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i-MEET – Nice, June 2019

# **CONFLICTS OF INTEREST**

**Research grant, educational support, consultancy** 





Speaker's fees

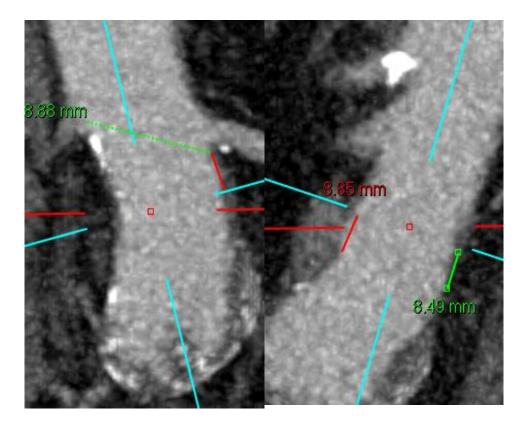
#### I am PI of the ANCHOR registry





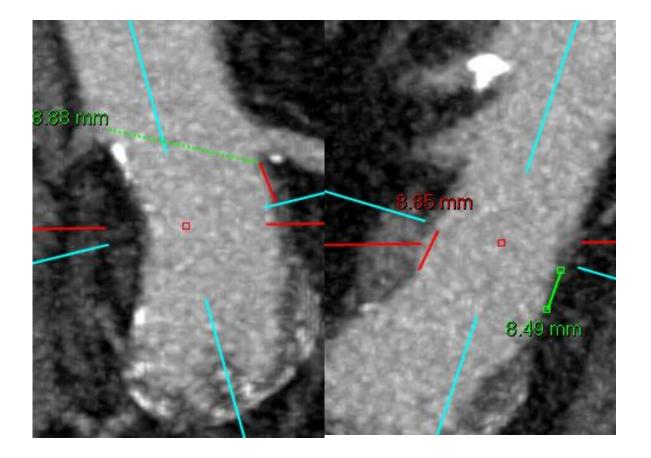
65 year old man 91 mm Ø AAA MI age 33 with residual angina Stroke 2017 Type II diabetes, newly diagnosed COPD BMI = 45 Poorly controlled hypertension

#### High-risk for open surgery





# **MANAGEMENT OPTIONS**



### **Conservative management**

**Open repair** 

Standard EVAR +/- adjuncts

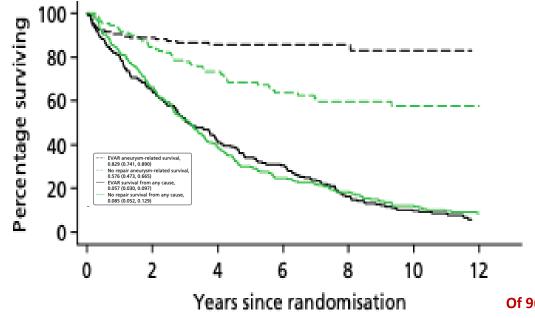
**FEVAR** 

chEVAR



# **CONSERVATIVE MANAGEMENT**

#### EVAR II TRIAL 404 patients (1999-2004)

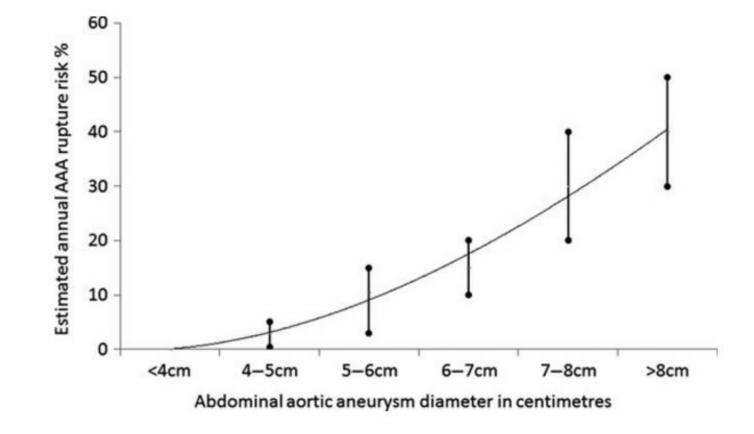


- 404 patients mean AAA diameter: 68 mm
- 9 rAAAs before EVAR
- 7% elective operative mortality (9% with ruptures)
- rupture risk in surveillance arm ~ 9%/year
- same quality of life
- increased cost
- 64 elective repairs in surveillance arm

