

Angioplasty Summit 2005, Korea

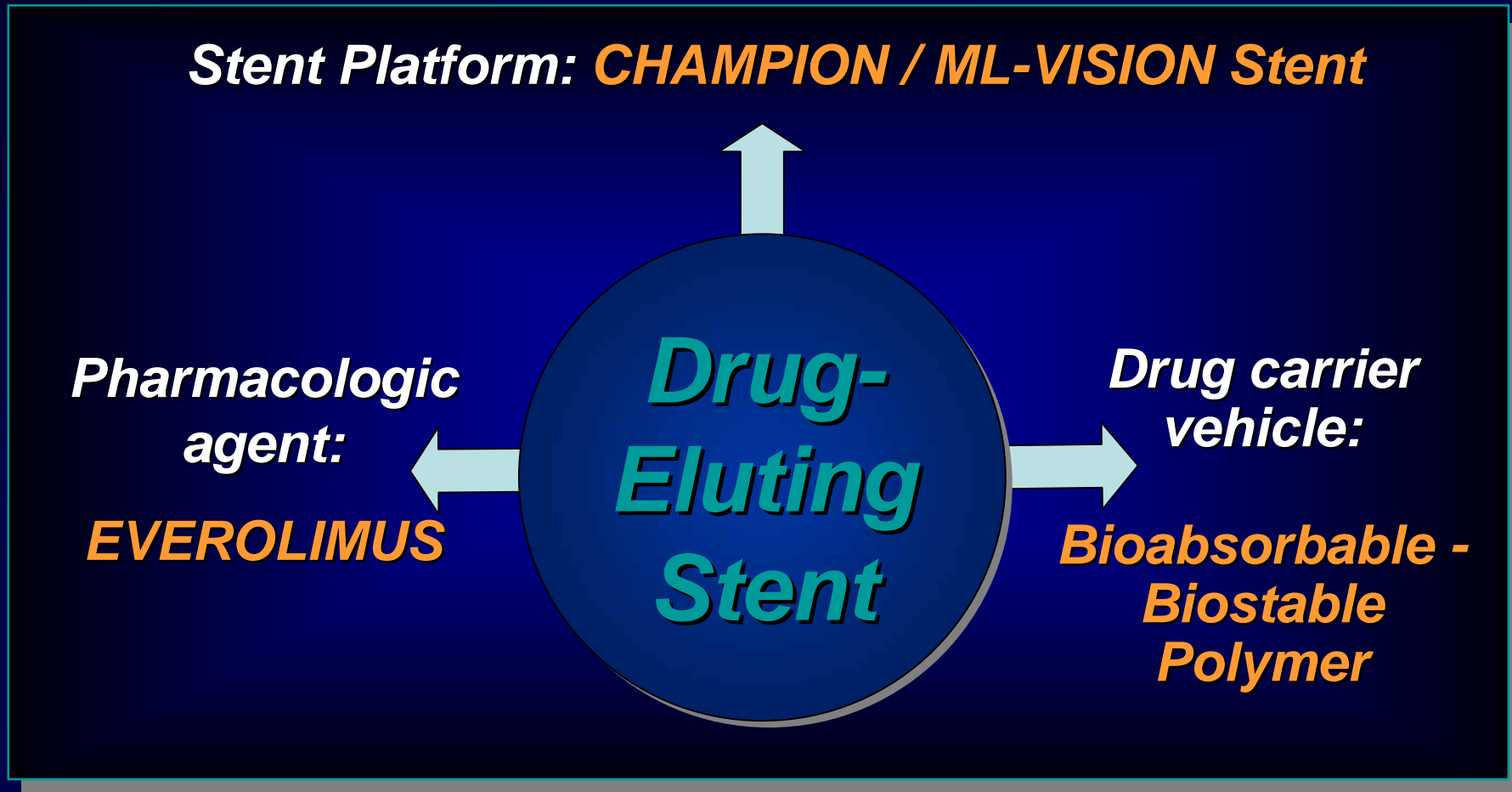
**Everolimus Drug-Eluting Stents I:
Review of Guidant FUTURE I and II,
and Status Update
of FUTURE III and IV**

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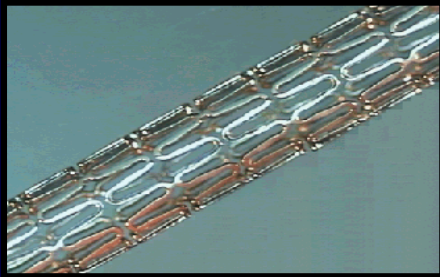
Siegburg / Stanford

