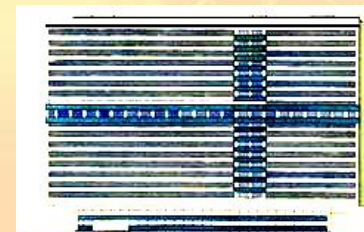


How to keep a small aneurysm small

E Allaire , J Dai , M Taurel, H Kobeiter,
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Faculty Disclosure

Eric Allaire

I disclose the following financial relationships:

Consultant for **Cardoz** Company

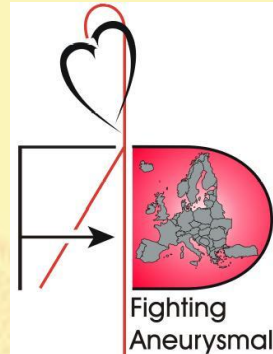
Receive grant/research support from

Fondation de l'Avenir pour la Recherche Médicale

European Union (PCRD7: "Fighting Aneurysmal Disease")

PHRC 2010

Major stockholder of **France Budget Deficit**



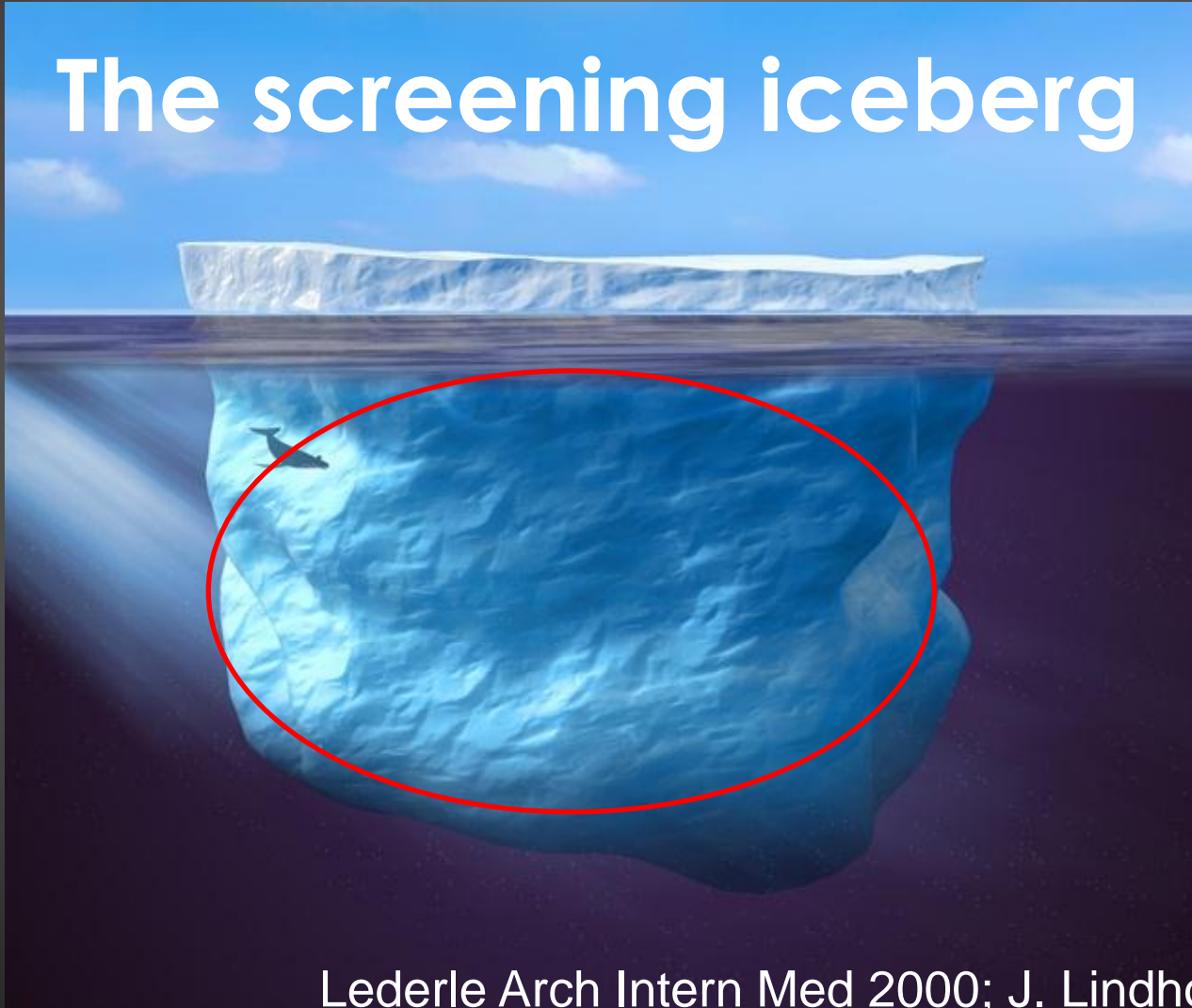
Why keep small AAAs small?

