



# Bifurcation Stenting with Functional Evaluation

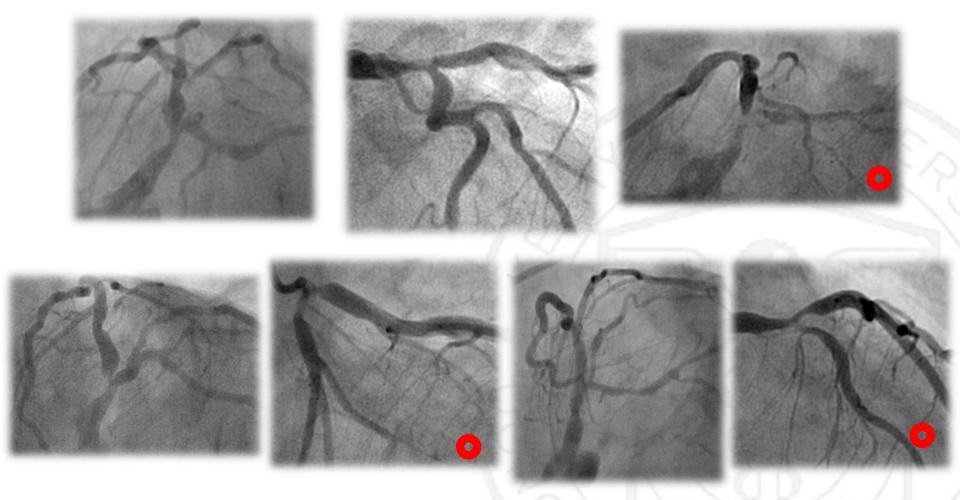
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Keimyung University Dongsan Medical Center, Daegu, Korea



