

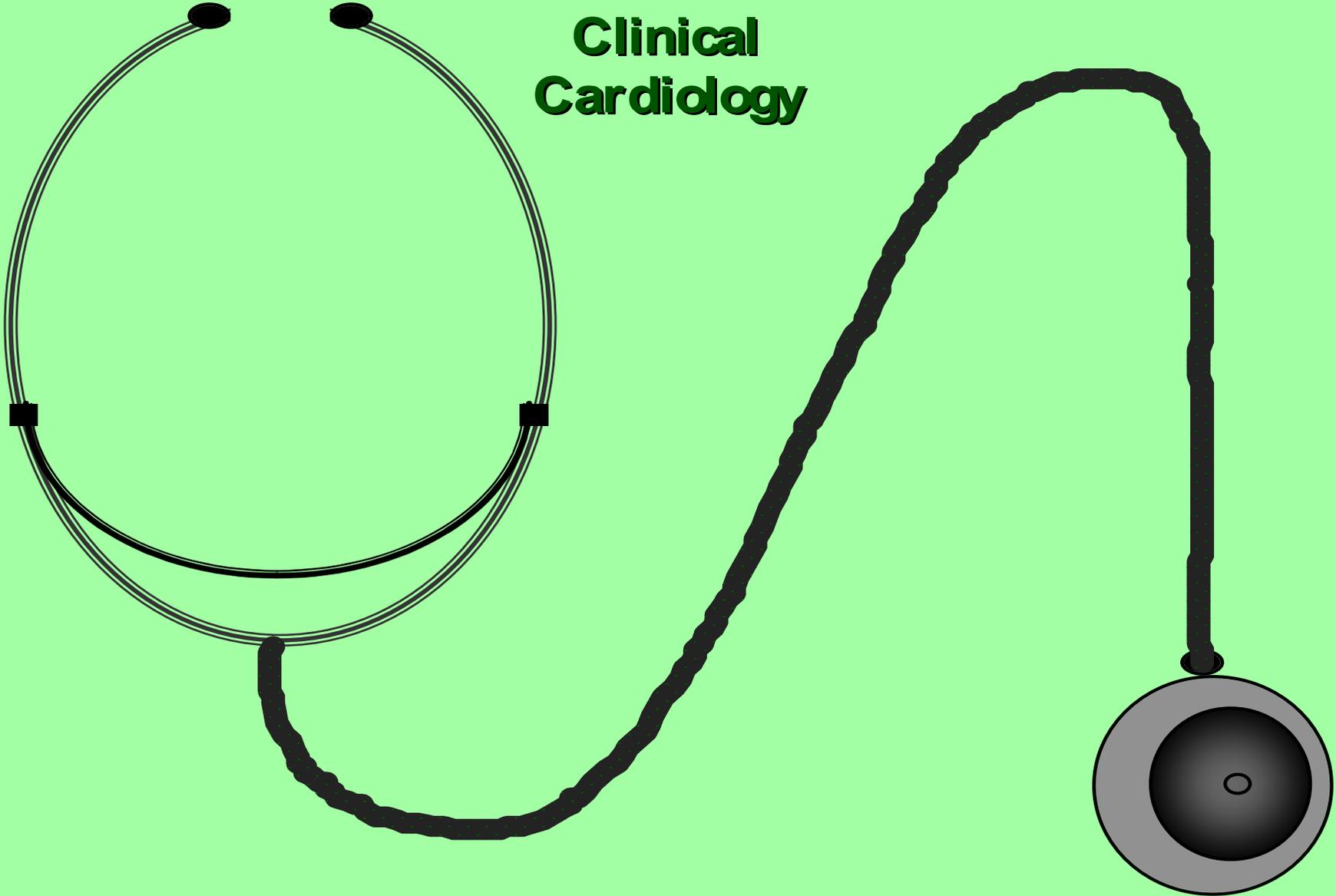
# Koronarstents ambulant

Geht das?