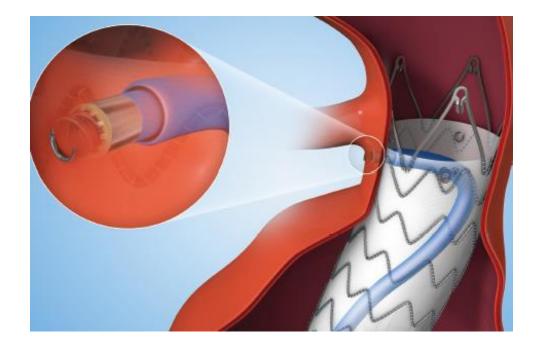
Of 96 patients alive in September 2009, all but 13 had their AAA repaired Of 23 patients alive in June 2015, all but 2 had their AAA repaired



## **CONSERVATIVE MANAGEMENT**



# **ENDOANCHORS**



**CE marked** 

**FDA** approved

With Endurant II/IIs

4-10 mm necks



# **DO ENDO-ANCHORS WORK?**

#### EndoSuture Aneurysm Repair (ESAR)

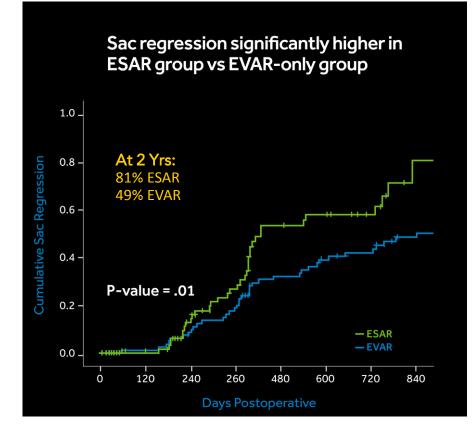
Propensity matched cohorts (99 EVARs + 99 ESARs)