#### **How to Treat LM bifurcation?**



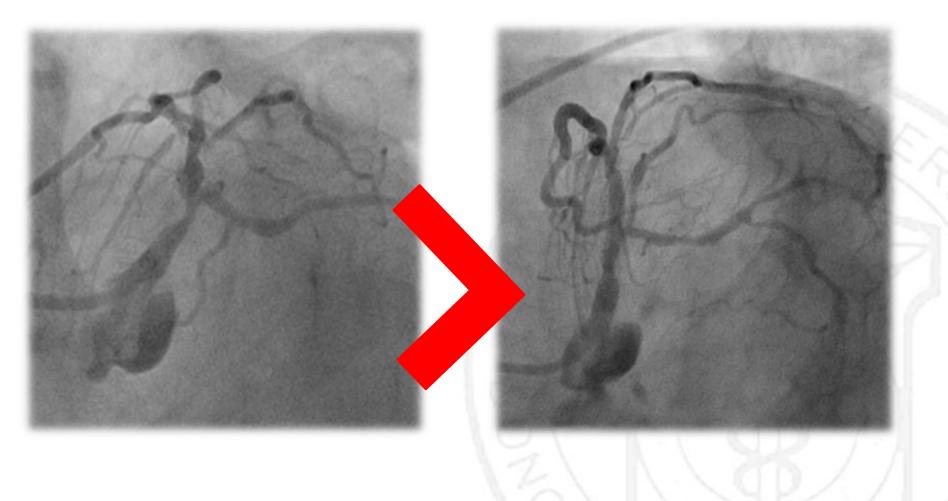


Sometimes, we need complex procedure



## 1st Cases: Which LM is significant?





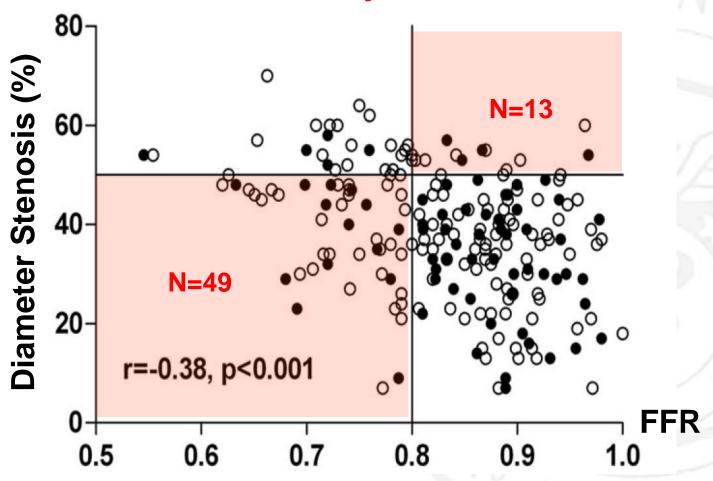


#### Angiography vs. FFR in LM Disease



#### 213 patients with equivocal left main lesions

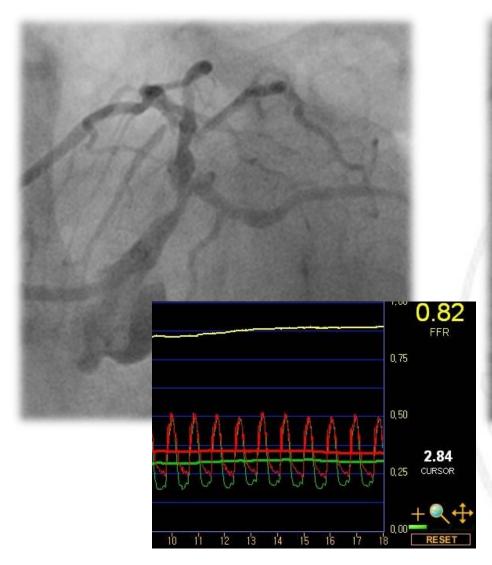
#### **Function-Anatomy mismatch: 30%**

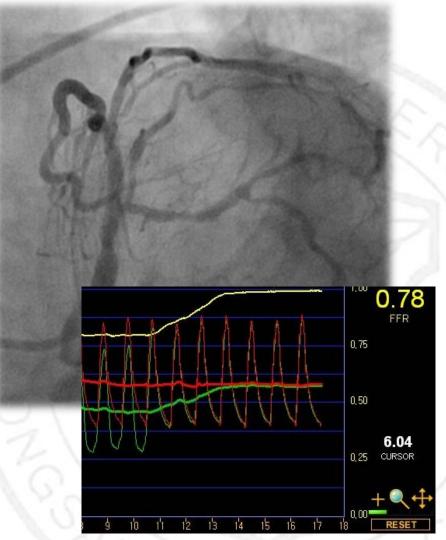




## 1st Cases: Which LM is significant?



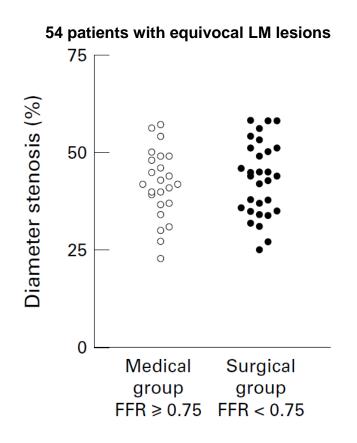


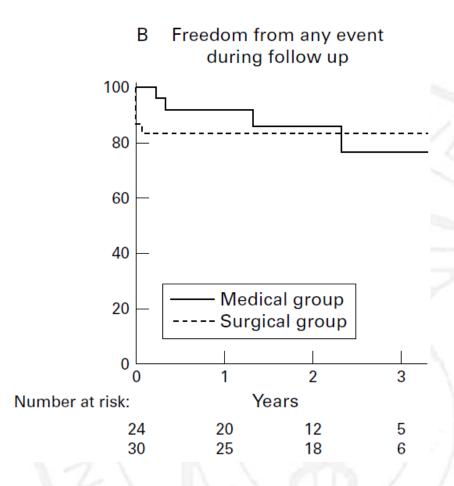




#### FFR guided treatment in LM Disease







1st Issue

#### Safety & Efficacy issues for Defer



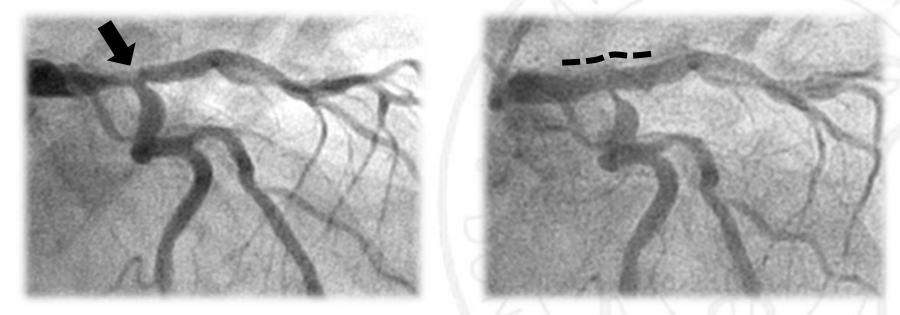
## 2<sup>nd</sup> Case: FFR-guided PCI in Jailed osLCX



