Update on the ECST-2 Trial

Jonathan Beard, Trial Committee*
Professor Martin Brown, Chief Investigator
Dr Roland Featherstone, Trial Manager

*no disclosures

Session 76

Stoke and Carotid Disease

- ECST and NASCET trials both showed the benefit of CEA in preventing stroke in patients with symptomatic carotid stenosis compared to medical therapy alone.
- Guidelines therefore recommend CEA (or CAS) for such patients.
- A risk model derived from ECST and validated by NASCET data has indicated that only patients with a 5 year risk of stroke >20% benefit from CEA.


Medical therapy has improved...

Since the original trials medical treatment for the prevention of stroke has evolved:
- Better antiplatelet regimes
- Cholesterol-lowering medication
- Better medications for blood pressure control
- Better smoking cessation support

The hypothesis of the ECST-2 trial...

We hypothesise that the routine use of modern optimised medical treatment (OMT) in patients with carotid stenosis will halve the risk of recurrent stroke.

Patients with a predicted risk of stroke in the next 5 years <20% will not benefit from intervention (CEA or CAS).

CAR Score

- Oxford Risk Prediction Tool recalibrated it to include asymptomatic patients and the predicted benefit of modern optimised medical therapy.

- Risk factors used to assess CAR score are:
  - Male or female
  - Severity of presenting event (stroke, TIA, ocular)
  - Degree of stenosis (50-69%, 70-99%)
  - Plaque morphology (smooth or ulcerated/irregular)
  - Age (<65, 65-74, >75)
  - Time since last event (>12, 4-12, 2-4, <2 weeks)

CAR Score*

*Recalibrated to take account of OMT
Symptomatic or asymptomatic carotid stenosis ≥50%  

Clinical screening  
CART Score  
<30% risk:  
Eligible for ECST-2  
MRI brain + carotid (or CT)  
US carotid (plaque)  
CEA preferred  
CAS preferred  
Randomisation  
OMT plus CEA  
OMT  
OMT plus CAS  
Follow up for 5 years  
MRI Brain at 2 & 5 years

Outcome Measures
Primary outcome measure:  
Any stroke*, any myocardial infarction** or procedural death attributed to carotid revascularisation

*MRI (CT) brain required for any stroke  
**ECG/troponin required for any MI

Progress towards target of 300 required for initial pilot

Thank you for your attention
Centres interested in participating please visit www.ecst2.com

Questions?