DK Crush should be the technique of choice for 1,1,1 Left Main disease: Against

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Two parts

- Theory, Intuition, Logic, Conceptualisation
- Data

- Theory, Intuition, Logic, Conceptualisation

Crush technique

- Born in adversity
- Opposite of what the engineers intended

What are its drawbacks?

1) Inflexible technique which commits you from the start to a two-stent approach

- Rigidity limits Adaptability

What are its drawbacks?

2) It is a technique which, of necessity, requires many steps for completion

- Every additional procedural step offers you an original and creative way to totally screw up the case

What are its drawbacks?

2) It is a technique which, of necessity, requires many steps for completion

- Be honest with yourself, how many 1,1,1 LM cases do you do a year?

What are its drawbacks?

2) It is a technique which, of necessity, requires many steps for completion

- *"There is nothing more likely to go wrong than a complicated bifurcation strategy undertaken as something of a novelty"*

  - *DHS, EBC, 2009 ad infinitum*

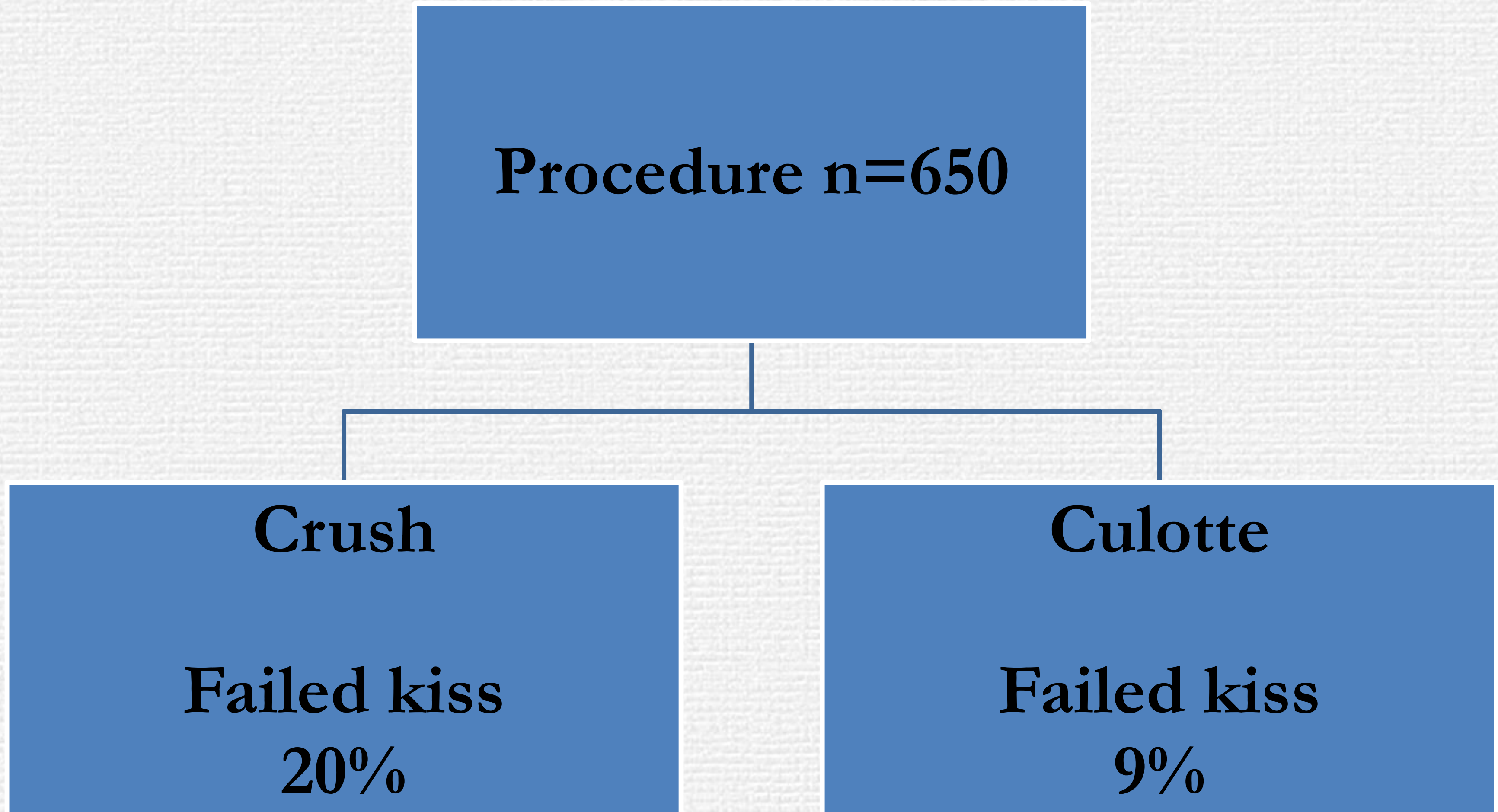
What are its drawbacks?