## 63/Male, Angina for 5 months

CVRF: HTN, DM, CVA

TMT: (+), 7.5 METs

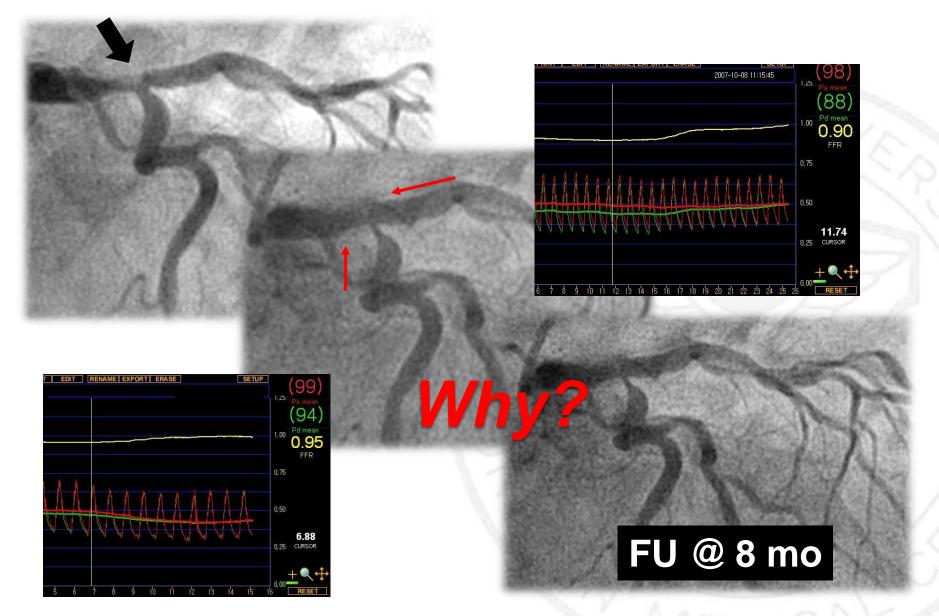


## How can we evaluate jailed osLCX?



#### FFR-guided PCI in Jailed LCXos

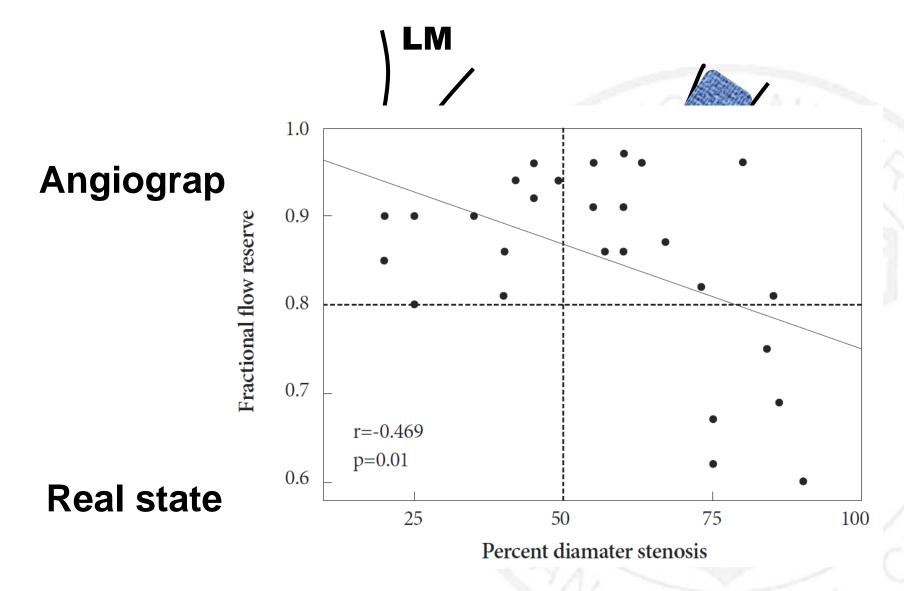






#### **Luminal narrowing of Jailed LCXos**







#### **Prognosis of Crossover stent in LM**

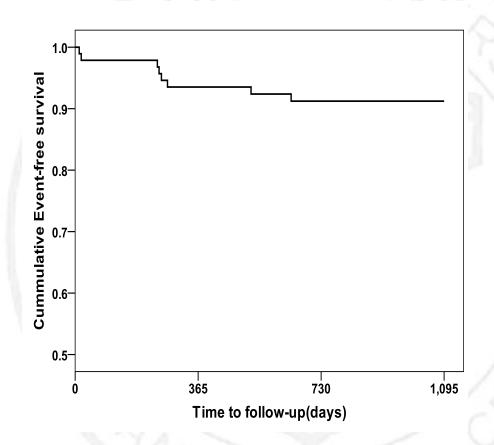




#### 2<sup>nd</sup> Issue

Safety and Efficacy of FFR-guided intervention in the jailed ostial LCX lesion

# 98 patients after single LM crossover stenting





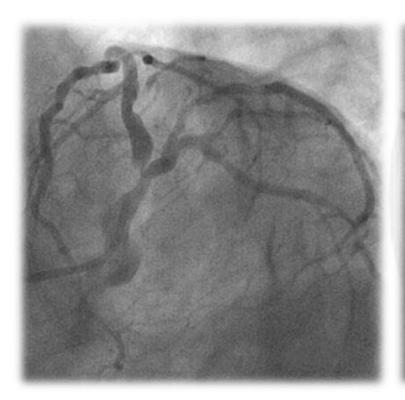
#### 3<sup>rd</sup> Case: Prediction of LCX compromise