Screening decreases AAA-related mortality

Lederle FA BJM 2002
J. Lindholt Br. J. Surg 2010, EJVES 2008; Thompson SG BMJ 2009

Why keep small AAAs small?

The screening iceberg



Lederle Arch Intern Med 2000; J. Lindholt EJVES 2000

How to do it?

Lessons from follow-up of small AAAs

Must/may be proposed to patients

Stop smoking (1)

Add AAP (2)

Statins?

Observations

Thrombus (3)

Diabetes (4)

Biomarkers (5)

(1) MacSweeney ST Lancet 1994

(2) Lindholt JS, EJVES 2008

(3) Parr A JVS 2011

(4) Sweeting MJ Br. J. Surg 2012, Parlani G JVS 2012

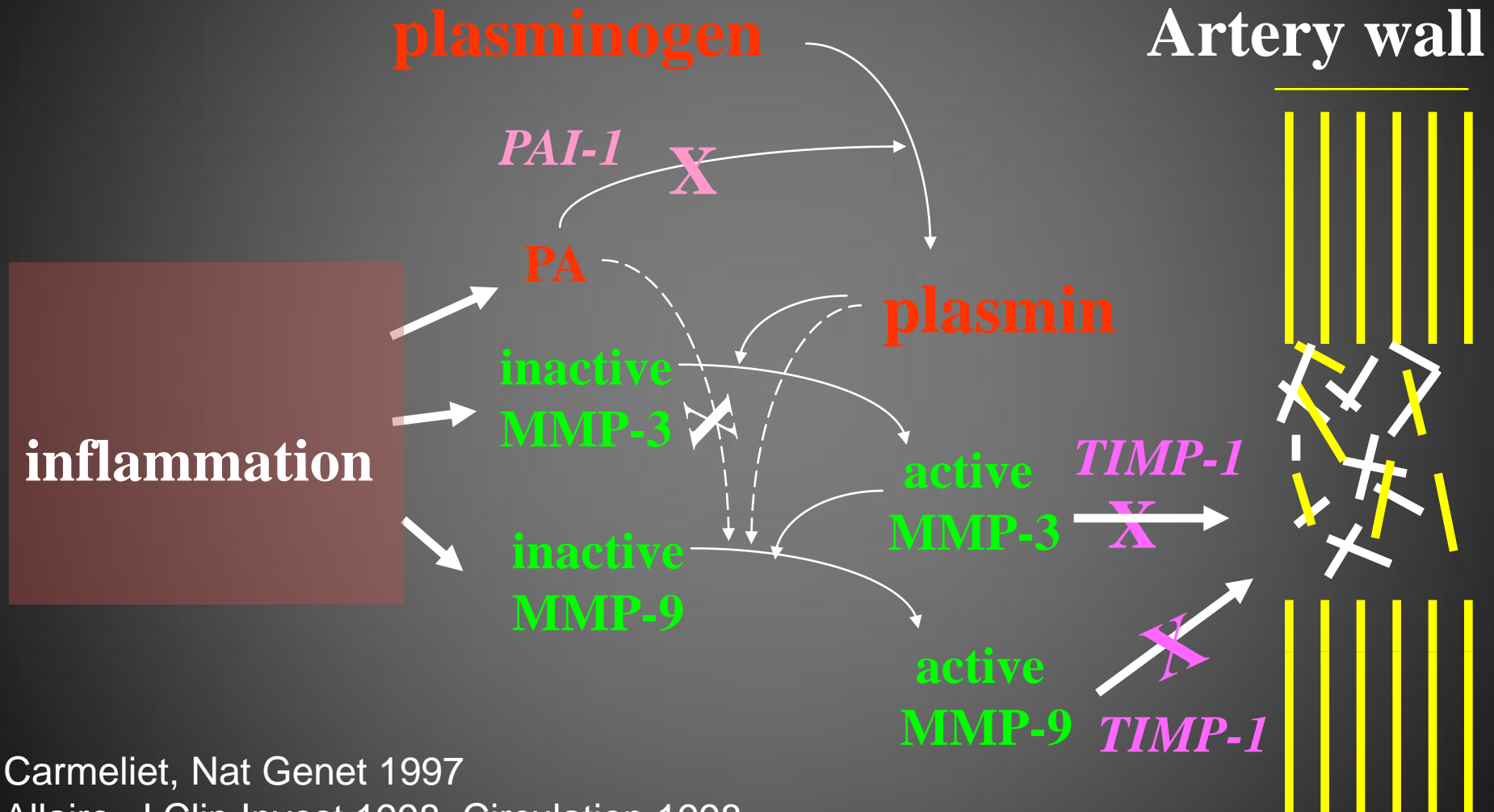
(5) Golledge J Circulation 2008

How to do it?

Stentgraft

| | Δ diameter (mm/year) | % Mortality (36 months) | % adverse event (36 months) |
|--------------|--------------------------------|----------------------------|-----------------------------------|
| EVAR | - 3.15 | 14.5 | 19.8 |
| Surveillance | + 1.5 (no repair) | 4.0 | 4.0 |
| p | < 0.001 | 0.6 | <0.001 |

How to do it?



Carmeliet, Nat Genet 1997

Allaire, J Clin Invest 1998, Circulation 1998

Deng, Circ Res 2003

Luttun, Circulation 2004

How to do it? (1)

Clinical trials / proteases-inflammation

Doxycycline (2)

NSAID (3)

Other clinical trials

Propranolol (4)

Azithromycin (5)