3) It leaves a triple layer of stent on the inner curvature

What are its drawbacks?

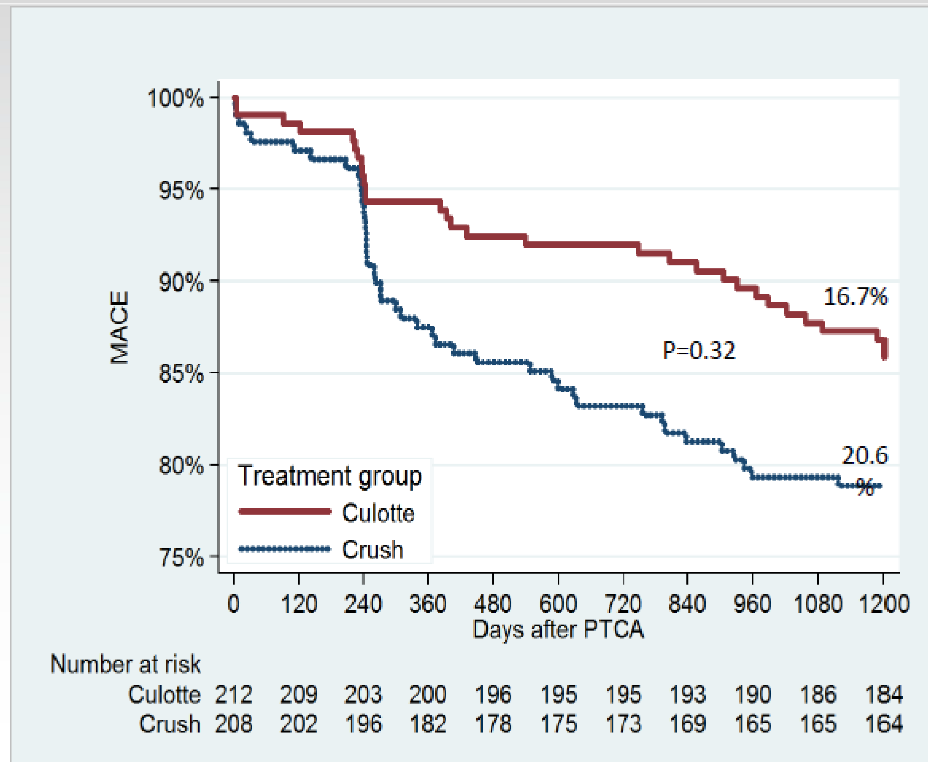
4) Inability to complete rewiring, crossing and final kissing balloon therapy is higher than with other techniques