Everolimus Eluting Stent Program



Guidant's EVEROLIMUS DES Program

CHAMPION™ Platform

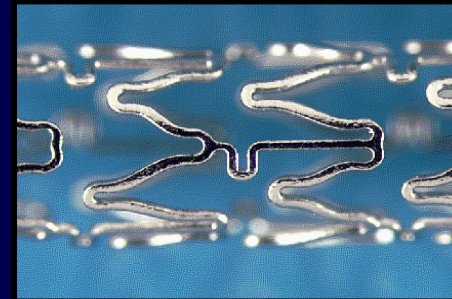


Bioabsorbable
Polymer Drug Carrier



FUTURE Clinical Trials

Multi-Link VISION™ Platform



Bioabsorbable
Polymer Drug Carrier

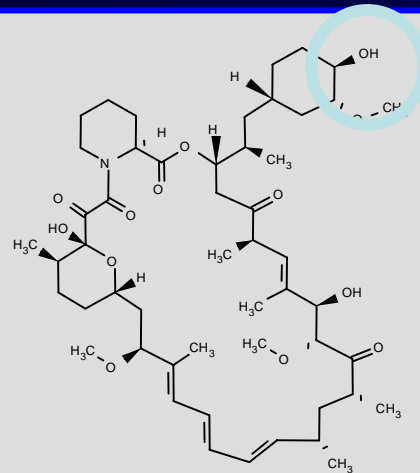


Durable Polymer
Drug Carrier

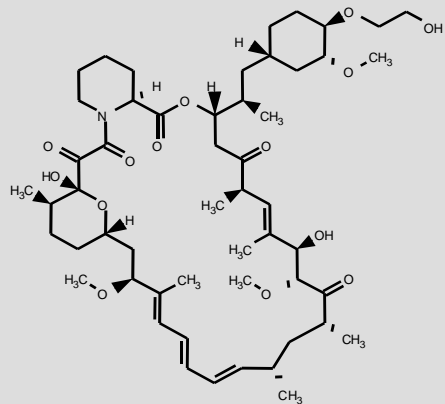


SPIRIT
Clinical Trials

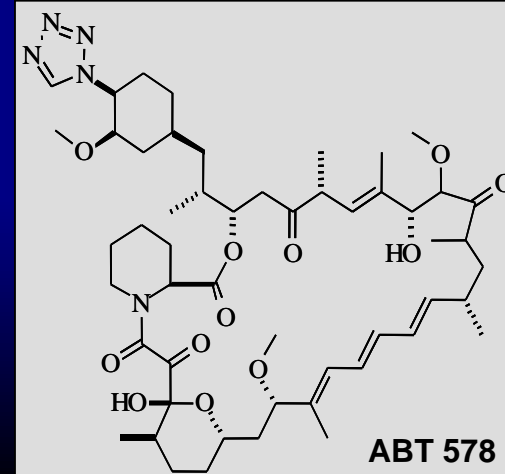
Limus Agents



Sirolimus



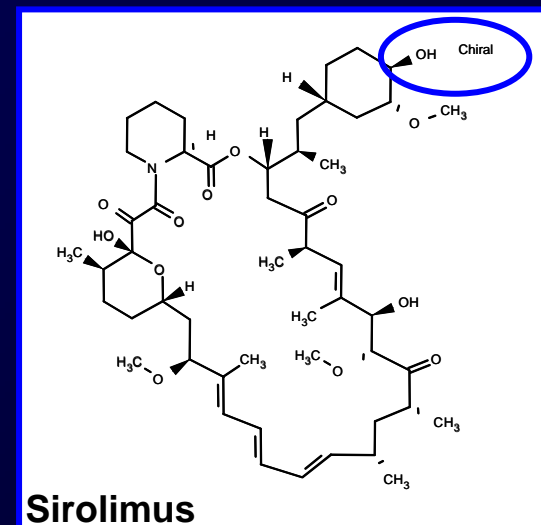
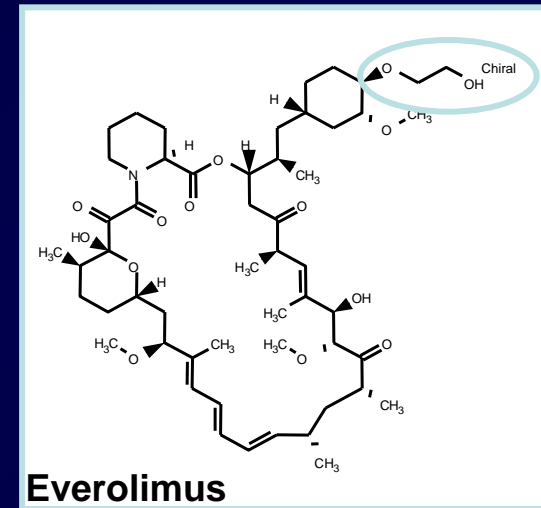
Everolimus



ABT 578

Everolimus

- **Potential Advantages**
- - Everolimus designed to have improved pharmacokinetics versus sirolimus for treating organ transplant patients
- - Increased lipophilicity and rapid tissue absorption¹
 - Longer cellular residence time and activity²
 - Improved chemical stability³
- - Reduced intimal thickening in cardiac graft vessels⁴ in randomized clinical trial



¹ Crowe and Lemaire. *Pharmaceutical Research* 1998, 15:11 (1666-1672) ³ Novartis Pharma

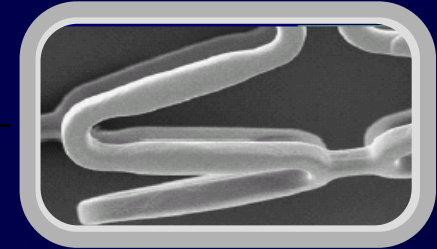
² Jacobsen et al. *Transplantation Proceedings* 2001, 33 (514-515)

⁴ Eisen H.J., *NEJM*, August 28, 2003, 349:9, 847-858

CHAMPION™ Drug Eluting Stent Objectives

Minimize Vessel Injury

- Narrower strut width at crest allows for lower deployment pressures to minimize vessel injury



