

Treatment of ruptured aortic aneurysms

Surgery versus VAR

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

Consulting and speakersfee

WL Gore & Associates

Medtronic

Unrestricted research grants

Medtronic

W.L Gore & Associates

Philips Medical Systems

r AAA : Co-morbidity



Coronary artery disease or CHF	50%
Preexisting hypertension	30-50%
COPD	30-40%
Chronic renal disease	5%
Cerebrovascular disease	6%



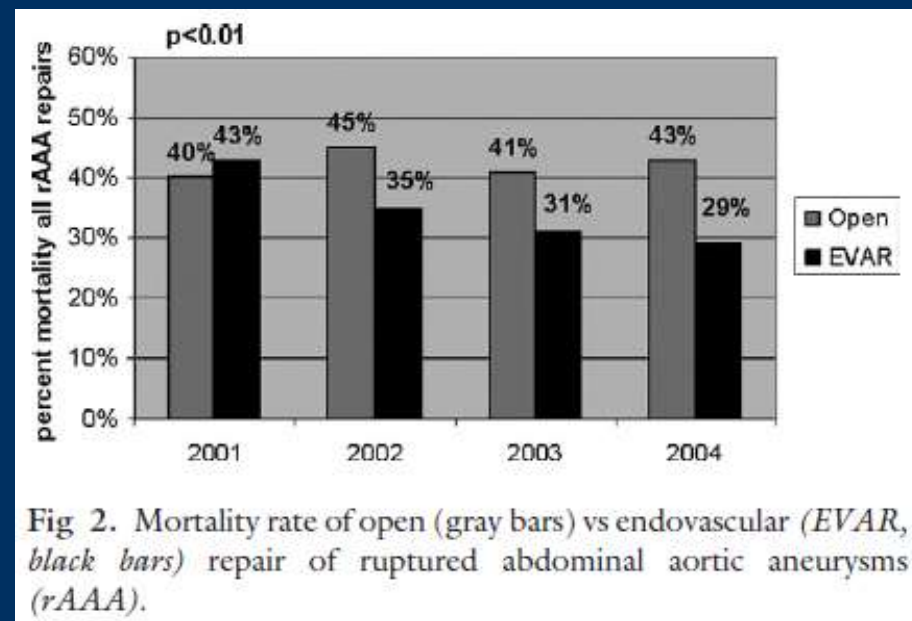
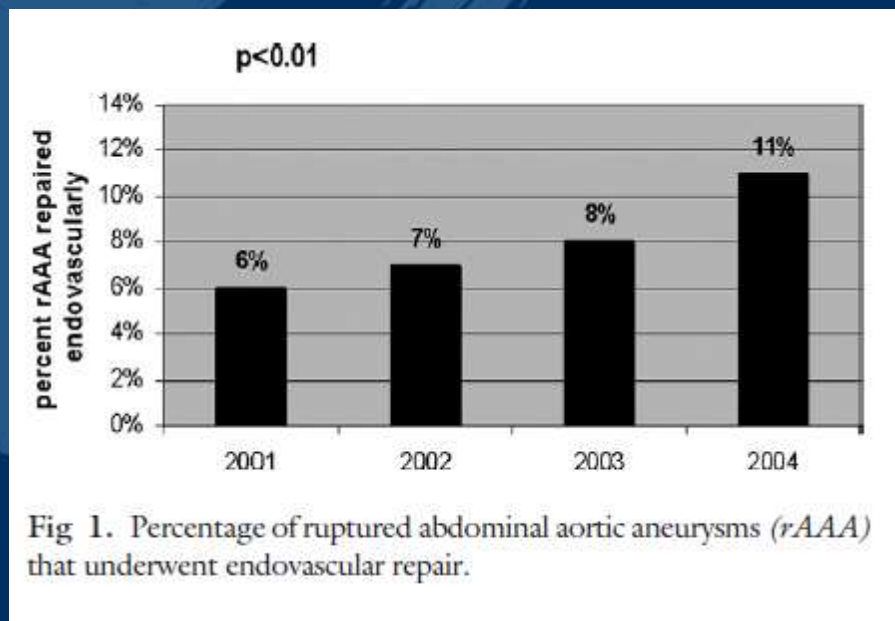
EVAR is established, and in most centers there is an
EVAR-first strategy

The most prominent challenges are

Logistics
Complex anatomy



Expanding use of EVAR



J Vasc Surg. 2008 Jun;47(6):1165-70

EVAR-first strategy for rAAA



The interpretation of current results from the literature is difficult because of patient selection criteria, definition of anatomic suitability for EVAR, and definition of hemodynamic stability.

