

15-year EVAR 1 follow up – benchmark for newer technologies

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- Consulting
 - Employment in industry
 - Stockholder of a healthcare company
 - Owner of a healthcare company
 - Other(s)
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- I do not have any potential conflict of interest

Individual Patient Data meta-analysis (IPD)

Combines actual results of EVAR, DREAM, ACE and OVER

Supported by all 4 trial management committees and principal investigators

DREAM – Jan Blankensteijn

ACE – Jean-Pierre Becquemin

OVER – Frank Lederle

**Datasets at Charing Cross, Imperial College
Statistical analysis at University of Cambridge**

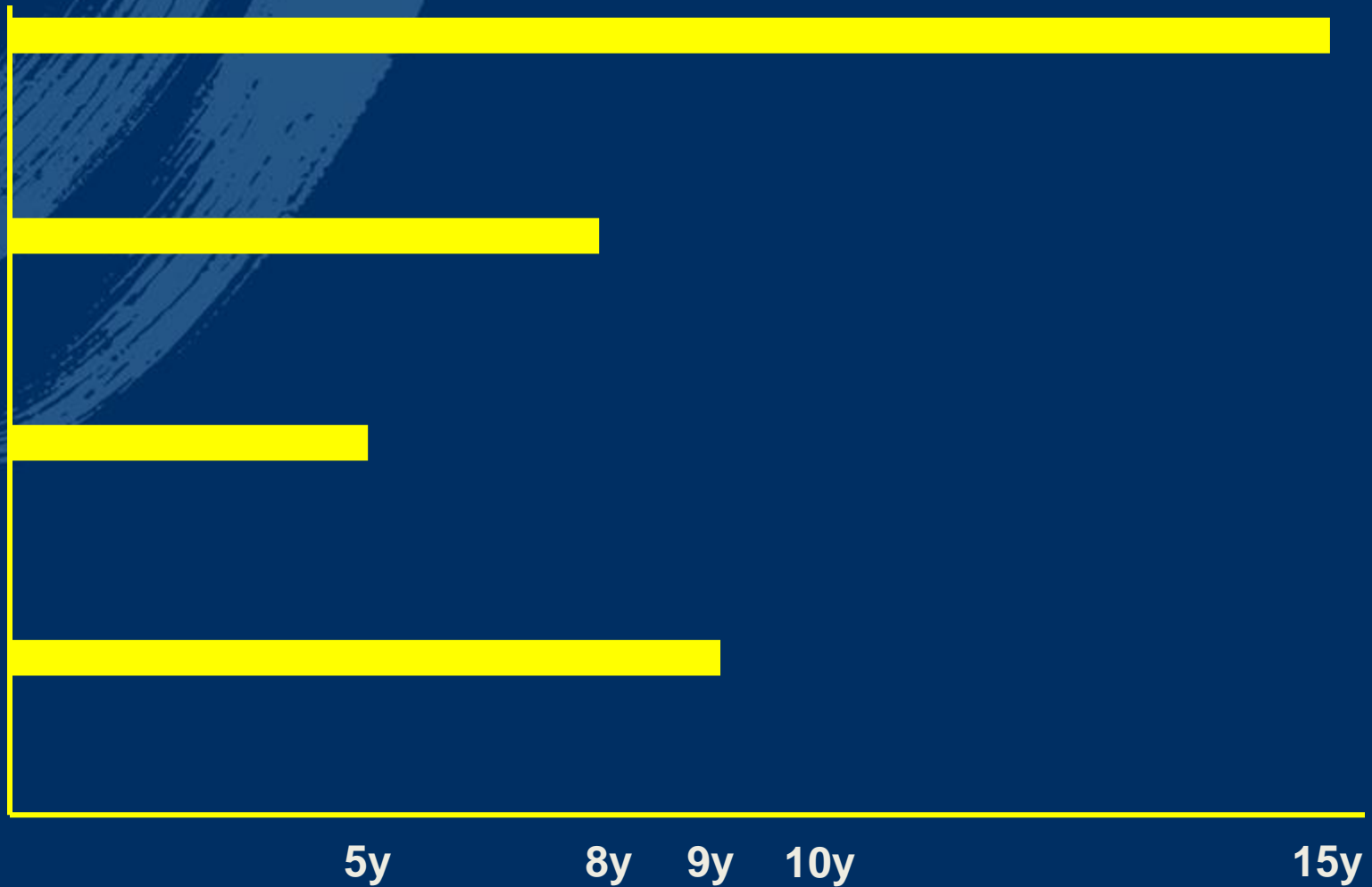
Follow-up of 4 RCTs

EVAR 1
1,252
>5.5cm

DREAM
351
>5.0cm

ACE
316
>5.0cm

OVER
881
>5.0cm



IPD

The length of follow up for each study:

EVAR 1	15 years
DREAM	6 years
ACE	3 years
OVER	9 years

The mean follow-up time to be used for the meta-analysis is 4.7 years

The common variables are to be chosen from the following but have not yet been finalised:

Age, sex, BMI, diabetes, smoking history, ABPI (except ACE), creatinine, previous history of angina/MI, max AAA diameter, AAA neck diameter and AAA neck length.

