New Atrium Covered Stents

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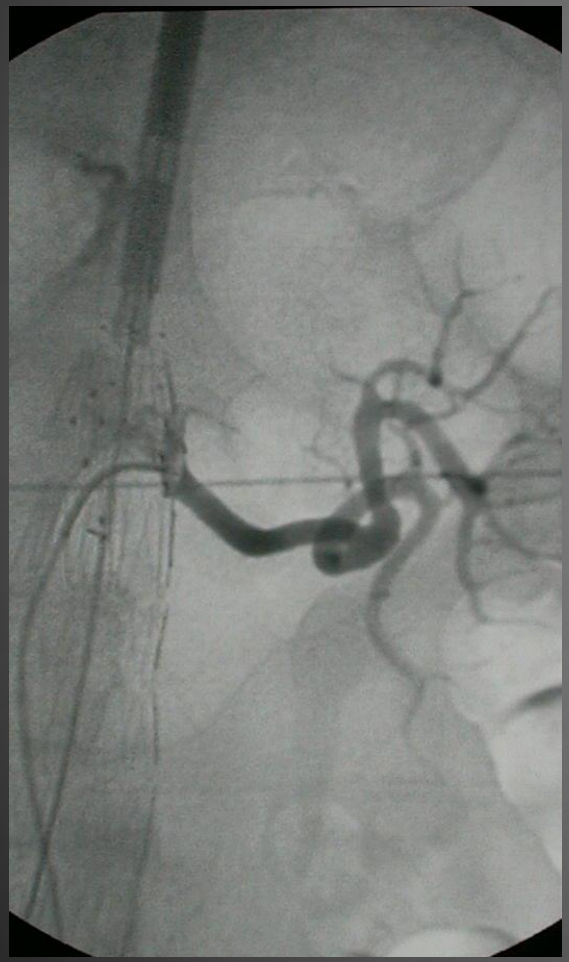
Disclosures

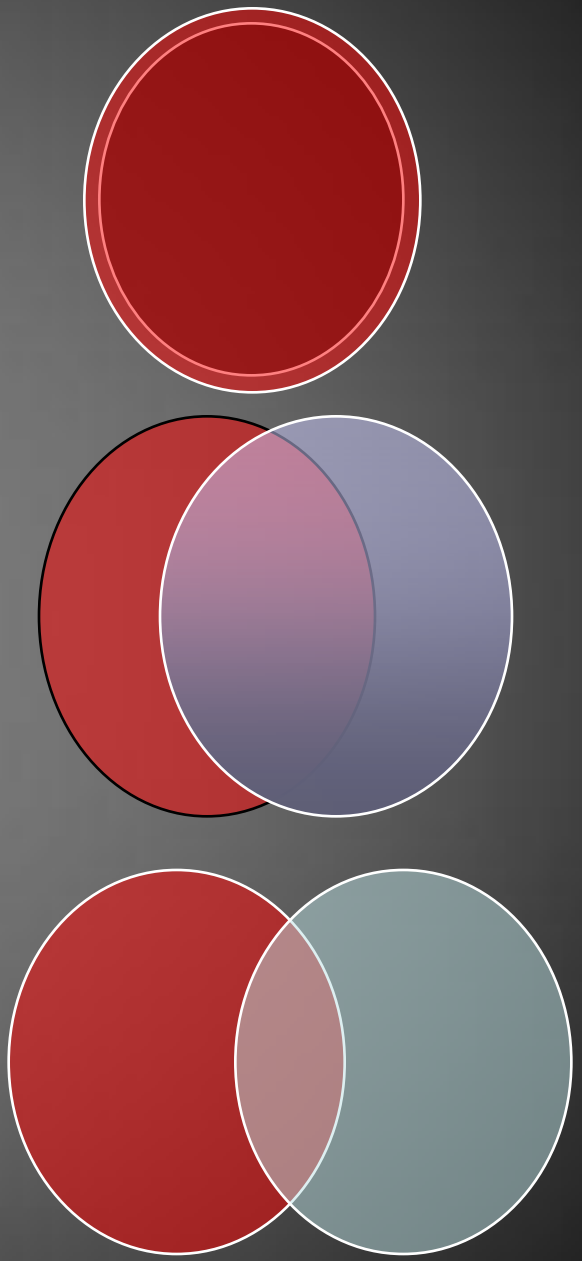
- William Cook Europe/Cook Inc.
  - Research grants & Consulting
- *W.L. Gore & Associates*
  - *Research grants & Consulting*
- Atrium
  - Consulting
- *Siemens*
  - *Consulting*

