

FIBER-OPTIC 0.014" PRESSURE-WIRE: USE AFTER BALLOON ANGIOPLASTY AND STENT IMPLANTATION

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DISCLOSURES

- **Consultant, Opsens**
- **Scientific Director of International Chair in Interventional Cardiology and Transradial Approach**
 - operates www.theradialist.org &
 - organizes AIM-RADIAL congress (www.aimradial.org)
 - **Chair receives funding from multiple industry and other sources**
 - **O₂ FIM study management and data analysis**

CASE STORY

- 83 year old man
- RF: glucose intolerance, hypertension
- crescendo angina
- Exercise test +/+ 5 minutes

CAUDAL RAO VIEW



NOT FOR MEDICAL USAGE

CRANIAL RAO VIEW

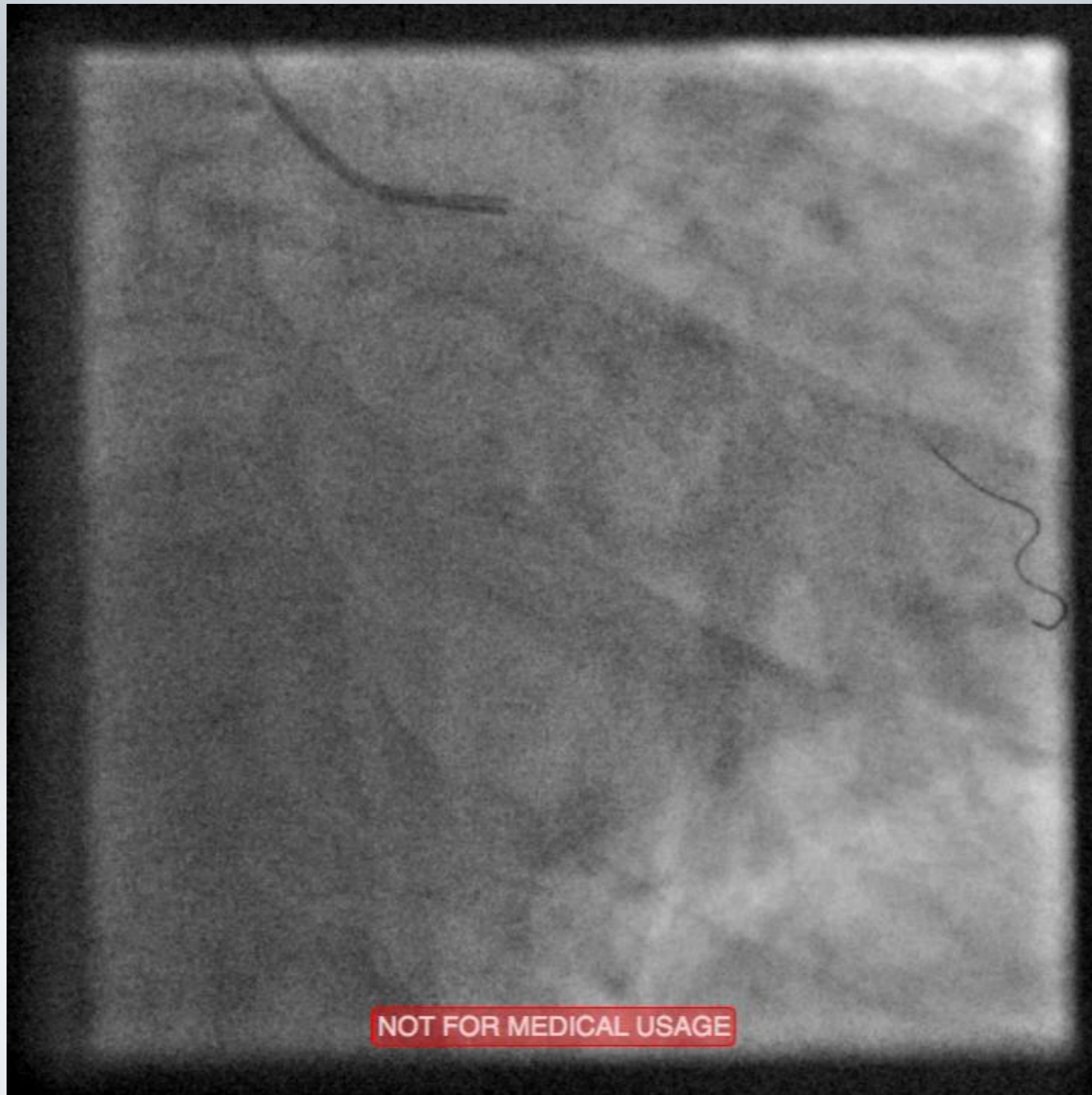


NOT FOR MEDICAL USAGE

