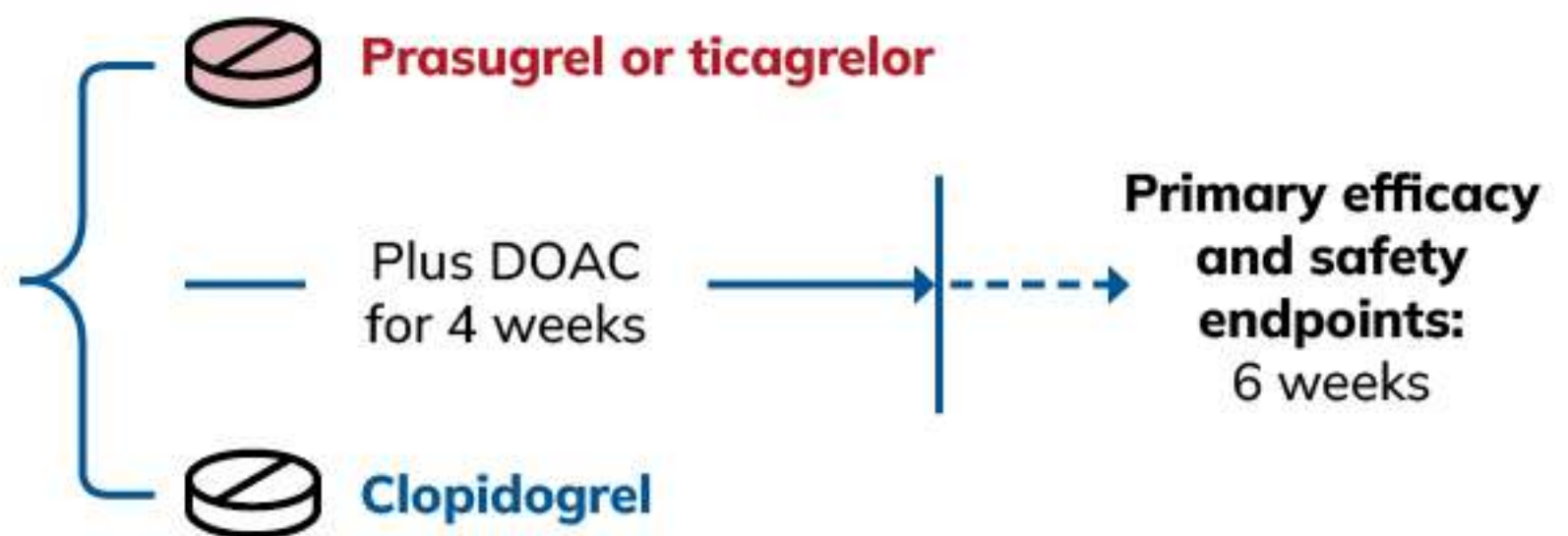
OBJECTIVE

To compare the efficacy and safety of escalated potent P2Y12 inhibition vs clopidogrel, with DOAC, in patients with ACS and AF undergoing PCI.

METHODS

- ACS
- AF requiring OAC
- Undergoing PCI

602
patients
randomised 1:1
33 centres in Austria
and Germany



RESULTS

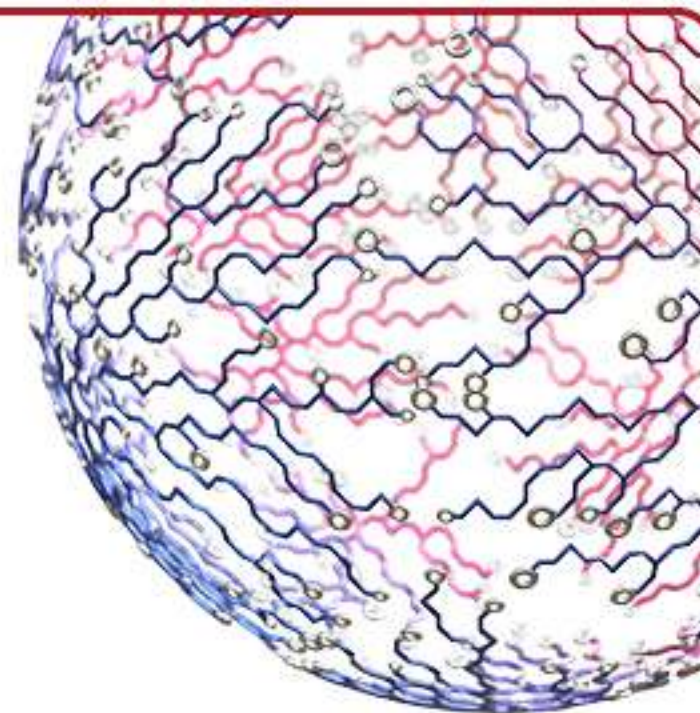
Primary endpoints at 6 weeks	Prasugrel/ticagrelor vs clopidogrel
Efficacy Death, stent thrombosis, MI, stroke, systemic thromboembolism and urgent revascularisation	HR 0.86 95% CI 0.44–1.67; p=0.649
Safety BARC ≥3 bleeding	HR 3.54 95% CI 1.15–10.85; p=0.028

LIBREXIA ACS

Milvexian after recent ACS



#ESCCongress



Presenter: Philippe Gabriel Steg
(Hôpital Bichat-Claude Bernard - Paris, France)



Conclusion

Milvexian did not reduce recurrent CV events compared with placebo after recent ACS.



Implications

The findings do not support adding milvexian after recent ACS to reduce recurrent CV events.

OBJECTIVE

To assess the efficacy and safety of the selective factor Xla inhibitor, milvexian, after ACS.

METHODS

- ACS within 7 days
- ≥ 2 risk-enhancing factors

14,194
patients
randomised 1:1
893 sites in 44 countries



RESULTS

Median follow-up: 10 months	Milvexian	Placebo	
Primary efficacy endpoint Cardiovascular death, MI or ischaemic stroke	5.4%	5.1%	HR 1.05; 95% CI 0.91–1.21; p=0.50
Principal safety endpoint BARC 3c or 5 bleeding	0.3%	0.3%	HR 1.04; 95% CI 0.58–1.87; p=0.88

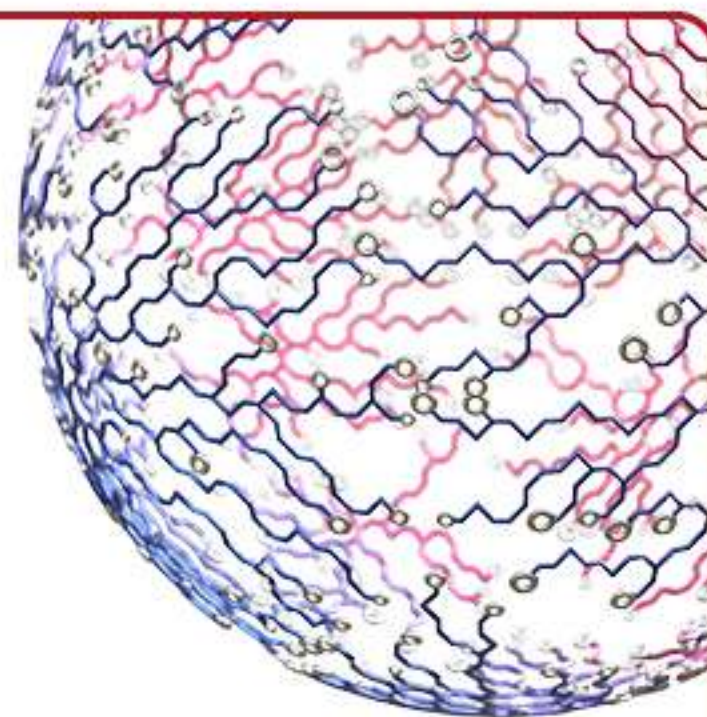
PREMIUM

Aspirin omission at the time of primary PCI in STEMI

Presenter: Gaku Nakazawa (Kindai University - Osaka, Japan)



#ESC Congress



Conclusion

Prasugrel monotherapy failed to show noninferiority to DAPT for any-cause death, MI or stroke after 12 months.



Implications

Upfront aspirin omission does not appear to be feasible in STEMI patients undergoing PCI.

OBJECTIVE

To determine whether prasugrel monotherapy without aspirin is noninferior to DAPT in patients with STEMI undergoing PCI.

METHODS

- STEMI undergoing primary PCI

2,280
patients
randomised 1:1
69 centres in Japan

**Prasugrel
monotherapy**



**Aspirin
plus prasugrel**



Primary endpoint:
Any-cause death,
MI or stroke at
12 months

RESULTS

Prasugrel vs DAPT

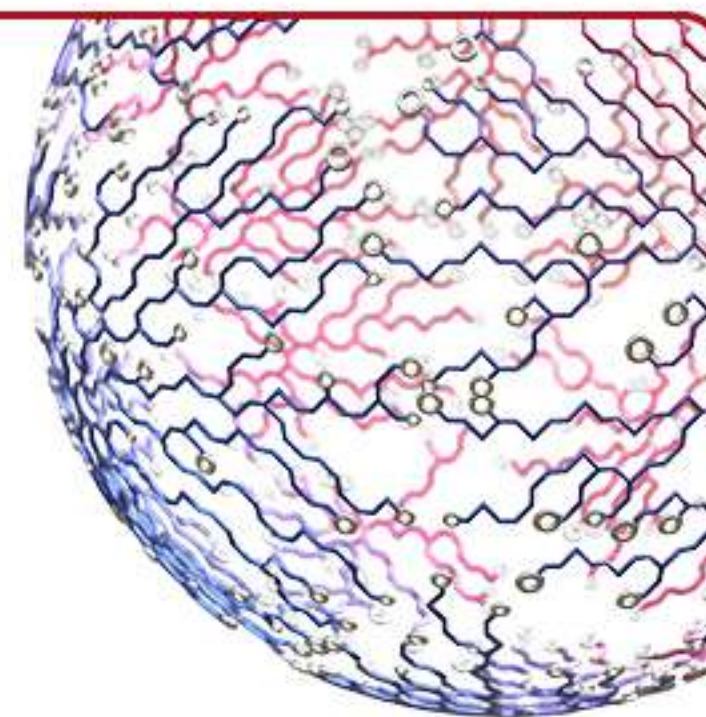
Primary endpoint after 12 months	11.0% vs 8.5% HR 1.34; 95% CI 1.02–1.75 p=0.40 for noninferiority	↑
Major bleeding	5.6% vs 8.4% HR 0.66; 95% CI 0.47–0.91	↓

SWITCH SWEDEHEART

Switching from ticagrelor to prasugrel in patients with ACS



#ESC Congress



Presenter: Elmir Omerovic (Sahlgrenska University Hospital - Gothenburg, Sweden)



Conclusion

A default prasugrel policy yielded similar ischaemic outcomes as ticagrelor and lower bleeding in an unselected ACS population undergoing PCI.



Implications

SWITCH SWEDEHEART demonstrates the feasibility of large-scale, registry-based randomised evidence generation.

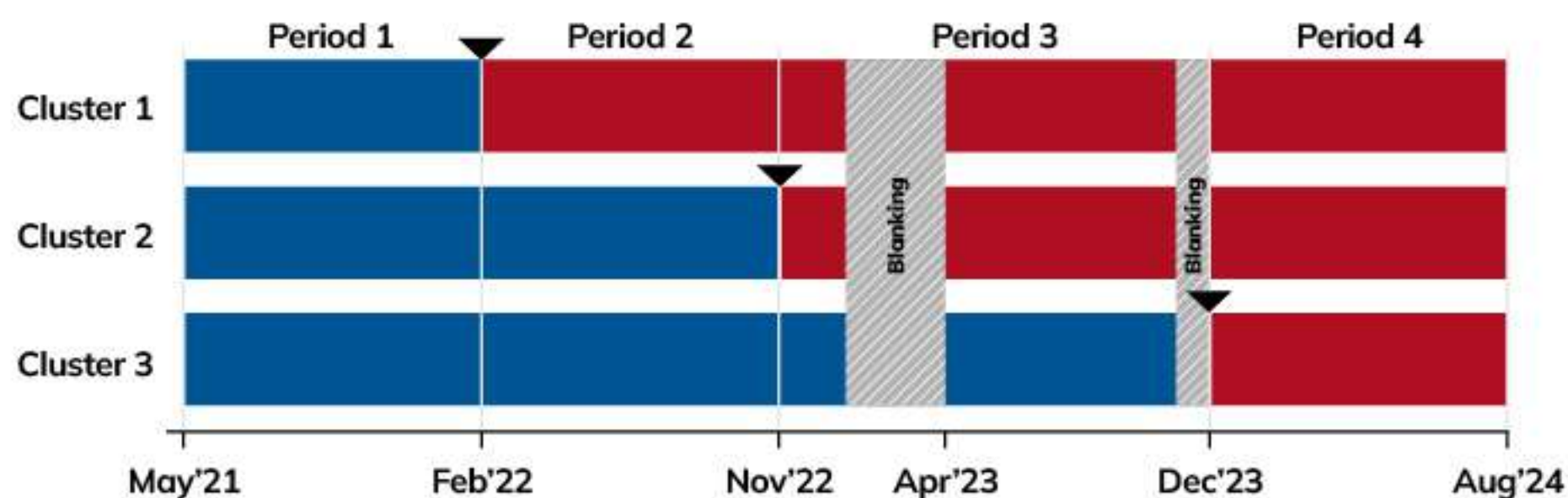
OBJECTIVE

To establish the optimal P2Y12 inhibitor for unselected patients with ACS undergoing PCI.