NORDIC II & BBC ONE



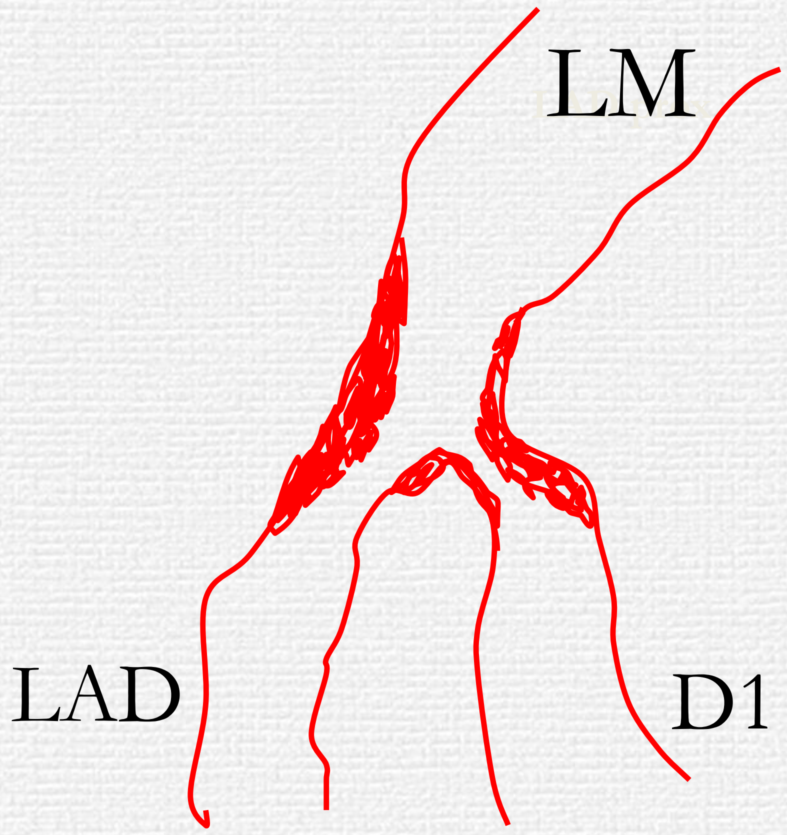
NORDIC II

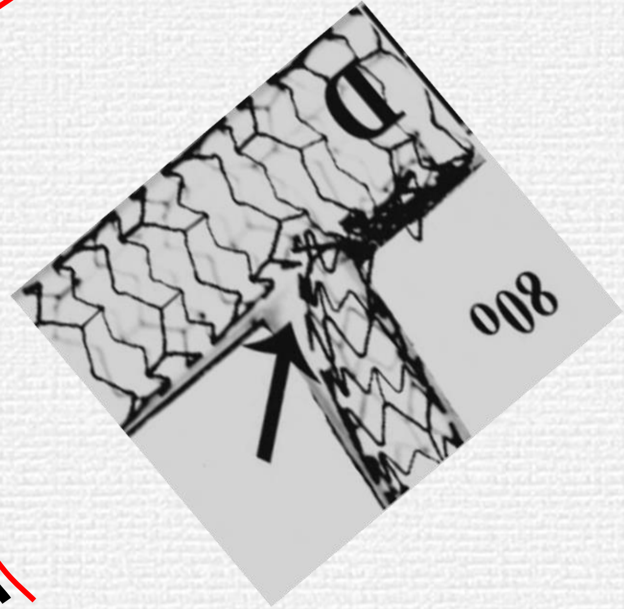
MACE-free survival during 36 months F-U

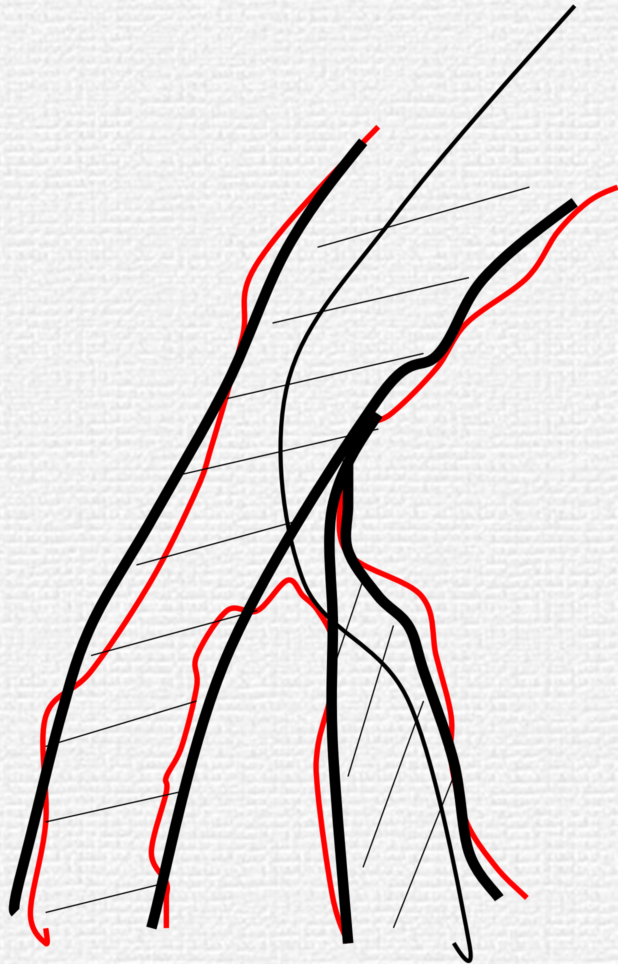