Lay-out

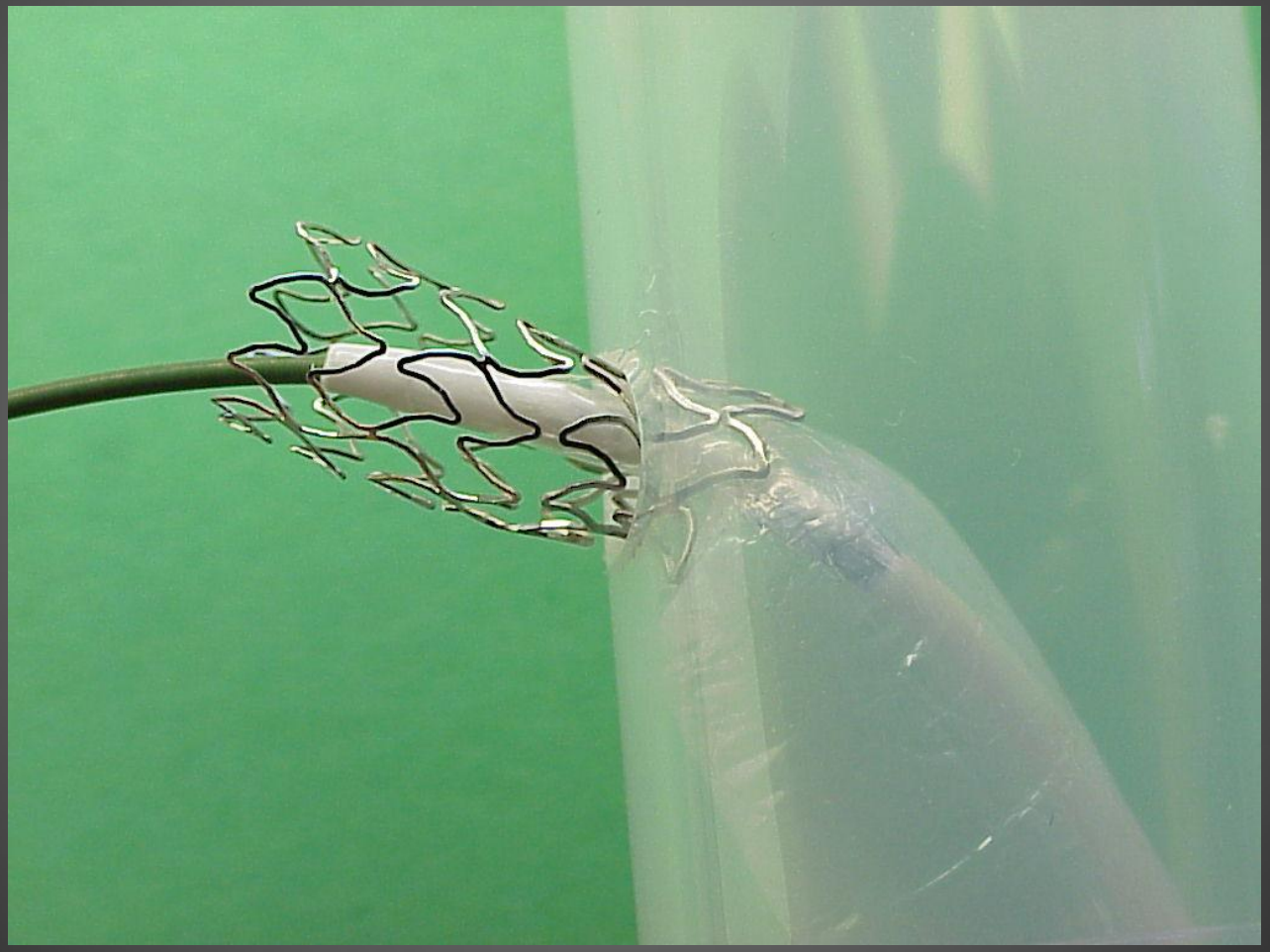
- History of fenestrated stent-grafting
  - Why stent?
  - Why use Atrium V12
- Optimized Atrium OTW 38&59
- Atrium Rx

Why stent?