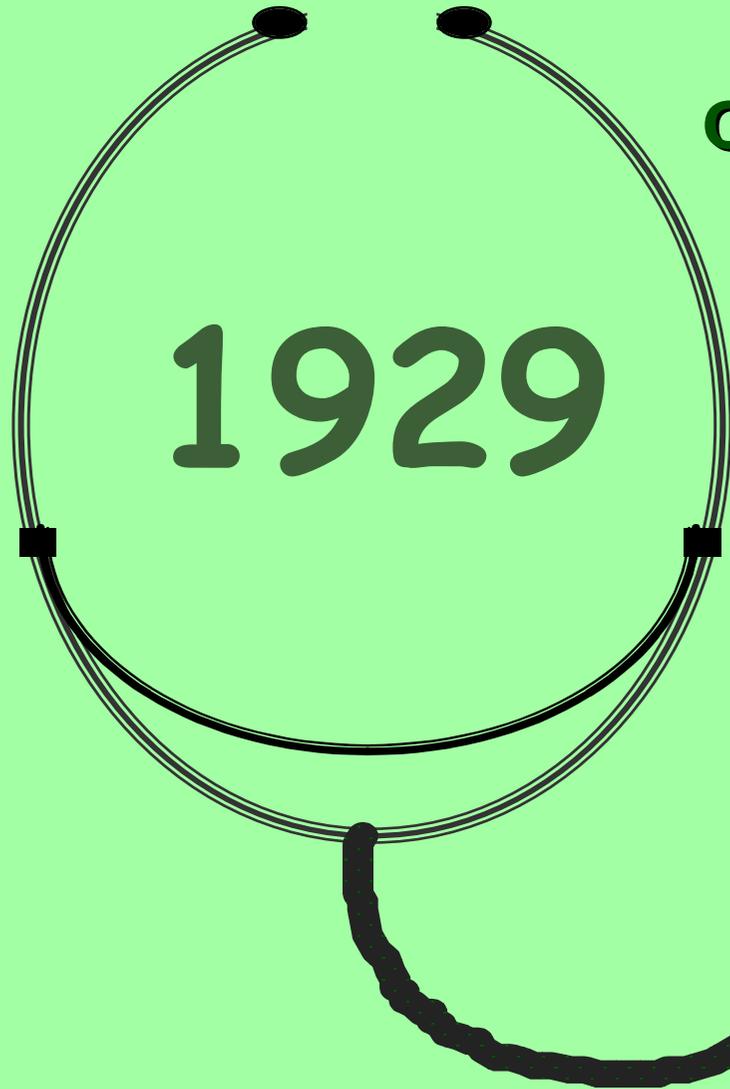
Bernhard Meier, Universität Bern

# The Evolution of Cardiology

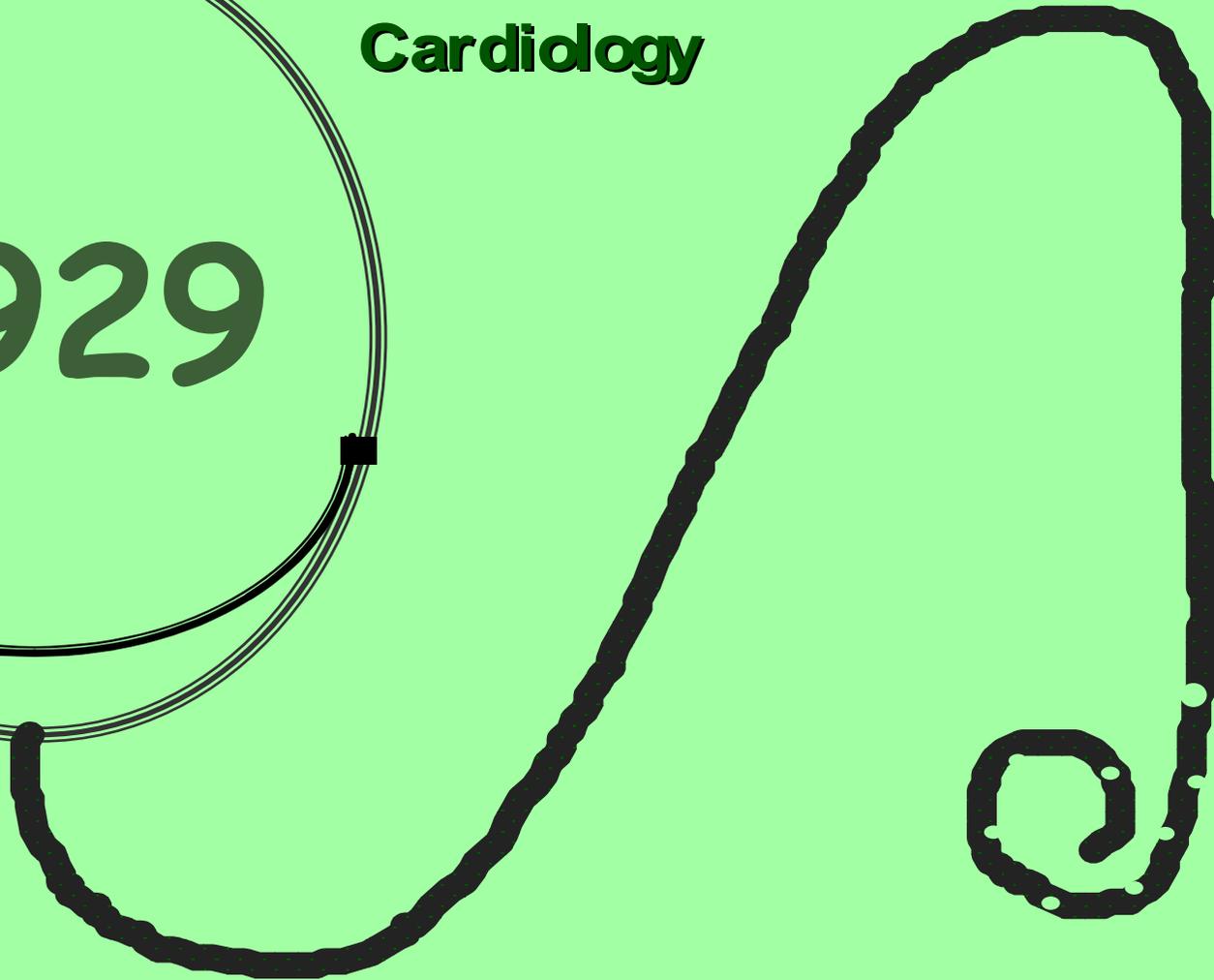
**Clinical  
Cardiology**



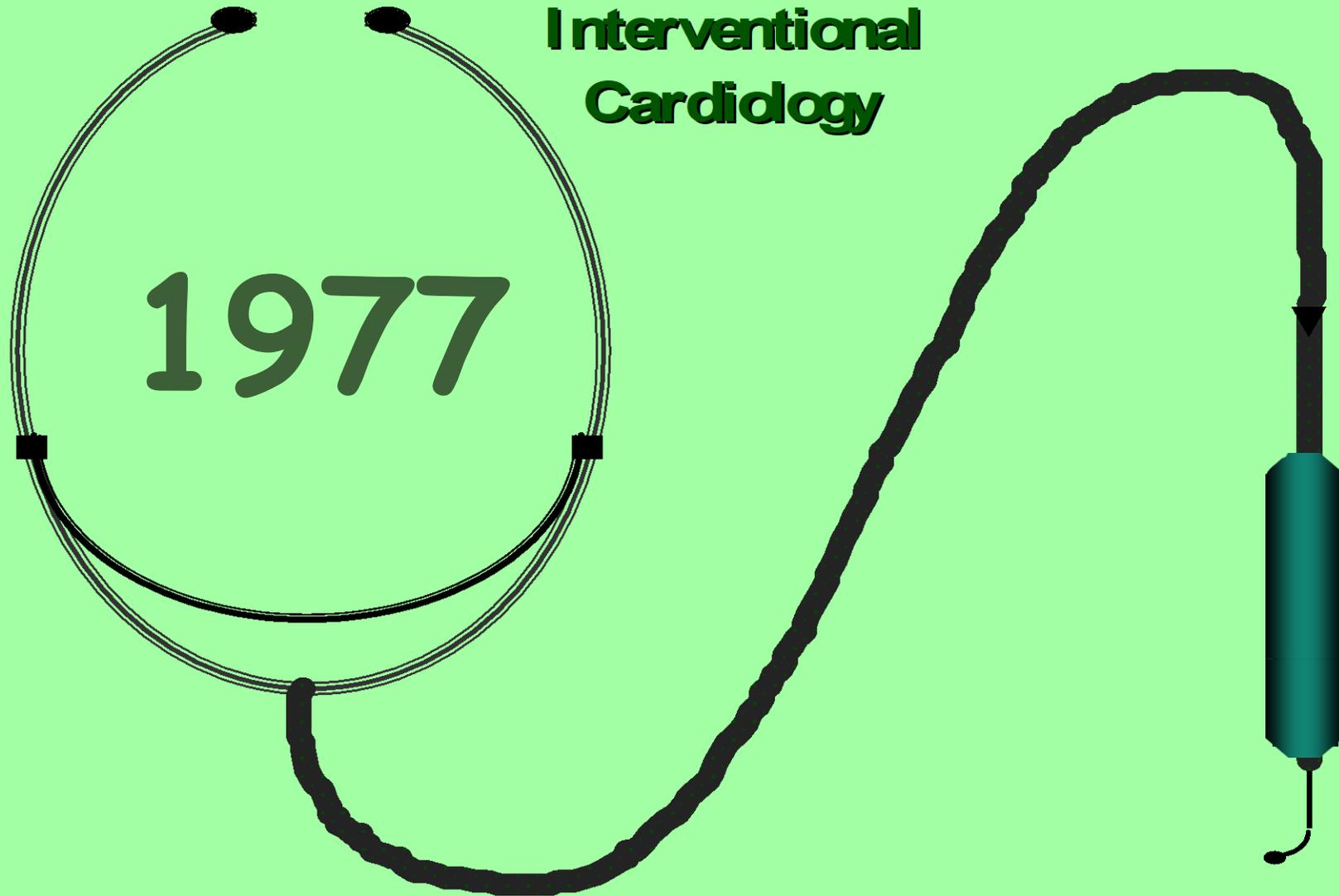
# The Evolution of Cardiology



**Invasive  
Cardiology**