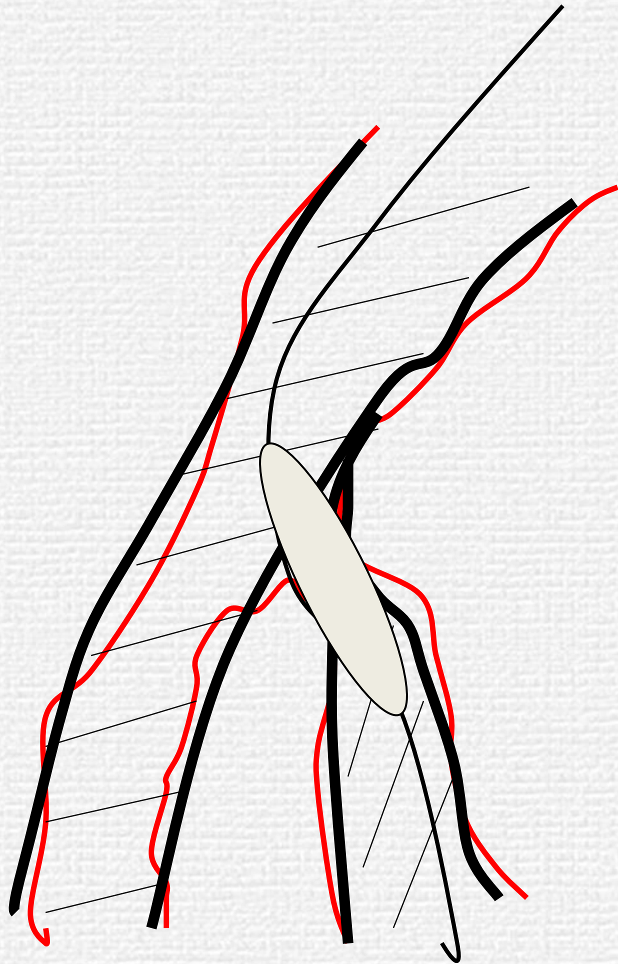
What are its drawbacks?

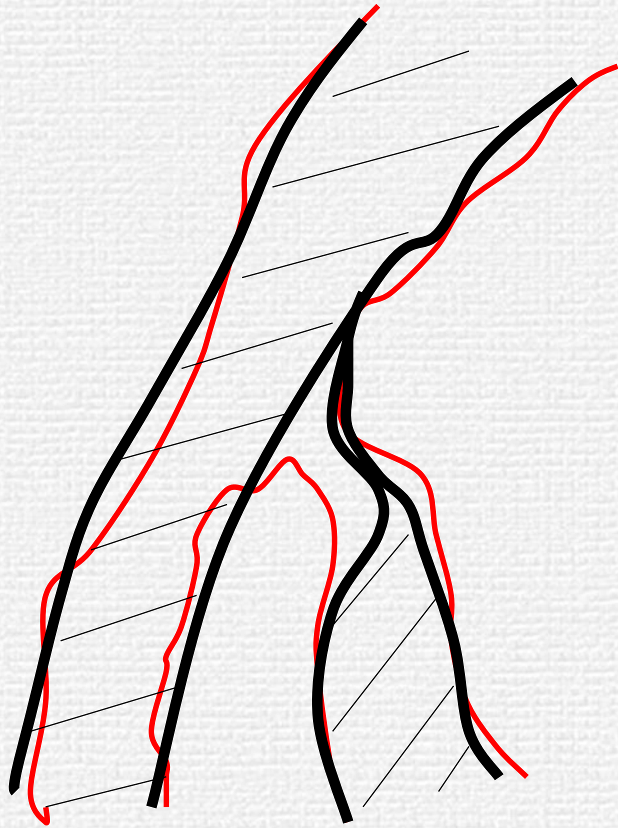
5) It is a technique in which rewiring *outside* the stented area is quite possible