Core Lab reviewed images

Same incidence of Type I EL

No migration



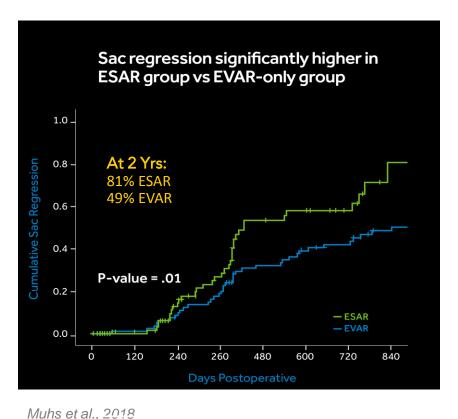




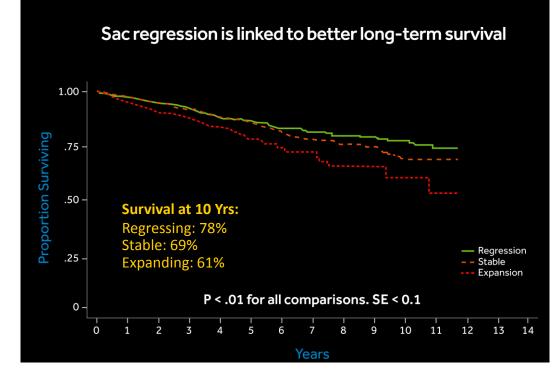


# WHY IS SAC REGRESSION IMPORTANT?

#### **ESAR**



#### 14,817 patients in VQI initiative (USA)



O'Donnell et al., 2018



# **FEVAR IN LIVERPOOL**

% of stent-grafts 10-2013 2014 2015 Calendar year n 

% of target vessels per calendar year

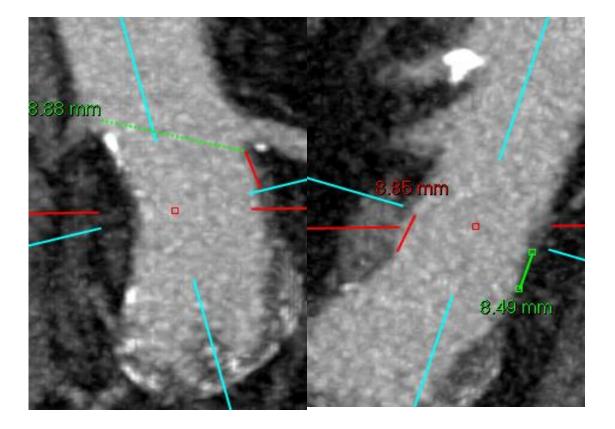
1 target vessel
2 target vessels
3 target vessels
4 target vessels

173 patients (2003-2015) Mortality: 5.2% 8% for 3-4 fens 2% for <3 fens Median survival 7.1 years No AAA-related deaths in follow-up

Graft-related endoleaks more common with 3-4 fens (12/90 v 6/83; P <0.001)



# **FEVAR?**



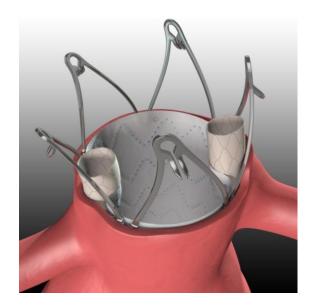
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# CH-EVAR OR FEVAR?