METHODS

- SWEDEHEART national registry
- 17,095 patients
- ACS
- PCI

7 regions grouped into 3 clusters sequentially switched from a **ticagrelor policy** to a **prasugrel policy**



RESULTS

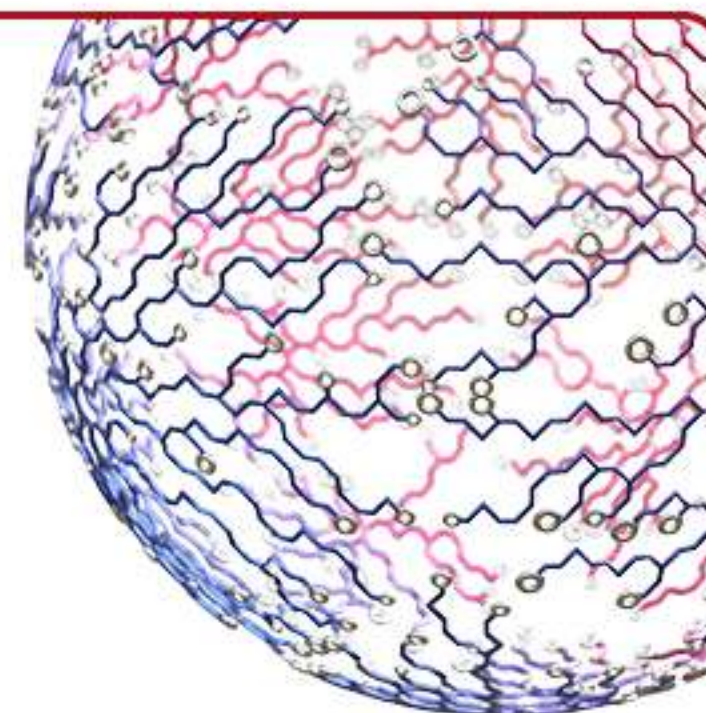
	Prasugrel policy	Ticagrelor policy	
Primary endpoint at 1 y Death, MI, stroke	11.1%	11.8%	p=0.22
Major bleeding at 1 y	4.2%	4.4%	p=0.042

AIR-STEMI

Functional coronary angiography in STEMI



#ESCCongress



Presenter: Simone Biscaglia (University Hospital of Ferrara - Ferrara, Italy)



Conclusion

Complete revascularisation guided by functional coronary angiography reduced CV events vs conventional angiography in patients with STEMI and multivessel disease.



Implications

AIR-STEMI establishes an optimal strategy for managing non-culprit lesions in multivessel disease.

OBJECTIVE

To test whether functional coronary angiography can improve the management of non-culprit lesions in STEMI patients with multivessel disease.

METHODS

- STEMI and multivessel disease
- Successful culprit-lesion PCI



1,823

patients
randomised 1:1
21 centres in Italy
and Pakistan

Functional coronary angiography

PCI only for functionally significant lesions

Conventional angiography

PCI of all non-culprit lesions angiographically deemed $\geq 50\%$



No PCI



RESULTS

Median follow-up: 17.9 months

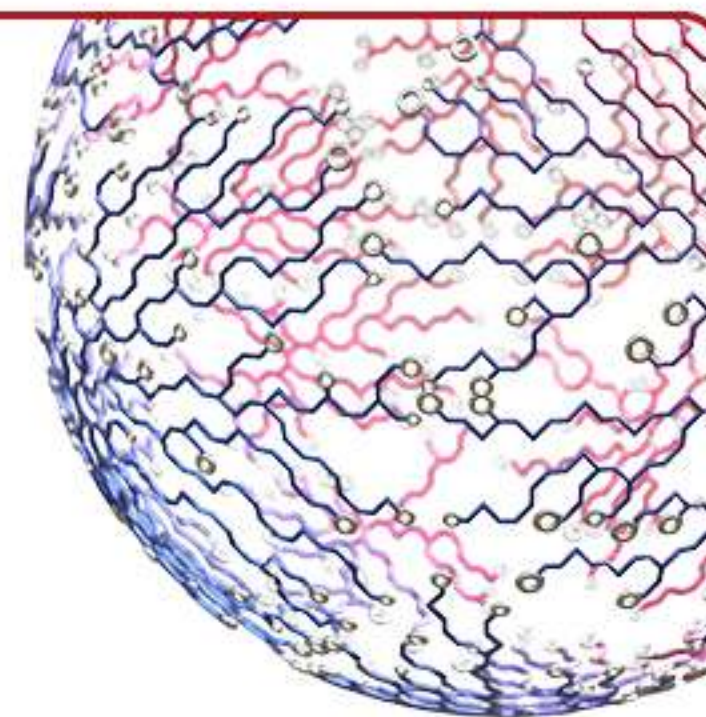
	Functional coronary angiography	Conventional angiography	
Primary endpoint All-cause death, MI, CVA or ischaemia-driven coronary revascularisation	8.9%	13.7%	HR 0.62 95% CI 0.47–0.83; p<0.001
Acute kidney injury or major bleeding	4.6%	7.1%	HR 0.63 95% CI 0.43–0.93; p=0.02

PRESC1SE-MI and IPD meta-analysis

Safety and efficacy of the 0/1-hour algorithm



#ESCCongress



Presenters: Jasper Boeddinghaus and Christian Mueller
(University Hospital Basel - Switzerland)



Conclusion

The 0/1-hour pathway was noninferior to the 0/3-hour pathway for safety but did not reduce the ED length of stay in patients with suspected MI.



Implications

Healthcare providers should be aware of the implementation barriers when considering adopting rapid pathways in practice.

OBJECTIVE

To assess the safety and efficacy of the 0/1-hour vs 0/3-hour pathway in hospitals that have not yet adopted the faster strategy.

PRESC1SE-MI trial


67,624
patient presentations
to ED with suspected MI

Stepped-wedge cluster
randomised trial
20 hospitals who had not
adopted the
0/1-hour pathway



Co-primary endpoints	0/1-hour pathway	0/3-hour pathway	
Death or new type 1 MI in 30 days, %	1.1	1.2	p for noninferiority <0.001
ED length of stay, minutes	309	309	p=0.65

IPD meta-analysis

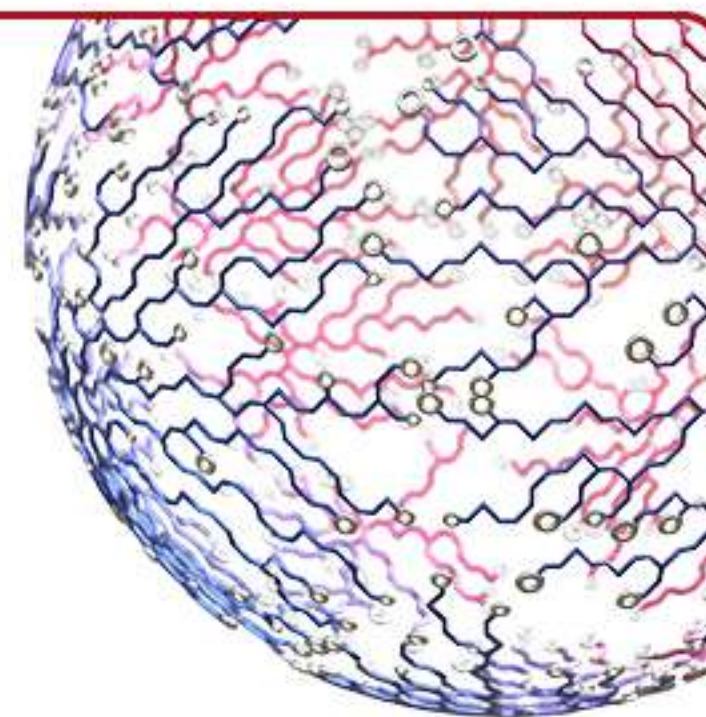
- PRESC1SE-MI plus 4 other trials: 110,933 patient presentations
- **Results were consistent with PRESC1SE-MI**

TARGET-CTCA

Troponin in acute chest pain to guide CTCA



#ESCCongress



Presenter: Nicholas Mills (University of Edinburgh - Edinburgh, UK)



Conclusion

CTCA did not reduce subsequent MI or cardiac death compared to standard care in intermediate-risk patients with suspected ACS where MI was excluded.



Implications

Implementing CTCA to guide management in this patient population is not warranted based on these findings.

OBJECTIVE

To determine if patients with suspected ACS where a MI had been ruled out but who were at intermediate risk based on hs-cTn testing could benefit from CTCA.

METHODS

- Suspected ACS
- MI ruled out
- Intermediate risk based on hs-cTn

3,170
patients
randomised 1:1
14 hospitals in UK



CTCA + SoC

SoC

Primary endpoint:
MI or cardiac death



Median follow-up:
3 years

RESULTS

- CTCA added to SoC did not reduce rates of MI or cardiac death:

CTCA + SoC:
7.0%

SoC:
7.3%

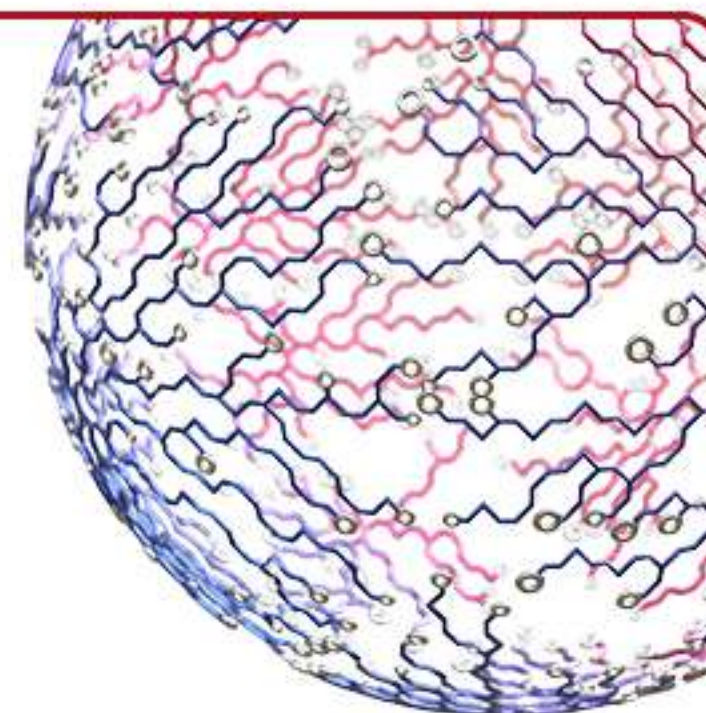
Adjusted HR 0.95
95% CI 0.73–1.23; p=0.712

ADHERE-ASCVD

Adaptive digital outreach for statin adherence



#ESCCongress



Presenter: Ankeet S. Bhatt (Kaiser Permanente SF Medical Center & Division of Research - San Francisco, USA)



Conclusion

Digital outreach improved short-term statin refill compared with usual communication. Second outreach produced additional gains among initial non-responders, although switching was no more effective than repeating the same modality.



Implications

These findings support scalable, adaptive health system outreach strategies to close gaps in CV prevention.