# The Evolution of Cardiology



# The Evolution of Cardiology

<sup>st</sup>  
Interventional  
Cardiology

1986



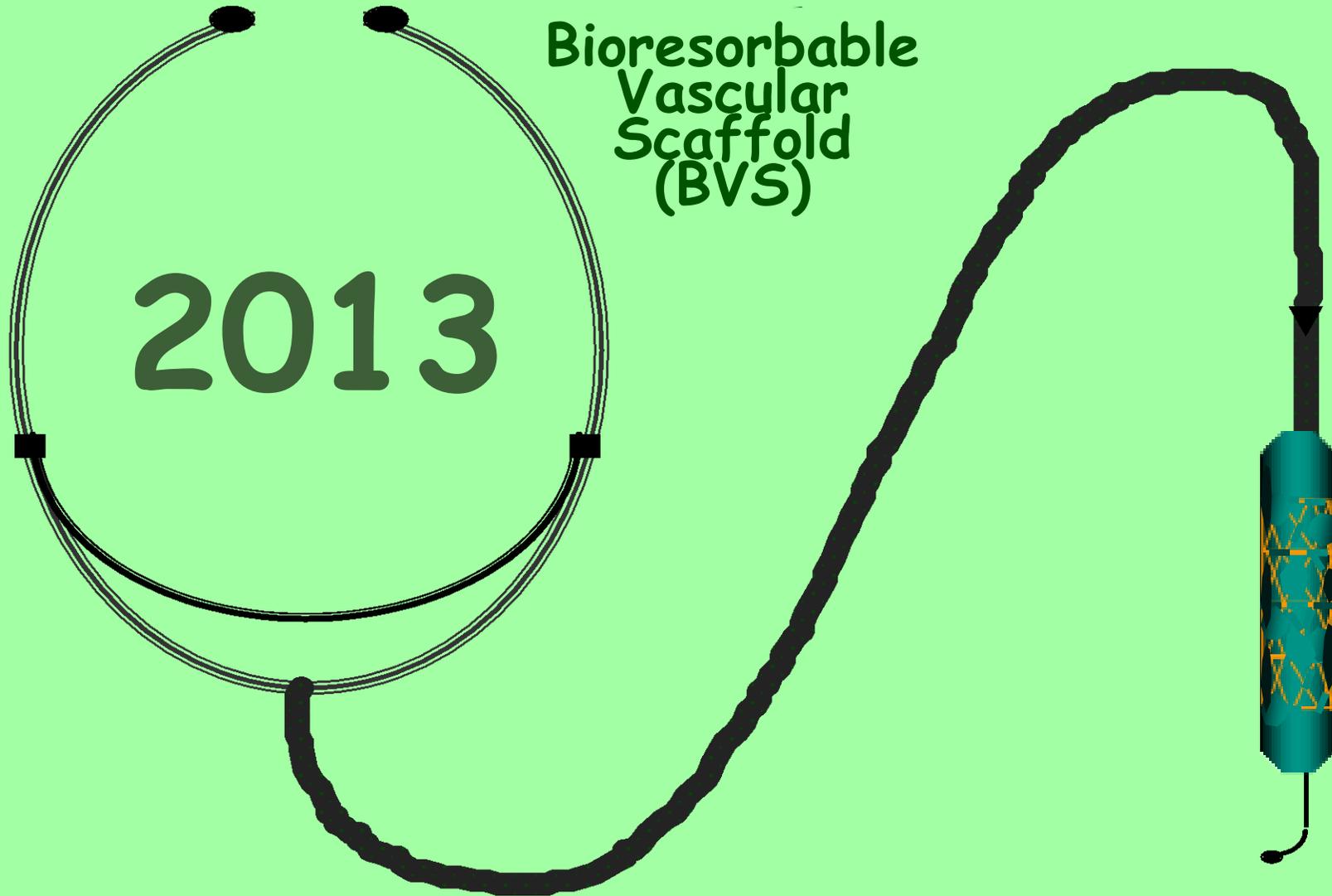
# The Evolution of Cardiology

<sup>st</sup>  
Interventional  
Cardiology

2001



# The Evolution of Cardiology



201  
4