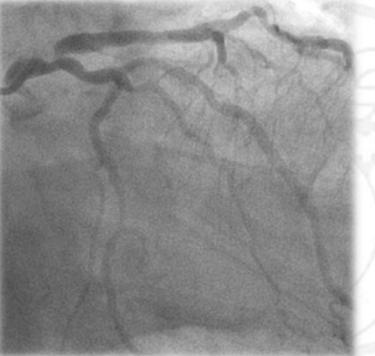


62/Male, Angina for 1 month

**CVRF: HTN, Dyslipidemia, Smoking** 

TMT: (+), 8.7 METs

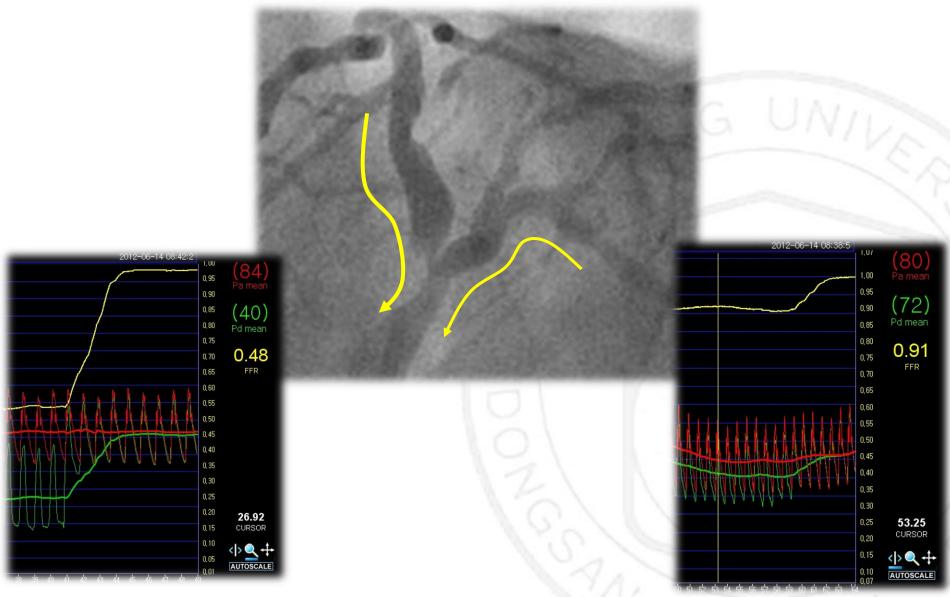






### **Physiologic Evaluation**

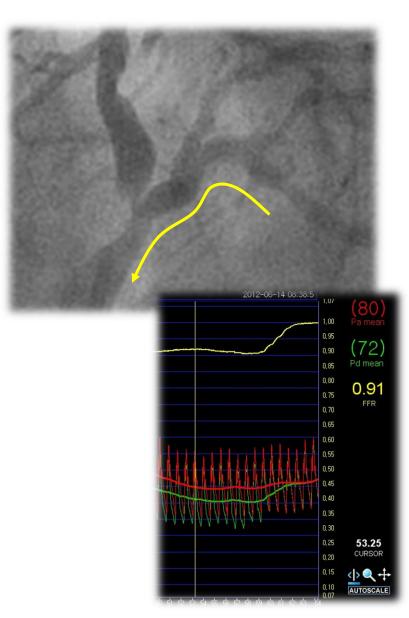