### **PROTAGORAS**



Donas et al., 2016

#### 128 patients

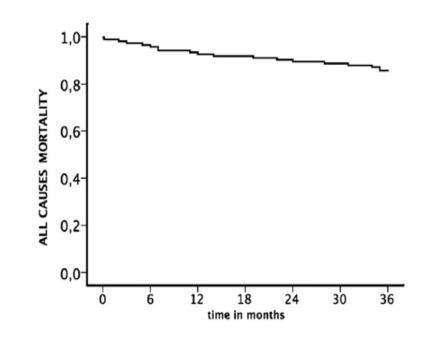
1-2 chimneys/snorkels

Mean neck length: 4.7 mm

Technical success: 100%

Primary chimney patency: 95.7%

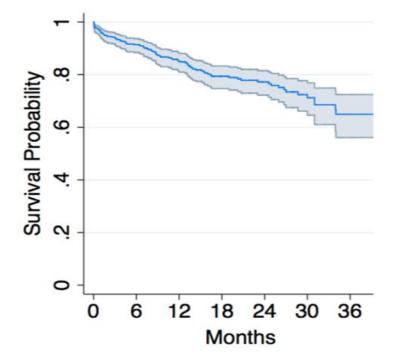
New onset Type I EL: 1.6%





### **C**H-EVAR

### PERICLES



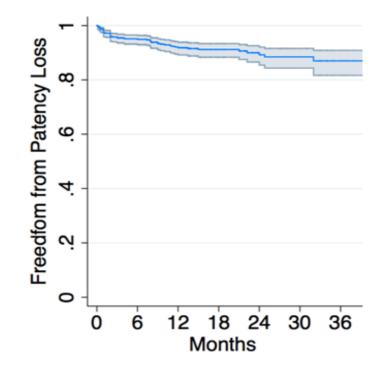