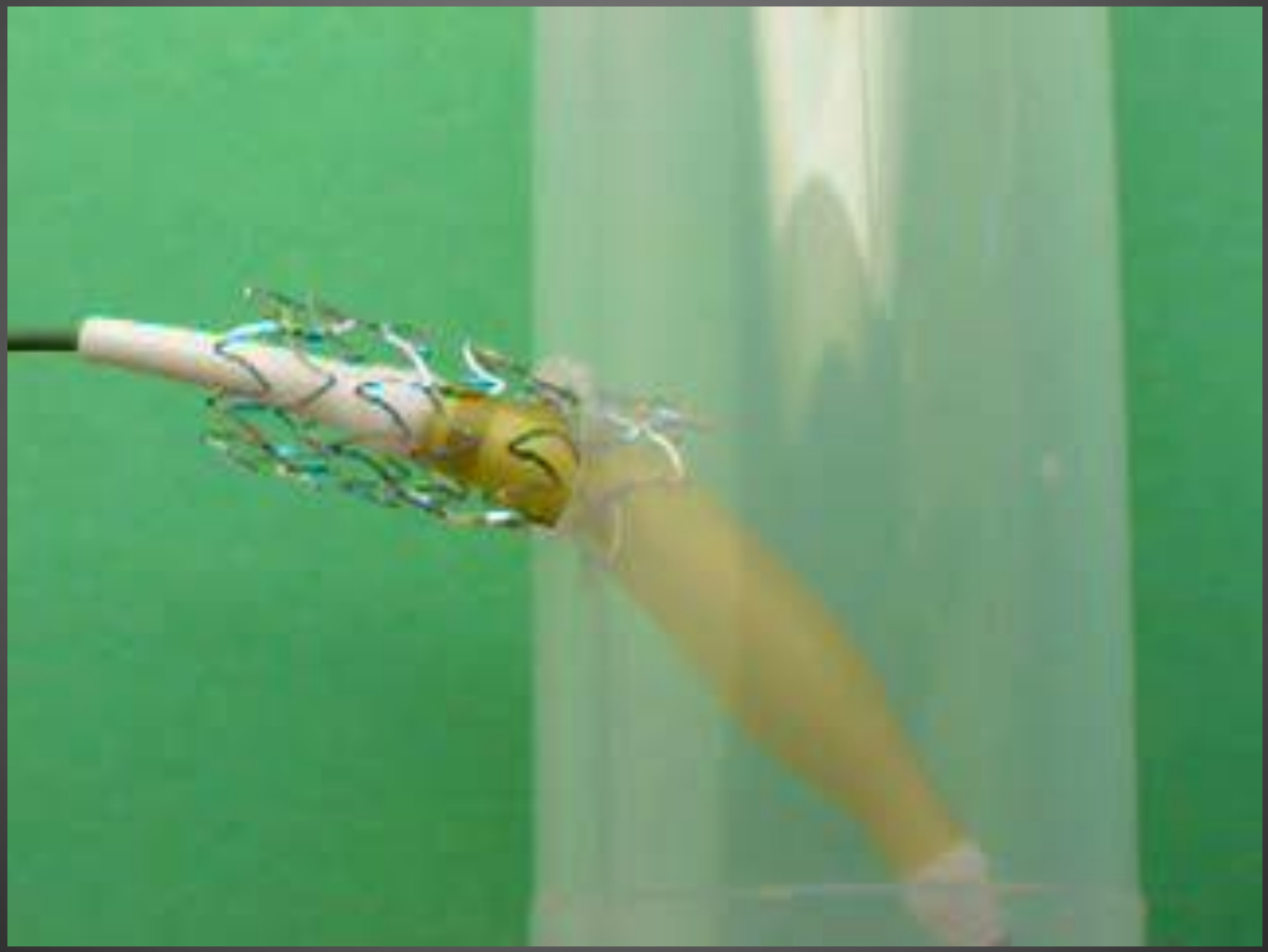




“Flairing” of stent



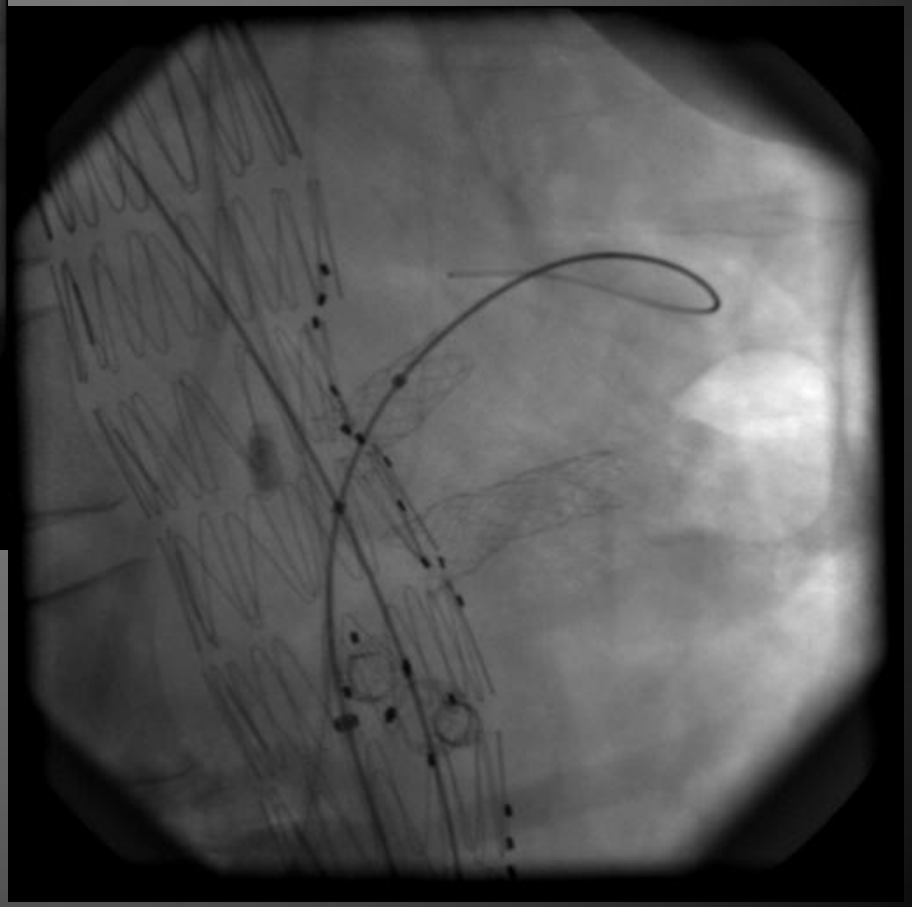