On the other side several authors have demonstrated that a **predefined strategy and systematic approach** of rAAA, that includes EVAR, **is associated with improved mortality**.

Unstable patients with rAAA may be particularly benefited by EVAR and should not be excluded from endovascular repair.

EVAR-first strategy for rAAA



Moore et al concluded that there was evidence of a lower mortality rate after the introduction of the intention-to-treat EVAR protocol: **30.0% vs 17.9%**

J Vasc Surg 2007;45:443-50

There were similar conclusions in several publications on implementation of an intention-to-treat eEVAR protocol

J Vasc Surg 2010;51:9-18

Surgeon. 2010 Feb;8(1):39-43.

Also in population based studies with historical control (Nationwide Inpatient Sample database using International Classification of Diseases), mortality for rAAA repair decreased from **44.3% to 39.9%** ($P < .0001$) in pre-EVAR era (1993 to 1998) with the post-EVAR era (2001 to 2005).

J Vasc Surg 2009;49:543-50

EVAR for rAAA

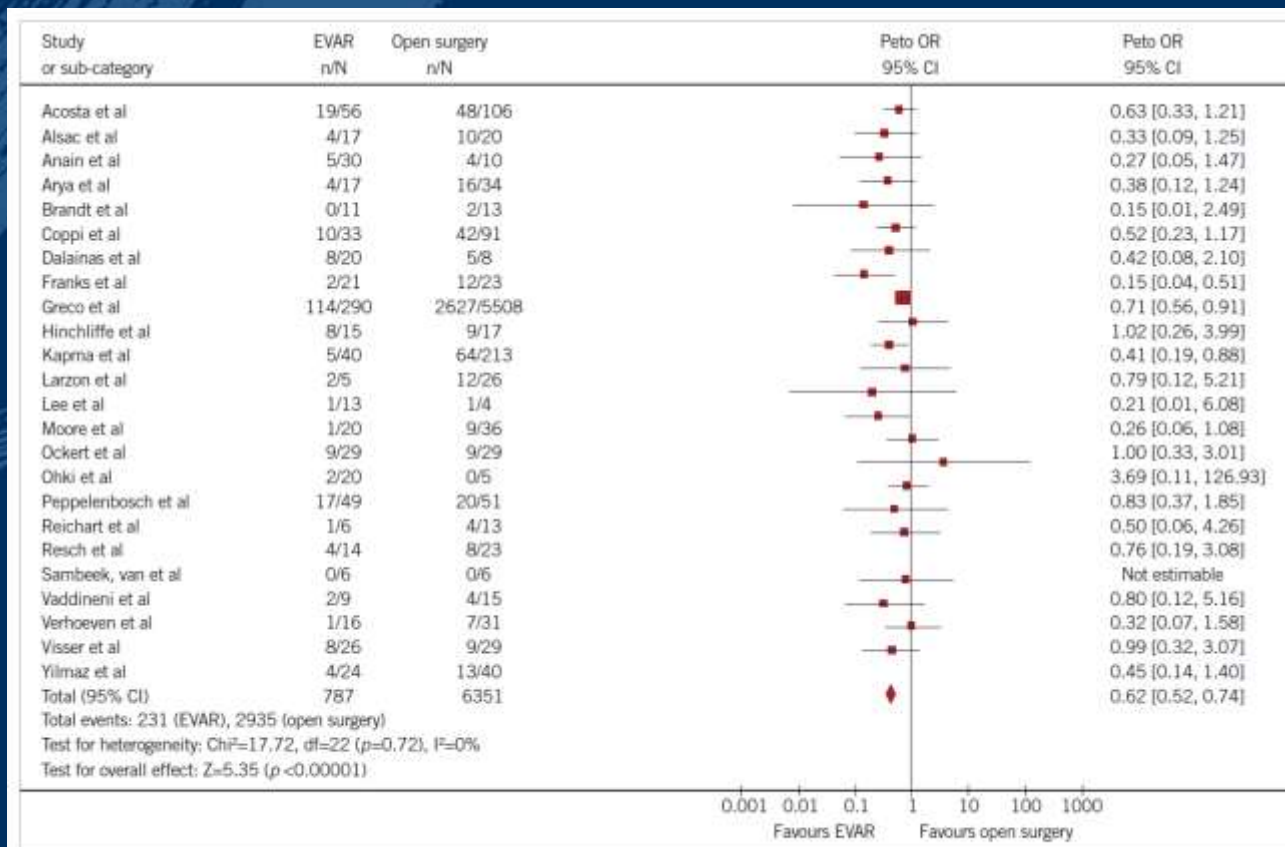
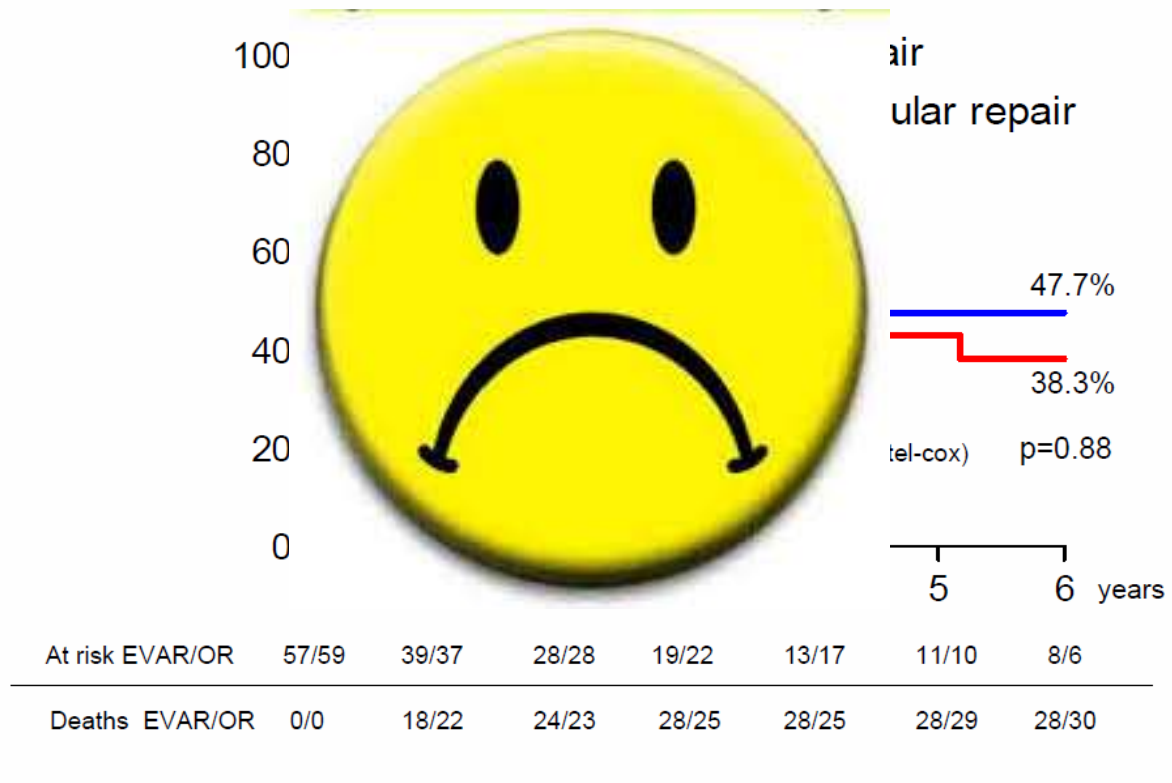


Figure 1. Forest plot of 30-day or hospital mortality in 24 studies comparing EVAR and open surgery in patients with a ruptured AAA.