(1) Rughani G Cochrane Database Syst Rev. 2012

(2) Baxter JVS 2002; Circulation 2008

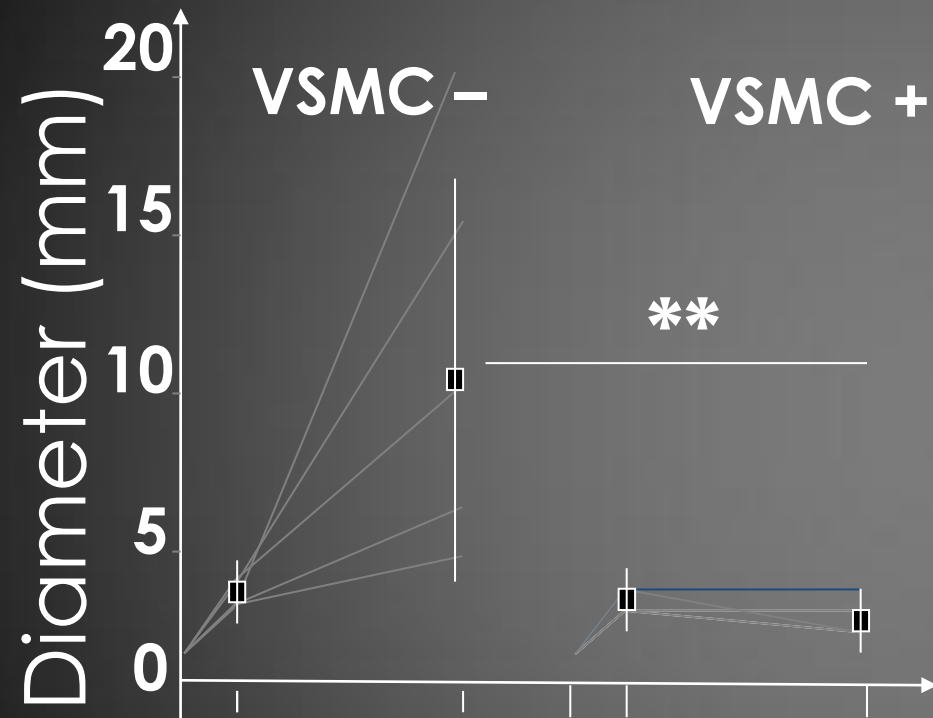
(3) Walton LG Circulation 1999

(4) JVS 2002

(5) Karlsson L JVS 2009

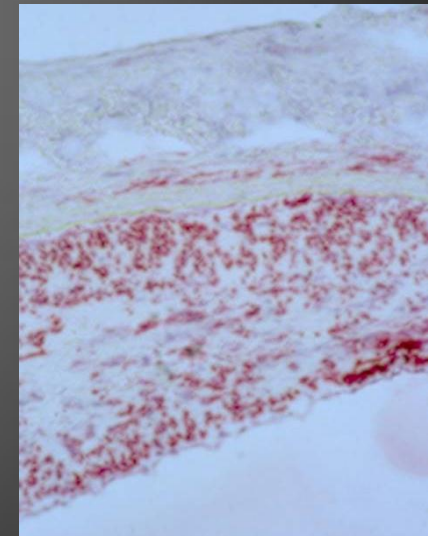
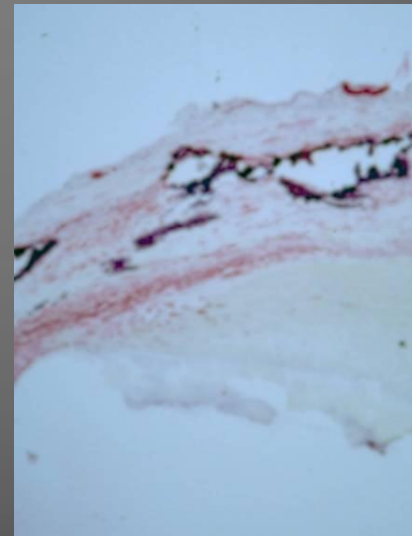