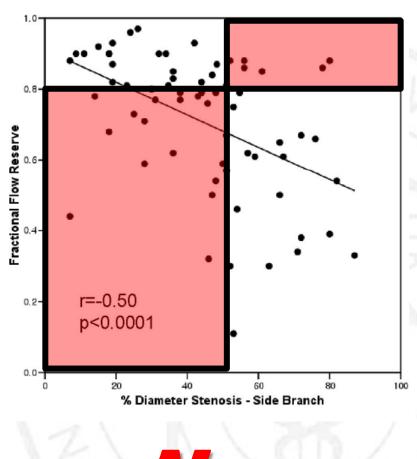




## Can we predict LCX compromise by FFR?

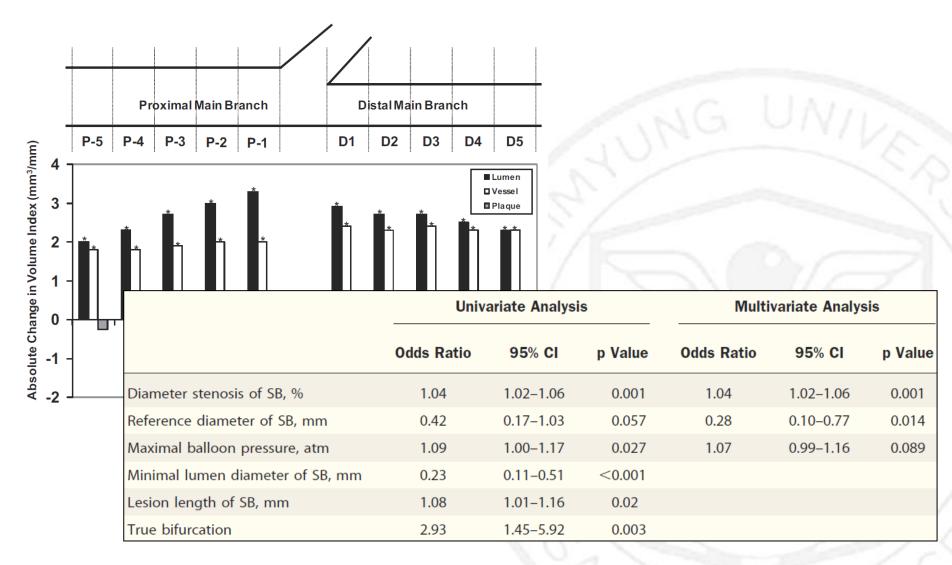








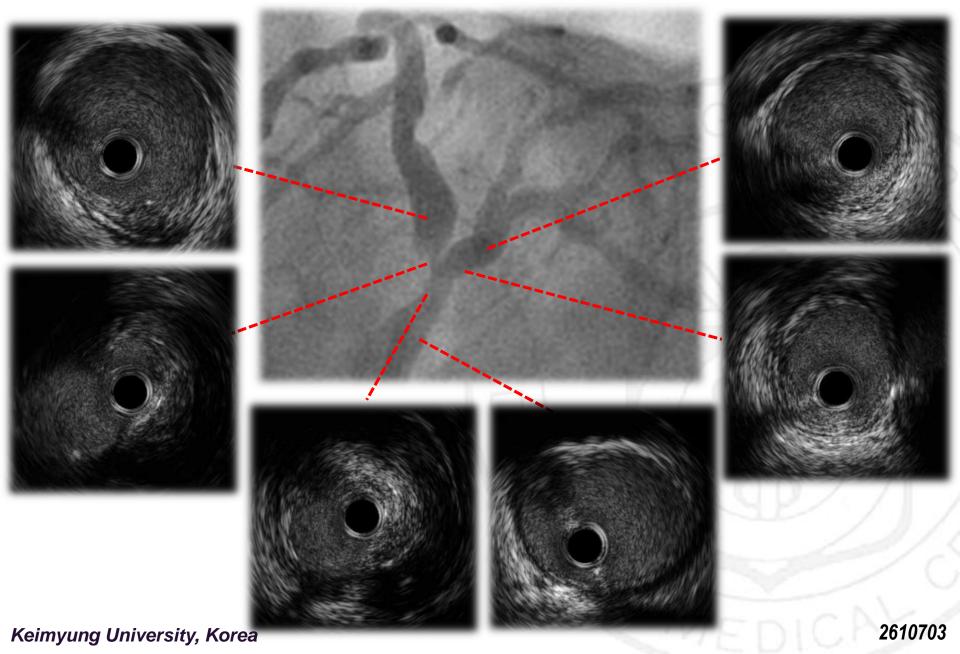
# How can we predict SB compromise?