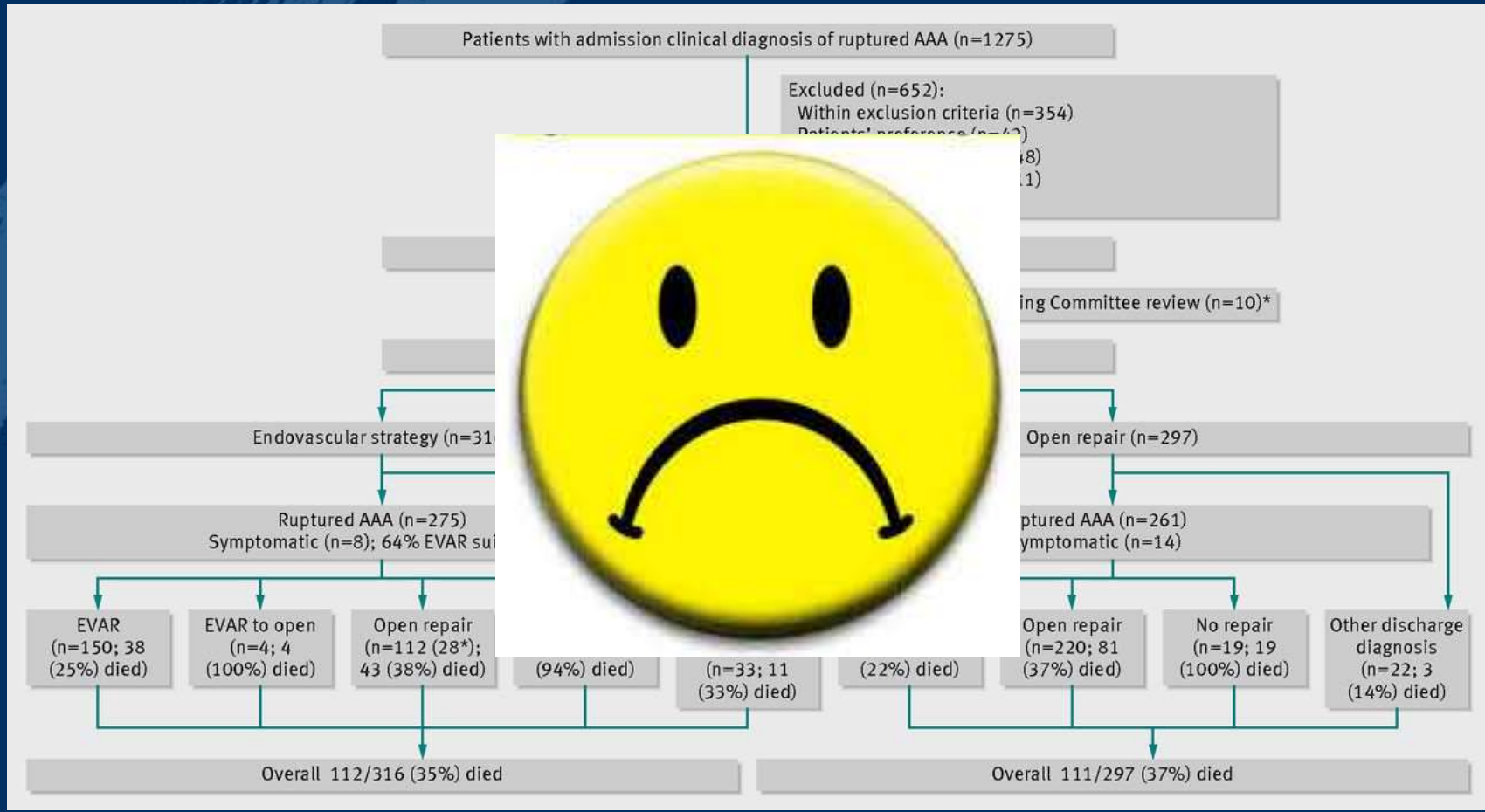
AJAX trial

Figure 2
Long term survival