Another approach to keep small AAAs small

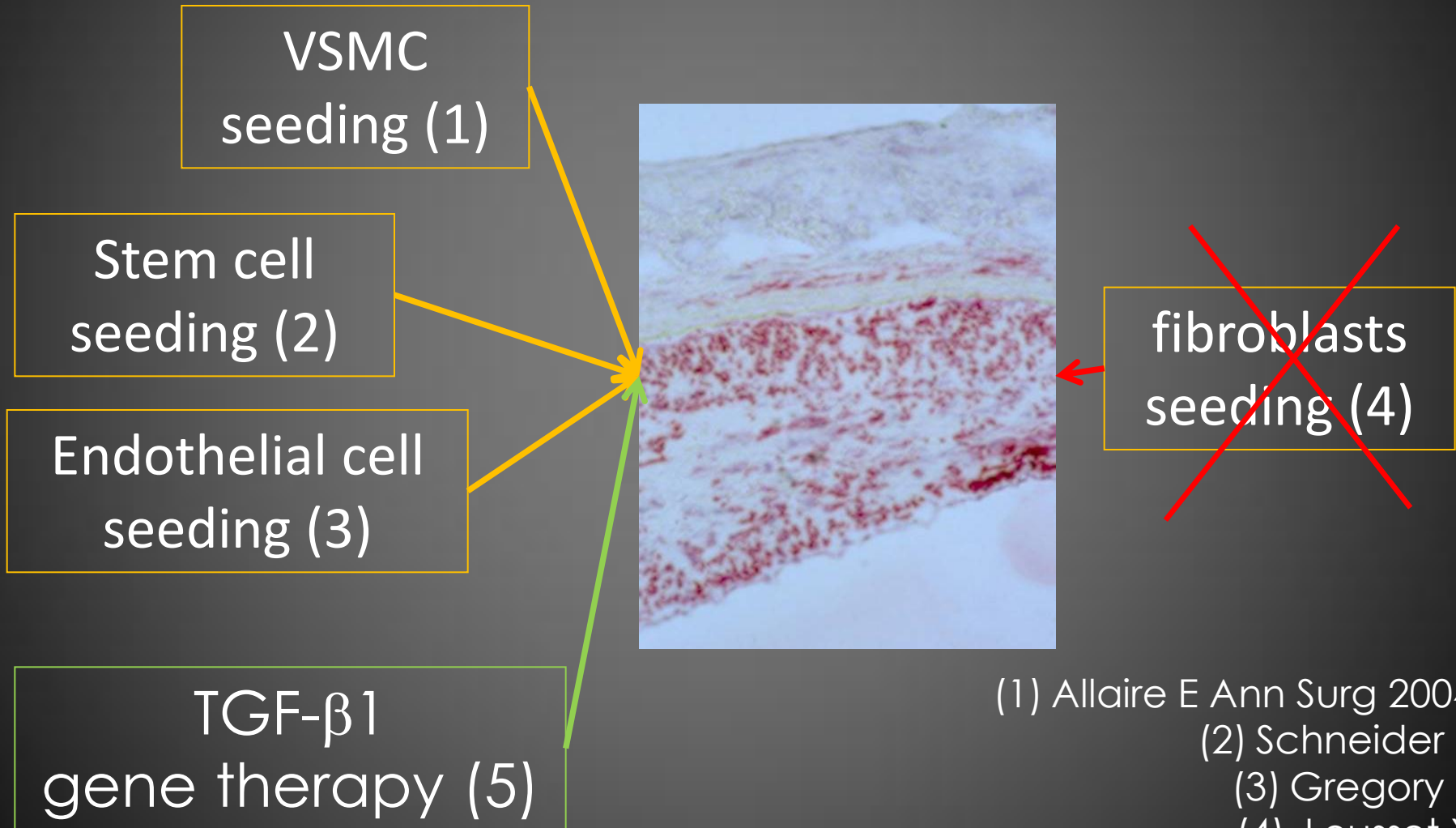


control

VSMCs



How to promote VSMC growth and small AAAs small



(1) Allaire E Ann Surg 2004

(2) Schneider F