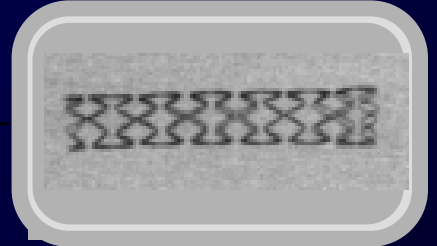
Uniform Strut to Wall Apposition

- Promotes uniform drug delivery in vessel



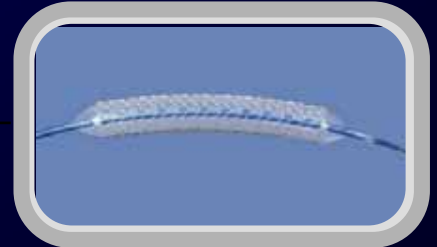
Precision Placement

- Excellent radiopacity for accuracy of stent placement



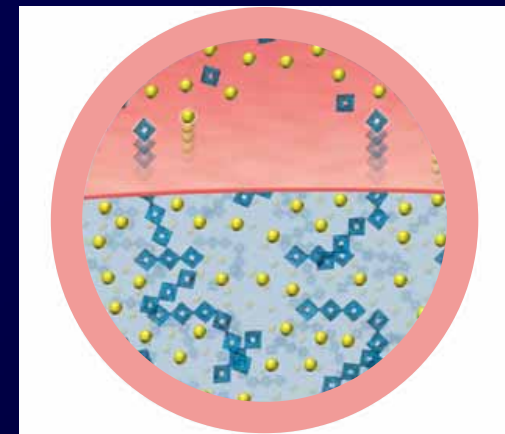
Deliverability

- Incorporates same delivery system as ML VISION™ for enhanced deliverability

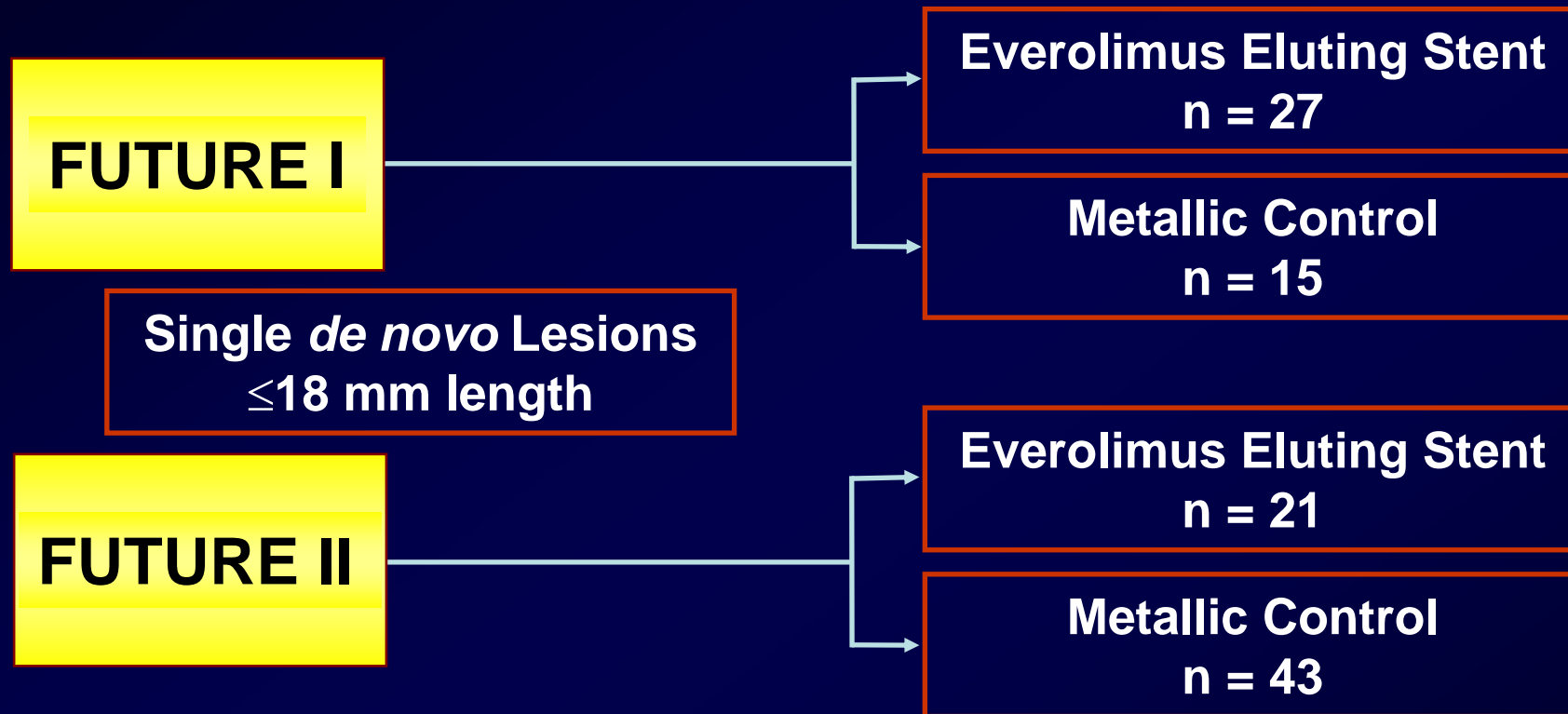


CHAMPION™ Bioabsorbable Polymer

- Thin-film Poly Lactic Acid (PLA)
- Safely used in numerous medical applications since the 1980's
 - Vascular, orthopedic, dental
- Breaks down to lactic acid, a natural metabolite
- High drug loading capability
 - High drug to polymer ratio—ability to load >50% drug
- As drug release matrix is absorbed, no residual drug is encapsulated in polymer



Everolimus Eluting Stent Program FUTURE I and II



- Stent sizes: 2.5 – 4.0 mm diameter, 14 and 18 mm lengths
- Prospective, randomized
- **Key Endpoints:** Angiographic and IVUS results at 6 months, clinical endpoints at 1, 6 and 12 months

FUTURE I & II

Clinical and Angiographic FU Summary

	FUTURE I 6-mo n=26 Angio 96% FU	FUTURE II 6-mo n=21/22** Angio 95% FU
Ref Diameter (mm)	3.07	2.91
Lesion Length (mm)	9.17	11.07
Diabetics (%)	4%	23.8%
MACE (%)	7.7% *(2/26)	4.8% (1/21)
TLR (%)	3.8% (1/26)	4.8% (1/21)
% DS at follow-up	2.63	2.94
Late Loss (mm) in-stent	0.11	0.12
Late Loss (mm) in-segment	0.19	0.16
Restenosis (%) in-stent	0.0% (0/25)	0.0% (0/21)
Restenosis (%) in-segment	4.0% (1/25)	4.8% (1/21)

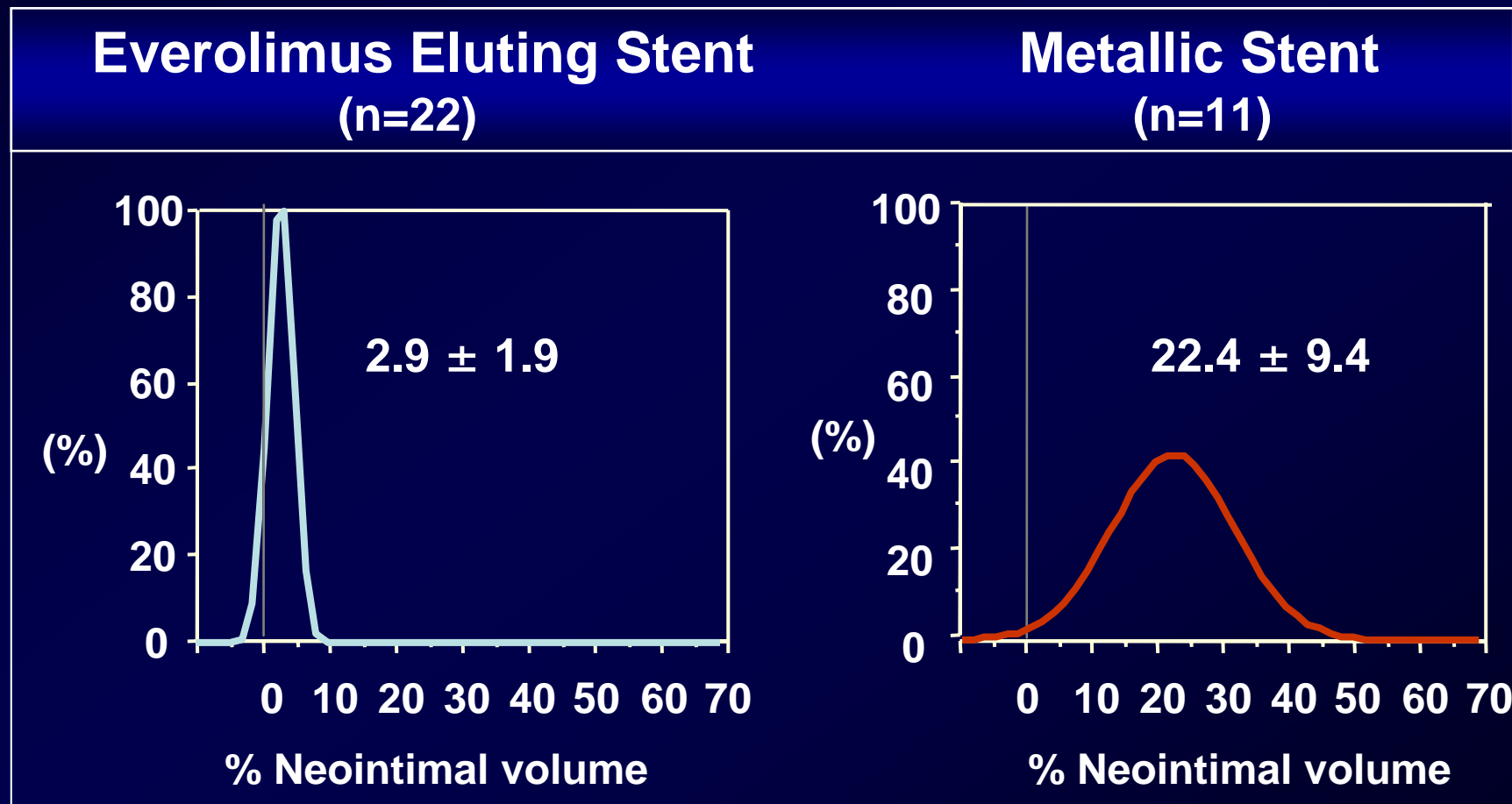
*One Death was non-cardiac due to underlying COPD