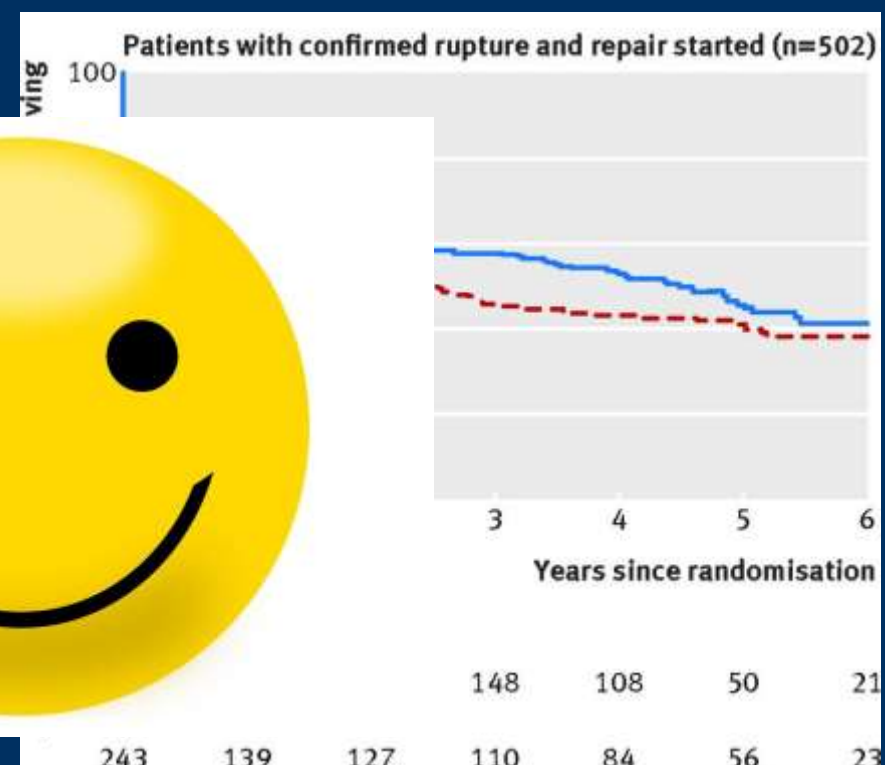
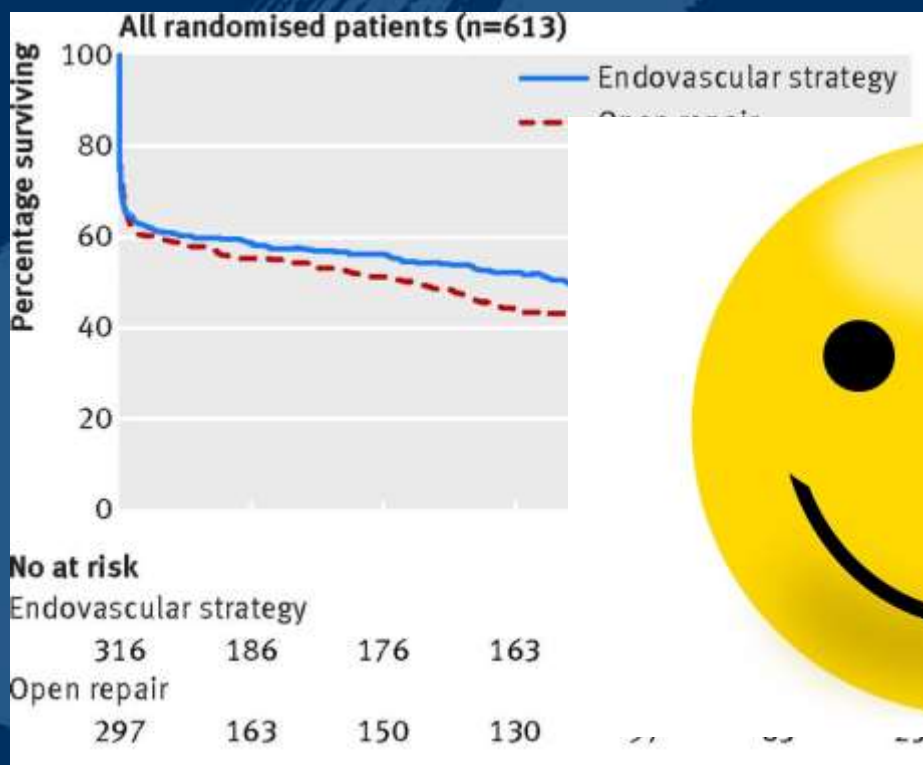