(3) Gregory F

(4) Lousset Y

(5) Dai J PLoSOne 2011

Cyclosporine induces TGF- β 1

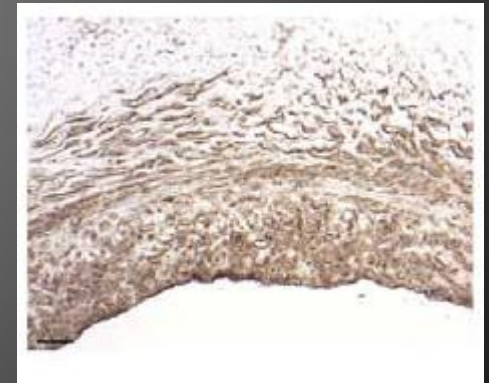
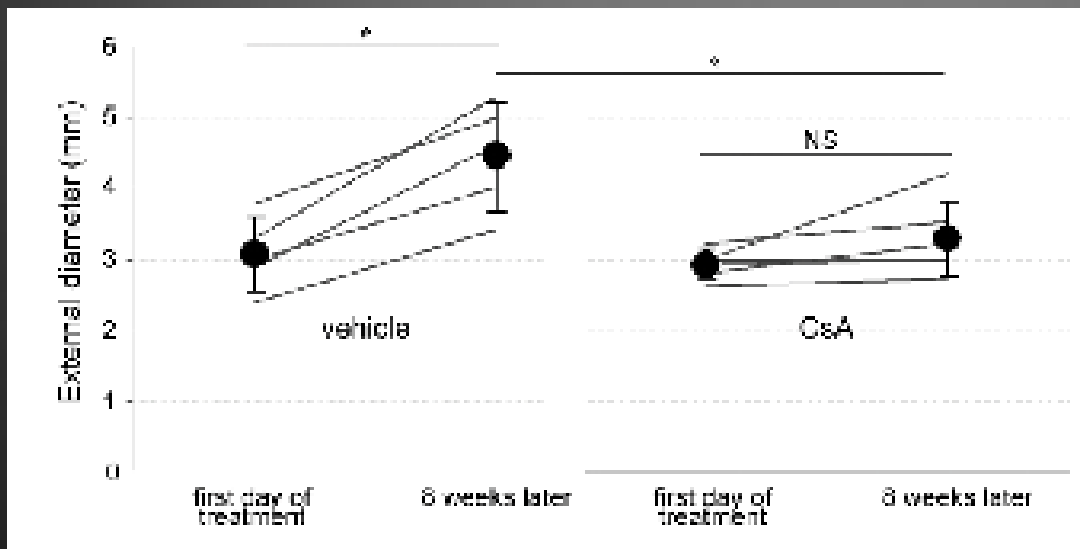
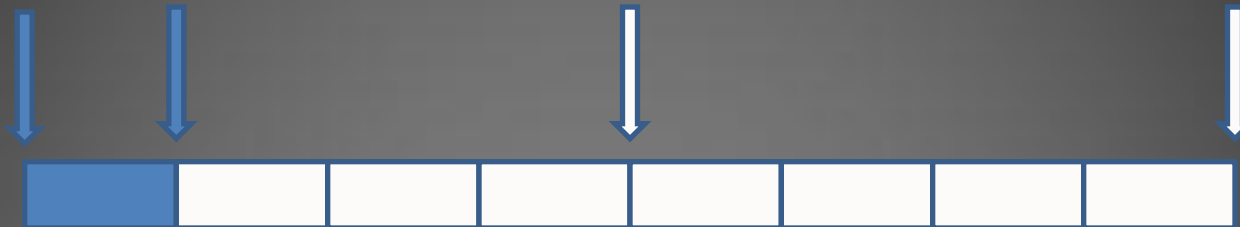