LATERAL VIEW



FFR IN CX ARTERY

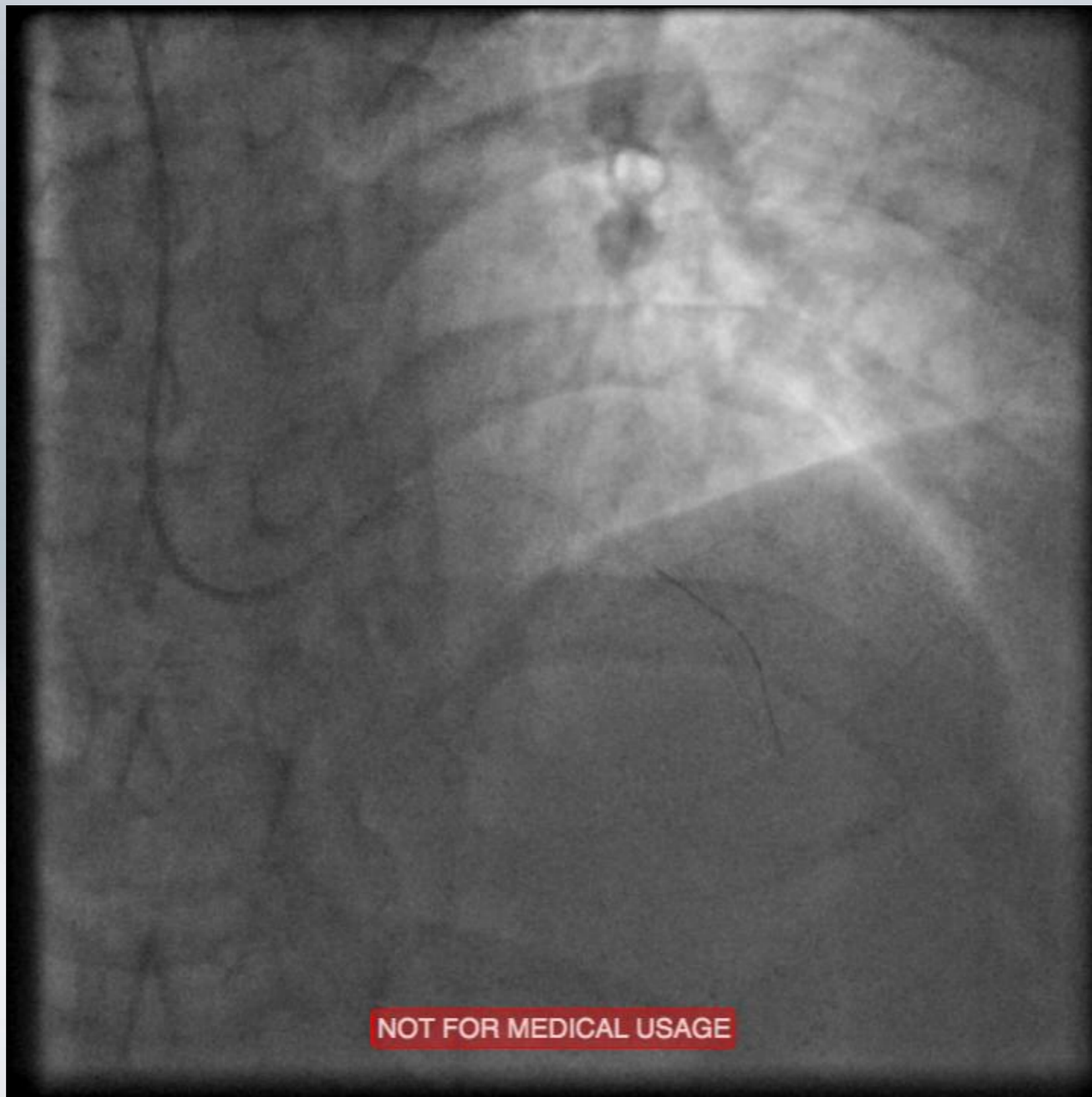


FFR IN CX ARTERY

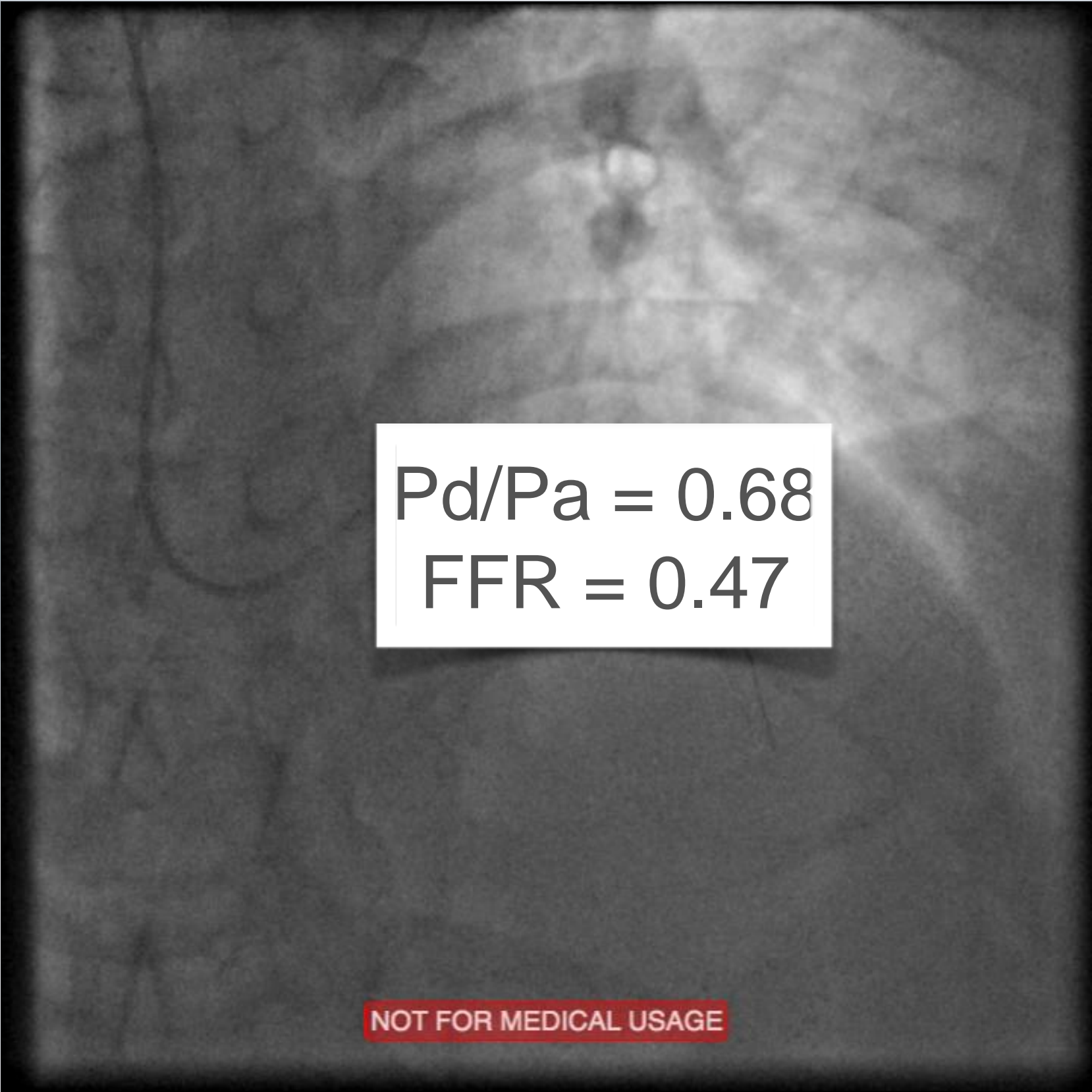
$P_d/P_a = 0.94$
 $FFR = 0.90$