517 patients in 13 centres

Mean f/u 17 months

Intra-op type la endoleak: 7.9%

Persistent intra-op type la EL: 2.9%

Type Ia endoleak at latest fu: 5.8%





Courtesy of Medtronic

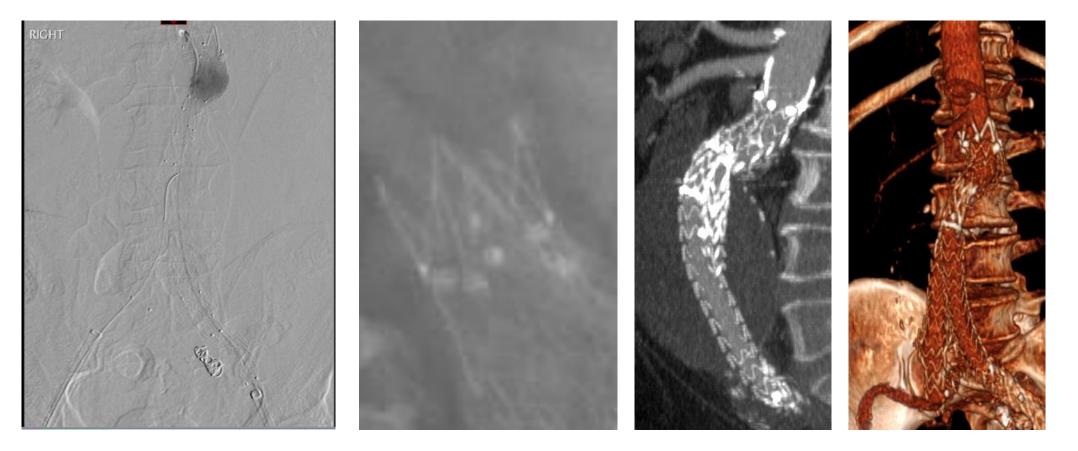


## Several endovascular options

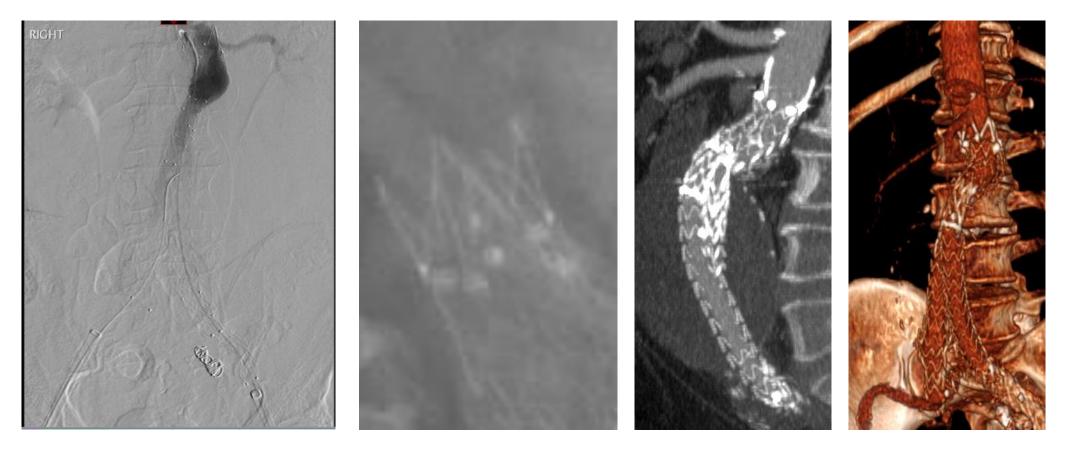