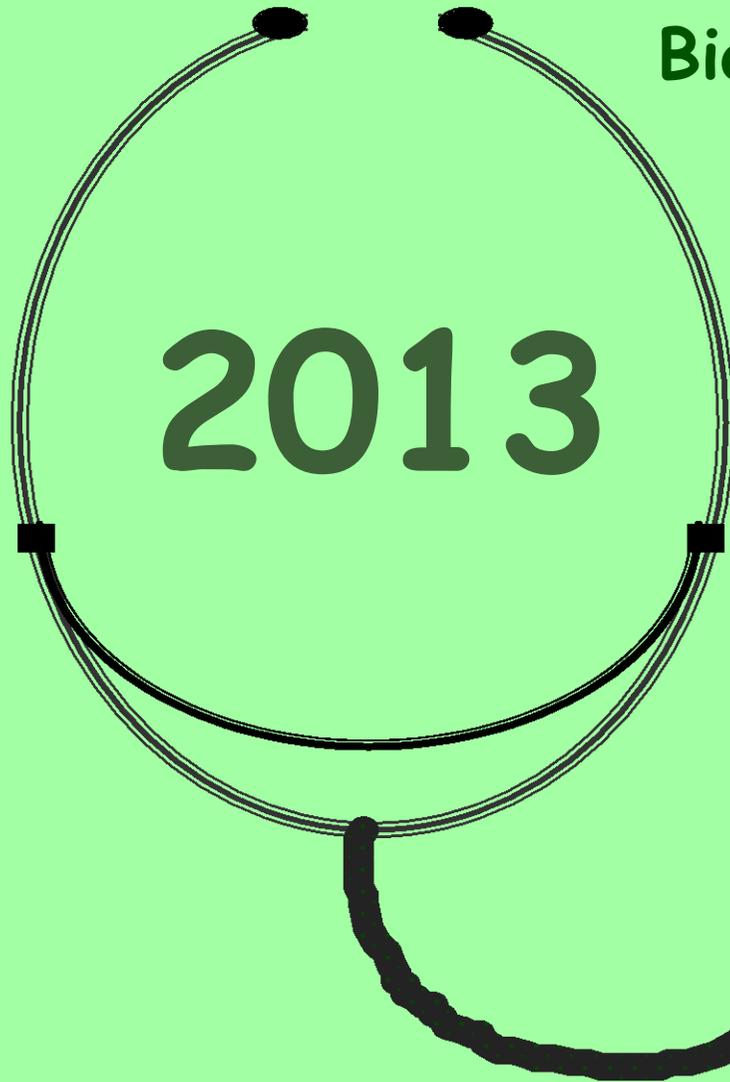
ABSORB



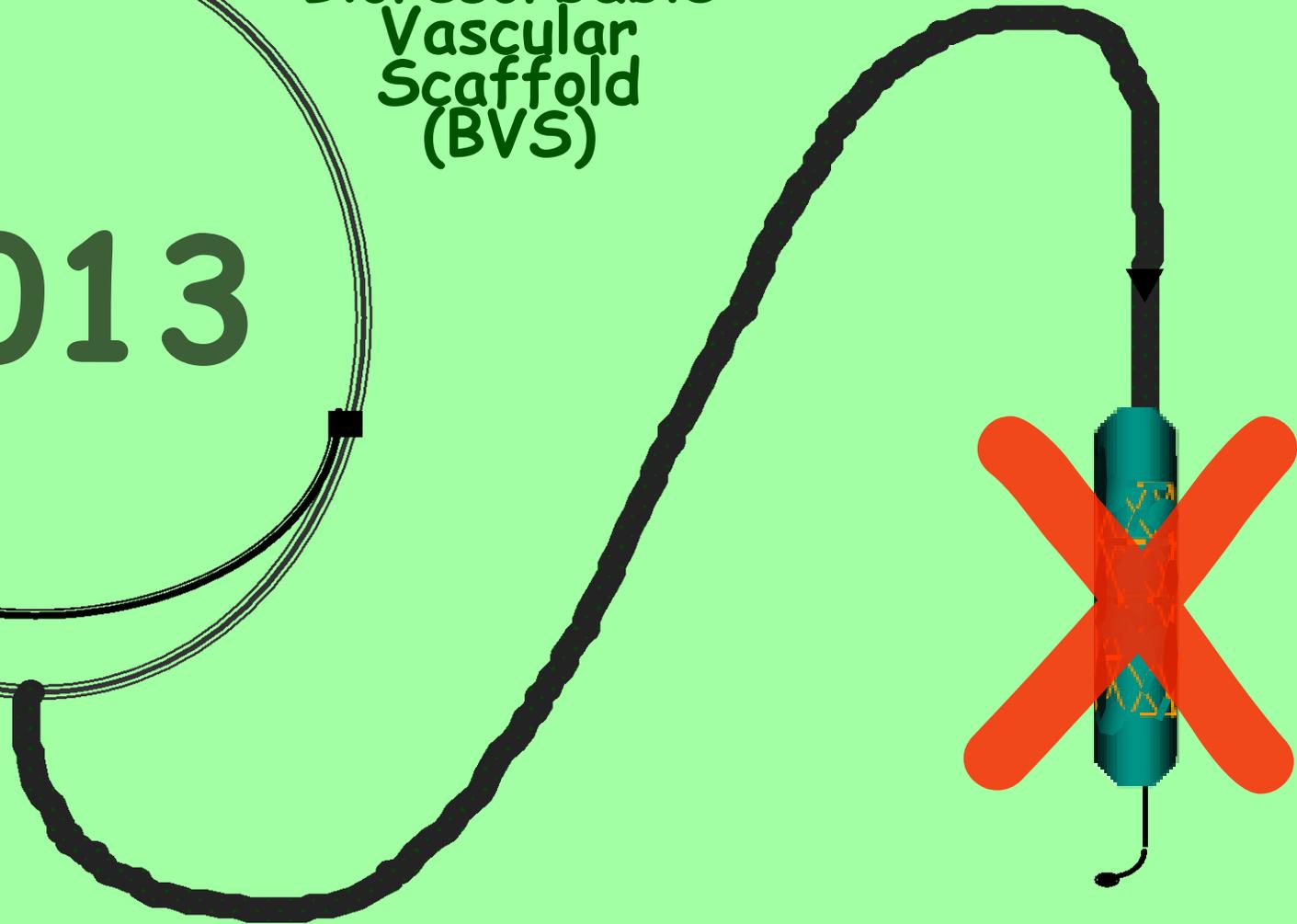
PCI

B.M./92

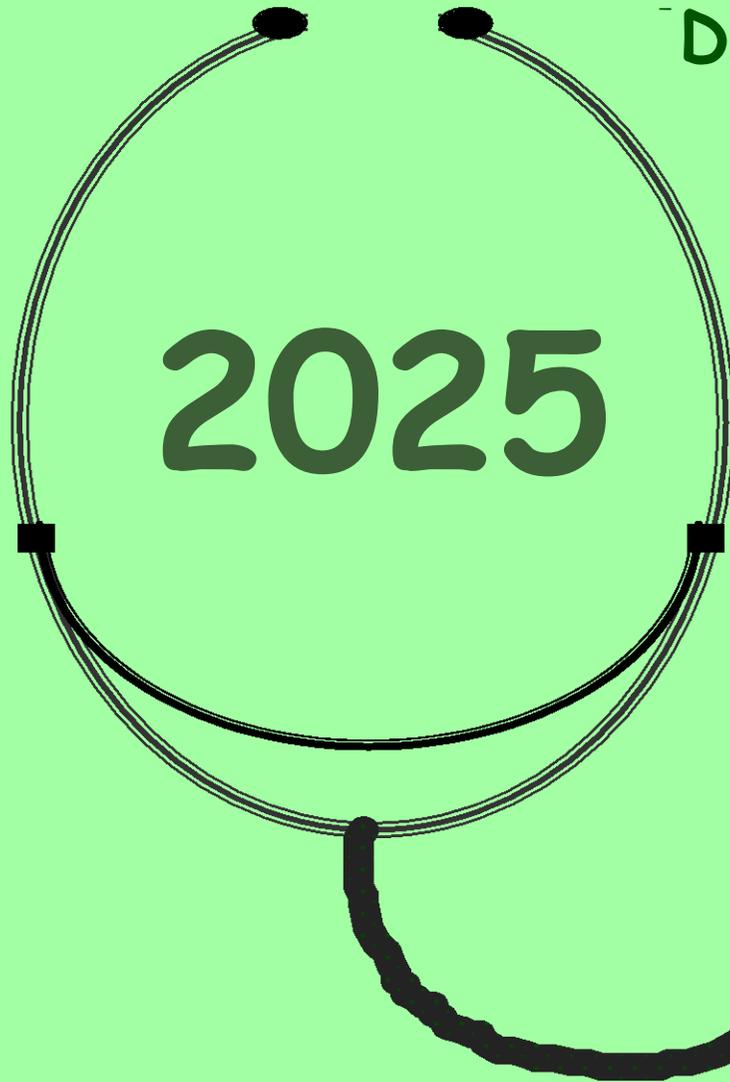
# The Evolution of Cardiology



Bioreabsorbable  
Vascular  
Scaffold  
(BVS)



# The Evolution of Cardiology



Drug Eluting  
Balloon  
(DEB)

