

# 2013 TCTAP

Wrap-Up Interview

## Femoropopliteal Lesions

Moderator

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Interviewees

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# Issues Briefs

## Atherectomy Controversy

- Clinical studies: DEFINITE LE...
- Discussion: for whom, which device

## Drug-eluting Balloon

- Clinical studies: THUNDER, FemPac, LEVANT I, PACIFIER, DEBATE-SFA
- Discussion: TASC C or D, Future perspective (ISR lesions..)

## Drug-eluting Stent

- Clinical studies: ZILVER-PTX trial and registry
- Discussion: TASC C or D, Future perspective (ISR lesions..)

## STOP ISR

- Clinical studies: STOP-IC trial
- Discussion: How long, To whom ?

# Periprocedural Outcomes

Outcomes	Claudication (RCC 1-3)	CLI (RCC 4-6)	All subjects (RCC 1-6)
Device success ( $\leq 30\%$ stenosis after plaque excision)	76%	72%	75%
Procedural success ( $\leq 30\%$ stenosis at the end of procedure)	91%	83%	89%

# Key Etudy Endpoints

Claudicants	Primary endpoint: Primary patency at 12 months (PSVR $\leq$ 3.5)		Secondary endpoint: secondary patency at 12 months (PSVR $\leq$ 2.4)	
	Patency	LL (cm)	Patency	LL (cm)
All (n=743)	82%	7.4	78%	7.4
Diabetic (n=345)	80%	7.6	77%	7.6
Non-diabetic (n=398)	83%	7.4	78%	7.4

CLI	Primary endpoint: freedom from major unplanned amputation of the target limb at 12 months
All (n=201)	95%

# Primary Patency in subgroup

Subgroup	Claudicants (n=743)		CLC (n=279)	
	Patency (PSVR≤2.4)	Lesion length (cm)	Patency (PSVR≤2.4)	Lesion length (cm)
All (n=1022)	78%	7.5	71%	7.2
<b>Lesion type</b>				
Stenosis (n=806)	81%	6.7	73%	5.8
Occlusion (n=211)	64%	11.1	66%	10.3
<b>Lesion location</b>				
SFA (n=671)	75%	8.1	68%	8.6
Popliteal (n=162)	77%	6.0	68%	5.4
Infrapopliteal (n=189)	90%	5.5	78%	6.0

# DEB for de novo lesion

## Meta-analysis

### A Target lesion revascularization

Study or Subgroup	PCB		UCB		Weight	Odds Ratio M-H, Random, 95% CI	Year
	Events	Total	Events	Total			
THUNDER	7	48	28	54	32.1%	0.16 [0.06, 0.42]	2008
FemPac	6	45	21	42	27.3%	0.15 [0.05, 0.44]	2008
LEVANT I	6	47	10	45	24.7%	0.51 [0.17, 1.55]	2010
PACIFIER	3	40	9	39	16.0%	0.27 [0.07, 1.09]	2011

**Total (95% CI)** 180 180 100.0% **0.23 [0.13, 0.40]**

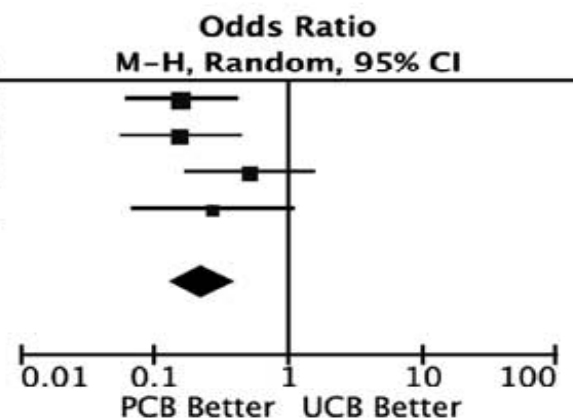
Total events 22 68

Heterogeneity:  $\tau^2 = 0.02$ ;  $\chi^2 = 3.19$ ,  $df = 3$  ( $P = 0.36$ );  $I^2 = 6\%$

Test for overall effect:  $Z = 5.09$  ( $P < 0.00001$ )

Heterogeneity<sub>(exact)</sub>:  $\chi^2 = 3.26$ ,  $df = 3$  ( $P = 0.35$ )