### No comparative data

### **Unknown durability (except FEVAR)**

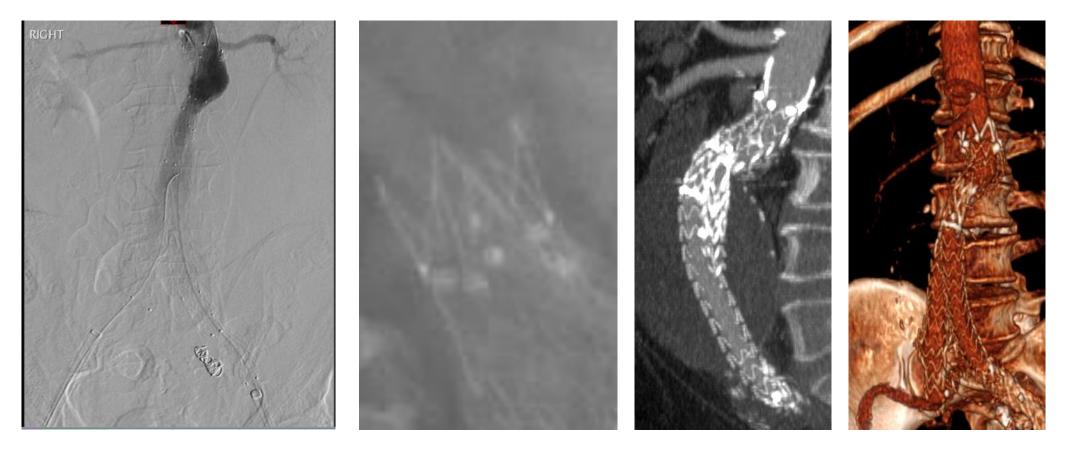




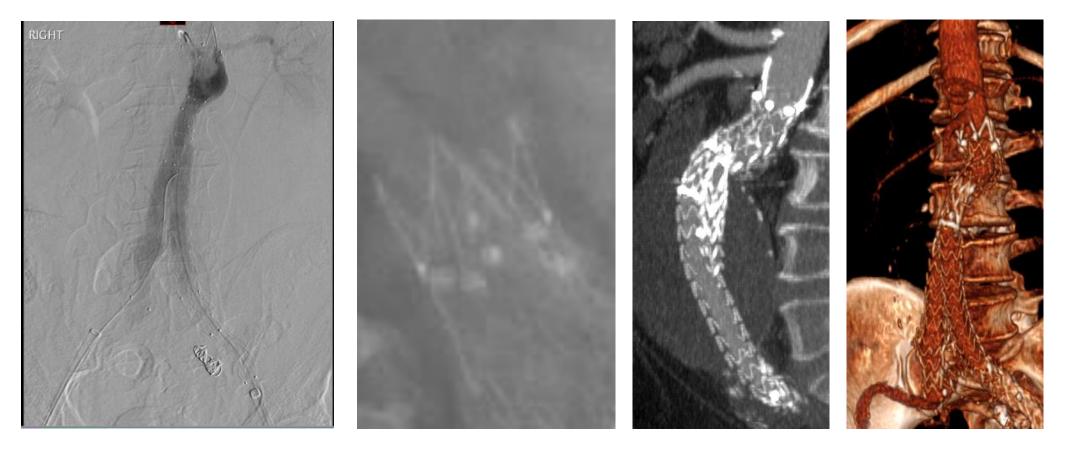




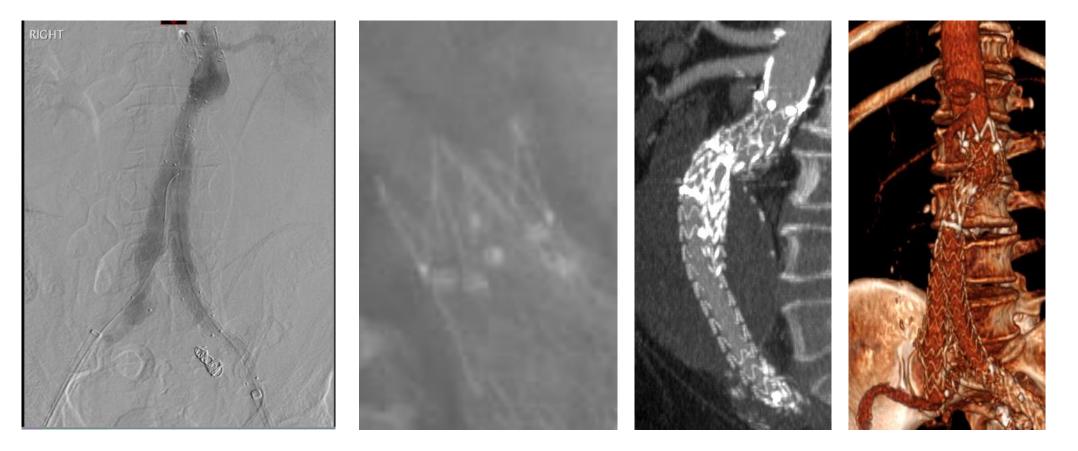




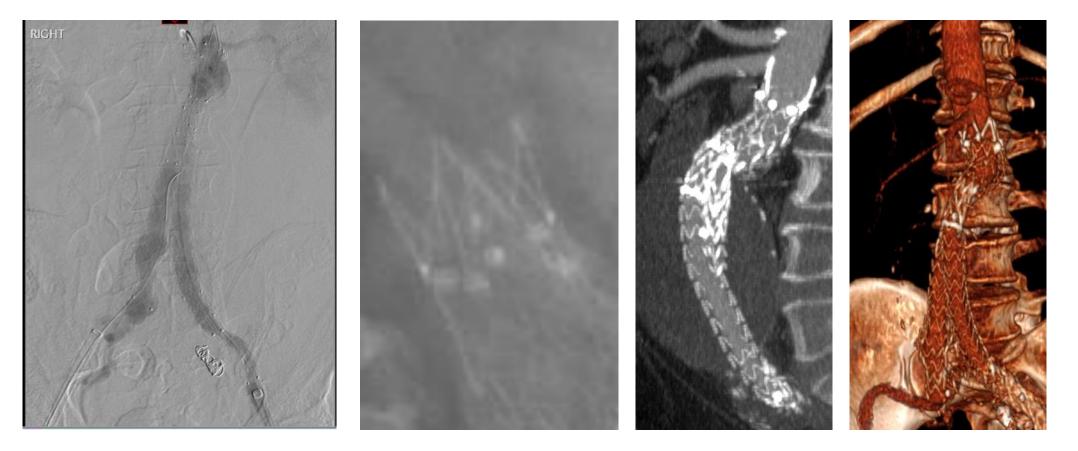




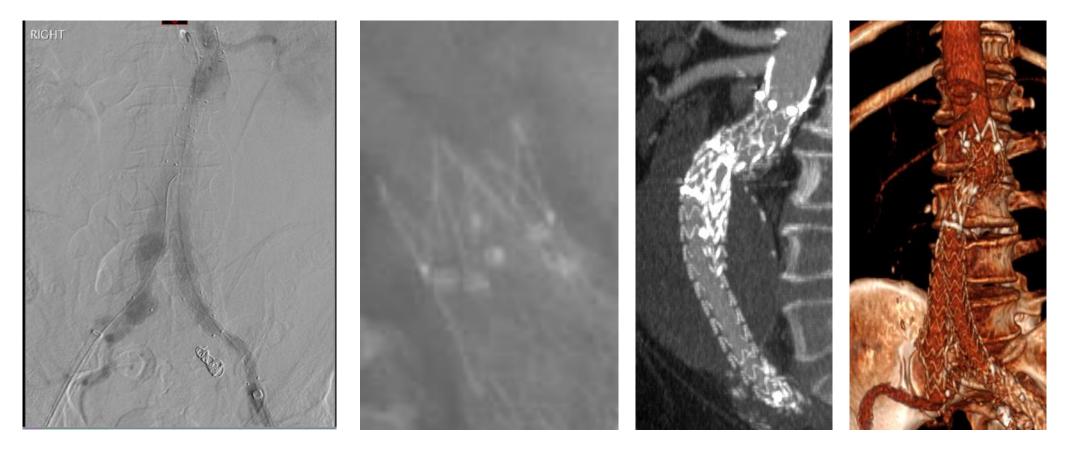














# TREATMENT ALGORITHM