OBJECTIVE

To evaluate digital outreach modalities to improve statin refill among patients with low adherence.

METHODS

- With or at high risk of ASCVD
- Low statin adherence


20,604
patients
randomised 1:1:1:1
Single US integrated
health system

Stage 1

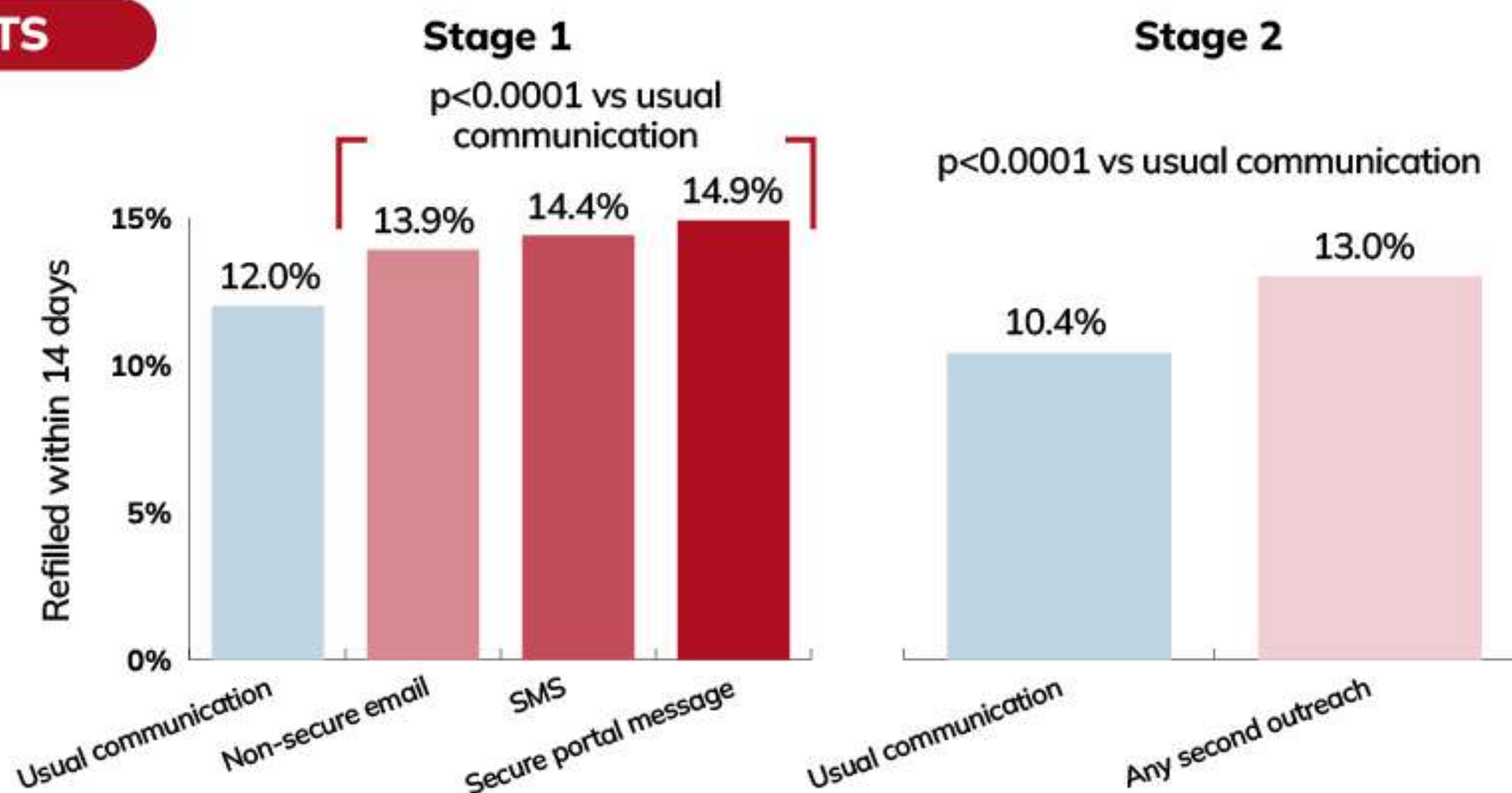
Non-secure email
SMS text
Secure portal message
Usual communication

Primary endpoint:
Refilled within
14 days

Stage 2

Non-responders
randomised
to the same or
switched digital
outreach or usual
communication

RESULTS

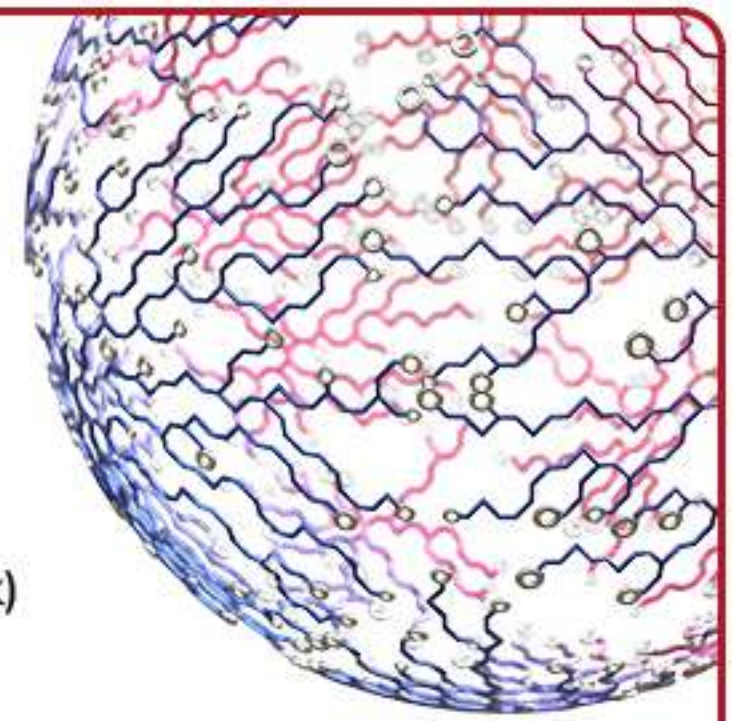


EMAIL-HF

Implementation of SGLT2 inhibitors in patients with HF through a digital strategy



#ESCCongress



Presenter: Mariam Elmegaard (Gentofte University Hospital - Copenhagen, Denmark)



Conclusion

Identification via a national health registry and digital engagement doubled the number of people initiating SGLT2 inhibitors within 6 months.



Implications

This type of digital strategy may offer an effective new pathway for delivering evidence-based therapies.

OBJECTIVE

To assess whether digital outreach linked to specialist evaluation could increase SGLT2 inhibitor use vs usual care in patients with HF.

METHODS

- HF
- Identified as not treated with SGLT2 inhibitor from Danish registries


5,996
patients
randomised 1:1

Digital strategy

Usual care

- Patient contacted via digital post system 
- Offered a telephone consult with a specialist 

RESULTS

- 60% of patients assigned to the digital strategy responded
 - 31% of these were eligible for SGLT2 inhibitors

	Digital strategy	Usual care	
Initiation of SGLT2 inhibitor within 6 months	18.6%	8.2%	p<0.001
Hospitalisation for HF or all-cause death	13.0%	14.0%	p=0.276

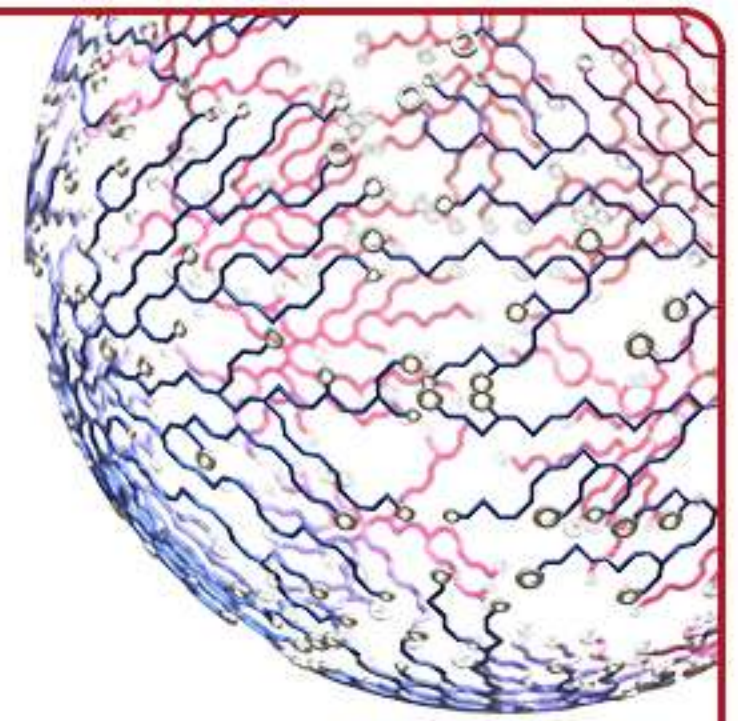
Remote Exercise SWEDEHEART

Cluster-randomised cross-over trial on cardiac telerehabilitation

Presenter: Maria Bäck (Sahlgrenska University Hospital - Gothenburg, Sweden)



#ESC Congress



Conclusion

Remotely delivered exercise-based cardiac rehabilitation (EBCR) added to centre-based EBCR resulted in a similar number of completed sessions as centre-based EBCR only.



Implications

Remote delivery offers an additional patient-centred option but is not a replacement for centre-based EBCR.

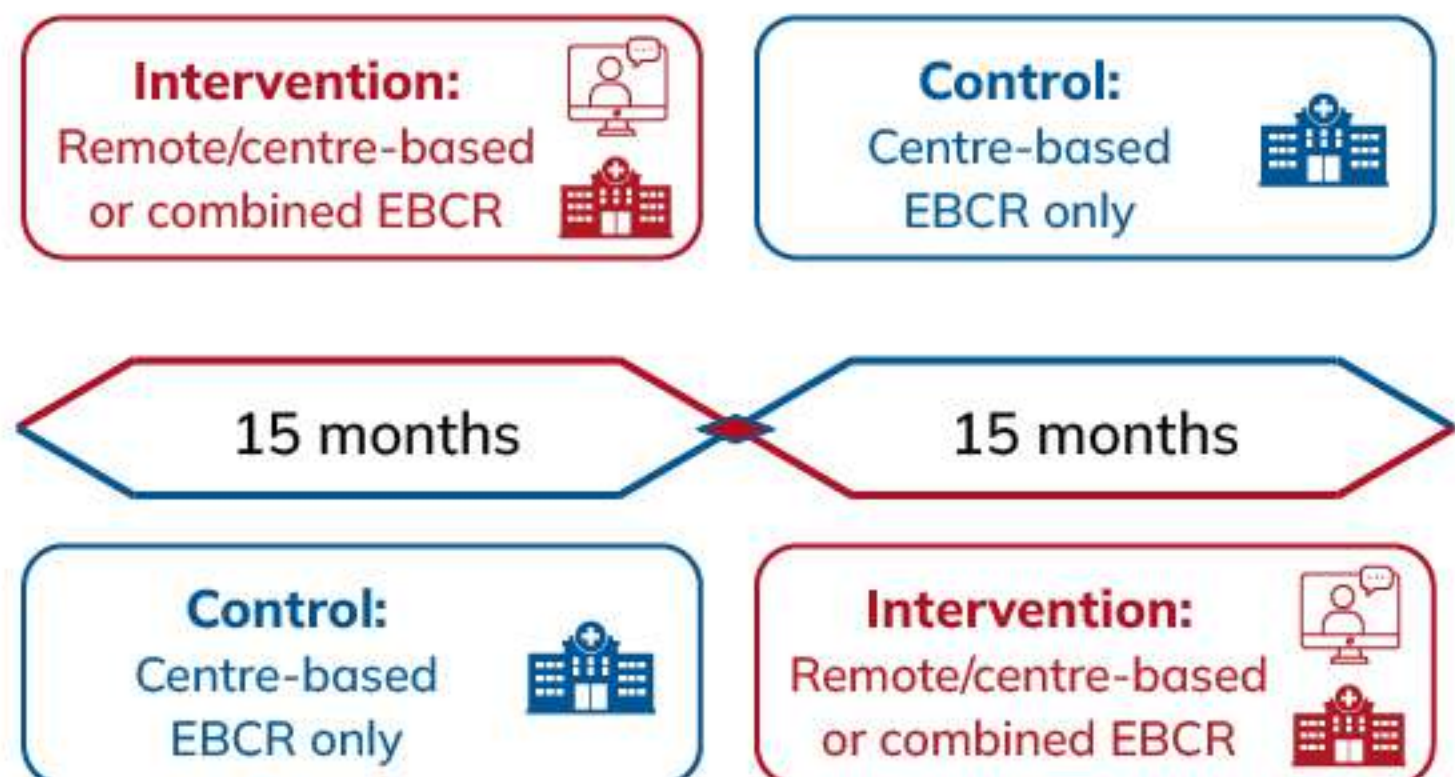
OBJECTIVE

To evaluate if participation in EBCR can be increased with remotely delivered sessions.