Reimerink JJ et al. Ann Surg 2013;258:248-56

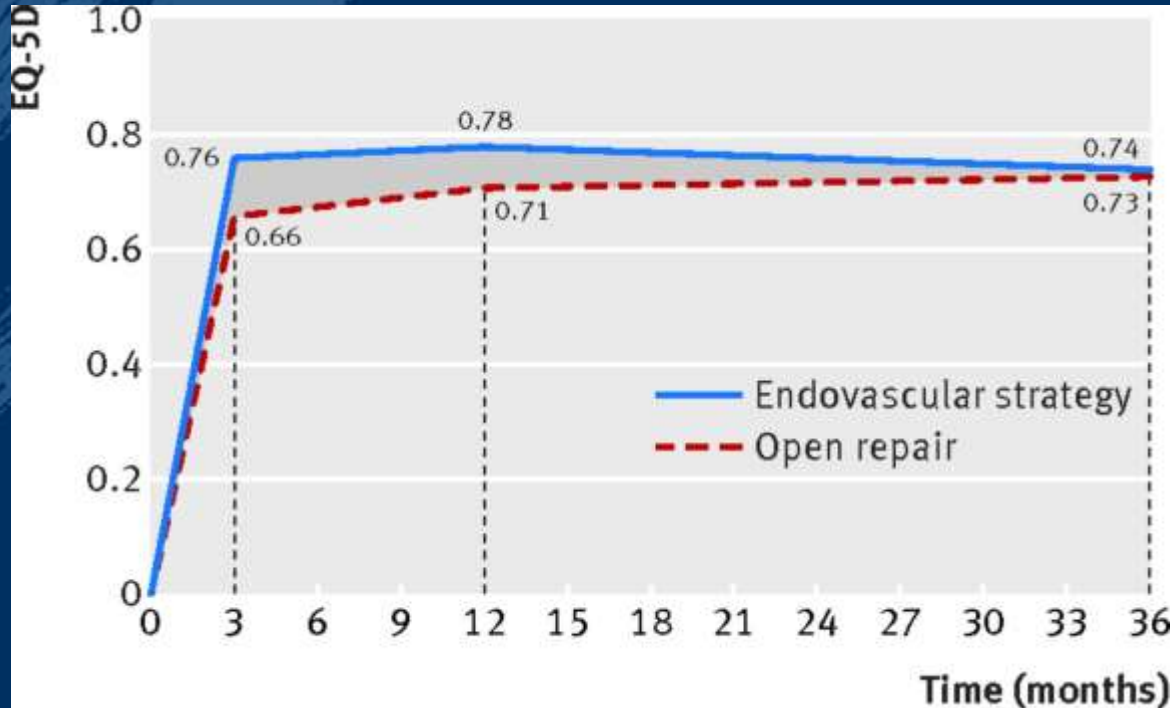
Improve trial 1 year



Improve trial 3 years



Improve trial 3 years



At three years, compared with open repair, an endovascular strategy for suspected ruptured abdominal aortic aneurysm was associated with a survival advantage, a gain in QALYs, similar levels of reintervention, and reduced costs.