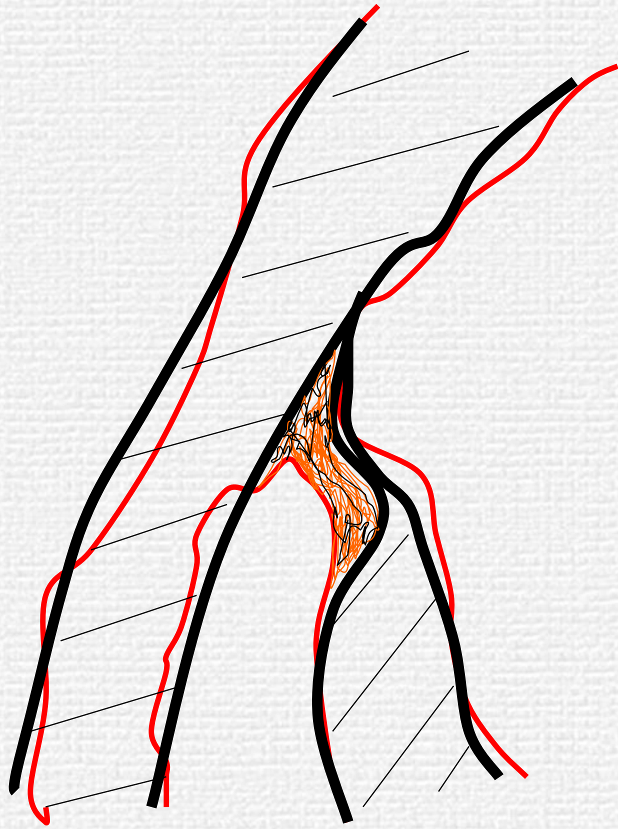

LM
LAD
D1











DK
r.i.p.

Is DK Crush a big improvement?

- Immediately infle que which commits you from the sta tent approach

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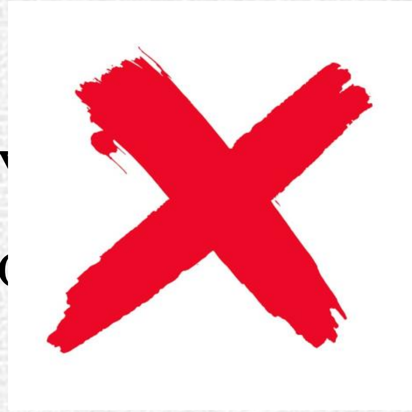
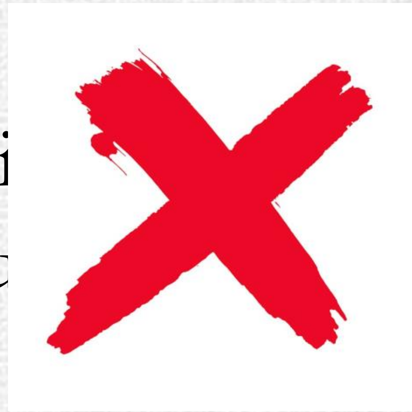
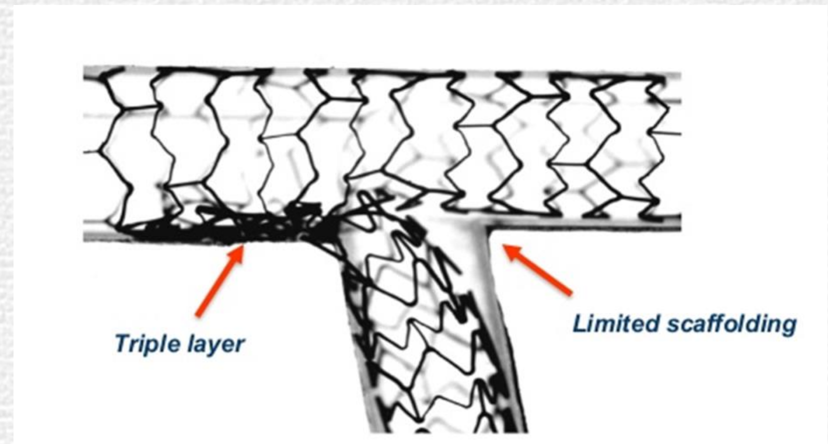


Is DK Crush a big improvement?

- It is a technique i  iring *outside* the stented area is qu



Is DK Crush a big improvement?

- Inability to compl g, crossing and final kissing balloon th gher than with other techniques

Is DK Crush a big improvement?