## **Anatomic Evaluation**

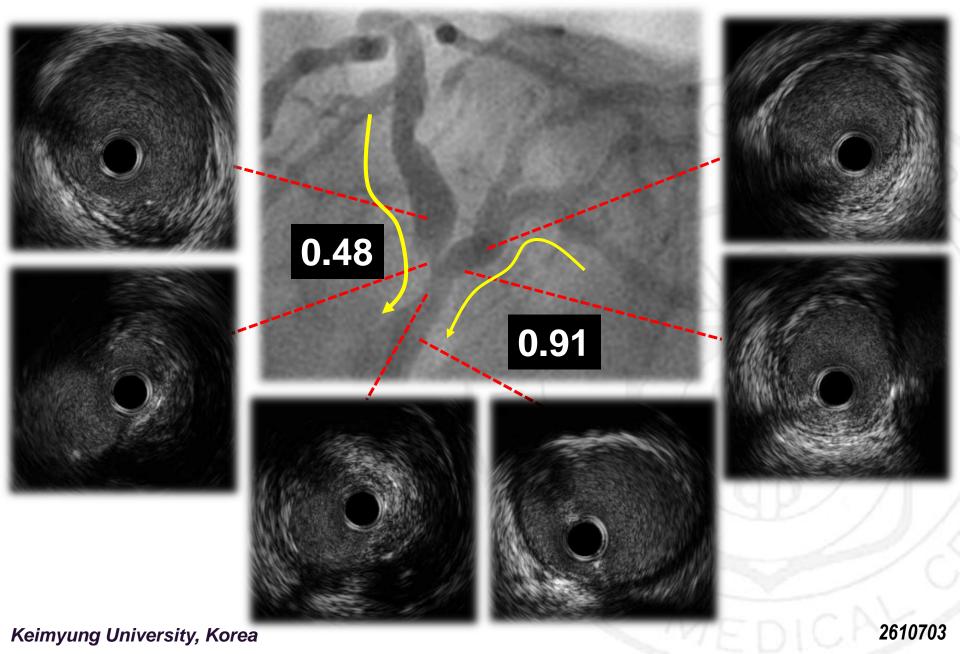






## What is your Decision?

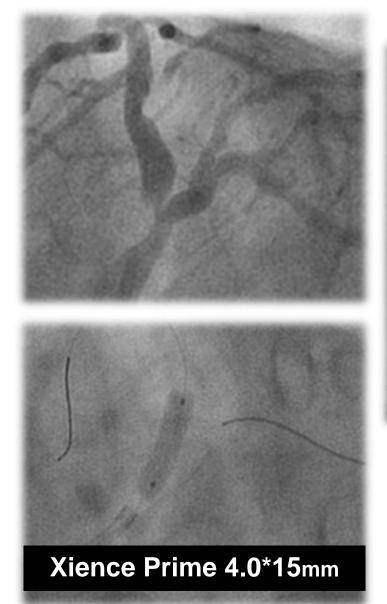


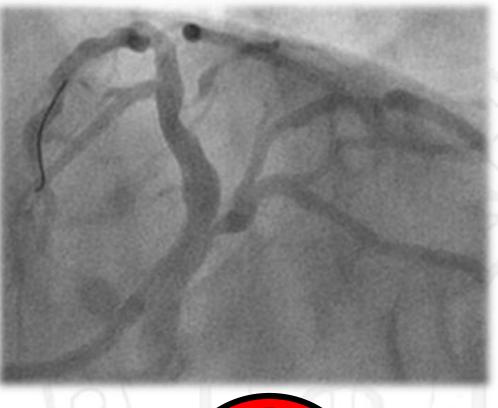




### **Simple Crossover Stenting**





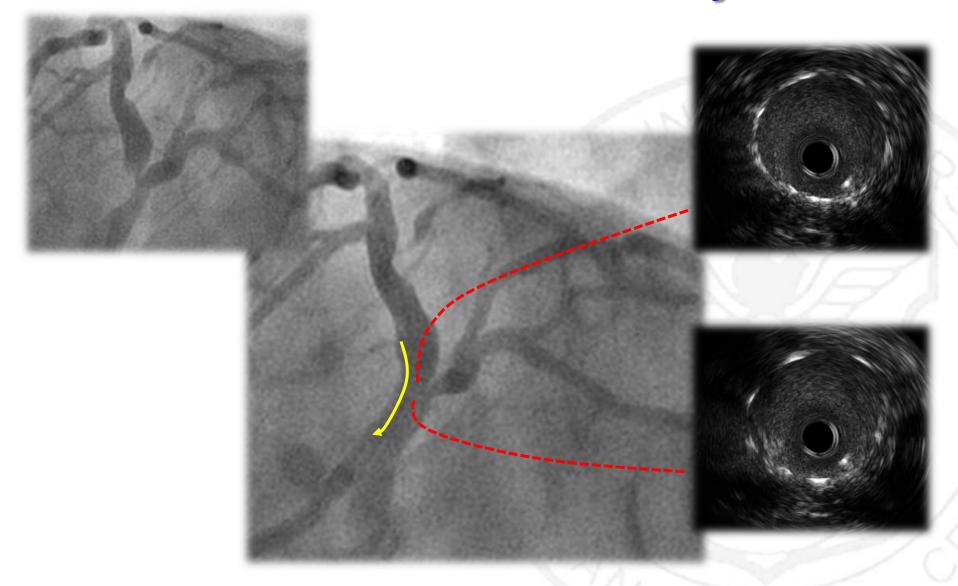






# Jailed LCXos Assessment by IVUS

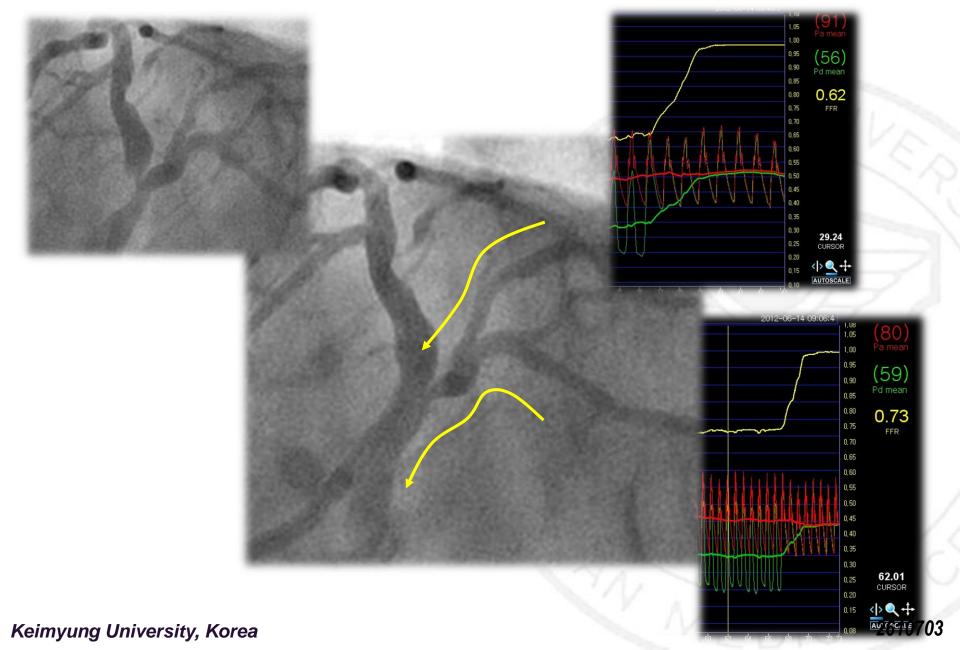