METHODS

3,112
patients with
type 1 MI


23 Swedish
centres
randomised



RESULTS

	Intervention	Control
Proportion of patients who completed the full exercise programme	13.8%	13.6%

Of all recorded exercise sessions:

~38% performed remotely

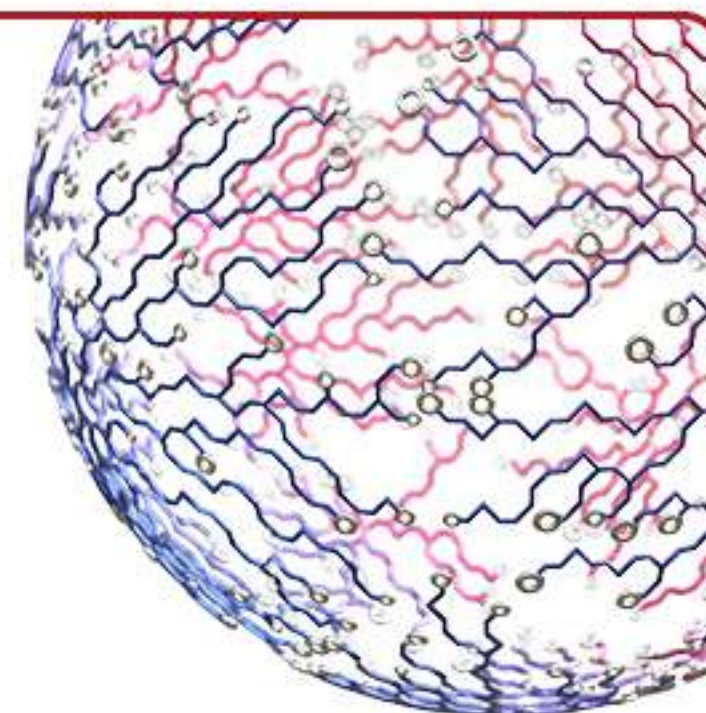
~62% performed at a centre

VIRTUES ICD & PM

Digital health platform for ICDs and pacemakers



#ESCCongress



Presenter: Ratika Parkash (Dalhousie University - Halifax, Canada)



Conclusion

In patients with CIEDs, virtual E-health system (VIRTUES) in combination with remote monitoring was as safe and effective as standard of care.



Implications

Similar systems should be implemented globally to improve care and reduce costs for the healthcare system and patients.

OBJECTIVE

To assess the safety and effectiveness of VIRTUES in addition to remote monitoring in the follow-up of patients with pacemakers or ICDs.

METHODS

VIRTUES ICD trial:

- Transvenous or subcutaneous ICD $\pm$ CRT

VIRTUES PM trial

- Pacemaker

1,115
patients
randomised 1:1
13 centres in Canada

VIRTUES digital
health platform



Standard care

RESULTS

Over 18 months	VIRTUES	Standard care	p for noninferiority
Primary safety outcome: Death, stroke, CV or device-related hospitalisations			
VIRTUES ICD	11.0%	11.2%	p=0.007
VIRTUES PM	6.1%	7.4%	p=0.0213
Primary efficacy outcome: Median days from a clinically important event to a clinical decision			
VIRTUES ICD	Difference: +1 day		p<0.0001
VIRTUES PM	Difference: -3.25 days		p<0.0001

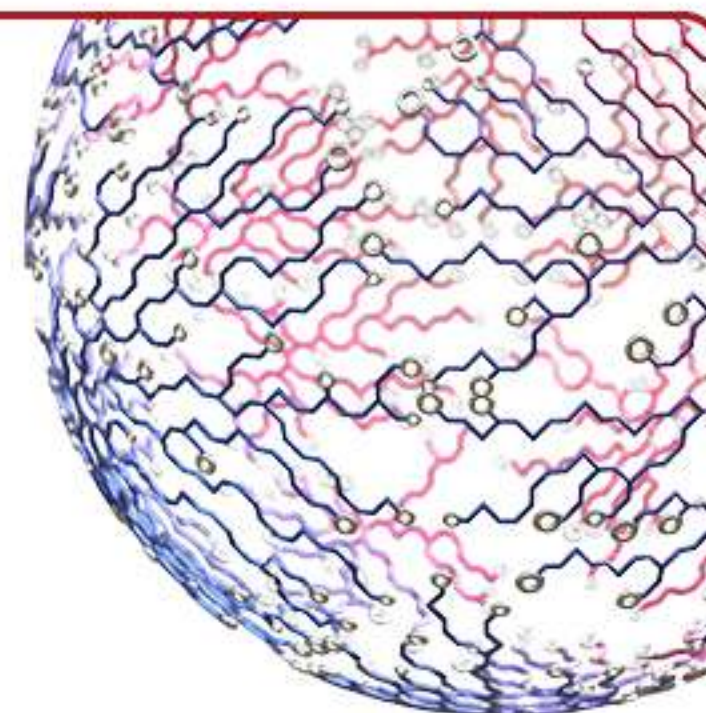
H-HeFT and meta-analysis

Hydralazine isosorbide dinitrate (H-ISDN) in HFrEF

Presenter: Lars Kober and Jawad Haider Butt (Rigshospitalet - Copenhagen University Hospital - Copenhagen, Denmark)



#ESCCongress



Conclusion

There was no difference in the primary endpoint between hydralazine-isosorbide dinitrate (H-ISDN) and placebo in patients with HF.



Implications

A high number of patients discontinued H-ISDN so no conclusions can be drawn. The tolerability of H-ISDN should be considered in clinical practice.

OBJECTIVE

To determine whether H-ISDN improves cardiovascular outcomes in patients with heart failure.

H-HeFT trial

- HF (NYHA II-IV)
- LVEF <40%
- Elevated NT-proBNP
- SBP >100 mmHg

592 patients
randomised 1:1
23 centres in Denmark

**Hydralazine
37.5 mg
+ ISDN 20 mg
(up-titrated)**

Placebo

Primary endpoint:

Death, worsening HF, urgent outpatient visit resulting in IV or metolazone therapy for HF, heart transplantation or LVAD



Follow-up: up to 7 years

	H-ISDN	Placebo	
Primary endpoint	8.6 events/100 patient-years	9.3 events/100 patient-years	HR 0.90; 95% CI 0.67–1.21
All-cause mortality	19.4%	24.2%	HR 0.72; 95% CI 0.51–1.02

META-ANALYSIS

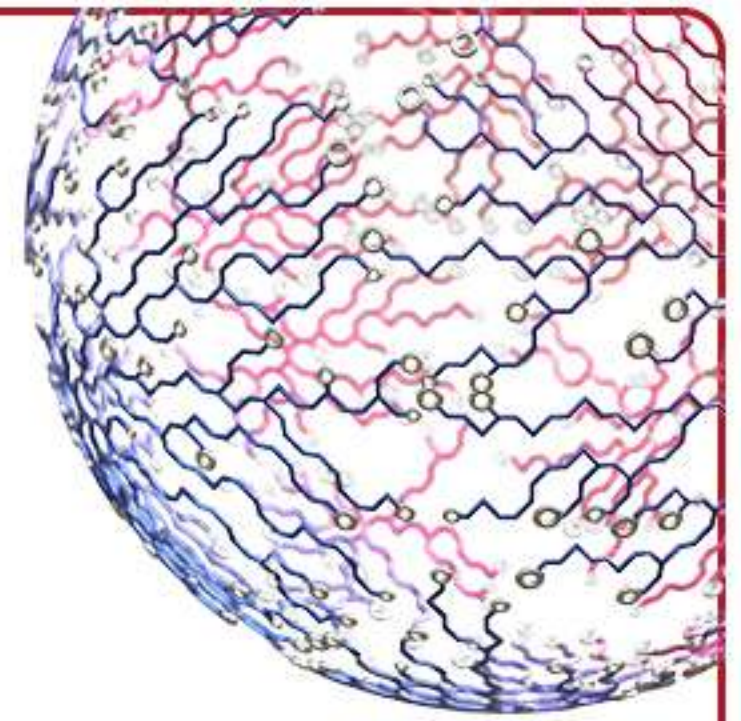
- Included H-HeFT plus 2 other trials (2,101 patients)
- Substantial differences in trial design, duration of follow-up and background therapies prevent conclusions being made

LUMINARA

Once-daily oral relaxin agonist for treating HF



#ESCCongress



Presenter: James Januzzi (Massachusetts General Hospital - Harvard Medical School - Boston, USA)



Conclusion

In this phase IIb trial, the oral relaxin agonist, AZD5462, was associated with signs of improved cardiac function and was well tolerated in patients with HF.



Implications

Larger randomised trials with AZD5462 are now warranted, focused on outcomes.

OBJECTIVE

To assess the efficacy and safety of AZD5462 in patients with HF.

METHODS

- HF
- On guideline-directed medical therapies
- 235 patients with LVEF $\leq 35\%$
- 140 patients with LVEF 41–55%


375
patients randomised
10 countries

AZD5462 20 mg

AZD5462 80 mg

AZD5462 360 mg

Placebo



24 weeks

RESULTS

Change from baseline to Week 24		AZD5462 20 mg	p value vs placebo
LVEF $\leq 35\%$	End systolic volume index	5.4 mL/m ² ↓	p=0.054
LVEF 41–55%	Systemic vascular resistance index	19% ↓	p $\leq$ 0.021

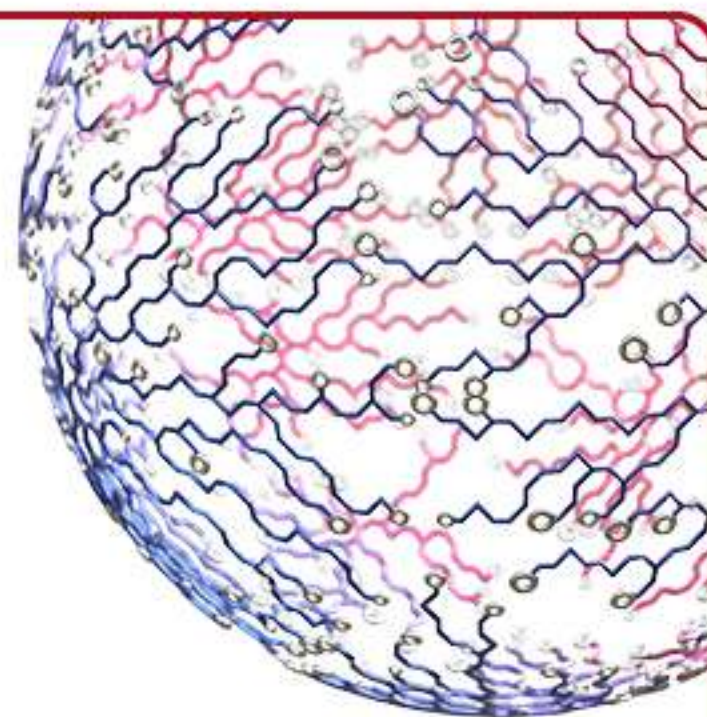
- Mild BP lowering with AZD5462, but significant hypotension not different vs placebo
- No evidence for significant volume overload with AZD5462

Met-HeFT and meta-analysis

Metformin and chronic HF



#ESC Congress



Presenter: Henrik Wiggers (Aarhus University Hospital - Aarhus, Denmark)
and Anders Hostrup Larsen (Goedstrup Hospital - Herning, Denmark)



Conclusion

Metformin did not significantly affect CV outcomes in patients with HF with diabetes or at risk of diabetes.



Implications

Metformin remains beneficial for glucose lowering but there is no evidence for independent cardioprotective effects.