Test for overall effect<sub>(exact)</sub>:  $P < 0.00001$



### A Binary restenosis

Study or Subgroup	PCB		UCB		Weight	Odds Ratio M-H, Random, 95% CI
	Events	Total	Events	Total		
THUNDER	7	41	21	48	38.8%	0.26 [0.10, 0.71]
FemPac	10	31	22	34	36.1%	0.26 [0.09, 0.73]
PACIFIER	4	40	12	39	25.1%	0.25 [0.07, 0.86]

**Total (95% CI)** 112 121 100.0% **0.26 [0.14, 0.48]**

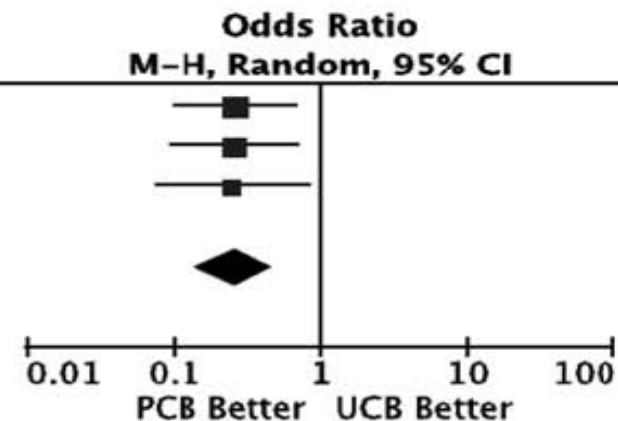
Total events 21 55

Heterogeneity:  $\tau^2 = 0.00$ ;  $\chi^2 = 0.01$ ,  $df = 2$  ( $P = 1.00$ );  $I^2 = 0\%$

Test for overall effect:  $Z = 4.27$  ( $P < 0.00001$ )

Heterogeneity<sub>(exact)</sub>:  $\chi^2 = 0.004$ ,  $df = 2$  ( $P = 0.99$ )

Test for overall effect<sub>(exact)</sub>:  $P < 0.00001$



# DEB for de novo lesion

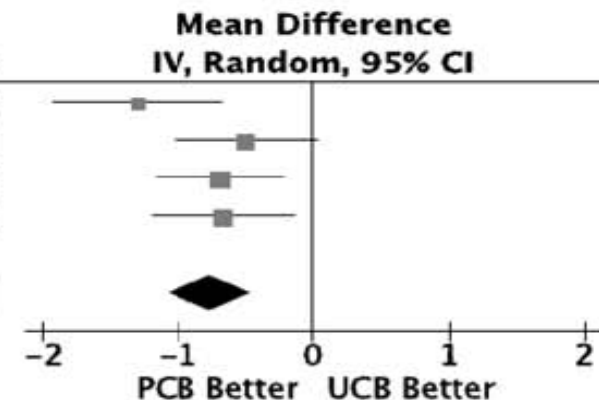
## Meta-analysis

### B Late lumen loss

Study or Subgroup	PCB			UCB			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
THUNDER	0.4	1.2	41	1.7	1.8	48	19.6%	-1.30 [-1.93, -0.67]
FemPac	0.5	1.1	31	1	1.1	34	25.2%	-0.50 [-1.04, 0.04]
LEVANT I	0.4	1.1	39	1.09	1	35	29.7%	-0.69 [-1.17, -0.21]
PACIFIER	-0.05	1.1	40	0.61	1.3	39	25.5%	-0.66 [-1.19, -0.13]
<b>Total (95% CI)</b>			<b>151</b>			<b>156</b>	<b>100.0%</b>	<b>-0.75 [-1.06, -0.45]</b>

Heterogeneity:  $\text{Tau}^2 = 0.02$ ;  $\text{Chi}^2 = 3.95$ ,  $\text{df} = 3$  ( $P = 0.27$ );  $I^2 = 24\%$

Test for overall effect:  $Z = 4.78$  ( $P < 0.00001$ )