**One EES patient had two lesions treated

FUTURE I

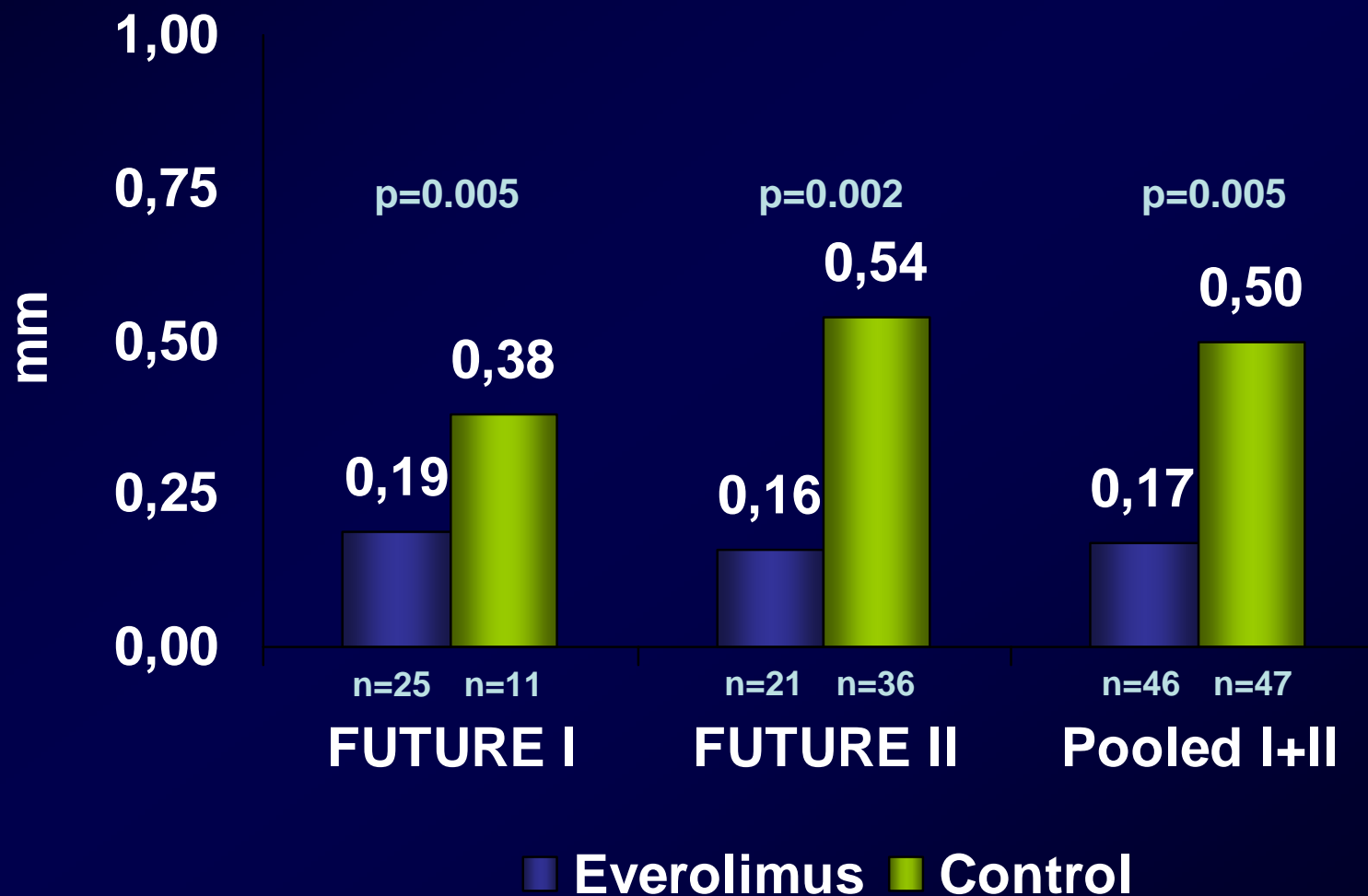
IVUS 6 Month Follow-Up

- Distribution of % Neointimal Volume