“Final appositioning” of stent

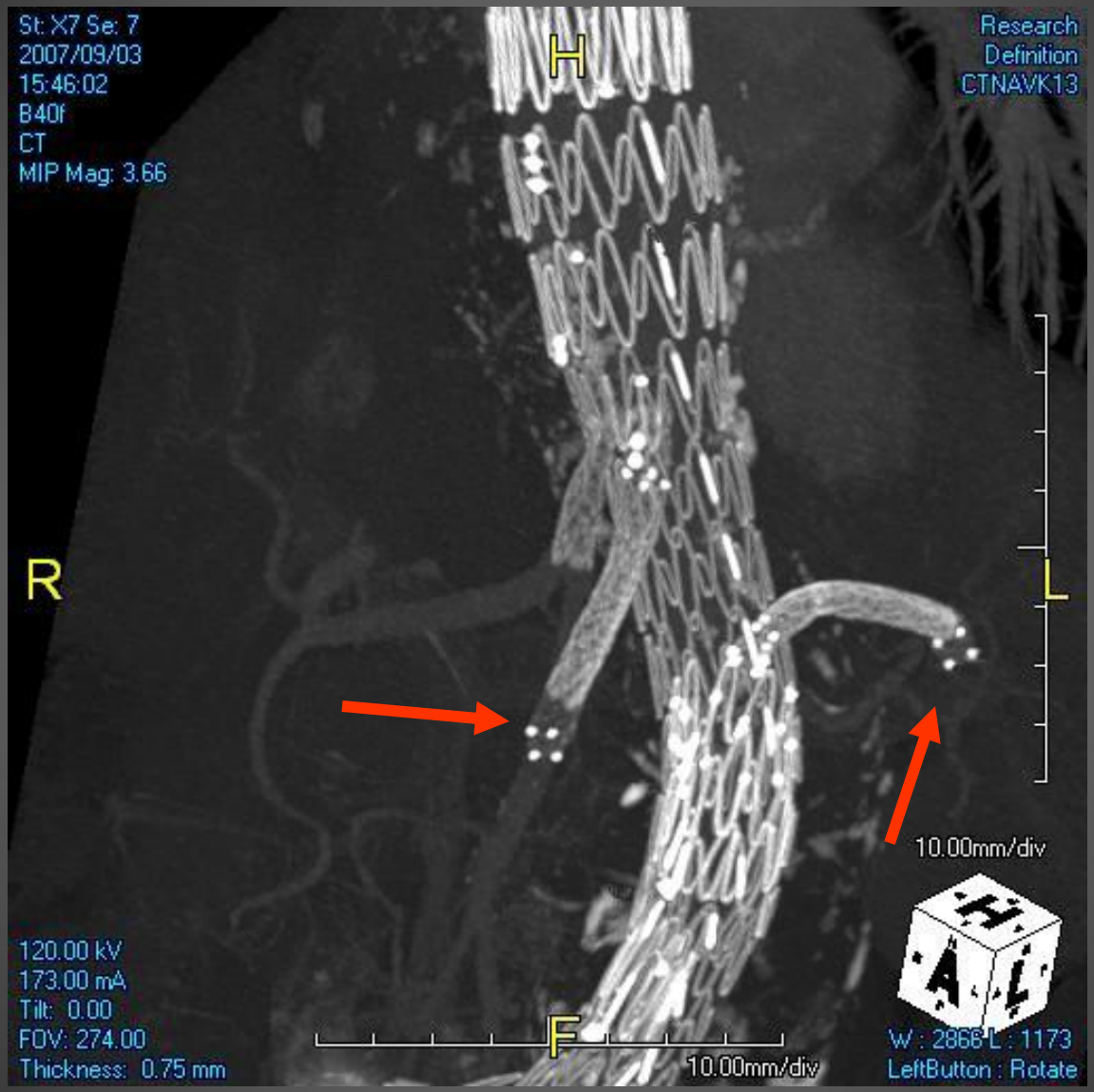


Why Covered and Atrium V12?