### C Death

Study or Subgroup	PCB		UCB		Weight	Odds Ratio M-H, Random, 95% CI
	Events	Total	Events	Total		
THUNDER	2	48	1	54	19.4%	2.30 [0.20, 26.25]
FemPac	6	45	3	42	46.6%	2.00 [0.47, 8.57]
LEVANT I	1	48	3	49	21.5%	0.33 [0.03, 3.25]
PACIFIER	0	41	2	41	12.6%	0.19 [0.01, 4.09]
<b>Total (95% CI)</b>		<b>182</b>		<b>186</b>	<b>100.0%</b>	<b>1.04 [0.34, 3.18]</b>

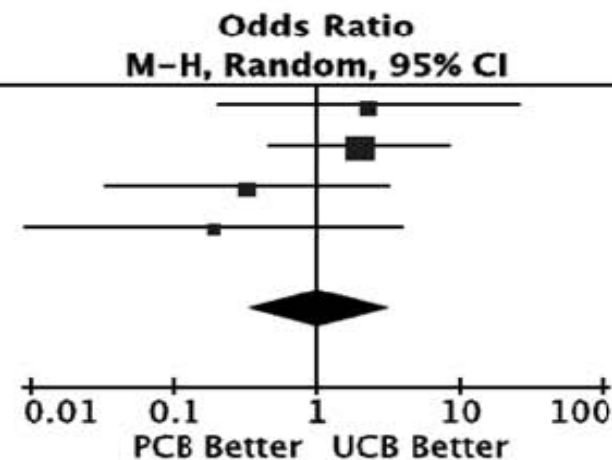
Total events

Heterogeneity:  $\text{Tau}^2 = 0.15$ ;  $\text{Chi}^2 = 3.37$ ,  $\text{df} = 3$  ( $P = 0.34$ );  $I^2 = 11\%$

Test for overall effect:  $Z = 0.06$  ( $P = 0.95$ )

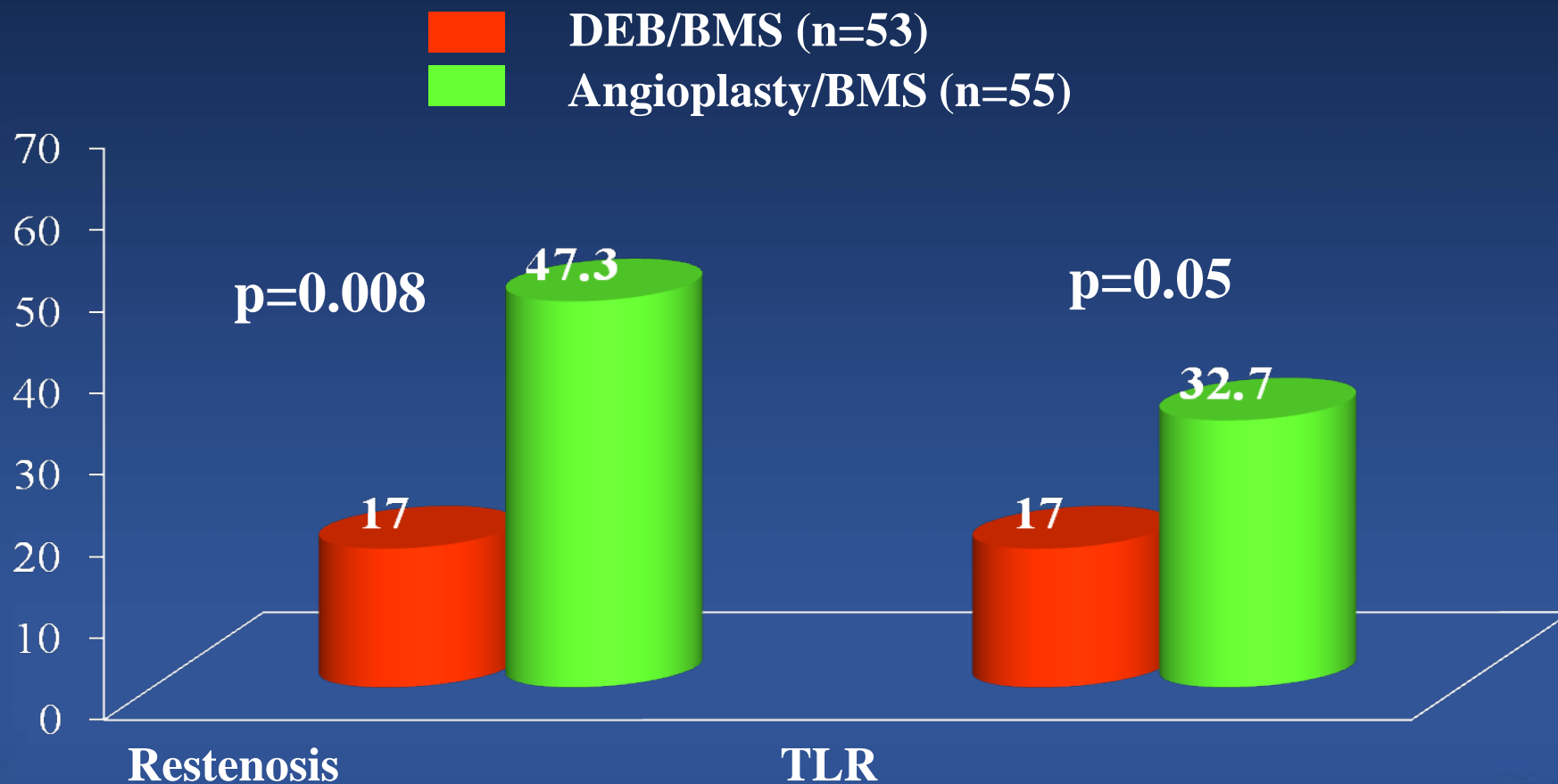
Heterogeneity<sub>(exact)</sub>:  $\text{Chi}^2 = 4.37$ ,  $\text{df} = 3$  ( $P = 0.22$ )