Open repair of an abdominal aortic aneurysm



Endovascular repair of an abdominal aortic aneurysm



Settle the Score

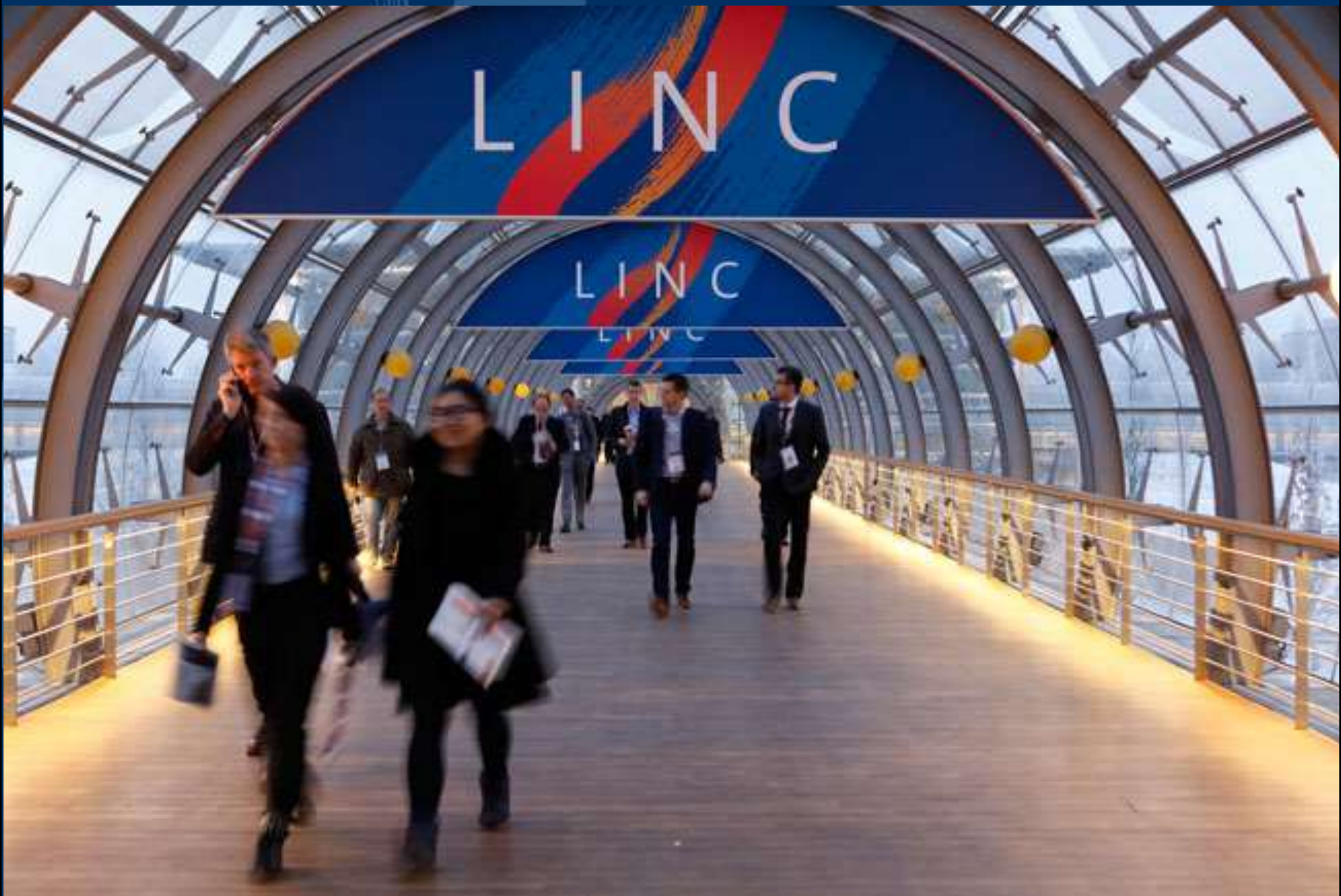
Stent-graft inserted
through right and left common
femoral arteries

N Engl J Med 2008; 358:464-474

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