EVAR 15 year follow-up

Primary objective: Aneurysm related mortality

Secondary objectives: All-cause mortality, complications and re-interventions, secondary rupture rates and costs.

We obtained the follow up for 68% of patients with EVAR and 34% with Open Repair

Hospital Episode Statistics (HES) data has been obtained in 663 patients with EVAR 1

EVAR Trial 1

1252
TOTAL

626
EVAR

626
open repair

365
EVAR still alive

361
open repair still alive

2009

EVAR

```
graph TD; EVAR --> Local[Local follow-up  
250 (68%)]; EVAR --> Alive[Still alive without  
follow-up 28 (8%)]; EVAR --> Dead[Dead without  
follow up 87 (24%)];
```

Local follow-up
250 (68%)

**Still alive without
follow-up 28 (8%)**

**Dead without
follow up 87 (24%)**

Open Repair

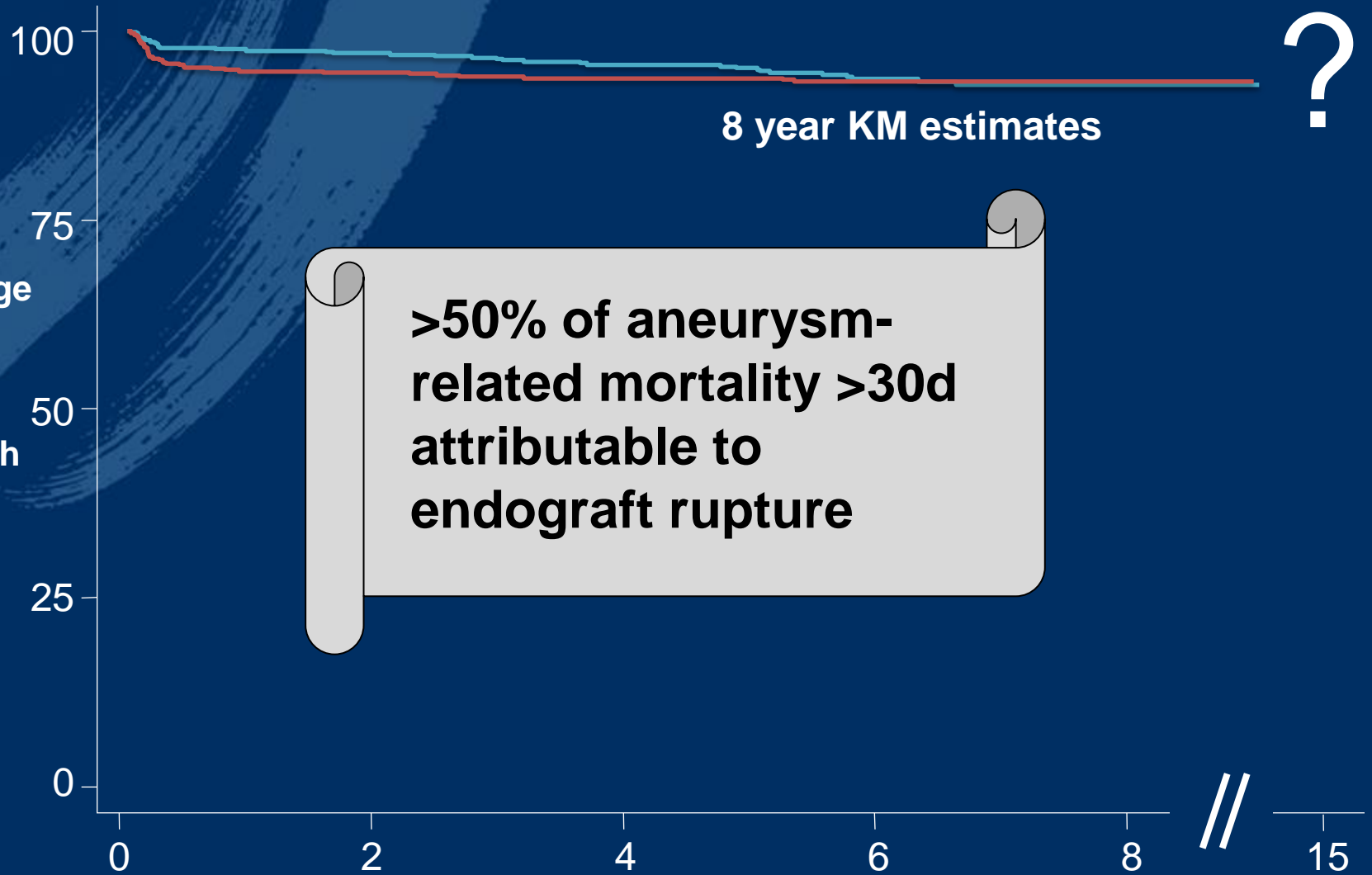