OBJECTIVE

To determine whether metformin has independent cardioprotective effects in patients with HF and diabetes or at risk of diabetes.

Met-HeFT trial

- HF
- Diabetes, prediabetes or increased risk of diabetes


940
patients
randomised 1:1
23 centres in Denmark

Metformin



Placebo



Primary endpoint:
Death, worsening HF,
acute MI or stroke



Follow-up: 3.7 years

	Metformin	Placebo	
Primary endpoint	25.1%	23.4%	HR 1.10; 95% CI 0.84–1.42 p=0.48

Meta-analysis

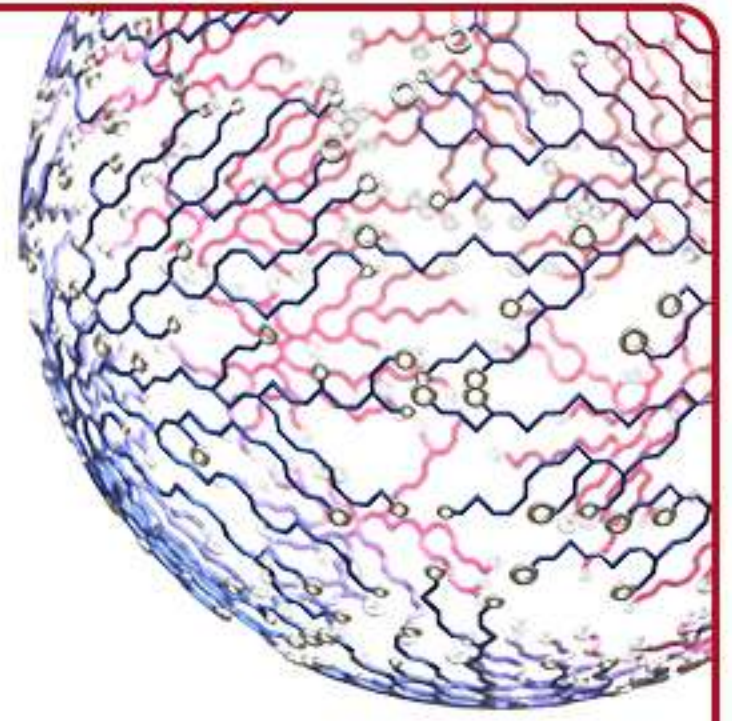
- Included Met-HeFT plus 2 other HF trials (1,077 patients) and 4 IHD trials (1,123 patients)
- **Results were consistent with the Met-HeFT trial**

PADN-PH-LHD

PADN for patients with PH from heart failure



#ESC Congress



Presenter: Shao-Liang Chen (Nanjing First Hospital Nanjing Medical University - Nanjing, China)



Conclusion

Pulmonary artery denervation (PADN) reduced the incidence of clinical worsening in patients with PH due to left HF receiving GDMT.



Implications

Adding PADN to GDMT may help improve outcomes in patients with PH due to left HF.

OBJECTIVE

To evaluate PADN for patients with HF-induced PH compared with GDMT alone.

METHODS

- PH secondary to left HF


264
patients
randomised 1:1
25 centres in China

PADN plus
GDMT



GDMT



RESULTS

Primary endpoint: Clinical worsening

All-cause mortality, heart or lung transplantation, HF hospitalisation, outpatient worsening HF requiring IV medication, or a $\geq 10\%$ or >30 -m absolute decline in 6MWD from baseline



Median follow-up:
338 days

PADN + GDMT:
25.7%

GDMT:
51.5%

**51%
reduction**

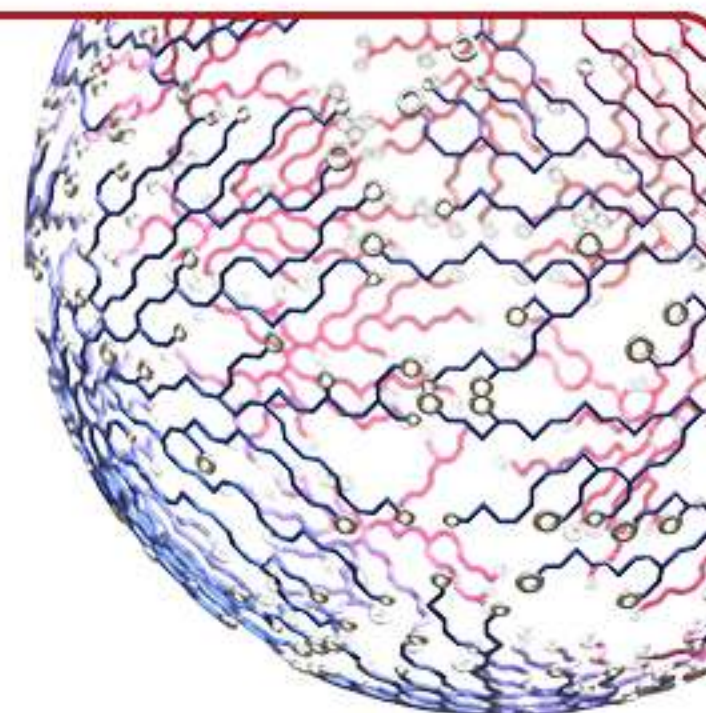
HR 0.49
95% CI 0.30–0.82
p=0.0059

TIME-HF

Team-based collaborative care model in HF



#ESCCongress



Presenter: Panniyammakal Jeemon (SCTIMST - Thiruvananthapuram, India)



Conclusion

A nurse-led mobile health intervention improved days alive and out of hospital at 2 years in patients with HFrEF vs usual care.



Implications

Structured, nurse-coordinated, technology-enabled interventions could improve routine HF management across a broad range of settings where guideline-directed medical therapy (GDMT) uptake is suboptimal.

OBJECTIVE

To determine whether a nurse-led, mobile health-based intervention could improve HF outcomes vs usual care.

METHODS


1,507
adults with HFrEF


22 centres in India
Randomised 1:1


Nurse-led mobile health intervention
Usual care

RESULTS

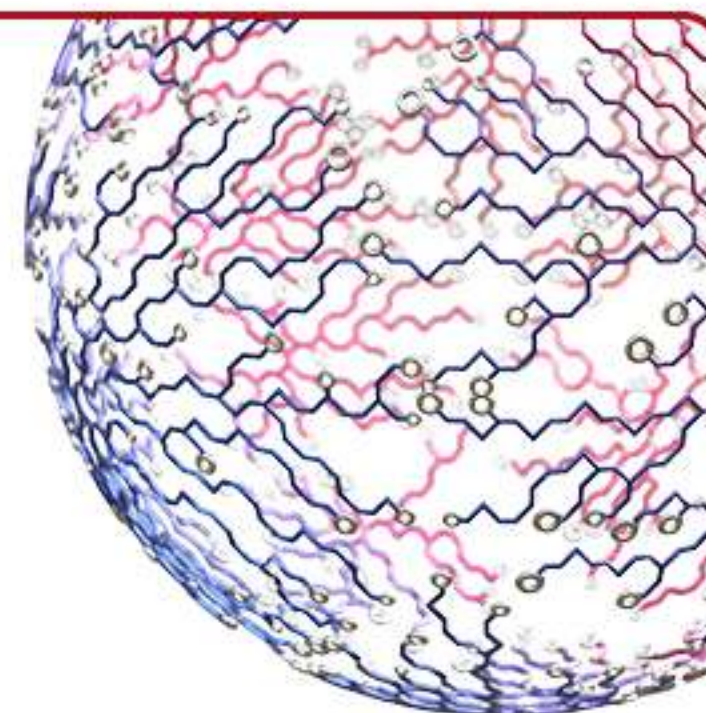
	Nurse-led intervention	Usual care	
Adherence to 4 GDMT at 2 years	37.3%	22.1%	
Surviving and out of hospital at 2 years	84.0%	79.4%	p<0.001
Deaths at 2 years	↓ 22.0% vs usual care		p=0.028

ACASA-TAVI

Antithrombotic therapy after TAVI



#ESC Congress



Presenter: Øyvind H Lie (Oslo University Hospital Rikshospitalet - Oslo, Norway)



Conclusion

After TAVI, substantial reductions in subclinical leaflet thrombosis were observed with NOAC monotherapy vs ASA monotherapy, without compromising safety.



Implications

NOAC monotherapy could represent an effective and safe antithrombotic approach after TAVI.

OBJECTIVE

To compare NOAC monotherapy and ASA monotherapy for subclinical leaflet thrombosis and safety in patients after TAVI without an indication for anticoagulation.

METHODS

- Successful TAVI
- Aged 65–80 years

360
patients
randomised 1:1
3 centres in Norway



NOAC monotherapy

Any of apixaban, edoxaban or rivaroxaban



ASA monotherapy

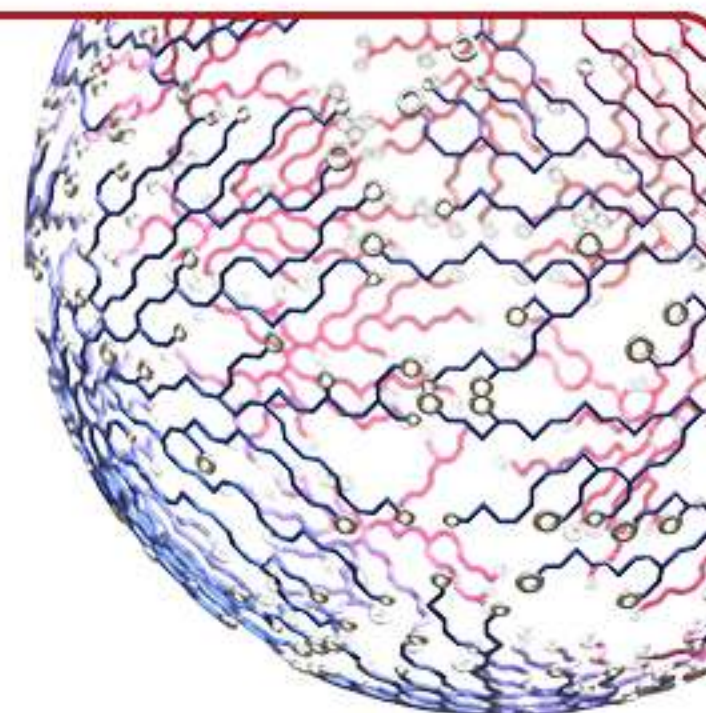
75 mg daily

RESULTS

At 12 months	NOAC monotherapy	ASA monotherapy	
Primary efficacy endpoint Hypo-attenuated leaflet thickening	17.2% ↓	32.6%	RR 0.55 95% CI 0.37–0.82 p=0.004
Primary safety endpoint VARC-3 bleeding events, thromboembolic events and all-cause death	7.5% ↔	10.6%	–3.3 % p for noninferiority <0.001

NOTION-4

Subclinical leaflet thrombosis after TAVI



Presenter: Troels Hojsgaard Jorgensen (Rigshospitalet - Copenhagen University Hospital - Denmark)



Conclusion

After TAVI, a 3-month DOAC regimen reduced subclinical valve thrombosis at 3 months but not at 12 months vs SAPT, and was associated with an increased risk of adverse outcomes.



Implications

The results do not support the use of this DOAC regimen in patients after TAVI without an indication for anticoagulation.

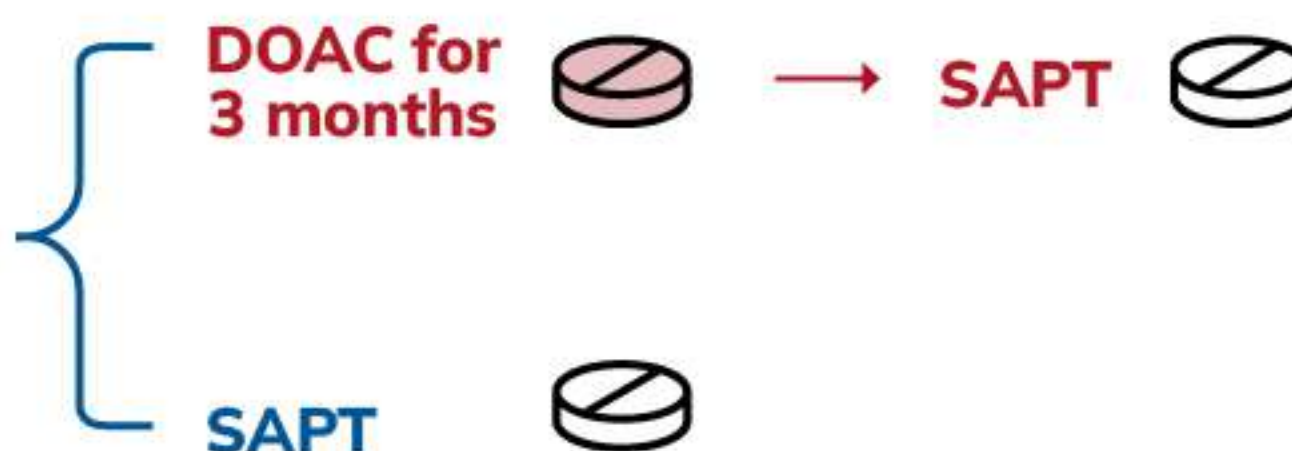
OBJECTIVE

To compare antithrombotic strategies for the prevention of hypo-attenuated leaflet thickening in patients after TAVI without an indication for anticoagulation.