- It leaves a triple l[illegible]t on the inner curvature

DK Crush

- Remains a technique which commits you to two stents from the start, has multiple catheter exchanges, may include inadvertent scaffold-free zones and leaves a triple layer of metal

- Data

Data

- "The data is the data"

DK Crush V trial

- 484 patients
- True LM bifurcation disease
- Randomised to DK Crush vs Provisional

DK Crush V Results

- Target Lesion Failure at 1 year
  - DK Crush 5%
  - Provisional 10%

2.1 What is new in the 2018 Guidelines?

- Calculation of the Syntax Score, if left main or multivessel revascularization is considered
- Radial access as standard approach for coronary angiography and PCI
- DES for any PCI
- Systematic re-evaluation of patients after myocardial revascularization
- Stabilised NSTE-ACS patients: revascularization strategy according to principles for SCAD
- Use of the radial artery grafts over saphenous vein grafts in patients with high-degree stenosis
- Myocardial revascularization in patients with CAD, heart failure, and LVEF ≤35%
  - CABG preferred
  - PCI as alternative to CABG

The figure does not show changes compared with the 2014 version of the Myocardial Revascularization Guidelines that were due to updates for consistency with other ESC Guidelines published since 2014.

- Completeness of revascularization prioritized, when considering CABG vs PCI
- NOAC preferred over VKA in patients with non-valvular AF requiring anticoagulation and antiplatelet treatment
- No-touch vein technique, if open vein harvesting for CABG
- Annual operator volume for left main PCI of at least 25 cases per year
- Pre- and post-hydration with isotonic saline in patients with moderate or severe CKD if the expected contrast volume is >100 mL

(green)	Class I	(yellow)	Class IIa
(orange)	Class IIb	(red)	Class III

- Routine non-invasive imaging surveillance in high-risk patients 6 months after revascularization
- Double-kissing crush technique preferred over provisional T-stenting in true left main bifurcations.
- Cangrelor in $P2Y_{12}$-inhibitor naïve patients undergoing PCI
- GP IIb/IIIa inhibitors for PCI in $P2Y_{12}$-inhibitor naïve patients with ACS undergoing PCI
- Dabigatran 150-mg dose preferred over 110-mg dose when combined with single antiplatelet therapy after PCI
- De-escalation of $P2Y_{12}$ inhibitor guided by platelet function testing in ACS patients
- Routine revascularization of non-IRA lesions in myocardial infarction with cardiogenic shock
- Current generation BRS for clinical use outside clinical studies

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Critique

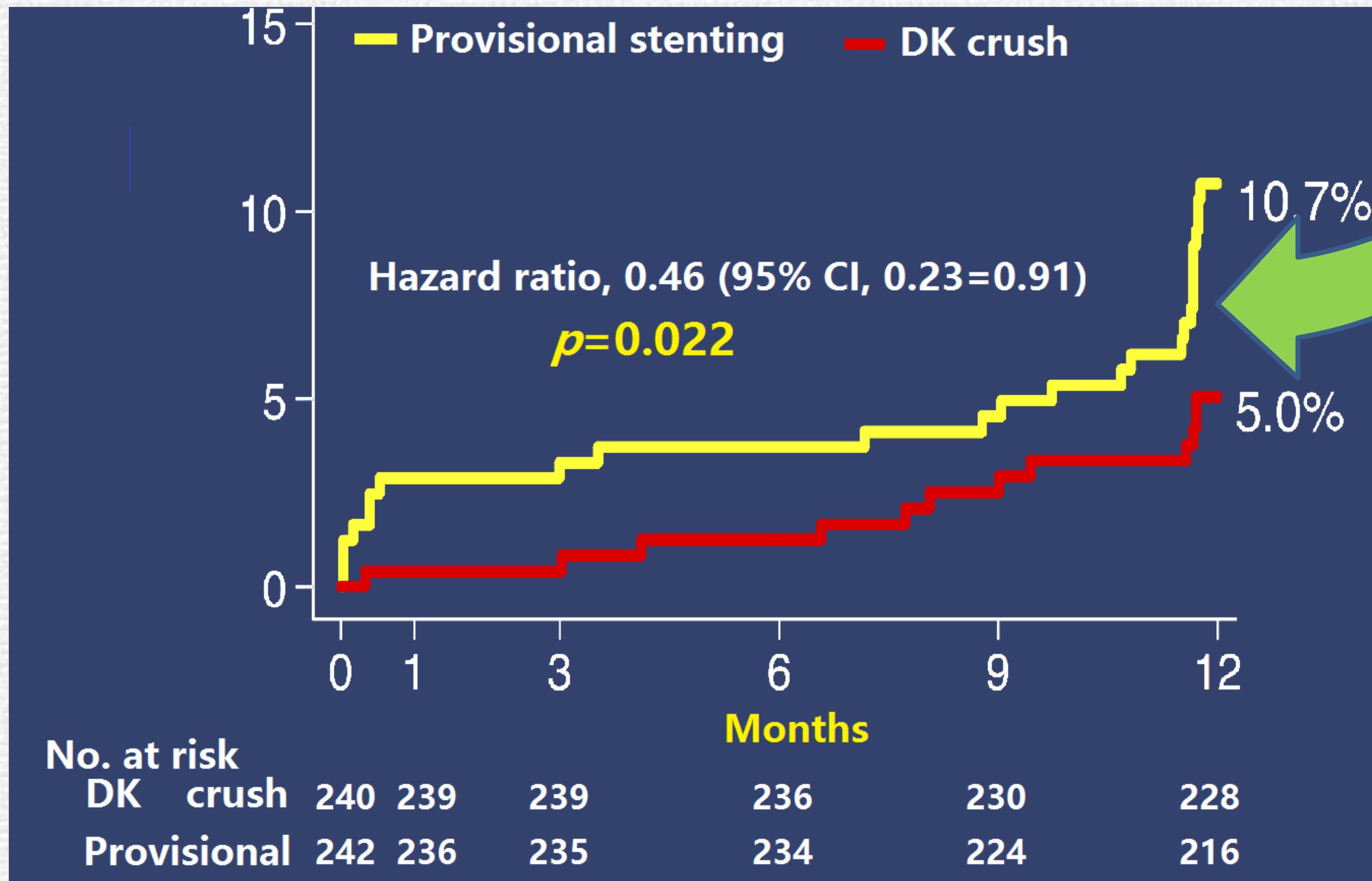
- Procedural success 100% in main vessel
- Final kissing success 99.6% in DK crush