- Patency
  - Mohabbat, Greenberg et al.
  - Personal experience (Groningen/Münster)
    - Uncovered versus covered (Atrium)
    - Experience with Jomed
- Precise deployment
- Conformability


liere BDS N.Stent




St: X7 Se: 7
2007/09/03
15:46:02
B40f
CT
MIP Mag: 3.66
Research
Definition
CTNAVK13
H
R
L
10.00mm/div
120.00 kV
173.00 mA
Tilt: 0.00
FOV: 274.00
Thickness: 0.75 mm
F
10.00mm/div
W : 2866 L : 1173
LeftButton : Rotate

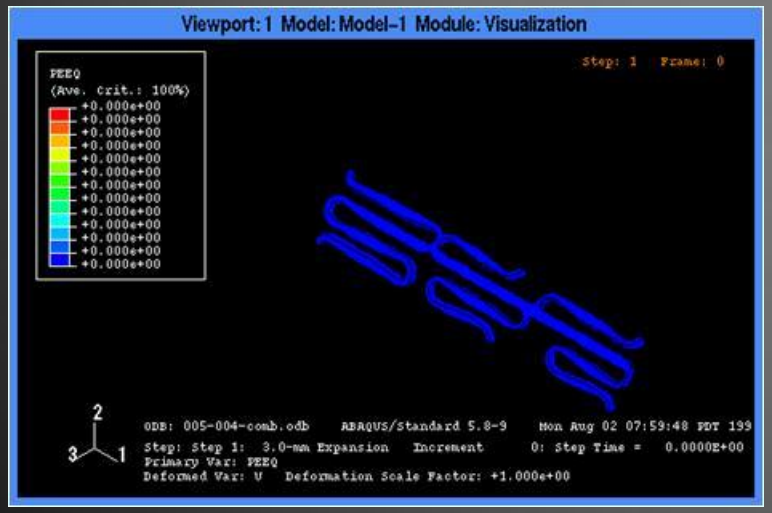
New open cell stent design V12

Atrium V12 stent: two different strut designs since 2005

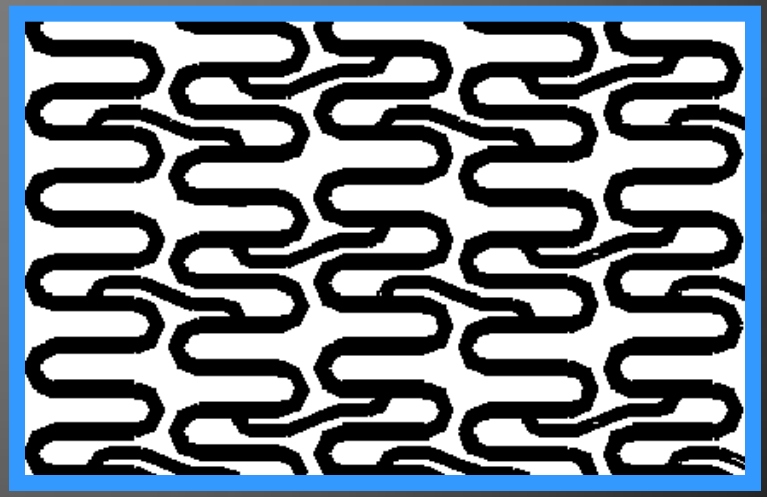
2005: 16 & 22 mm – open cell design

38 & 59 mm – closed cell design

2012: 16, 22, 38 & 59 – open cell design



(closed cell)



(open cell)

Benefits open cell design V12

- Increased flexibility
- Greater radial strength
- Lower recoil
- Lower crossing profile
- Higher stent retention

Increased flexibility

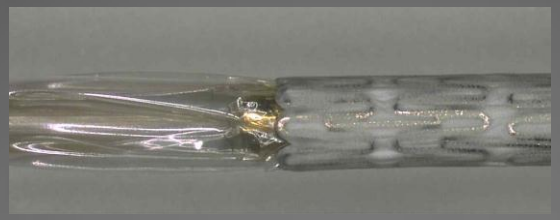
Standardized stent design (ex 59mm)

Current stent design (ex 59mm)

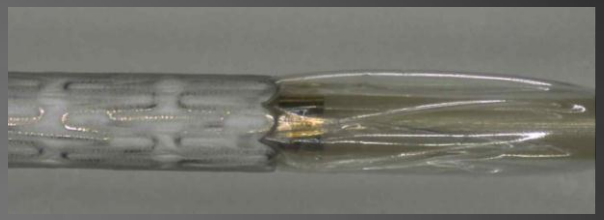
Post simulated use

Open cell design

New LP Design (Proximal)