Test for overall effect<sub>(exact)</sub>:  $P = 0.98$



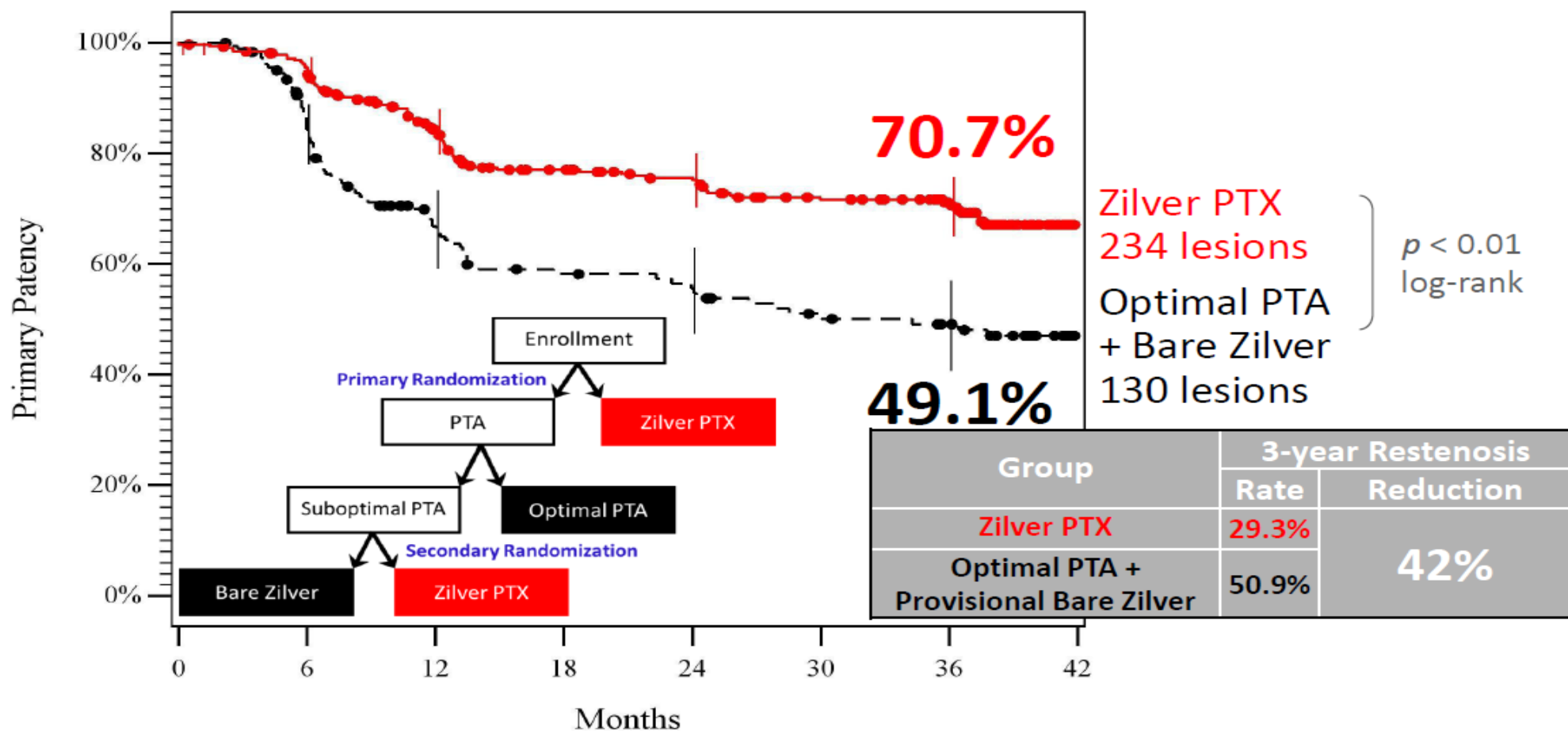
# DEBATE SFA trial