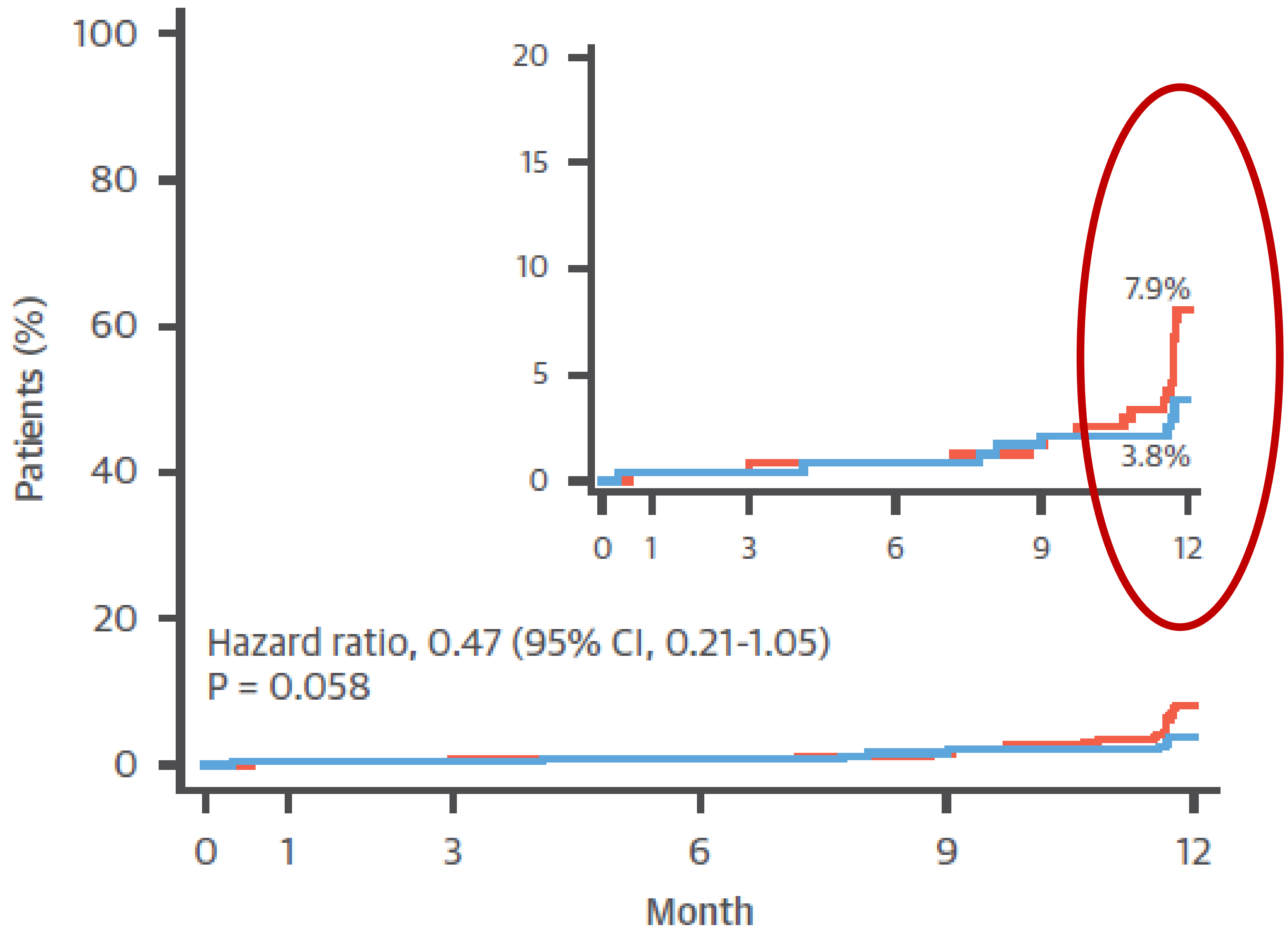
- Follow-up 100%

Critique

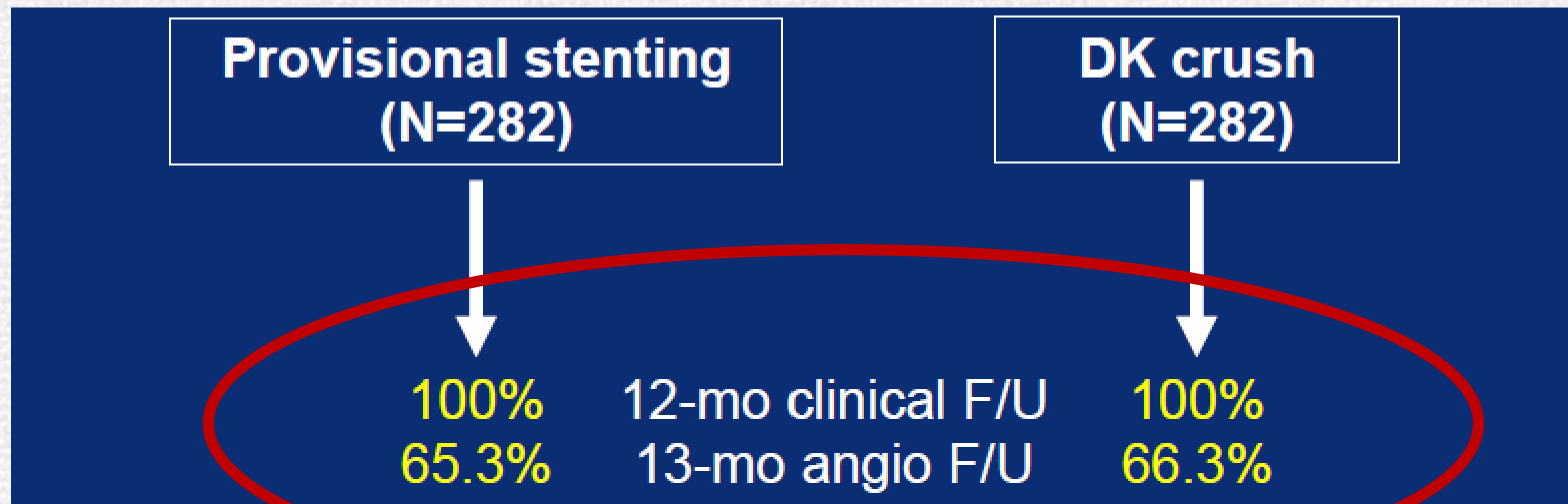
- No POT prior to recrossing in provisional
- 47% of cases had crossover to 2 stents
- Final kissing 78% vs 99.6%
- Stent thrombosis 0.4% vs 3.3%

What happened here?




Target Lesion Revascularization
Patients (%)
100
80
60
40
20
0
20
15
10
5
0
7.9%
3.8%
0
1
3
6
9
12
Hazard ratio, 0.47 (95% CI, 0.21-1.05)
P = 0.058
Month

Repeat Angiography?



All of which suggests to me:

- Operators very good at doing DK Crush
- Not very good at doing Provisional!

- And of course, results yet to be replicated….

Conclusion

- There are genuine theoretical, practical and data concerns about the DK Crush technique
- It should certainly not replace the provisional approach based on one contentious trial
- Roll on EBC MAIN