METHODS

- Successful TAVI
- No indication for OAC therapy

352
patients
randomised 1:1
2 centres in Denmark



RESULTS

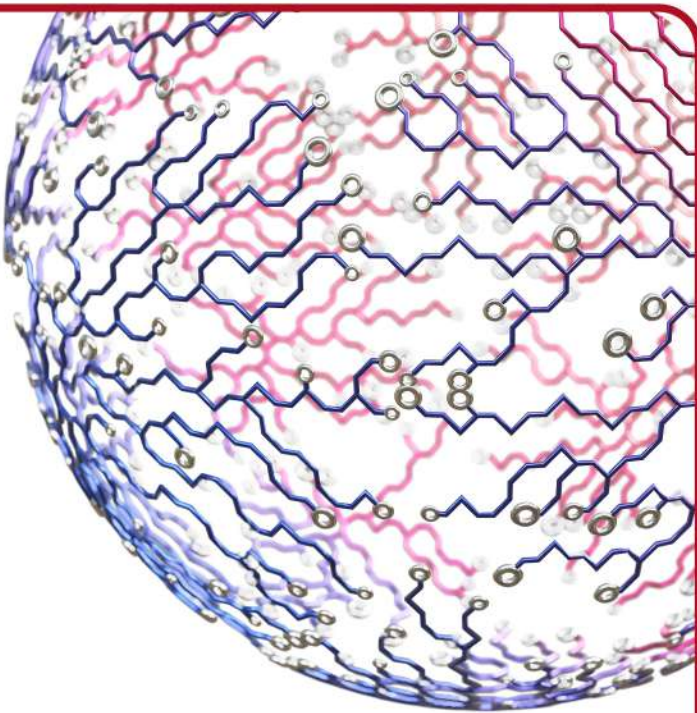
	DOAC then SAPT	SAPT	
Hypo-attenuated leaflet thickening at 3 months	12.1%	31.8%	p<0.001
Primary endpoint Hypo-attenuated leaflet thickening at 12 months	28.3%	32.2%	p=0.54
All-cause mortality, stroke or major/life-threatening bleeding at 12 months	8.8%	2.3%	p=0.008

POPular ACE TAVI

Routine or selective protamine administration after TAVI



#ESCCongress



Presenter: Christiaan Overduin (St Antonius Hospital - Nieuwegein, Netherlands)



Conclusion

Routine protamine after TAVI reduced all-cause death or clinically relevant bleeding at 30 days vs selective protamine.



Implications

Data support routine protamine after TAVI to reduce minor bleeding, but this should be balanced against a small risk of anaphylaxis.

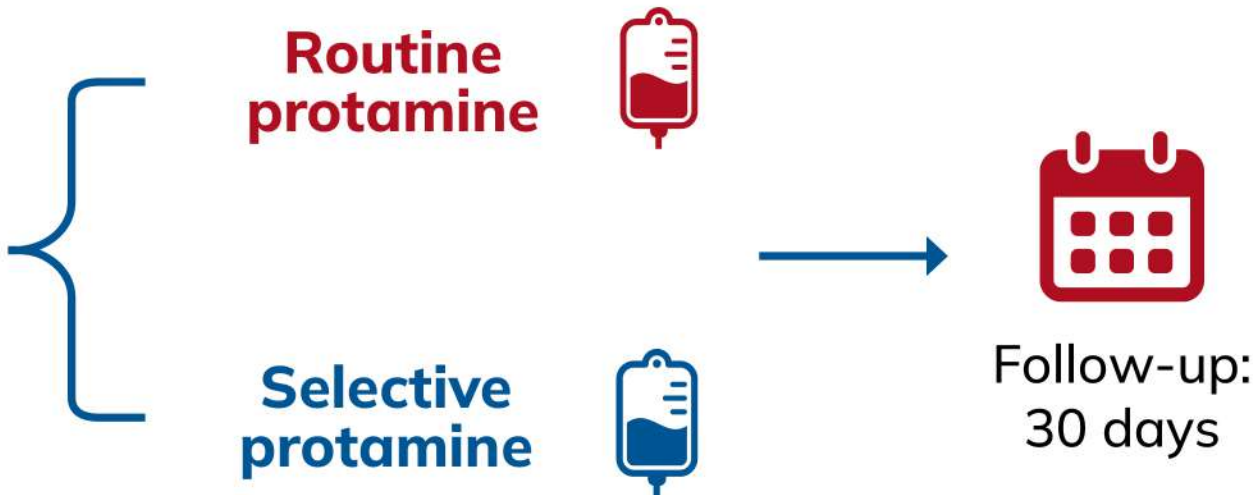
OBJECTIVE

To assess the safety and efficacy of routine vs selective protamine administration before large-bore arterial sheath removal after transfemoral TAVI.

METHODS

- Undergoing TAVI
- No recent PCI


966
patients
randomised 1:1
6 centres in Belgium
and Netherlands



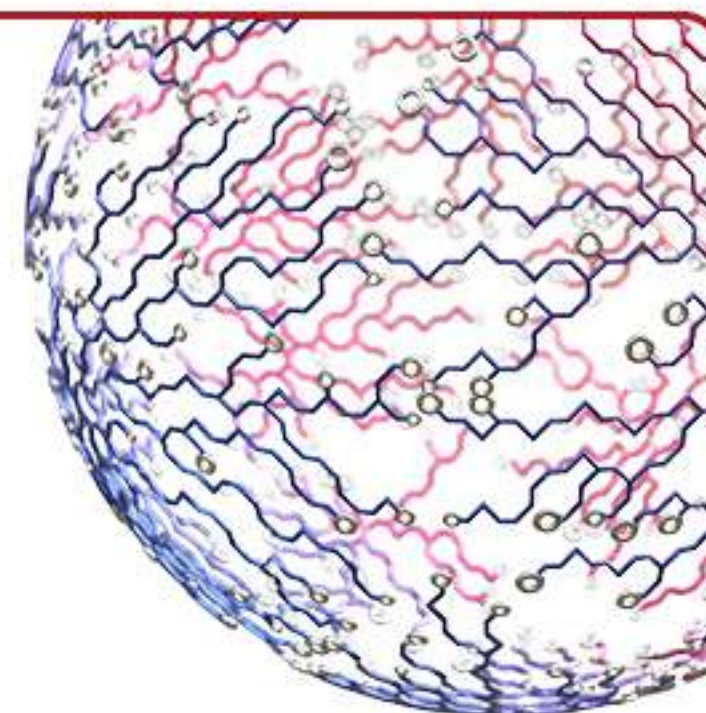
RESULTS

 **Routine** vs  **Selective**

Primary endpoint All-cause mortality or clinically relevant bleeding	Risk difference: -10.9% 95% CI -17.0 to -4.8; p<0.001	↓
Bleeding type 1	Risk difference: -10.9% 95% CI -16.8 to -5.1	↓
Anaphylaxis	Risk difference: 1.3% 95% CI 0.2 to 3.0; p=0.01	↑

TAVI PCI

Timing of PCI/TAVI in patients planned for both



Presenter: Barbara Elisabeth Stähli
(University Hospital Zurich - Zurich, Switzerland)



Conclusion

TAVI-then-PCI was noninferior to PCI-then-TAVI after 1 year, with no safety concerns in patients with both severe AS and CAD.



Implications

An individualised approach to procedure timings may be adopted.

OBJECTIVE

To test the hypothesis that TAVI-then-PCI is noninferior to PCI-then-TAVI in patients with severe AS and concomitant CAD.

METHODS

- Severe AS and CAD
- Eligible for TAVI and PCI



RESULTS

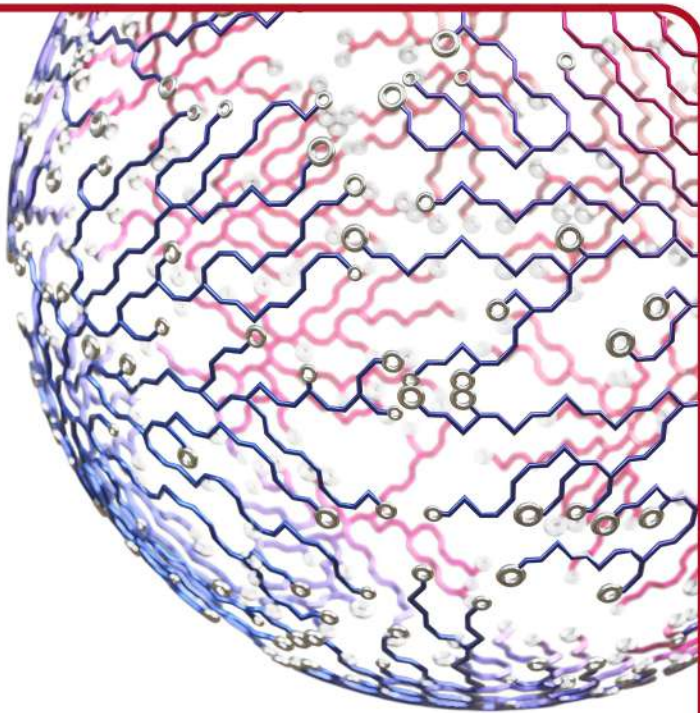
	TAVI→PCI	PCI→TAVI	
Primary endpoint at 1 year All-cause death, nonfatal MI, ischaemia-driven revascularisation, valve-, procedure- or HF-related rehospitalisation or life-threatening, disabling or major bleeding	22.2%	24.2%	p<0.001 for noninferiority

TRIC-I-HF

Tricuspid intervention in heart failure



#ESCCongress



Presenter: Joerg Hausleiter (Ludwig Maximilians University - Munich, Germany)



Conclusion

Transcatheter tricuspid valve repair (TTVR) significantly improved clinical outcomes in high-risk patients with severe tricuspid regurgitation (TR).



Implications

These results establish TTVR as a possible effective disease-modifying therapy.

OBJECTIVE

To assess whether TTVR plus medical therapy improves symptoms and outcomes in high-risk patients with severe TR compared with medical therapy alone.

METHODS

- Severe TR despite optimal medical therapy
- High risk:** HF hospitalisation within previous 1 y or cardio-renal syndrome or cardio-hepatic syndrome


360
patients
randomised 2:1
29 high-volume centres
in Germany

TTVR
(any CE-marked device)
plus medical
therapy



Medical
therapy only



RESULTS

Hierarchical analysis of primary endpoints	TTVR plus medical therapy	Medical therapy only
First: All-cause mortality, HF hospitalisation and lack of QoL improvement at 1 y	Win ratio 2.42 95% CI 1.76–3.33; p<0.001	
Second: All-cause mortality or HF hospitalisation at 3 y	HR 0.40 95% CI 0.29–0.55; p<0.001	

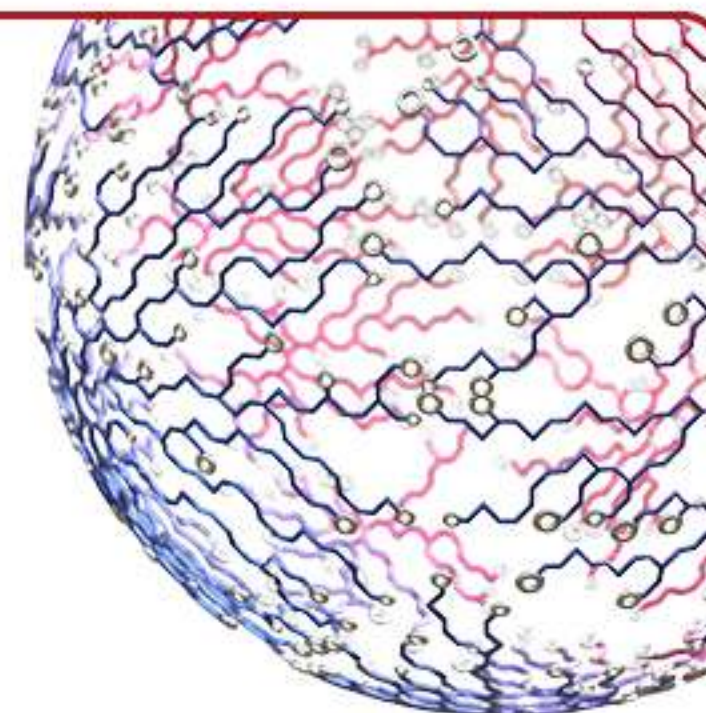
AFFIRMO

AF integrated approach in Frail, multimorbid and polyMedicated Older people

Presenter: Gregory YH Lip (University of Liverpool - Liverpool, UK)



#ESCCongress



Conclusion

A mobile-health integrated care approach based on the ABC pathway (iABC) plus Comprehensive Geriatric Assessment (CGA) did not reduce unplanned hospitalisations vs usual care.