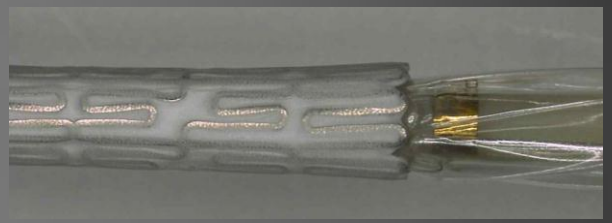
New LP Design (Distal)



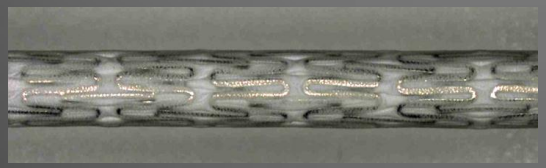
Closed cell design

Current Design (Proximal)

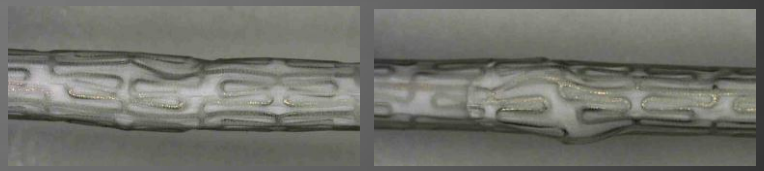
Current Design (Distal)



New LP Design (Middle)



Current Design (Middle)



Open cell design

Closed cell design

Advantages in daily practice

- New crimping process: stent fixed on balloon

  → Less risk of loosing the stent

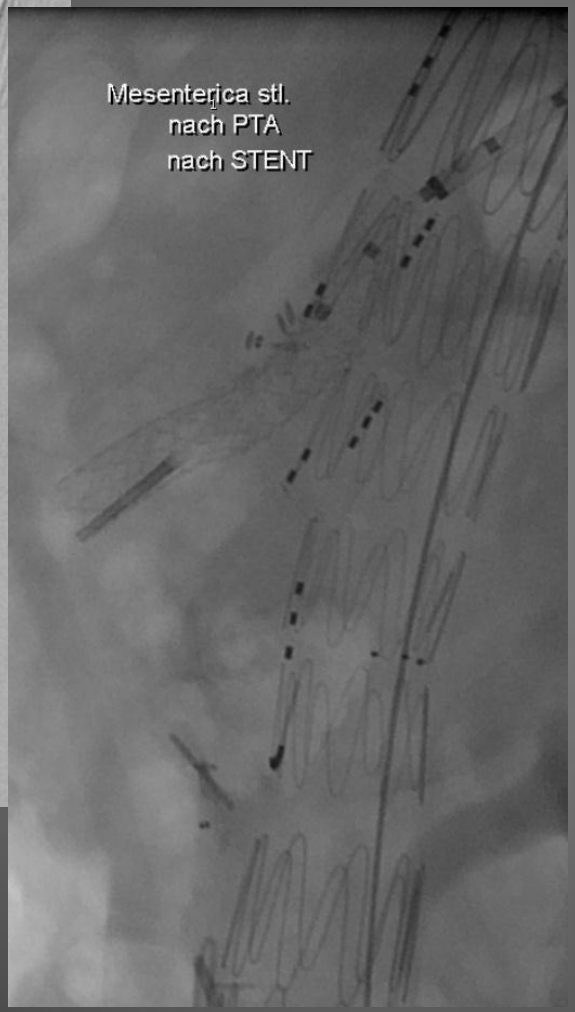
- More Flexibility and higher radial force