## 1-YEAR OUTCOMES

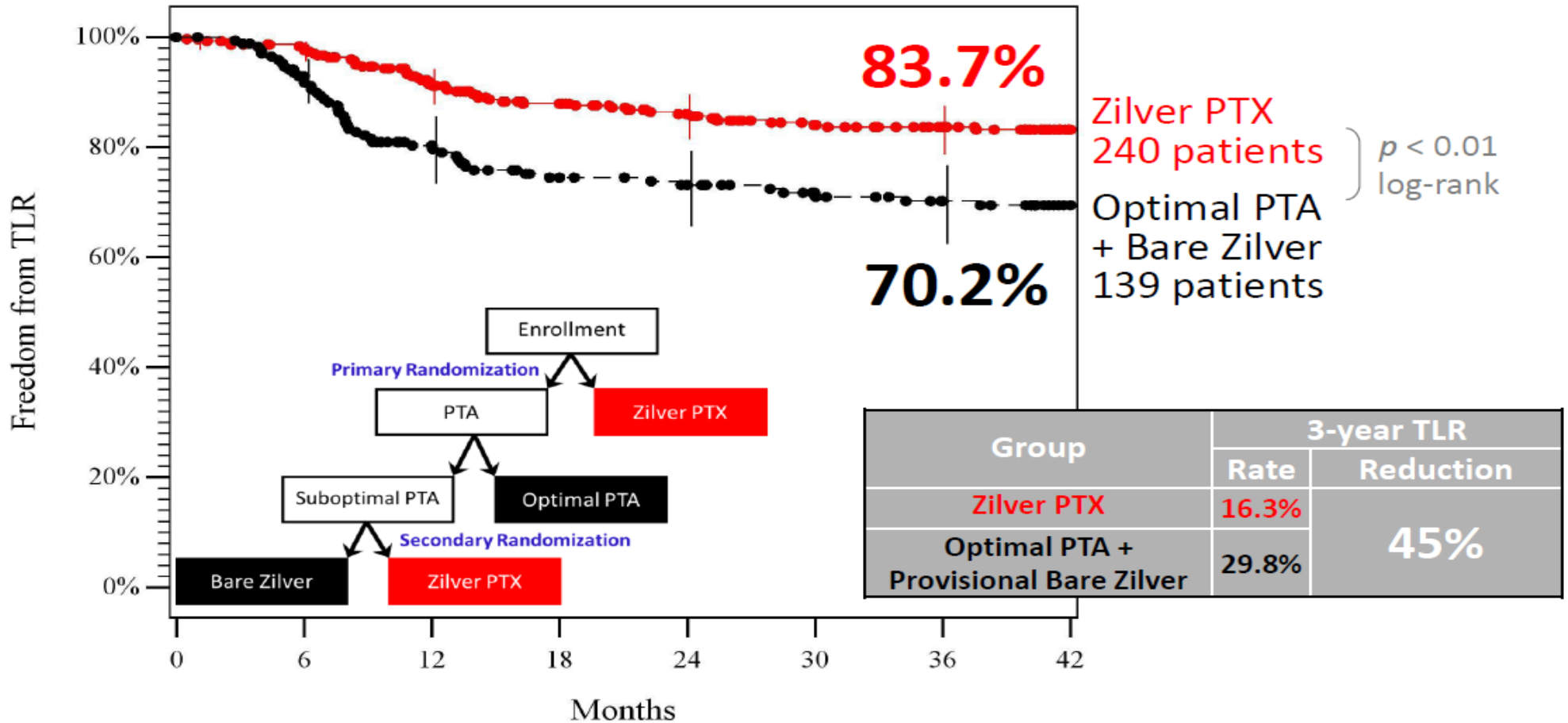




# 3-Year Primary Patency (PSVR < 2.0) Zilver PTX vs. Standard