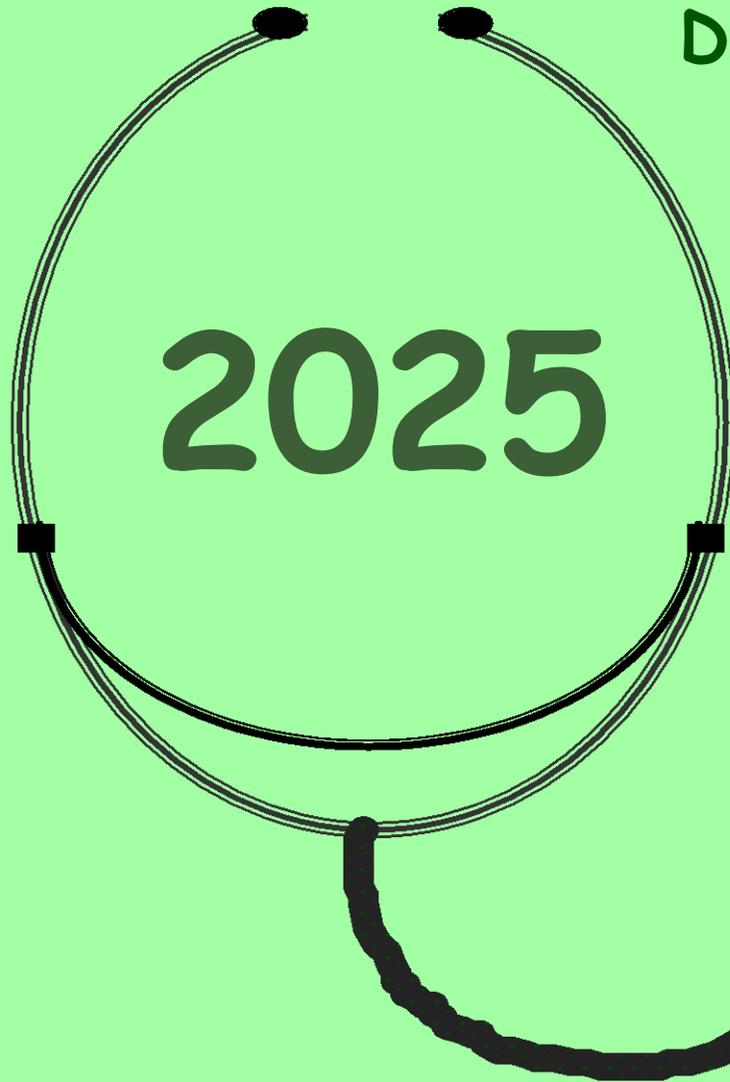


IEB / DCB

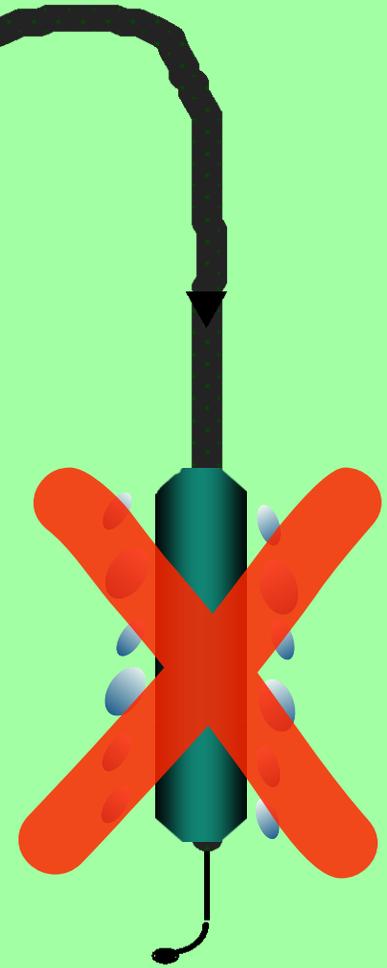


PCI

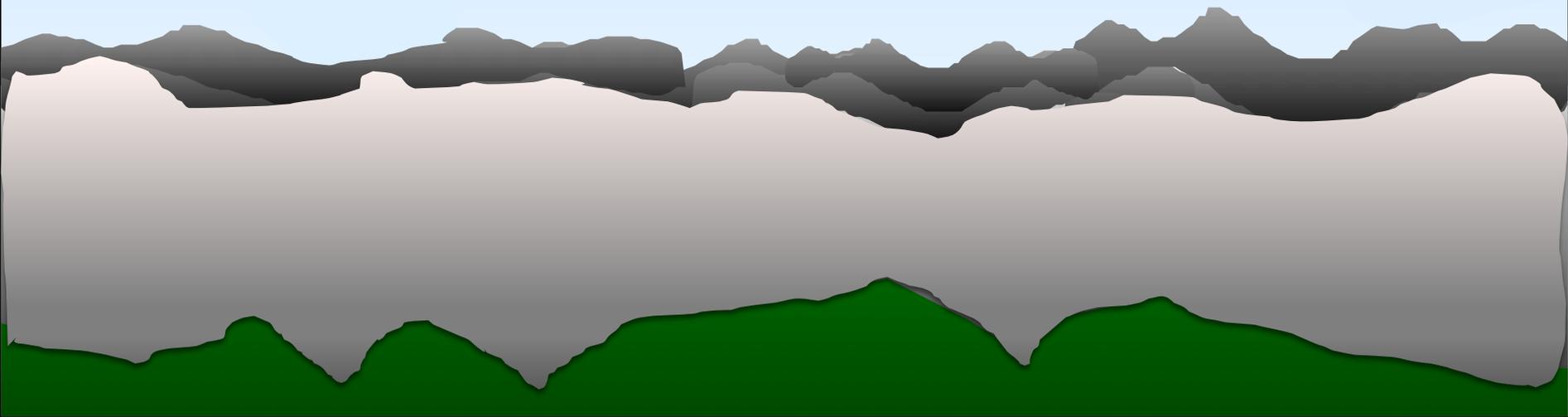
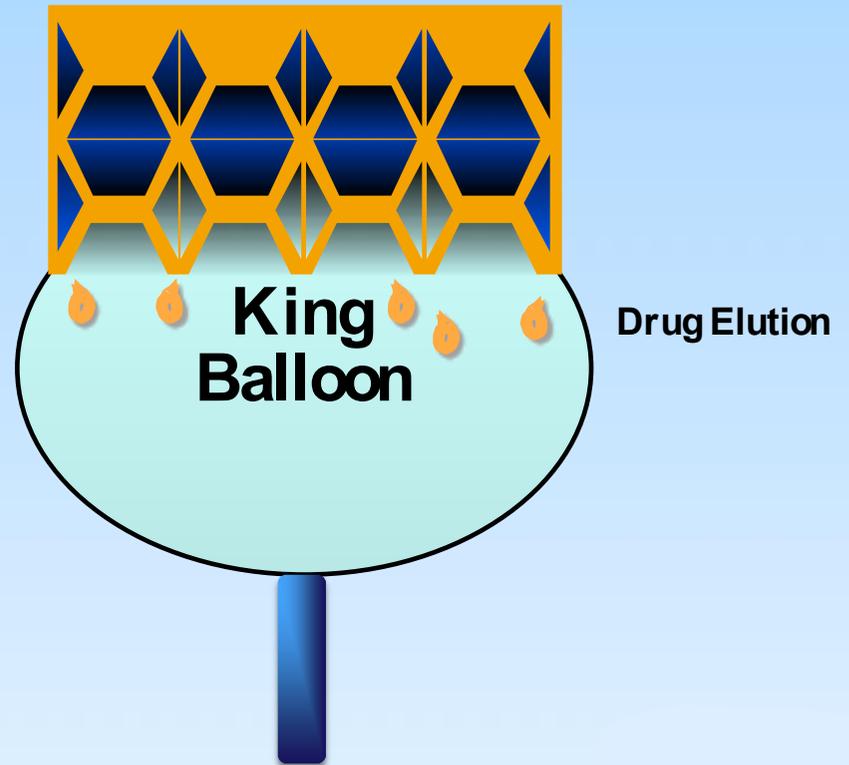
# The Evolution of Cardiology



Drug Eluting  
Balloon  
(DEB)

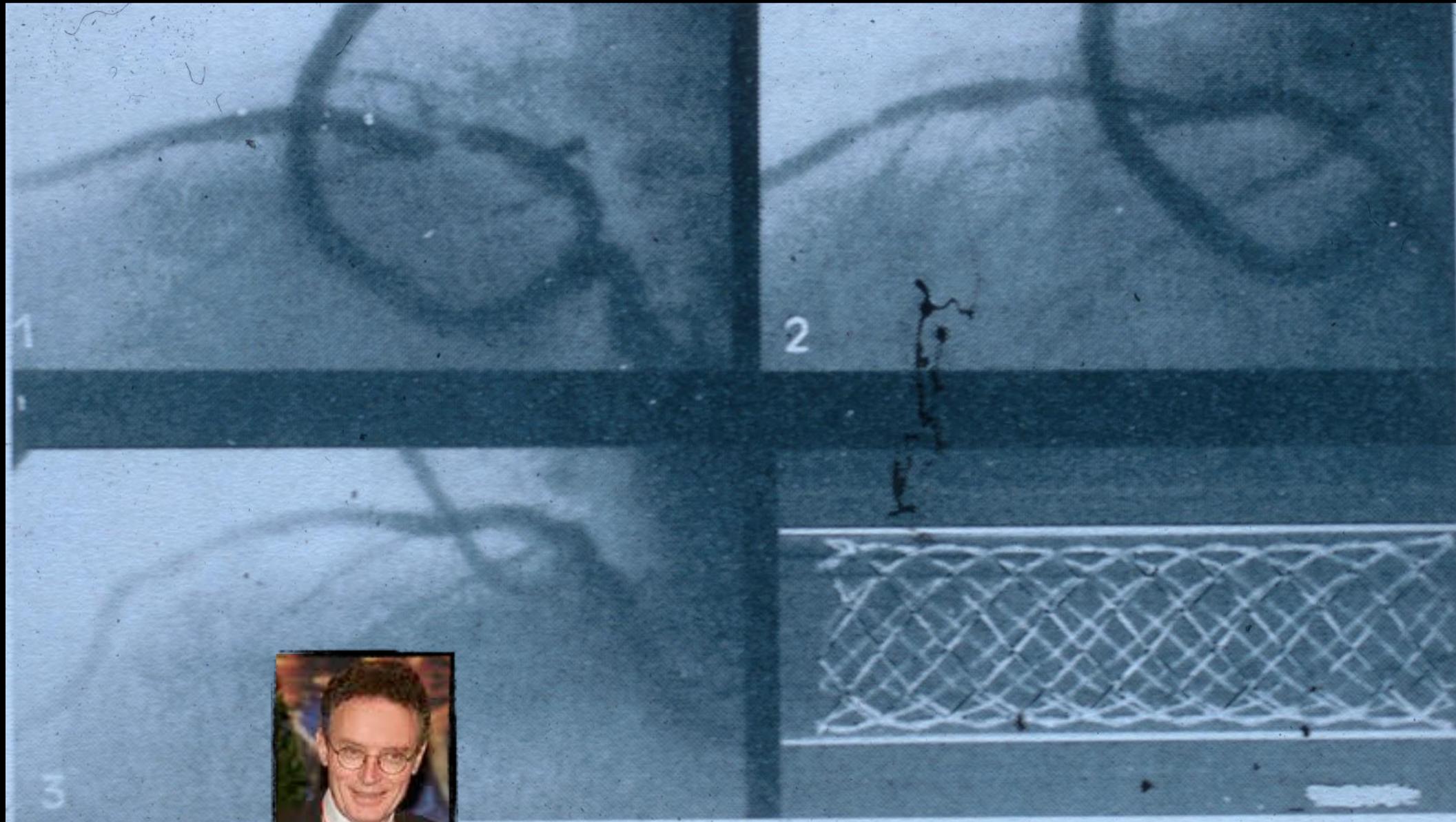


1977 - 2026



# First Coronary Stent Case

(Jacques Puel, Toulouse, France, March 29, 1986)