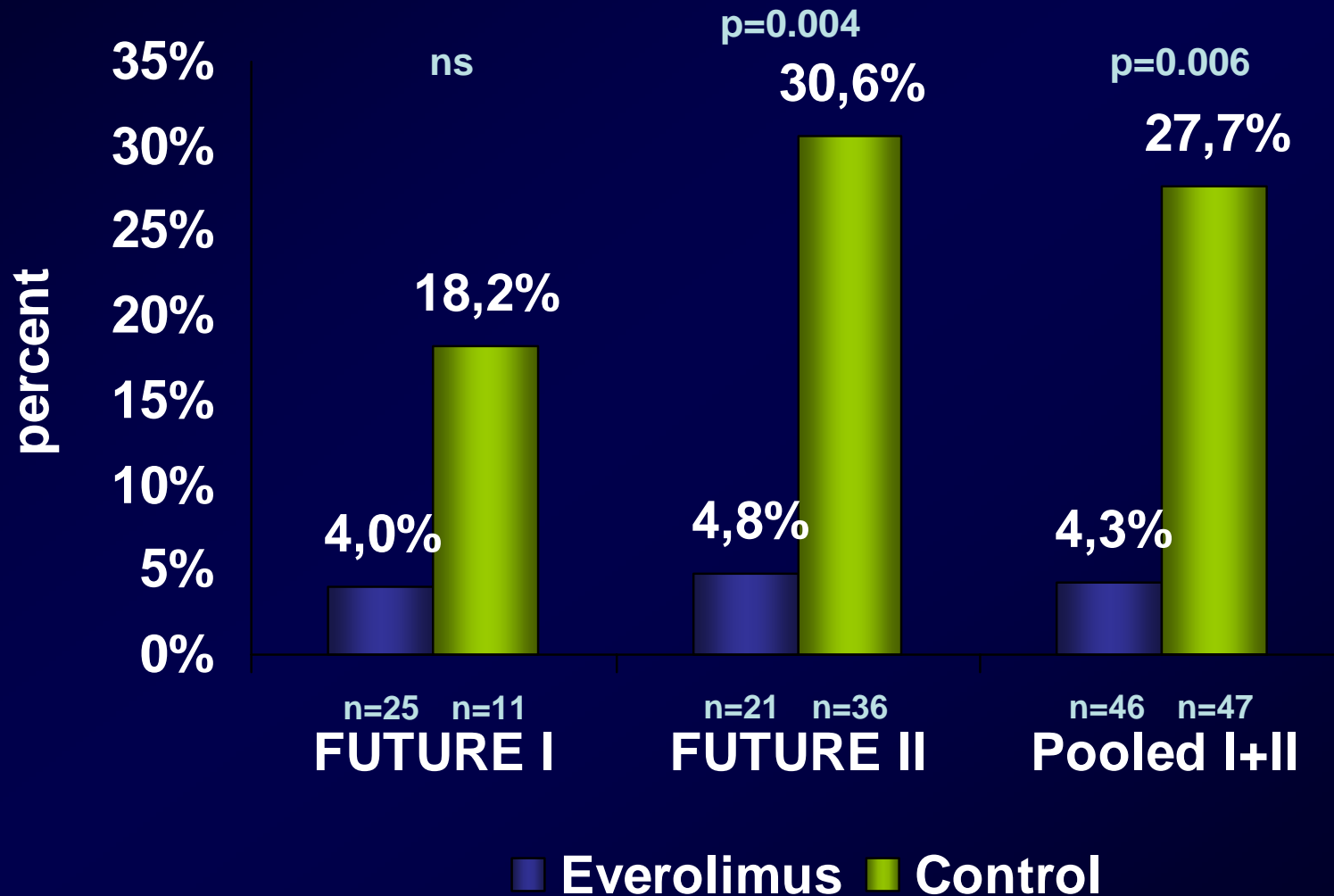
FUTURE I and FUTURE II

In-segment Late Loss at 6MFU

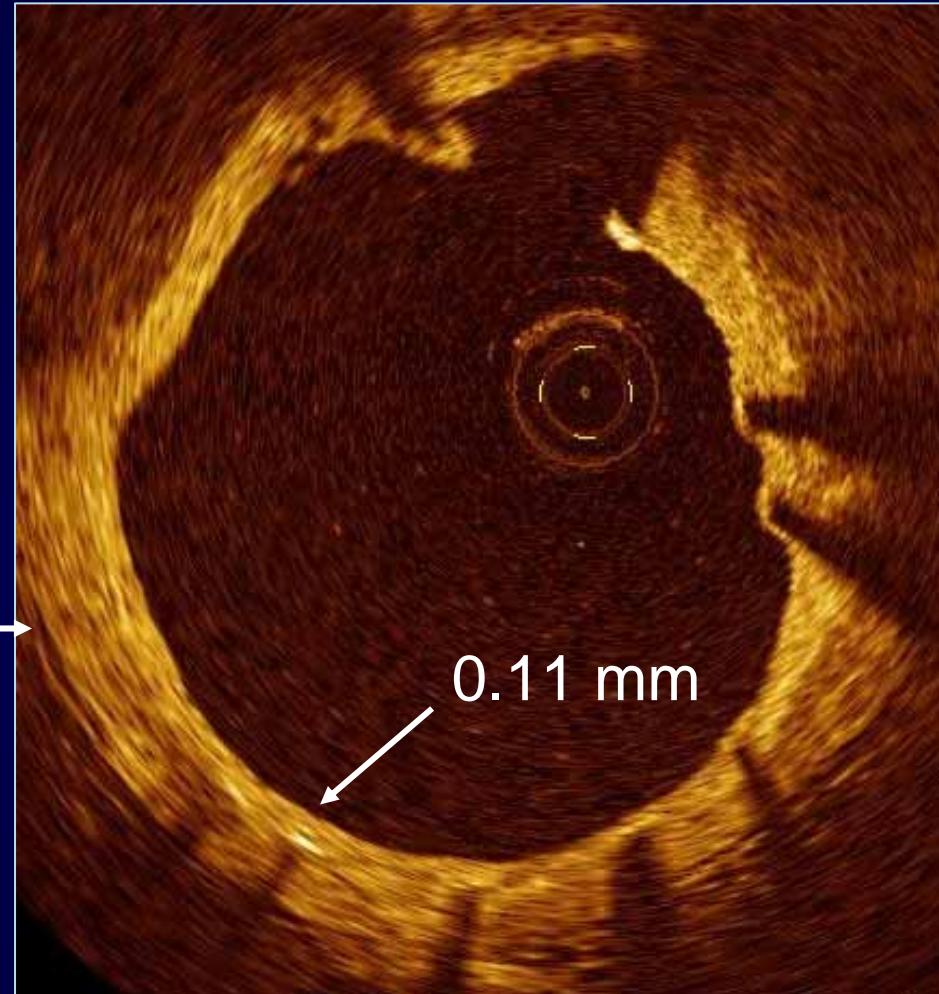
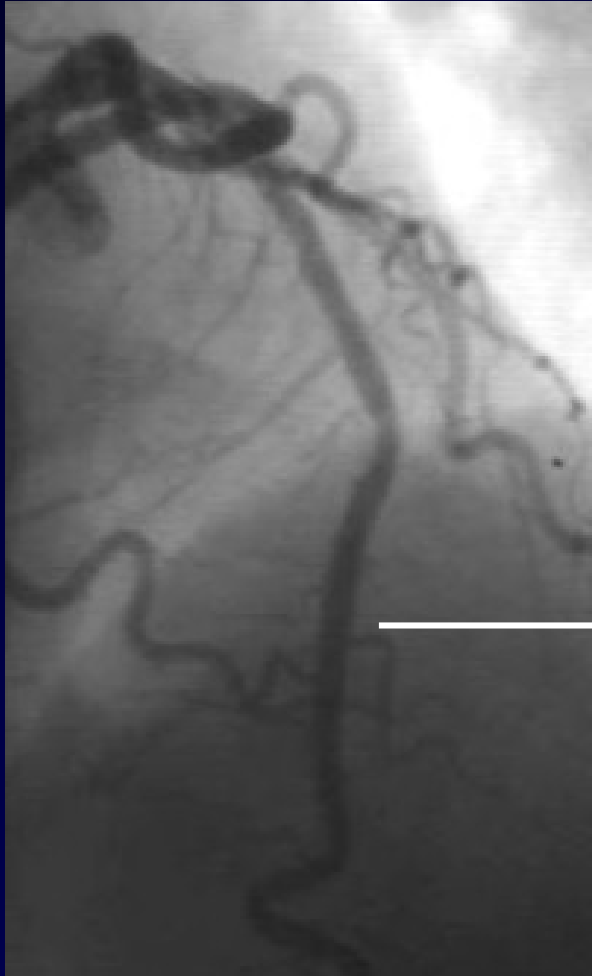