Care

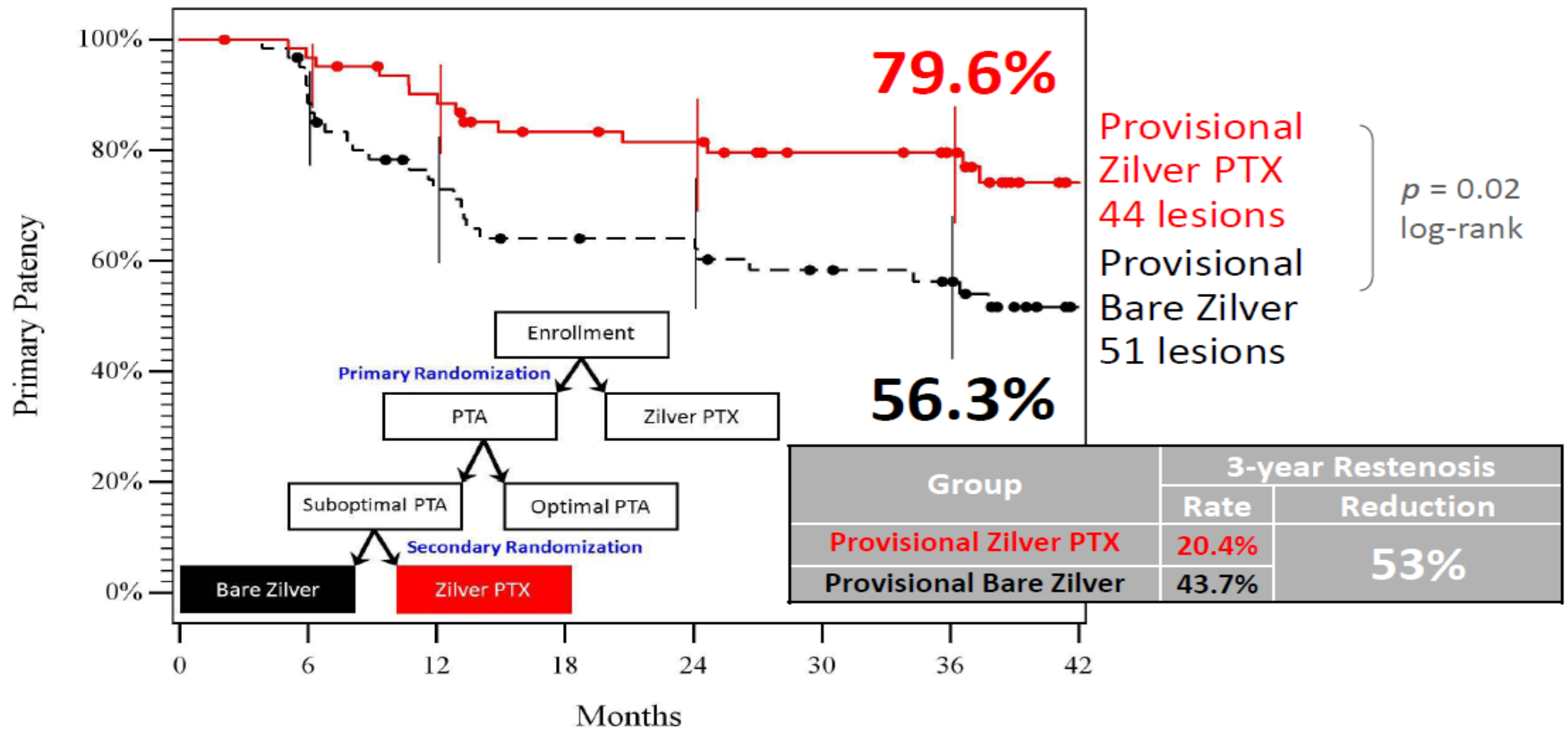


# 3-Year Freedom from TLR Zilver PTX vs. Standard Care



# 3-Year