Implications

The iABC system was designed to improve guideline adherence but there was high baseline guideline adherence and low event rates, with low use of the mobile app and limited efficacy of CGA in this well-preserved population.

OBJECTIVE

To evaluate the efficacy of a mobile-health intervention adapting the ABC pathway and combining CGA in older patients with AF and comorbidities.

METHODS

- Aged ≥ 65 years
- Any AF type
- At least 1 comorbidity


1,260
patients
Cluster randomised trial
6 European centres

iABC + CGA



App



Clinician
dashboard

Usual care

RESULTS

- Guideline adherence was very high at baseline in both arms

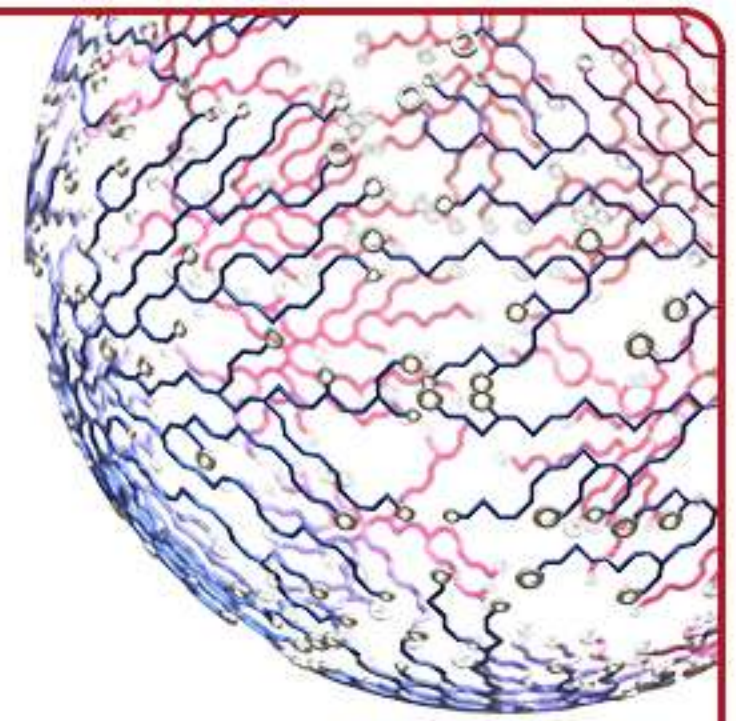
	iABC	Usual care	
Primary endpoint All-cause unplanned hospitalisations at 1 year	17.1%	18.2%	OR 0.95 95% CI 0.61–1.49 p=0.84

IDEAL-AF

Individualised low-voltage ablation in persistent AF



#ESCCongress



Presenter: Astrid Paul Nordin (Karolinska Institute - Stockholm, Sweden)



Conclusion

In patients with persistent AF and significant low-voltage zones (LVZ), LVZ ablation with PVI improved rhythm outcomes and QoL vs PVI alone with no safety concerns.



Implications

Tailored treatment with LVZ ablation improved the treatment of persistent AF.

OBJECTIVE

To evaluate whether ablation of LVZs in addition to PVI improves rhythm outcomes compared with PVI alone in patients with persistent AF and significant LVZ substrate.

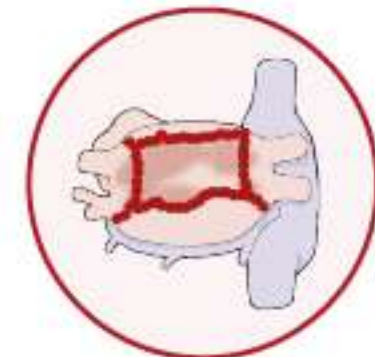
METHODS

- Persistent AF
- ≥ 1 LVZ ≥ 3.0 cm²
- First-time catheter ablation

209
patients
randomised 1:1
5 centres in Sweden

LVZ ablation + PVI

PVI



RESULTS

Primary endpoint

Freedom from documented atrial arrhythmia lasting >30 sec without anti-arrhythmic drugs at 1 y

LVZ ablation + PVI

67.6%

PVI alone

37.4%

OR 3.50
95% CI 1.98–6.20; p<0.001

LVZ ablation + PVI

Improved QoL by AFEQT



Safety

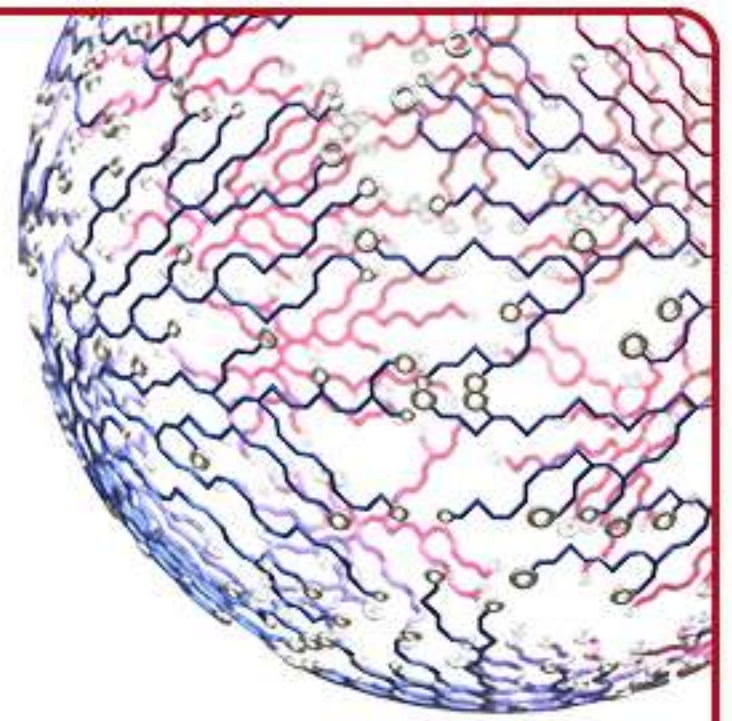


NEXAF

Long-term exercise in patients with non-permanent AF



#ESCCongress



Presenter: Bjarne Nes (Norwegian University of Science and Technology - Trondheim, Norway)



Conclusion

A 12-month exercise programme reduced the total AF burden and improved cardiopulmonary fitness but did not increase AF-specific QoL vs usual care.



Implications

This hybrid model was feasible and may enable wider use of exercise-enabled rehabilitation.

OBJECTIVE

To evaluate the effect of a long-term supervised and eHealth-based exercise intervention on AF burden and AF-specific QoL.

METHODS

- Non-permanent AF
- Physical activity level less than recommended


295
patients
randomised 1:1
3 centres in Norway

Exercise
Supervised sessions
for 4 weeks

Usual care
No structured or supervised exercise

Home-based eHealth



RESULTS

**Exercise vs
usual care
at 12 months**

Primary endpoints

Time in AF

3.9%
with exercise

7.1%
with usual care


p=0.016

Cardiopulmonary
fitness 

Overall AFEQT score

+5.6
with exercise

+4.4
with usual care


p=0.43

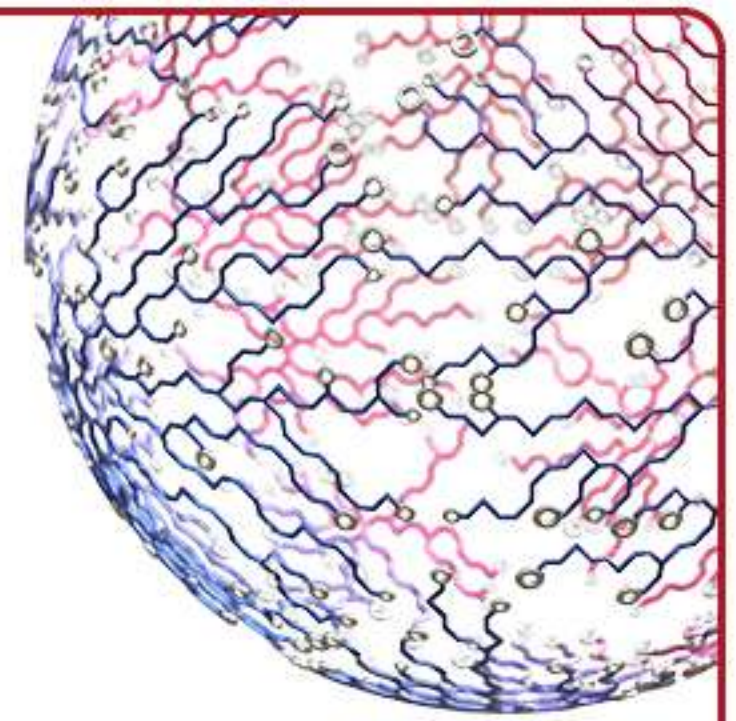
Hospitalisations 

PVI-SHAM-AF

Pulmonary vein isolation vs sham in AF



#ESCCongress



Presenter: Rolf Wachter (University of Leipzig Medical Centre - Leipzig, Germany)



Conclusion

Catheter ablation did not improve AF-related quality of life compared with a sham intervention, despite reducing AF recurrence.



Implications

These data should be discussed with patients when catheter ablation is being considered.

OBJECTIVE

To investigate improvements in AF-related quality of life with catheter ablation compared with a sham procedure.

METHODS

- Symptomatic paroxysmal or persistent AF

262
patients
randomised 2:1
9 sites in Germany
and Poland



**Catheter
ablation**

**Sham
procedure**

Primary endpoint

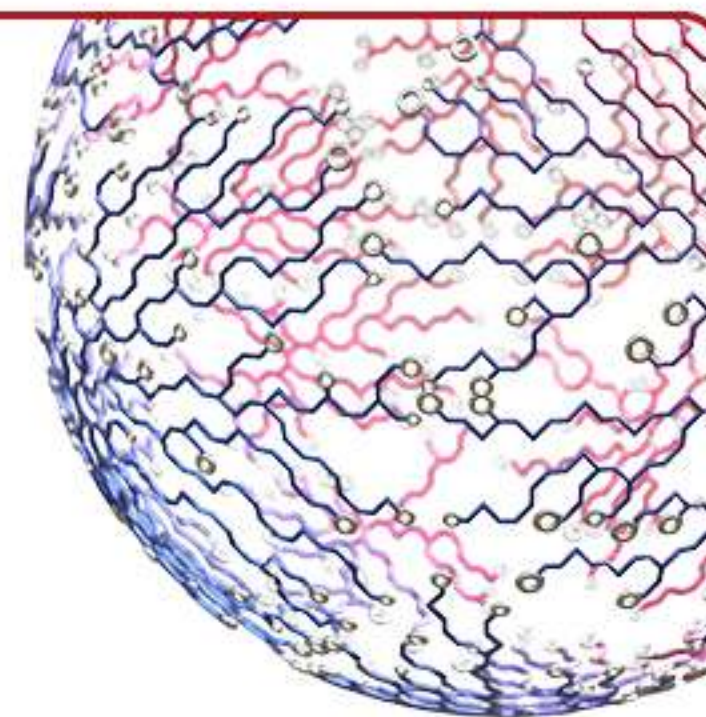
Change in
AF Effect on the Quality of
Life (AFEQT) questionnaire
from baseline to 6 months



RESULTS

	Catheter ablation	Sham procedure	
AFEQT summary score at baseline and 6 months	61.3 → 81.1	59.2 → 74.9	p=0.36
Freedom from AF at 6 months	73%	52%	

Blood pressure-lowering treatment across the spectrum of CV risk



Presenter: Kazem Rahimi (University of Oxford - Oxford, UK)



Conclusion

The relative benefits of pharmacological BP lowering were seen regardless of CV risk. Absolute benefits were larger at higher baseline risk.