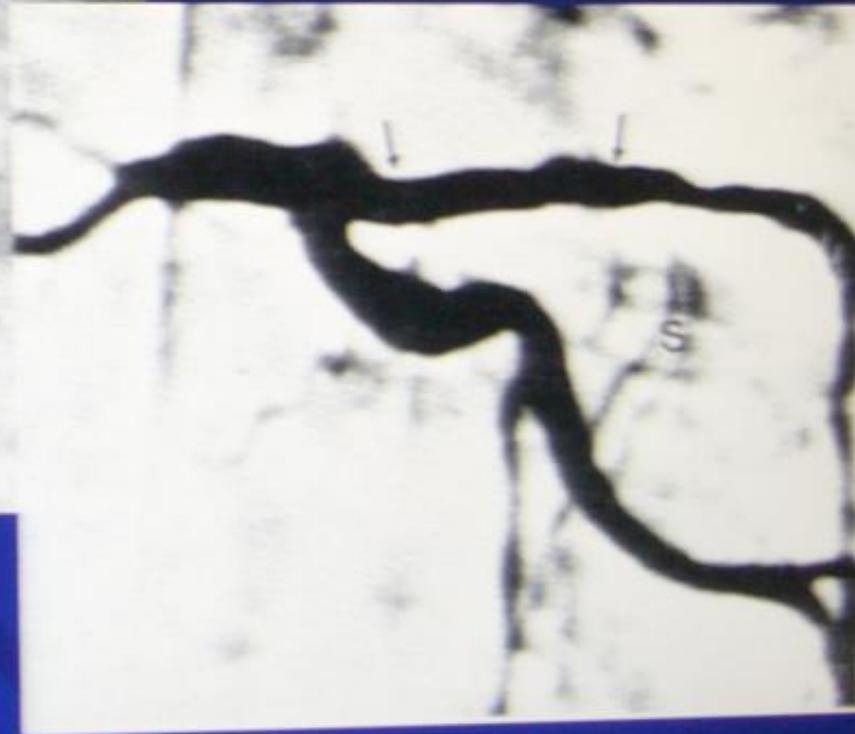
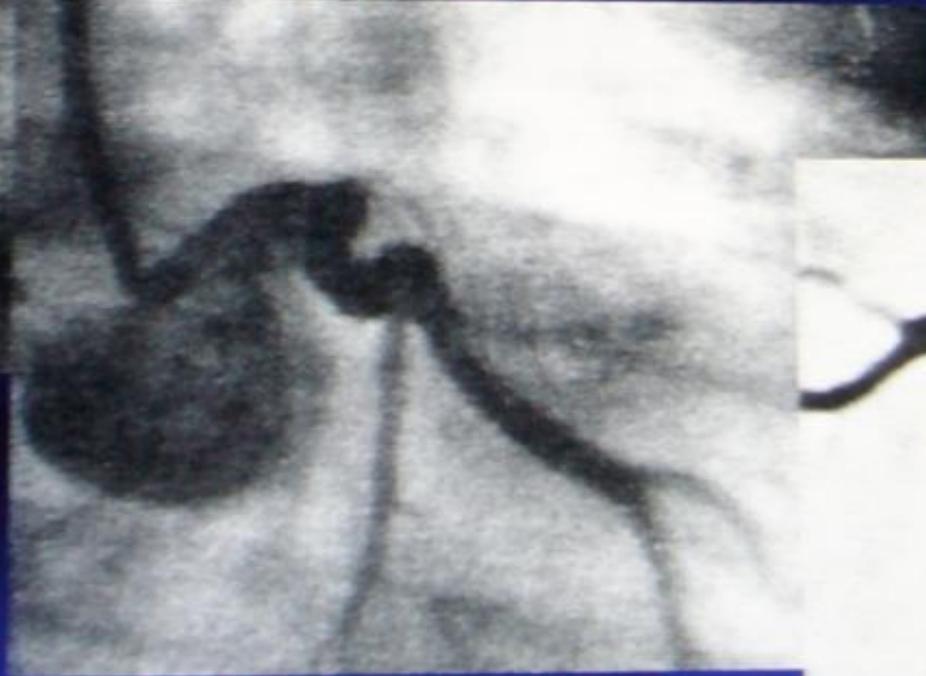
1949 - 2008 (May 27)