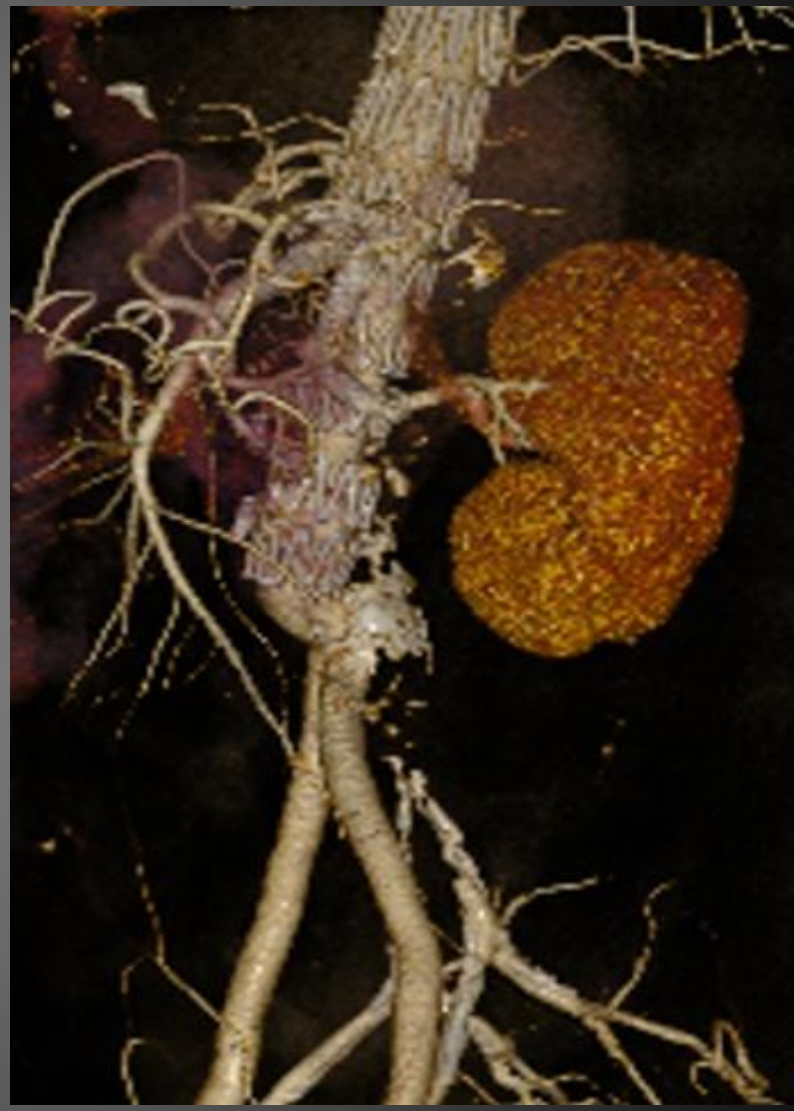
  → No relining needed


Mesenterica


nach STENT
nach PTA


Mesenterica stl.
nach STENT
nach PTA


Mesenterica stl.
nach PTA
nach STENT



5mm - 7mm

Vascular

V12 RX

covered stent

Balloon expandable RX covered stent for vessels sizes -7mm

Key Features:

- Low profile, .014” rapid exchange platform
- Accurate one-step deployment
- Power Crimp™ Technology
- Low and predictable foreshortening
- Improved deliverability and trackability
- Increased flexibility
- Encapsulated in thermo-conformable PTFE
- Proven Clinical Performance

Lowest profile stent graft system

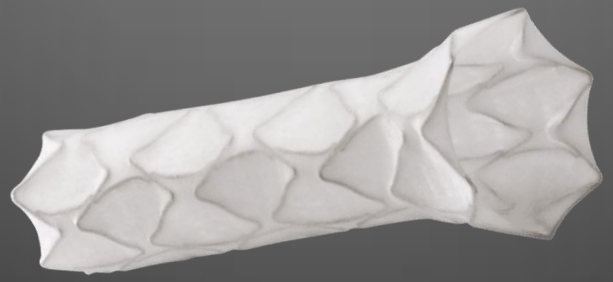
- Pre-mounted in manufacturing
- Powercrimp™ technology
- Ultra small crossing profile
  - -Introducer sheath compatibility
    - 5Fr (5 & 6mm), 6Fr (7mm)
  - - Guide catheter compatibility
    - 6Fr (5 & 6mm), 7Fr (7mm)