# Jailed LCXos Assessment by FFR

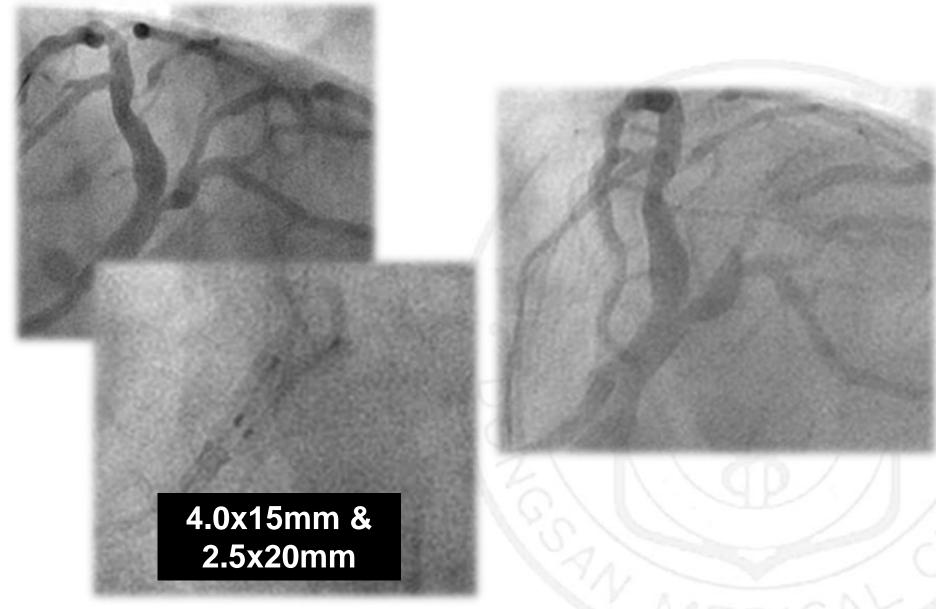






#### **Kissing Balloon for Optimization**

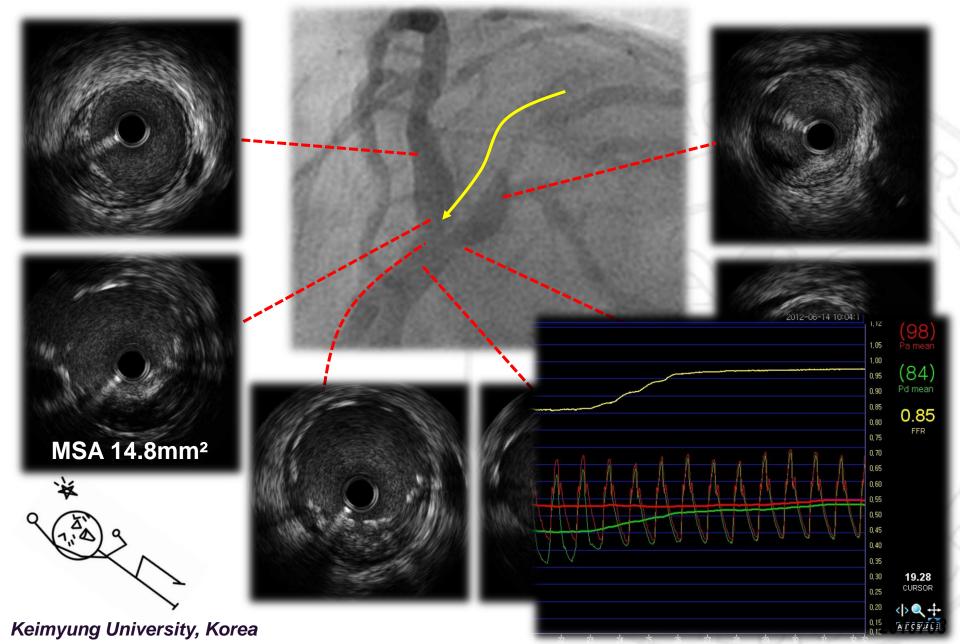






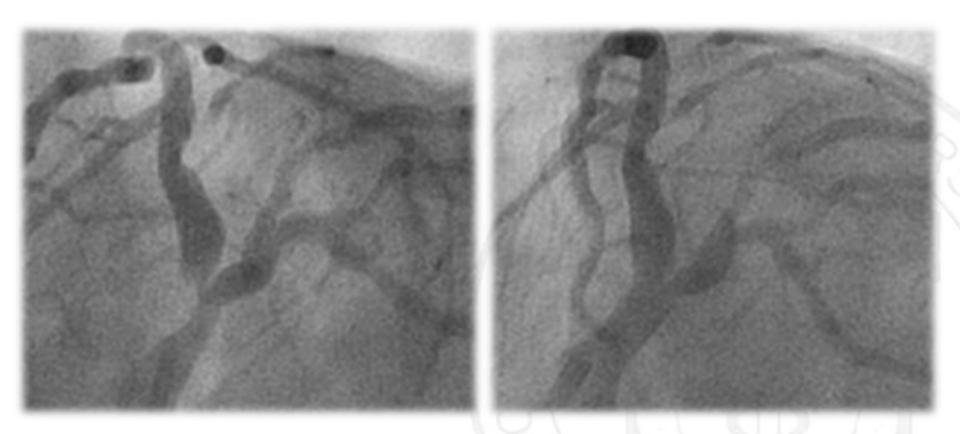
## **Result Evaluation by IVUS & FFR**







## LM bifurcation PCI with IVUS & FFR KUDH



Follow-up TMT: (-), 12.1 METs



## **Take Home Message**



- 1. Safety & efficacy issues for FFRguided defer in LM bifurcation lesion
- 2. Safety & efficacy issues for FFR-guided PCI in Jailed LCX ostial lesion.
- 3. Limitations for prediction of LCX jailing after simple crossover stenting. However, IVUS and FFR gave various information in LM bifurcation PCI.





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## Thank you for yours attention

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