Puel J, Arch Mal Coeur. 1987;8:1311-1312

# First True Bailout Coronary Stent



- Lausanne, June 1986
- Live course
- Courtesy: Ulrich Sigwart, MD



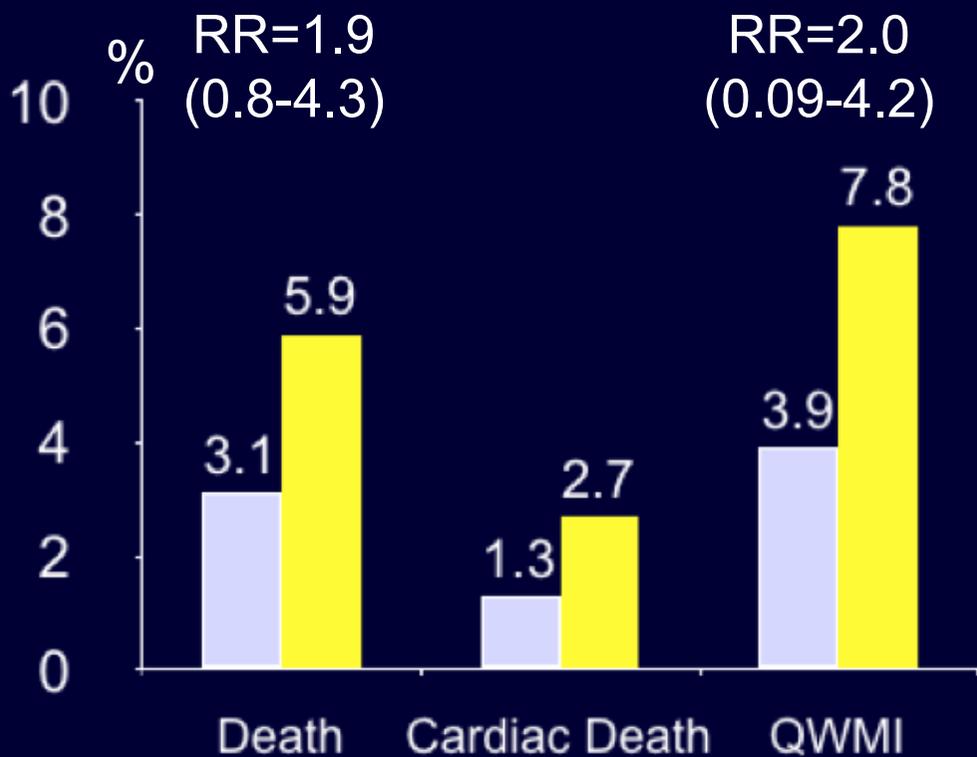
# Routine Stenting

## Stent Thrombosis

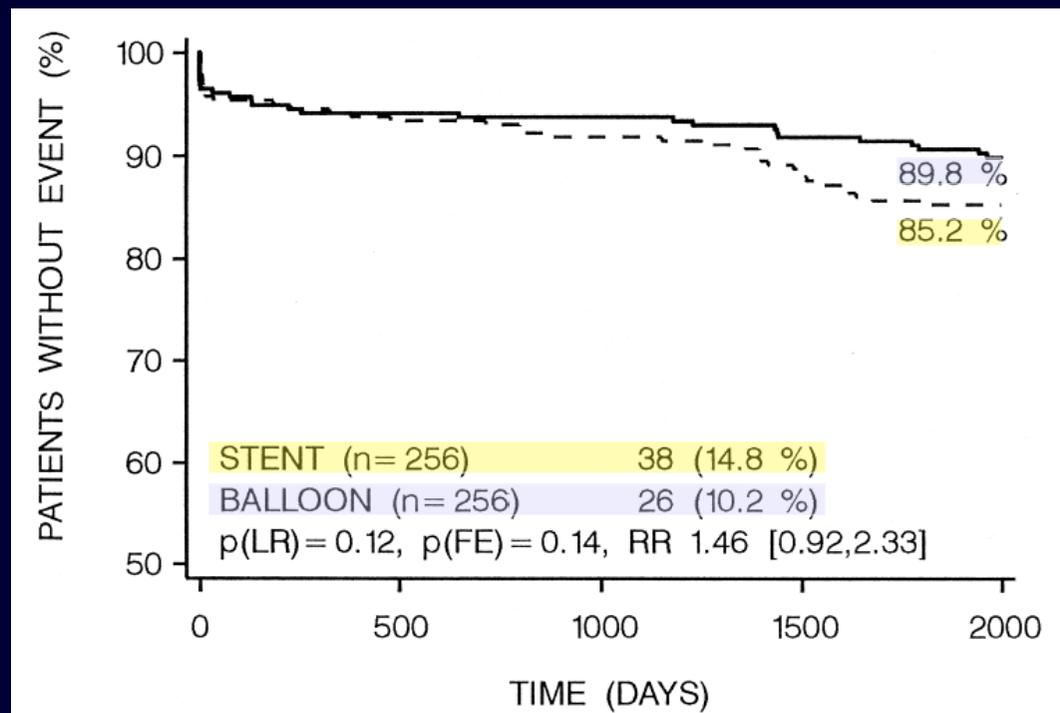


# Five Year Clinical Follow-up of BENESTENT I Randomized Comparison of Balloon and BMS

Kiemeneij F et al. *JACC* 2001;37:1598-603

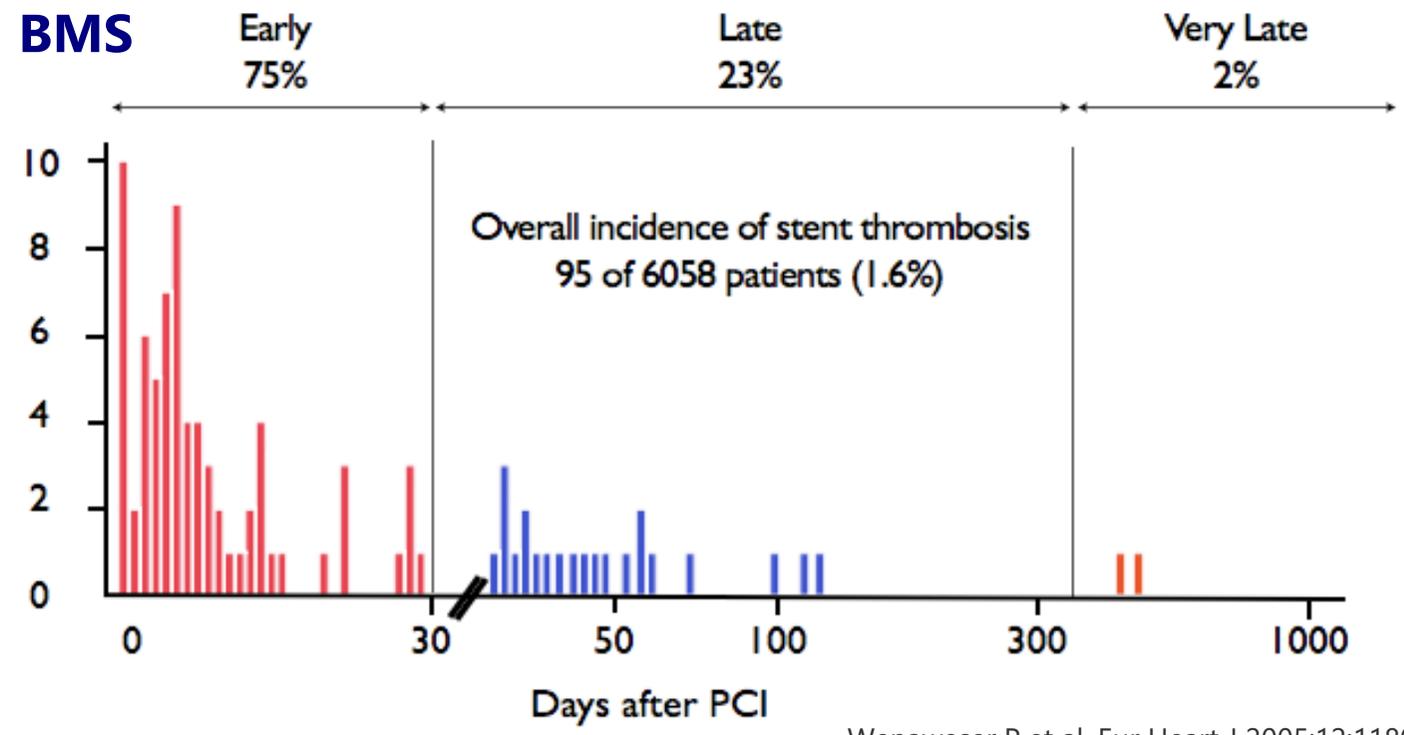


## Freedom from Death, MI, and CVA



- Balloon Angioplasty (N=256)
- Bare Metal Stent (N=256)