FUTURE I & FUTURE II

In-segment Binary Restenosis at 6MFU

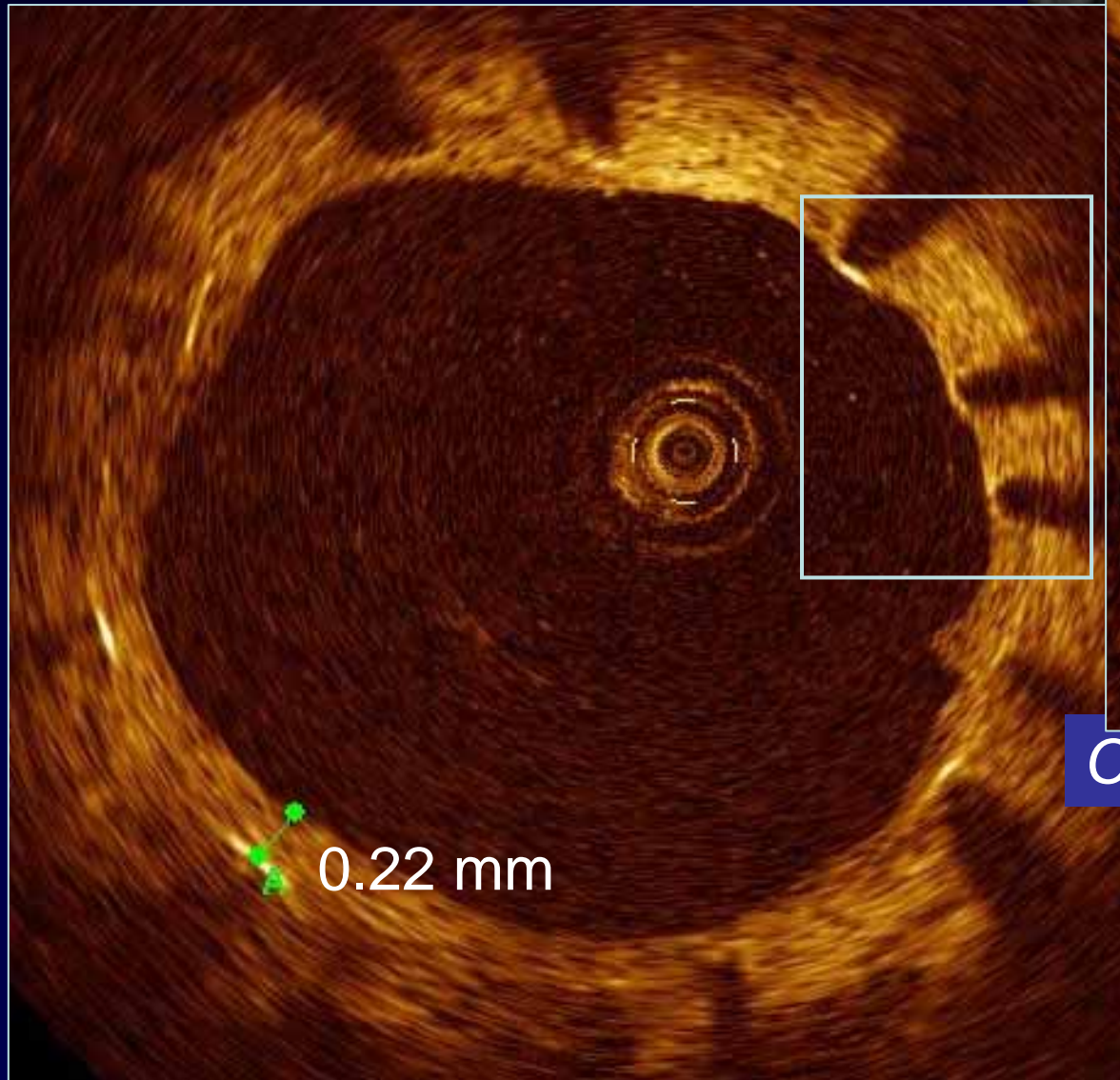


Everolimus-eluting stent



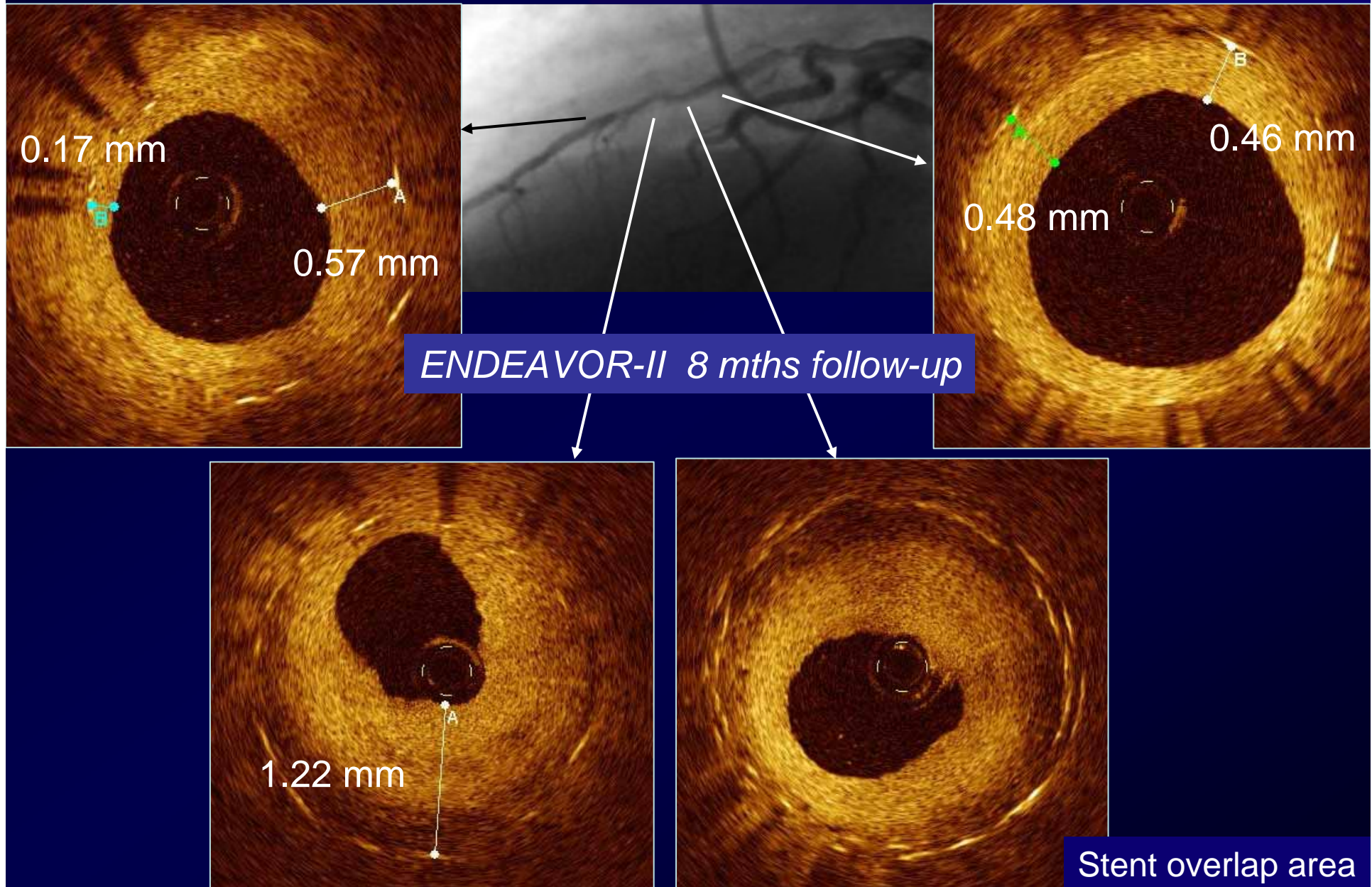
FUTURE-1 29 mths follow-up

Cypher DES



Cypher 10 mths follow-up

ABT-578-eluting stent



CHAMPION™ Clinical Trials

FUTURE I

Safety and performance

Europe

n = 42

FUTURE II

Safety and performance

Europe

n = 64

FUTURE III

Clinical support for OUS launch

International

n = 800

FUTURE IV

Pivotal U.S.: Support for FDA approval

U.S.A.

n = 975

PI: C. Rogers

CHAMPION™ Clinical Trials

FUTURE I

**Safety and
performance**

Europe

n = 42

FUTURE II

**Safety and
performance**

Europe

n = 64

FUTURE III

**Clinical support
for OUS launch**

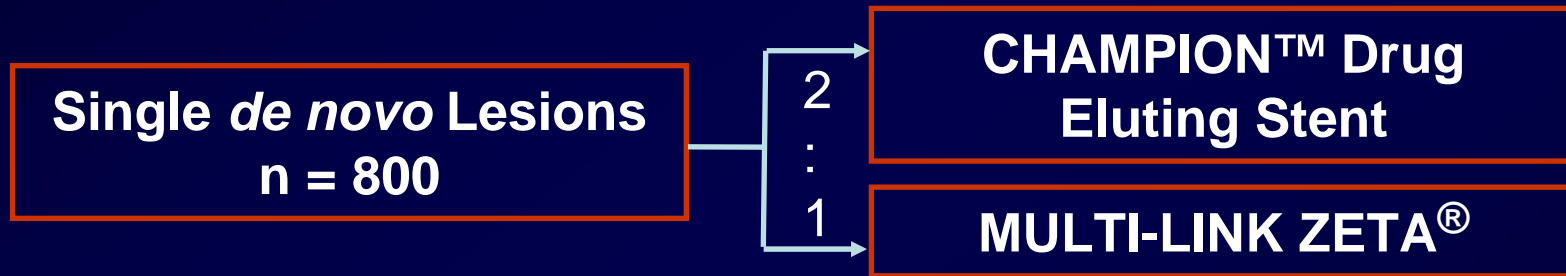