Paclitaxel Effect

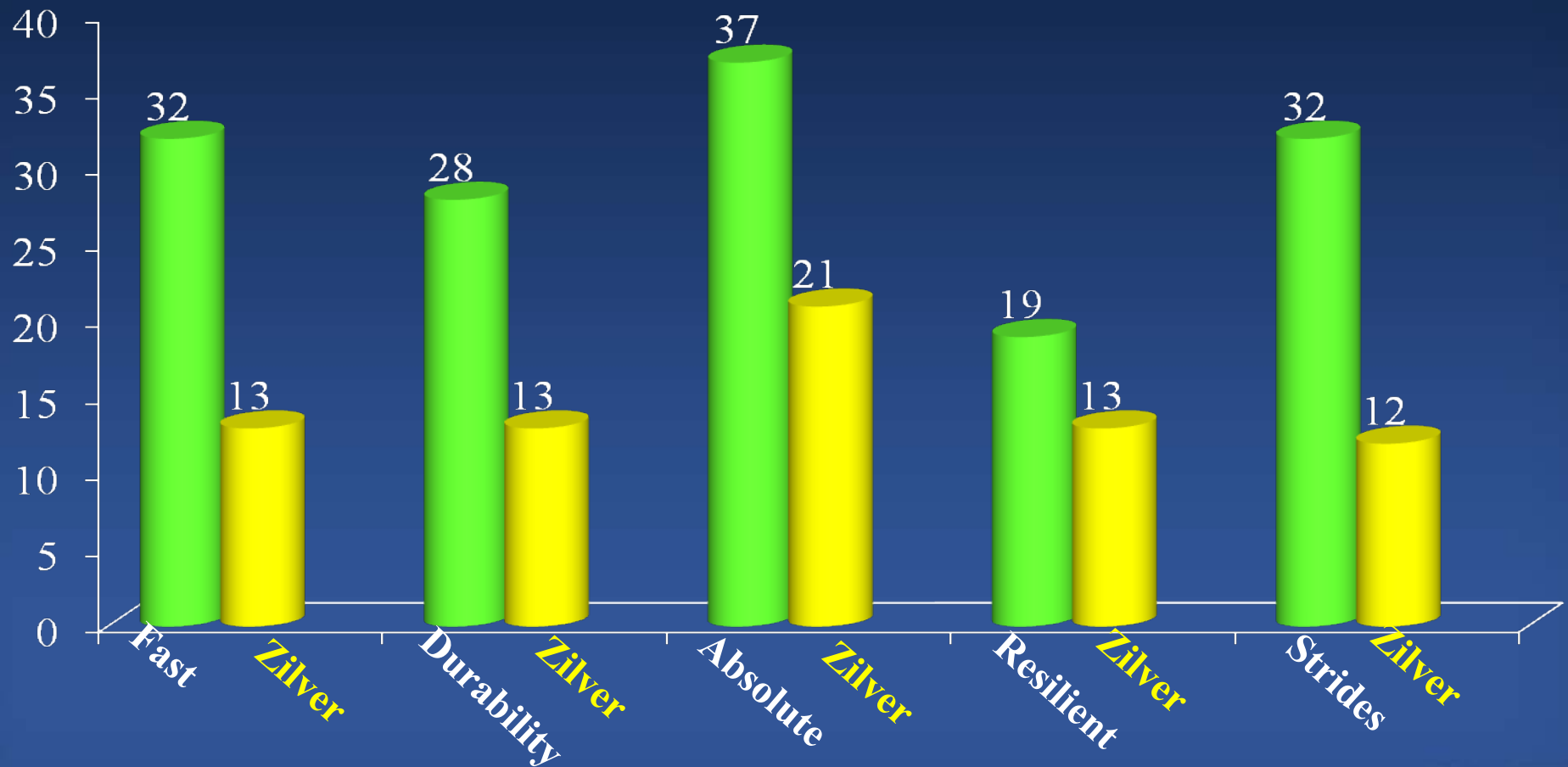
## Patency (PSVR < 2.0): Provisional Zilver PTX vs. BMS