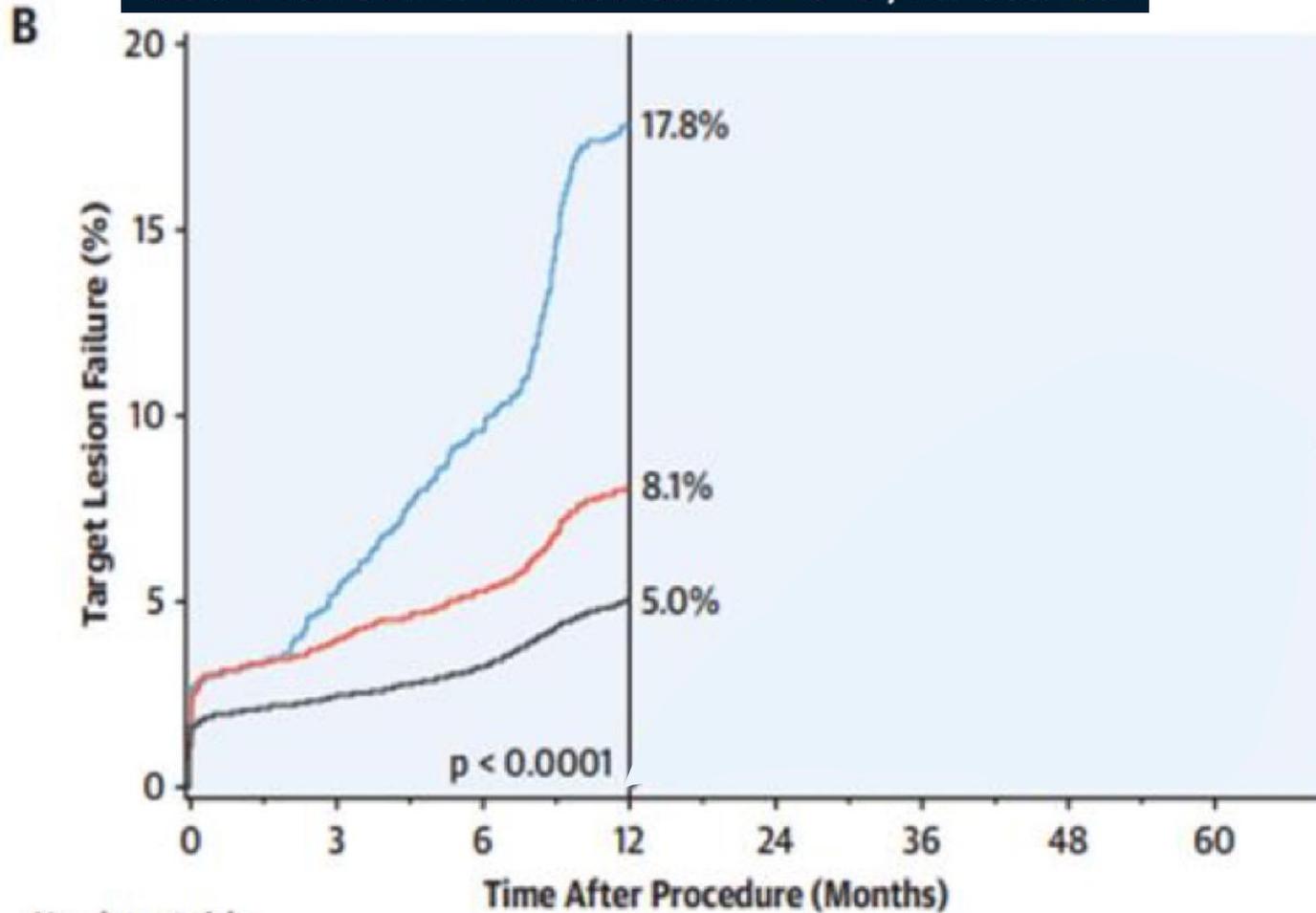
# Coronary Stent Thrombosis



Wenaweser P et al. Eur Heart J 2005;12:1180-7

# Very-Late Stent-Related Cardiovascular Events<sup>1</sup>

<sup>1</sup>Madhavan et al. J Am Coll Cardiol 2020 ; 75: 590–604

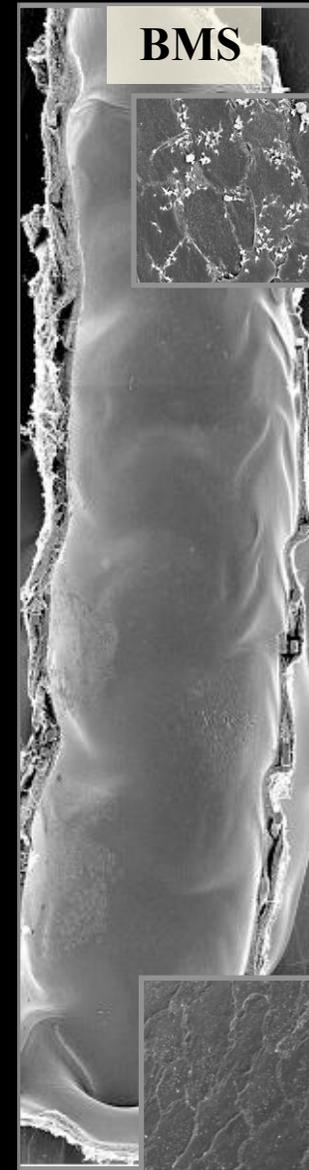


Number at risk:

BMS	1,830	1,725	1,636	1,462	1,395	1,335	1,267	479
DES1	4,591	4,384	4,296	4,108	3,916	3,465	2,850	1,470
DES2	13,157	12,792	12,653	12,287	11,819	10,928	5,679	3,446

- Bare-Metal Stent (BMS)
- First-Generation Drug-Eluting Stent (DES1)
- Second-Generation Drug-Eluting Stent (DES2)

# Relationship of Late Loss and Thrombosis



28 days  
Electron  
Beam  
Microscopy

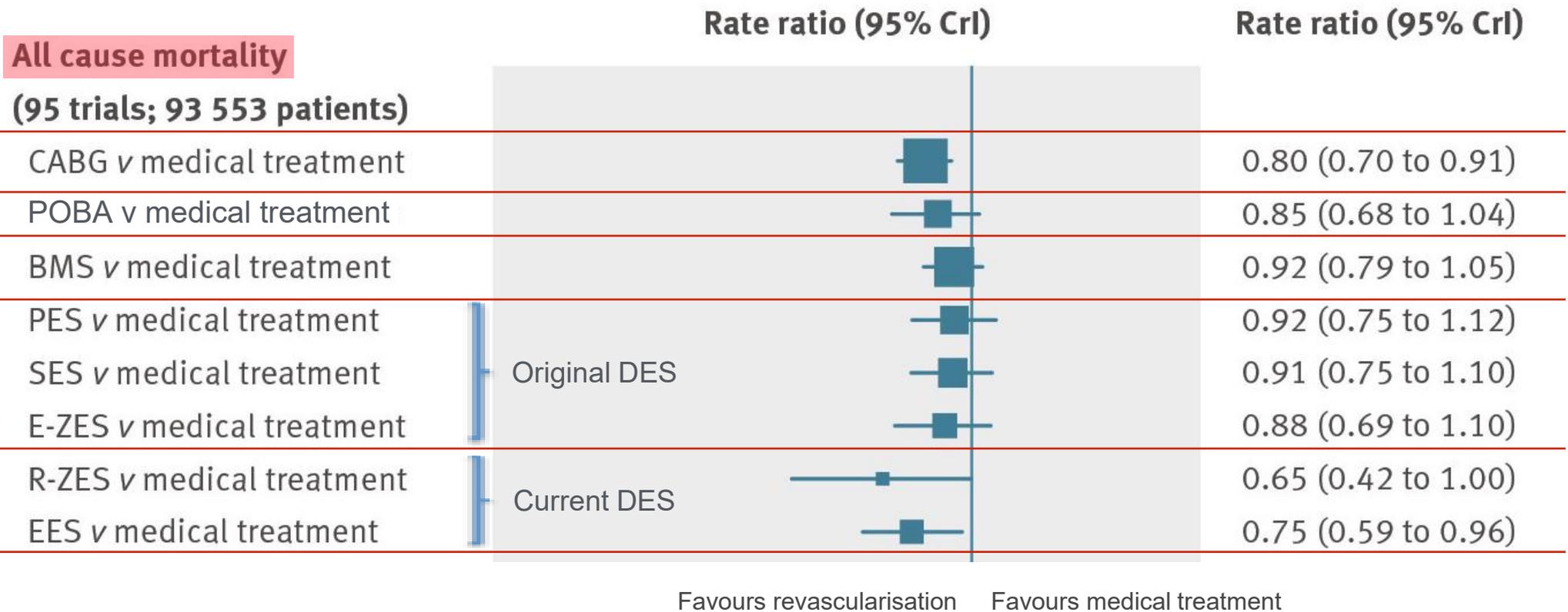
Courtesy  
Michael Joner, MD

# Revascularisation versus medical treatment in patients with stable coronary artery disease

## Network meta-analysis

### All cause mortality

(95 trials; 93 553 patients)



BMS bare metal stent  
 CABG coronary artery bypass grafting  
 EES **Xience** everolimus-eluting stent  
 E-ZES **Endeavor** zotarolimus-eluting stent  
 PES **Taxus** paclitaxel-eluting stent  
 POBA plain old balloon angioplasty  
 R-ZES **Resolute** zotarolimus-eluting stent  
 SES **Cypher** sirolimus eluting stent

# Ideale Anwendung der Koronardilatation (PCI)

## Lebensflucht

Alter

Koronare Herzkrankheit

Normales  
gesundes  
Leben

PET / COURAGE / MASS-2 / BARI-2D / FAME / ORBITA / ISCHEMIA / REVIVED-BCIS2 / SENIOR-RITA Studien

PCI