International

**n = 800
PI: E. Grube**

FUTURE IV

FUTURE III Study Design

FUTURE III



- Prospective, randomized 2:1, multi-center, single-blind, superiority trial
- International: up to 80 study sites
- Stent sizes: 2.5 – 4.0 mm diameter, 8 - 28 mm lengths
- Primary endpoint: In-stent late loss at 4/6 months
- Clinical follow-up at 1, 4, 6, 9, 12 months, 2 and 3 years
- Angiographic and IVUS follow up subsets at 4 & 12 and 6 & 12 months

CHAMPION™ Clinical Trials

FUTURE I

Safety and
performance

Europe

n = 42

FUTURE II

Safety and
performance

Europe

n = 64

FUTURE III

Clinical support
for OUS launch

International

n = 800

FUTURE IV

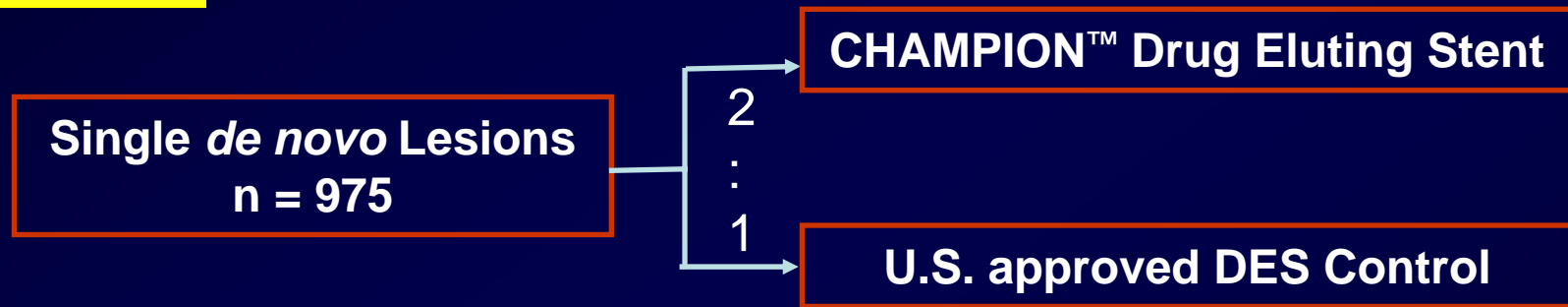
Pivotal U.S.:
Support FDA
approval

U.S.A.