Technical information

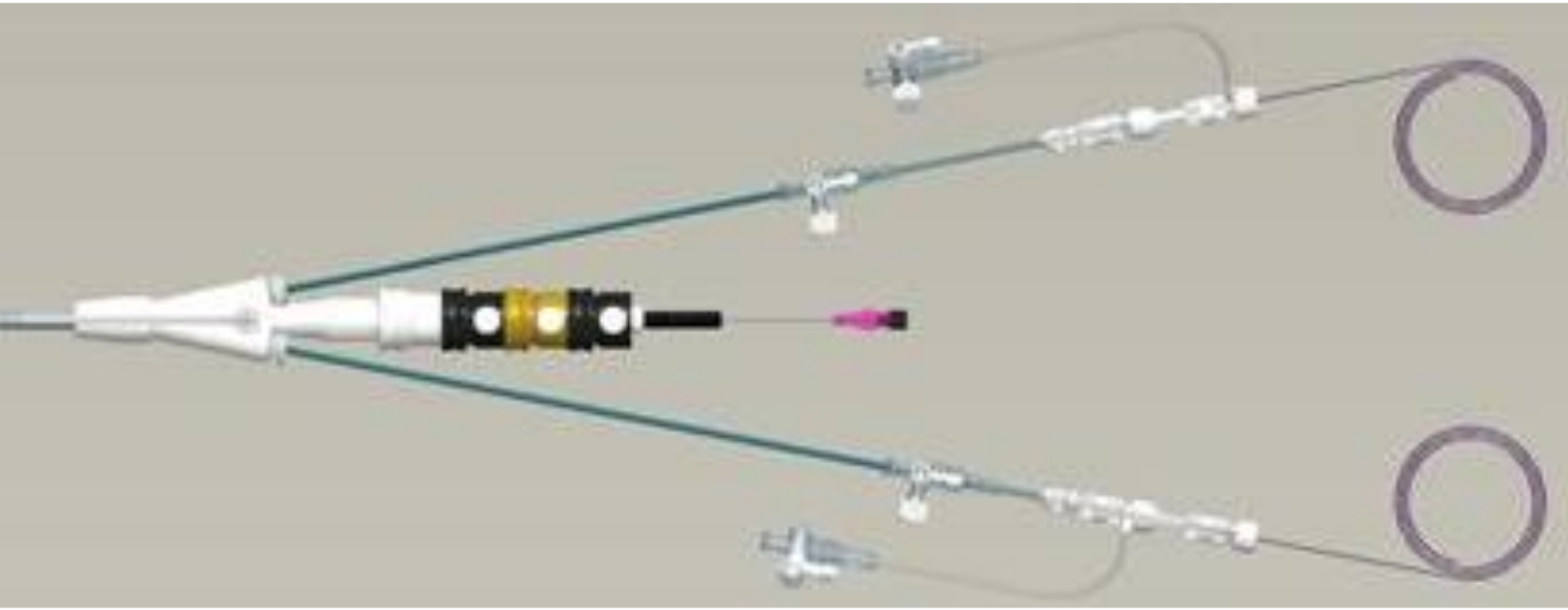
- Pre-mounted: diameters from 5 – 7 mm
  length 16, 21 and 24 mm

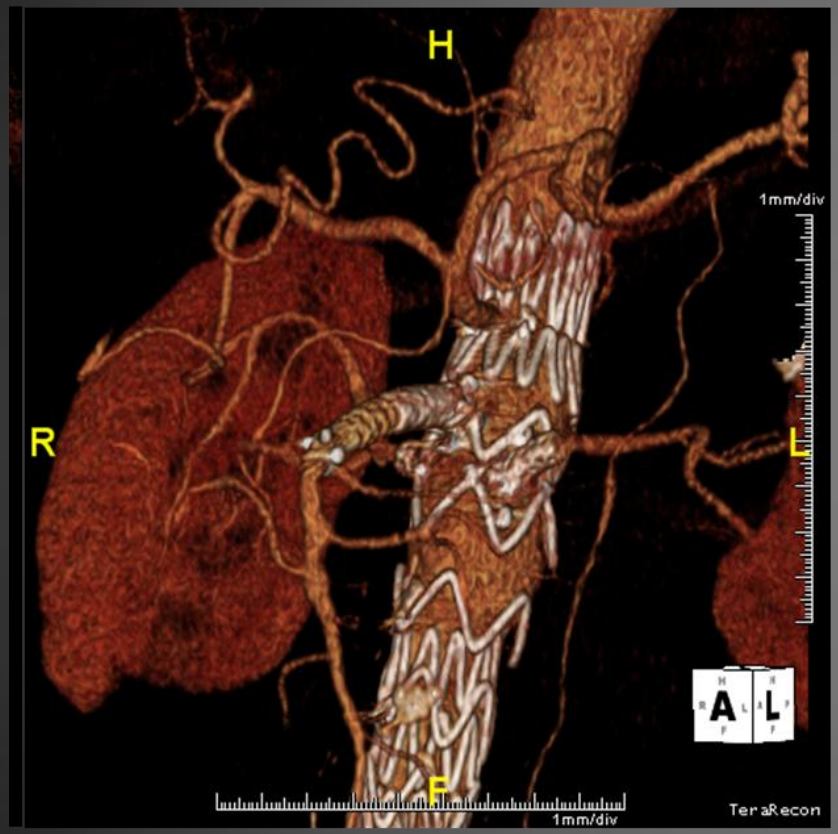
- Stents can be post dilated* up to 8mm diameter
  * Post dilation data available for the 6mm and 7mm diameter stents to 8mm

- V12 RX can be flared & stepped to conform to vessel anatomy



Zenith® Preloaded Delivery System





Courtesy Prof Haulon

Conclusions

- Optimized Atrium V12
  - More flexible
  - Lower risk of „loosing“ the stent
  - Easier introduction in tortuous anatomy
- V12 Rx
  - Ideal for future generations of Zenith fenestrated stent-grafts
    - Preloaded
    - Off-the-shelf