NOT FOR MEDICAL USAGE

FFR IN LAD ARTERY



FFR IN LAD ARTERY



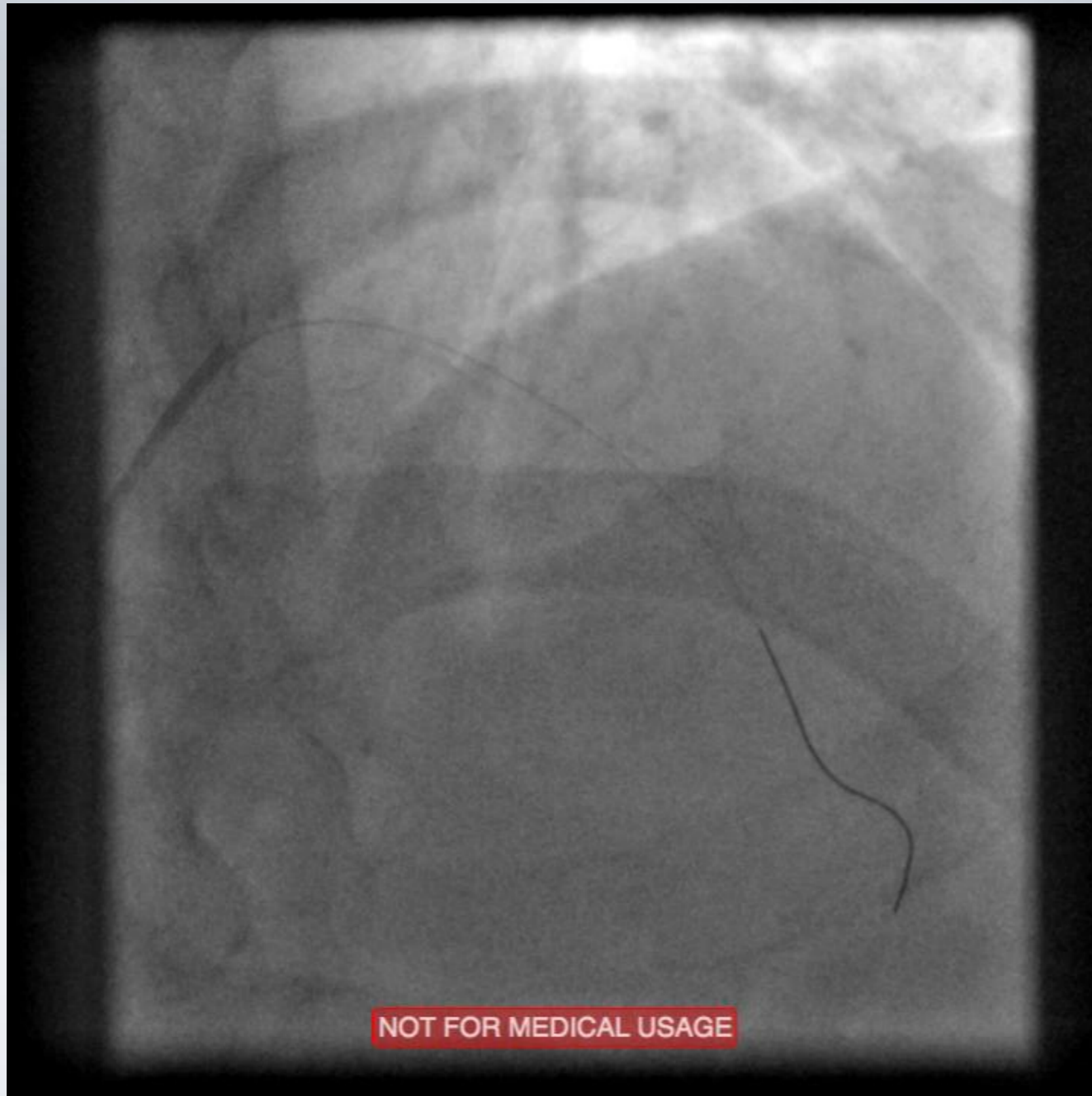
$Pd/Pa = 0.68$
 $FFR = 0.47$

NOT FOR MEDICAL USAGE

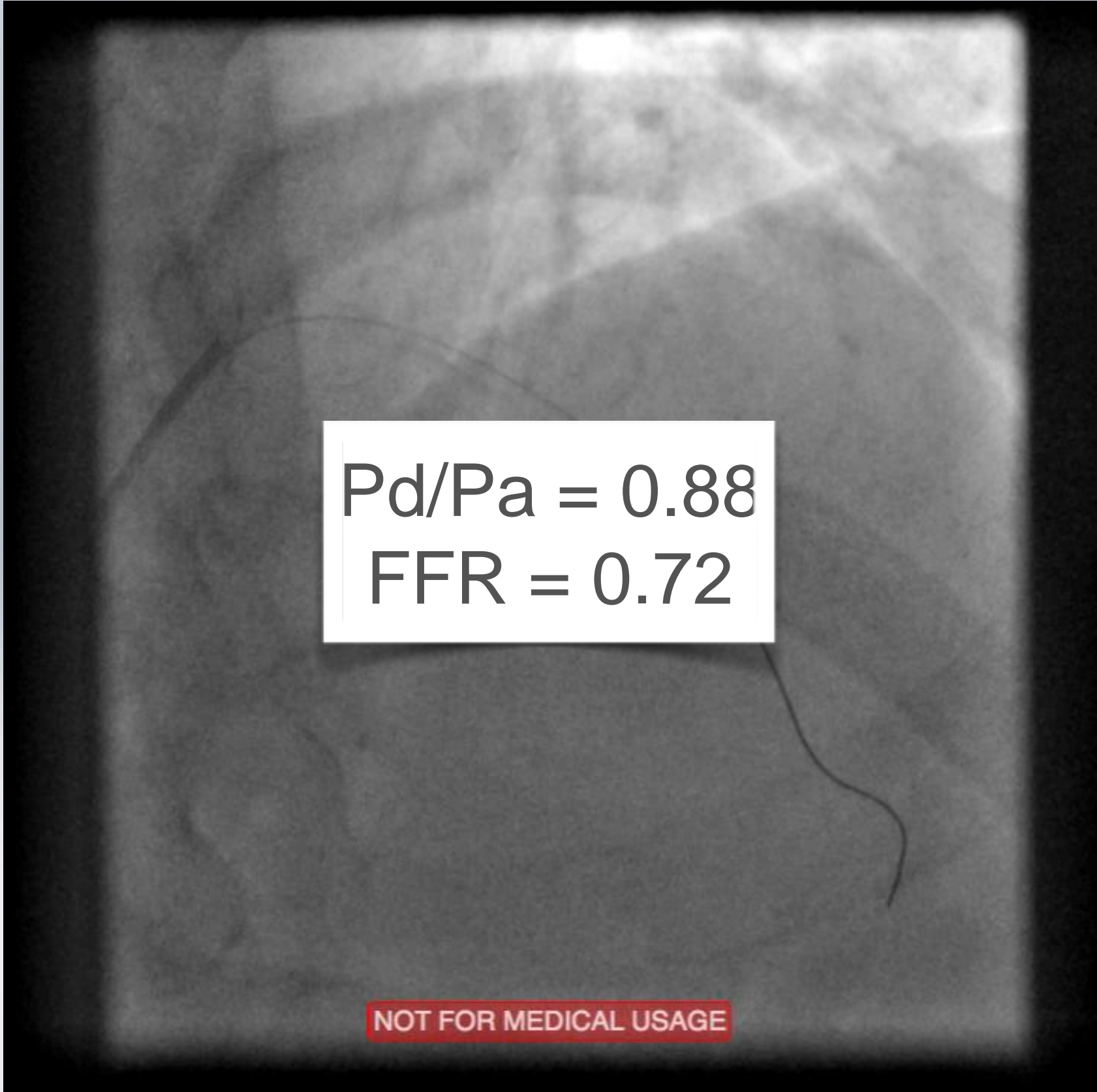