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graph TD; A[Open Repair] --- B[Local follow-up 123 (34%)]; A --- C[Alive without follow-up 94 (26%)]; A --- D[Dead without follow-up 144 (40%)];
```

Local follow-up
123 (34%)

**Alive without
follow-up** 94 (26%)

**Dead without follow
up** 144 (40%)

Aneurysm-related mortality



Number at risk

EVAR	626	543	472	312	101
Open	626	534	461	301	109

Time from randomisation (years)

626
534

543
461

472
301

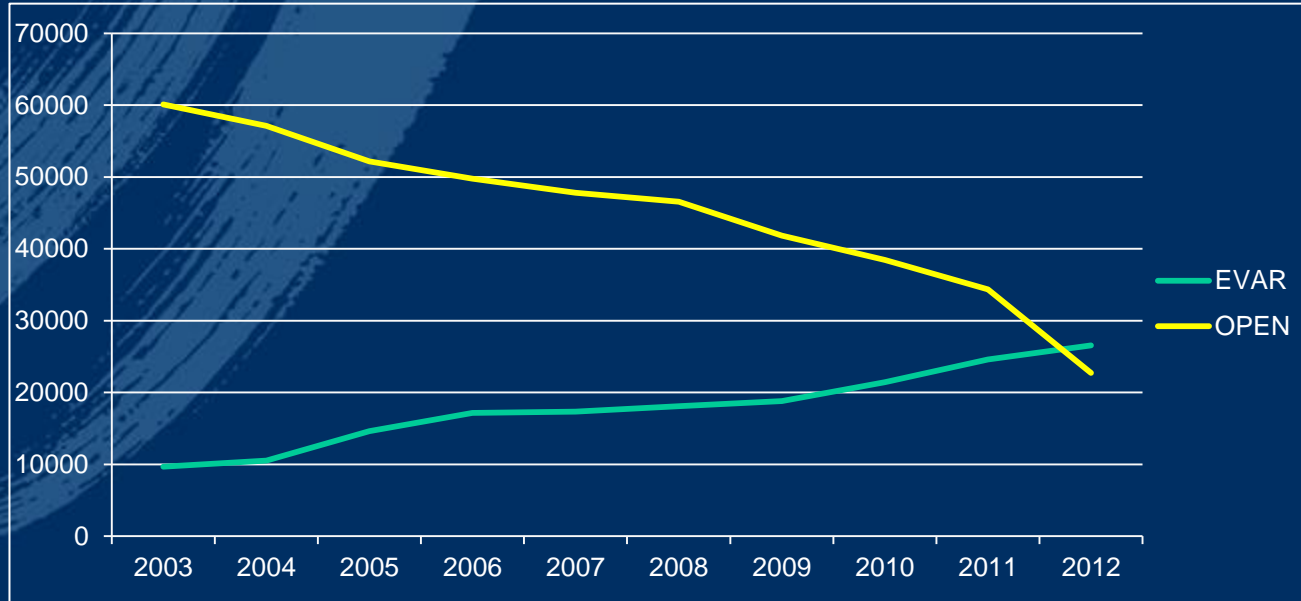
312
109

101
109

Effect of evidence that EVAR works

European Vascular and Endovascular Monitor (EVEM): EVAR vs OPEN 2003-2012

WESTERN EUROPE PROCEDURES



Y-O-Y GROWTH RATE

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
EVAR	9%	39%	18%	1%	4%	4%	14%	15%	8%
Open	-5%	-9%	-5%	-4%	-3%	-10%	-8%	-11%	-34%



EVAR trial 30-day
results – The Lancet



EVAR 5-year
results – The Lancet



EVAR 10-year
results – NEJM

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