# Zilver PTX for de novo lesion

Matching comparison with other stent trials

**12 months restenosis**



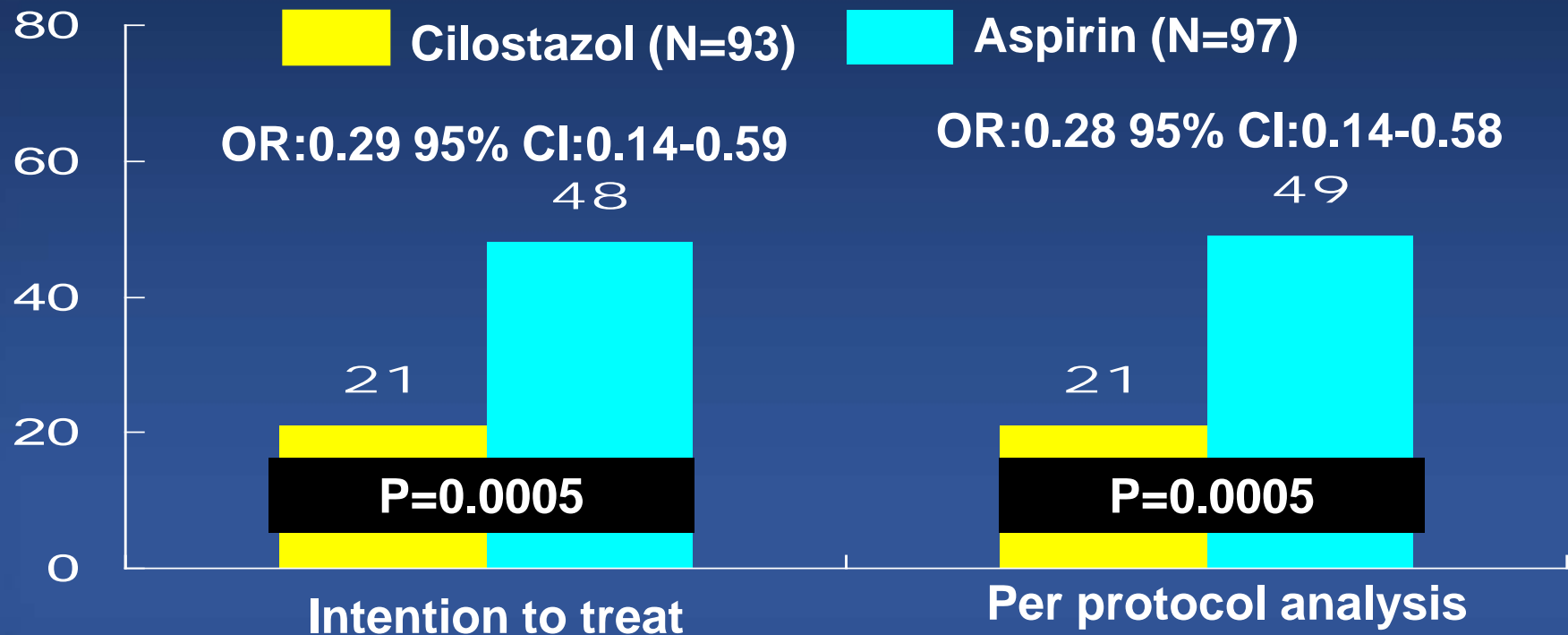
J ENDOVASC THER 2011;18:613-623

# STOP-IC

Aspirin vs. Aspirin/Cilostazol for 1 year after stenting

- 190 patients randomization
- All patients received aspirin ticlopidine for 1 month

## 12 Months angiographic restenosis



TCT 2012

# Discussion

- **Most Optimal Strategy for SFA**
  - Atherectomy, DEB, DES, or DEB with BMS
- **Post-stenting Maintenance**
  - Cilostazol
  - Others?