BALLOON 2.0MM



POST-BALLOON 1



POST-BALLOON 1



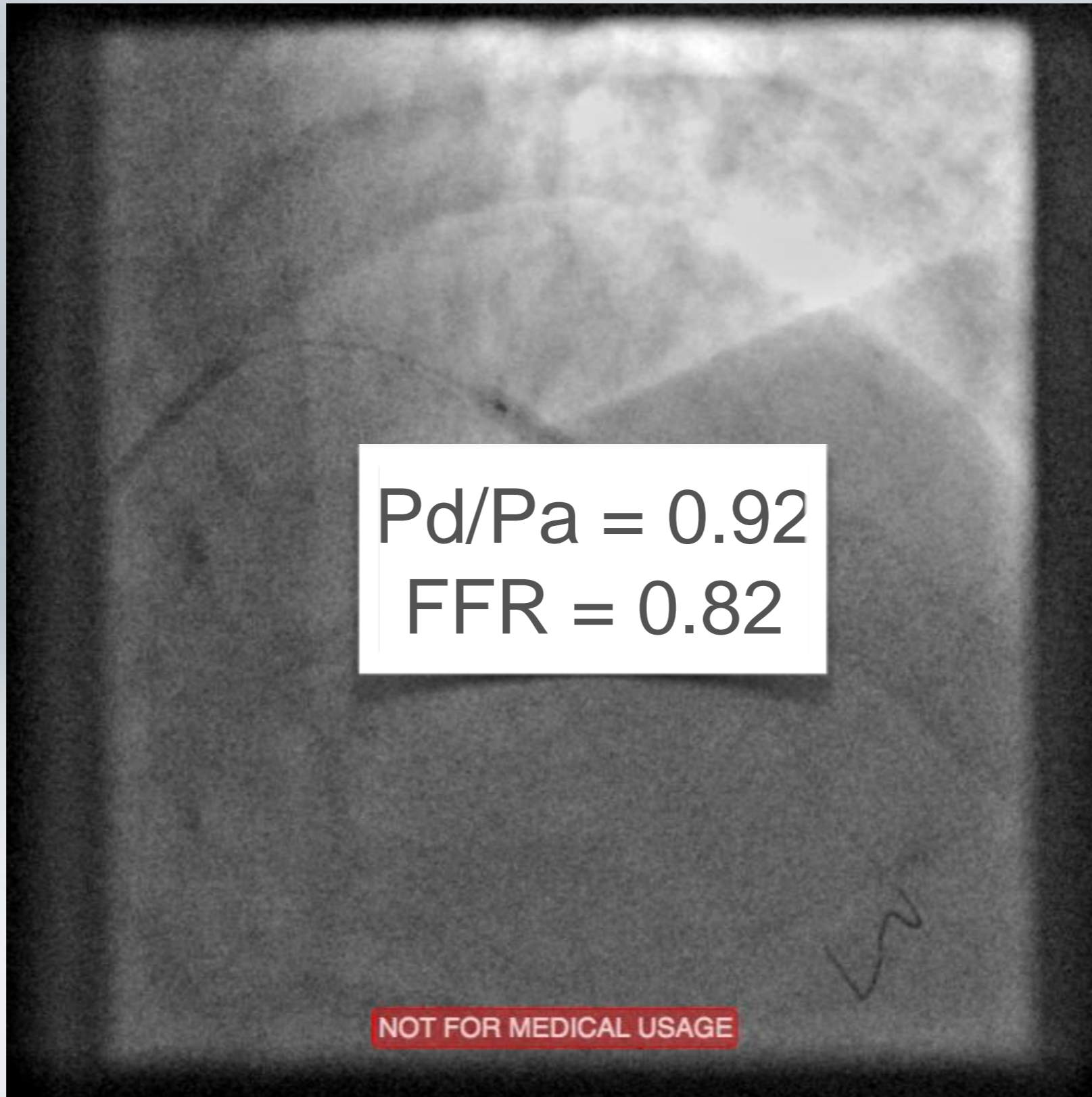
$Pd/Pa = 0.88$
 $FFR = 0.72$

NOT FOR MEDICAL USAGE

BALLOON 3.0 MM