hypertrophy



atrophy

Short and low dose treatment with cyclosporine



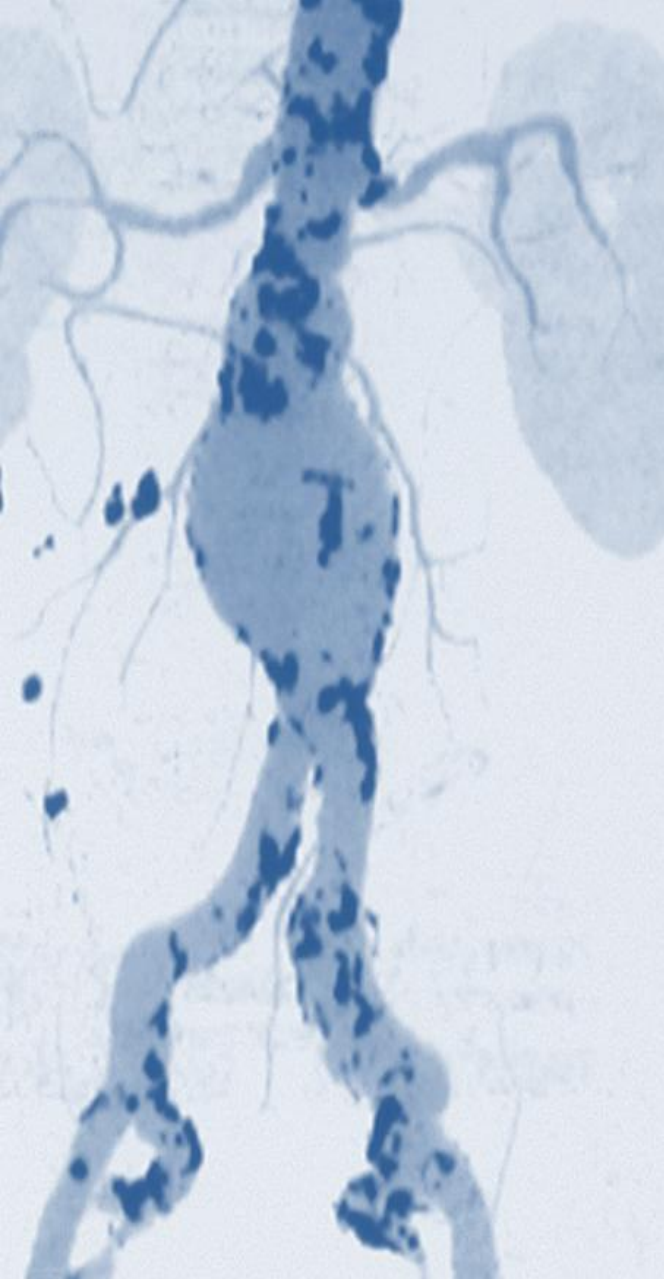


Short treatment/low dose CSA

Etude ACA4*

PHRC, SFMV, SCV, Université Paris Est-Créteil

* Administration courte de Ciclosporine A pour induire la stabilisation des Anévrismes de l'Aorte Abdominale de petit diamètre



Multicentric, randomized,
double blind trial

360 patients

3 groups:

2 CsA doses

1 placebo

1,2 million Euros PHRC

How to keep small AAAs small

Small evidence that we can

Future of inhibition strategies towards inflammation and proteases?

Next step in France: ACA4 clinical trial / healing



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Le personnel paramédical

Patients!

Animal facility

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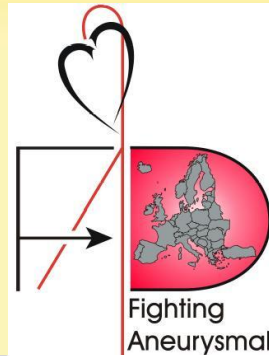
Philippe Mario, T Paris 12

Claire Justine, T Paris 12

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY

JANUARY 17-19 2013

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE



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