n = 975
PI: C. Rogers

FUTURE IV Study Design

FUTURE IV

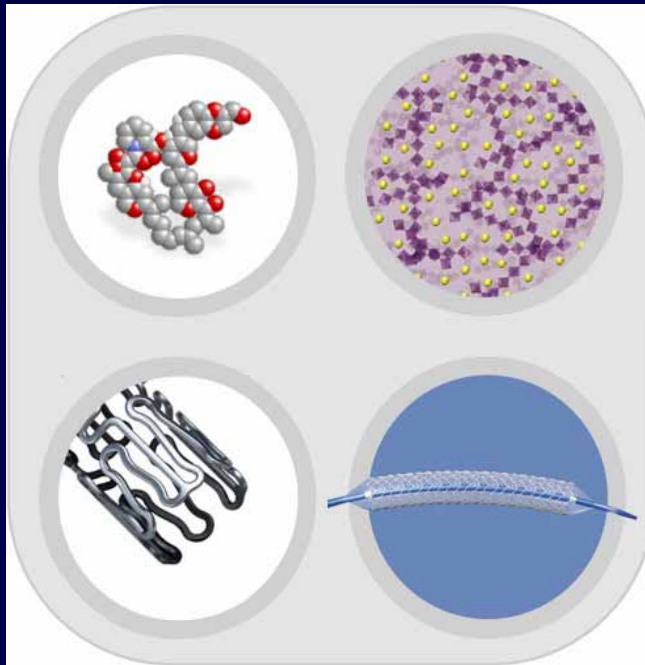


- **Prospective, randomized 2:1, multi-center, single blind, non-inferiority, 975 patients**
 - Stent Sizes: 2.5 – 3.5 mm diameter, 8 – 28 mm lengths
- **4.0 mm non-randomized arm: 105 patients**
 - Stent Sizes: 8 – 28 mm length
- **Up to 70 study sites**
- **Primary endpoint: Angiographic in-segment late loss at 8 months**
- **Secondary endpoint: Clinically-driven target vessel failure at 9 months**
- **Clinical follow-up at 1, 8, 9, 12 months and 2, 3, 4, 5 years**
- **Angiographic and IVUS subsets at 8 months**

ML VISION[®] DES

Everolimus Eluting Coronary Stent System

Everolimus



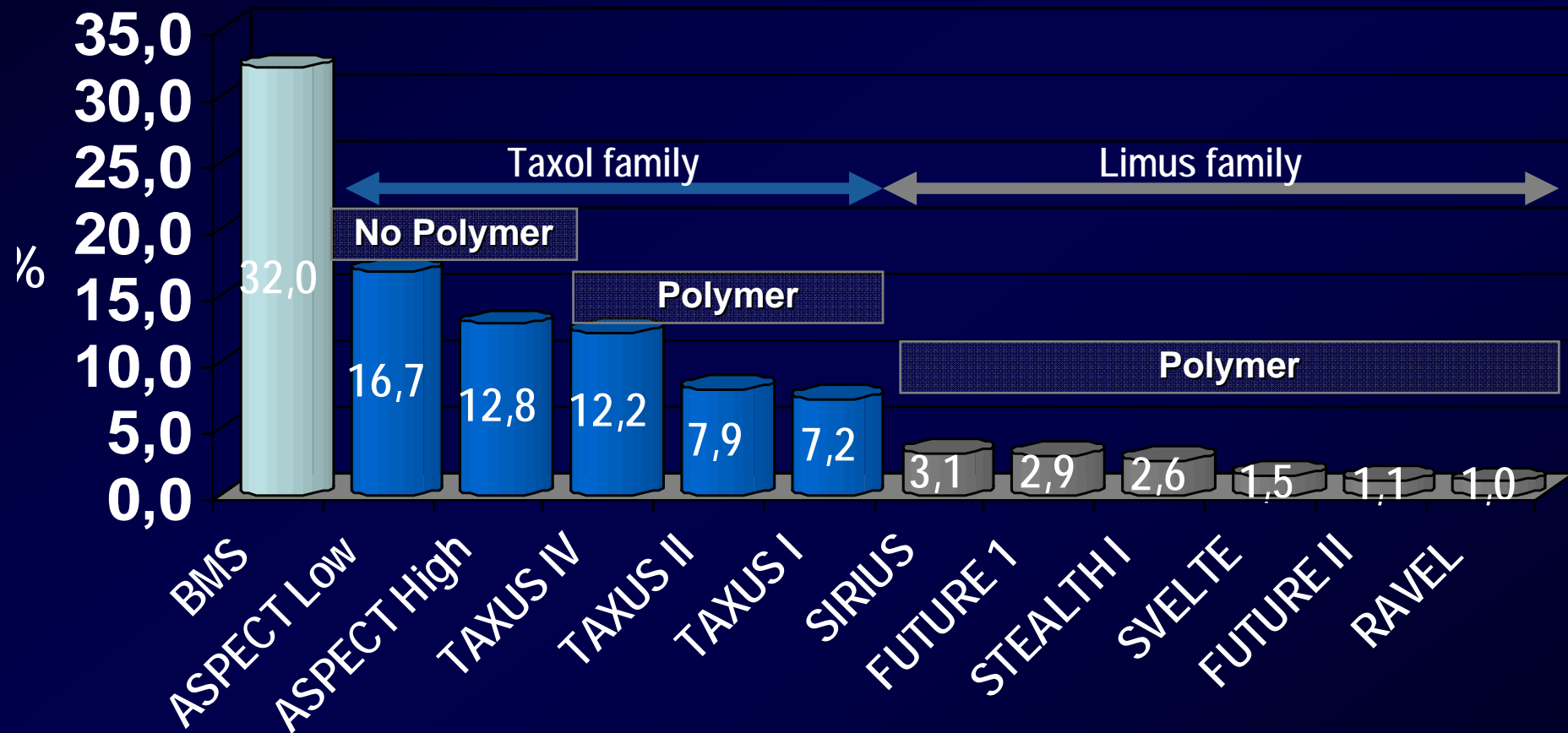
Durable Polymer

ML VISION[®]
Platform

ML VISION[®]
Stent Delivery
System

STEALTH

Comparison of Neointimal Volume



Conclusions

- **Studies on everolimus eluting stent systems demonstrate safety and efficacy of these stent concepts**
- **Larger randomized trials are ongoing for stent approval**