Implications

Risk-guided management could prevent CV events missed under conventional strategies while avoiding unnecessary treatment in those least likely to benefit.

OBJECTIVE

To examine whether the benefits of BP lowering extend across the spectrum of CV risk.

METHODS

- Meta-analysis
- Trials of antihypertensive treatment vs comparator


51
trials identified

→ **357,440 participants**
classified into
10 categories
(from <4% to >27%)
by predicted 5-year CV
risk at randomisation

→ **Primary outcome**
Major CVD
(nonfatal or fatal stroke,
nonfatal or fatal IHD, or
HF resulting in death or
hospitalisation)

Median follow-up:
4.2 years

RESULTS

- Major CVD: HR 0.90 (95% CI 0.88–0.92) per 5 mmHg reduction in SBP

- Homogeneous across predicted-risk categories

p for interaction
>0.99



- Absolute benefits increased progressively with baseline predicted risk

Lowest risk decile (<4%): absolute risk reduction 0.4 percentage points

Highest risk decile (>27%): absolute risk reduction 2.6 percentage points

p for trend
<0.001

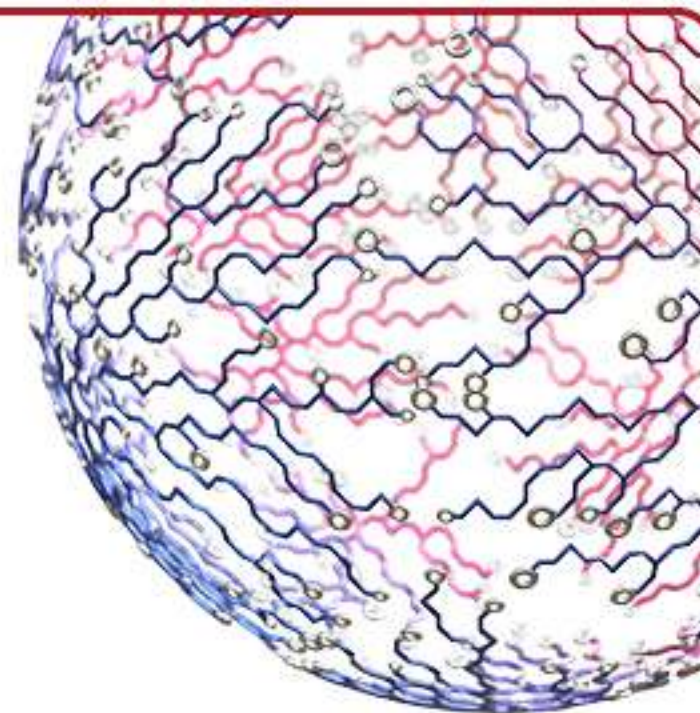


CRHCP

Long-term blood pressure control and dementia risk



#ESCCongress



Presenter: Shanshan Zhong (The First Affiliated Hospital of China Medical University - Shenyang, China)



Conclusion

A community-based intervention delivered by non-physician HCPs resulted in substantial reductions in blood pressure and also in dementia.



Implications

Wider use of this scalable intervention globally may help to reduce the increasing burden of dementia.

OBJECTIVE

To assess whether intensive BP lowering reduces the incidence of dementia.

METHODS



326 villages in rural China randomised

33,995
adults

- Aged ≥ 40 years
- Untreated $\geq 140/90$ mmHg ($\geq 130/80$ mmHg if treated or high risk)

Community intervention



Trained non-physician HCPs adjusted BP medication

Active trial: 4 y → Observation: 3 y

Usual care

RESULTS

At the end of 7-y period	Community intervention	Usual care	
SBP reduction	17.6 mmHg	2.4 mmHg	
Dementia	8.85%	10.55%	$p < 0.001$

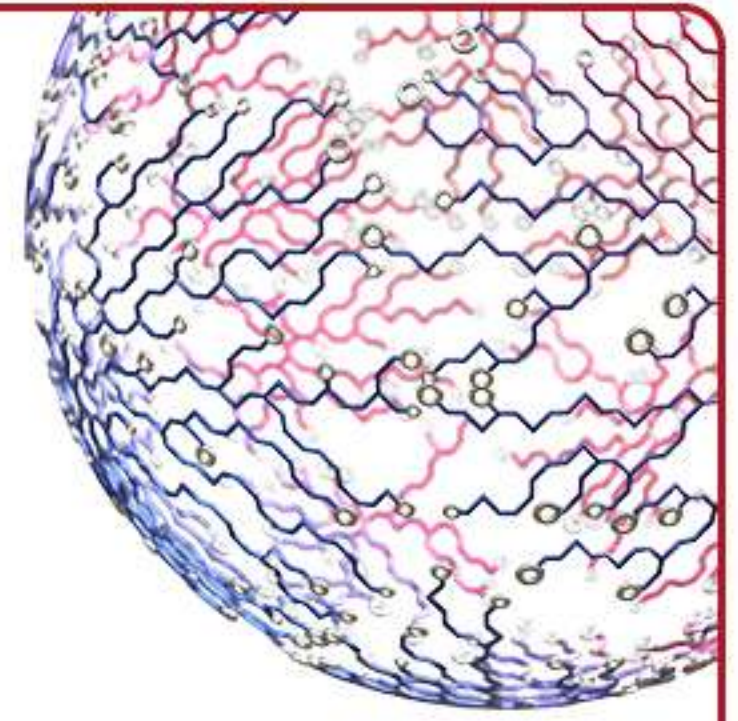
ECLIPSE-CKD

Salt substitute in CKD

Presenter: Dong Shui (Harbin, China)



#ESCCongress



Conclusion

In adults with hypertension and CKD, salt substitution lowered BP and modestly increased serum potassium over 3 months, with no episodes of hyperkalaemia.



Implications

Salt substitution may provide a scalable adjunct to BP management. Further trials are required to establish long-term effects on CV and kidney outcomes, and safety.

OBJECTIVE

To assess the efficacy and safety of salt substitutes in patients with CKD.

METHODS

- Hypertension
- eGFR
45–89 mL/min/1.73 m²



640
patients
randomised 1:1
7 centres in China

Salt substitute

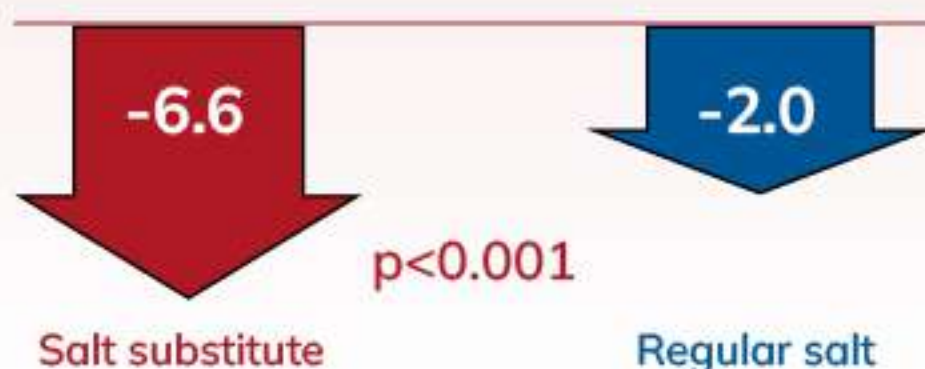
75% sodium chloride and
25% potassium chloride

Regular salt

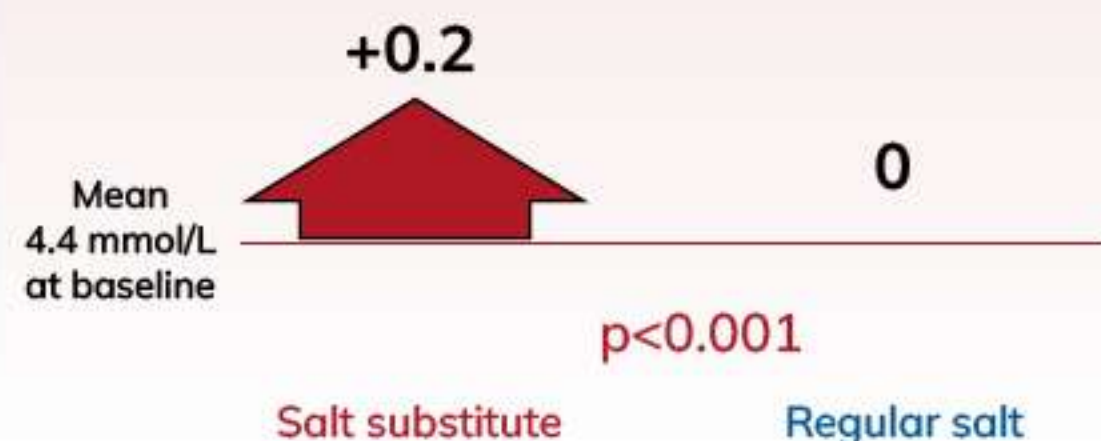
100% sodium chloride

RESULTS

Primary endpoint
Change in SBP (mmHg)
from baseline to month 3



Change in serum potassium (mmol/L)
from baseline to month 3



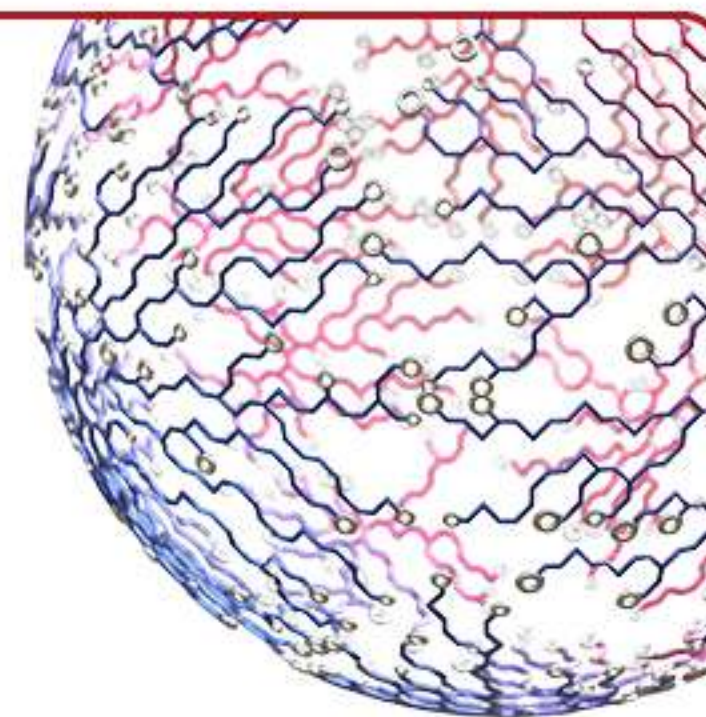
No episodes of hyperkalaemia were observed

SHASTA-3/4

Plozasiran in severe hypertriglyceridaemia



#ESC Congress



Presenter: Gerald Watts (University of Western Australia - Perth, Australia)



Conclusion

Plozasiran treatment resulted in substantial reductions in triglyceride levels in patients with severe hypertriglyceridaemia after 1 year.



Implications

Plozasiran may represent a promising therapy for patients with limited current treatment options.

OBJECTIVE

To assess plozasiran in patients with severe hypertriglyceridaemia.

METHODS

- Severe hypertriglyceridaemia (TG $\geq$ 500 mg/dL)

757
patients
randomised 2:1
24 countries

**Plozasiran 25 mg
SC every 3 months**



**Placebo SC
every 3 months**



RESULTS

	Plozasiran	Placebo
Primary endpoint Median triglyceride reductions	79–81%	~27%
Acute pancreatitis events	Risk ratio 0.22 95% CI 0.07–0.67; p=0.008	