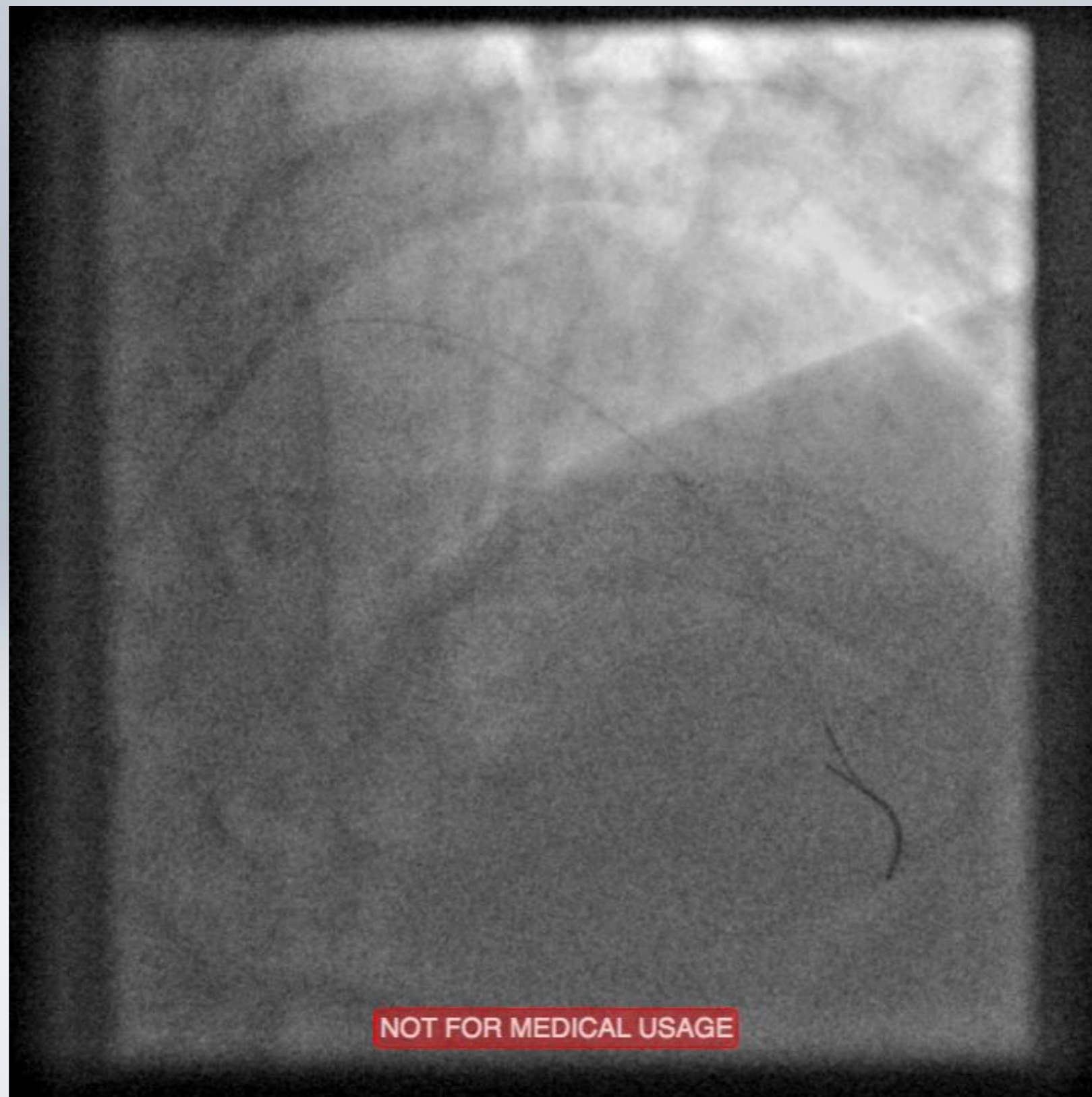
BALLOON 3.0 MM



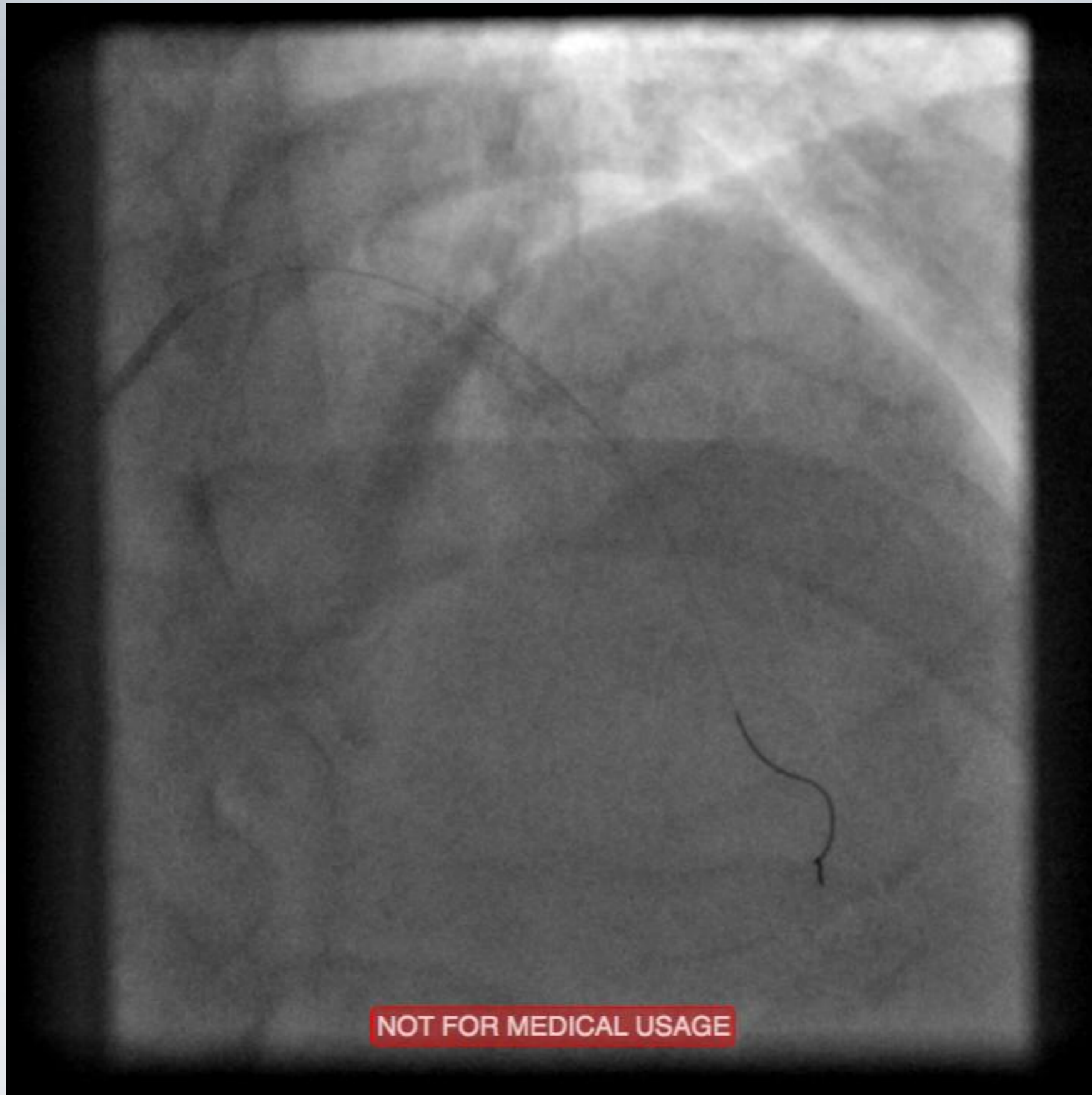
$Pd/Pa = 0.92$
 $FFR = 0.82$

NOT FOR MEDICAL USAGE

STENT IMPLANTATION



POST-STENT 1

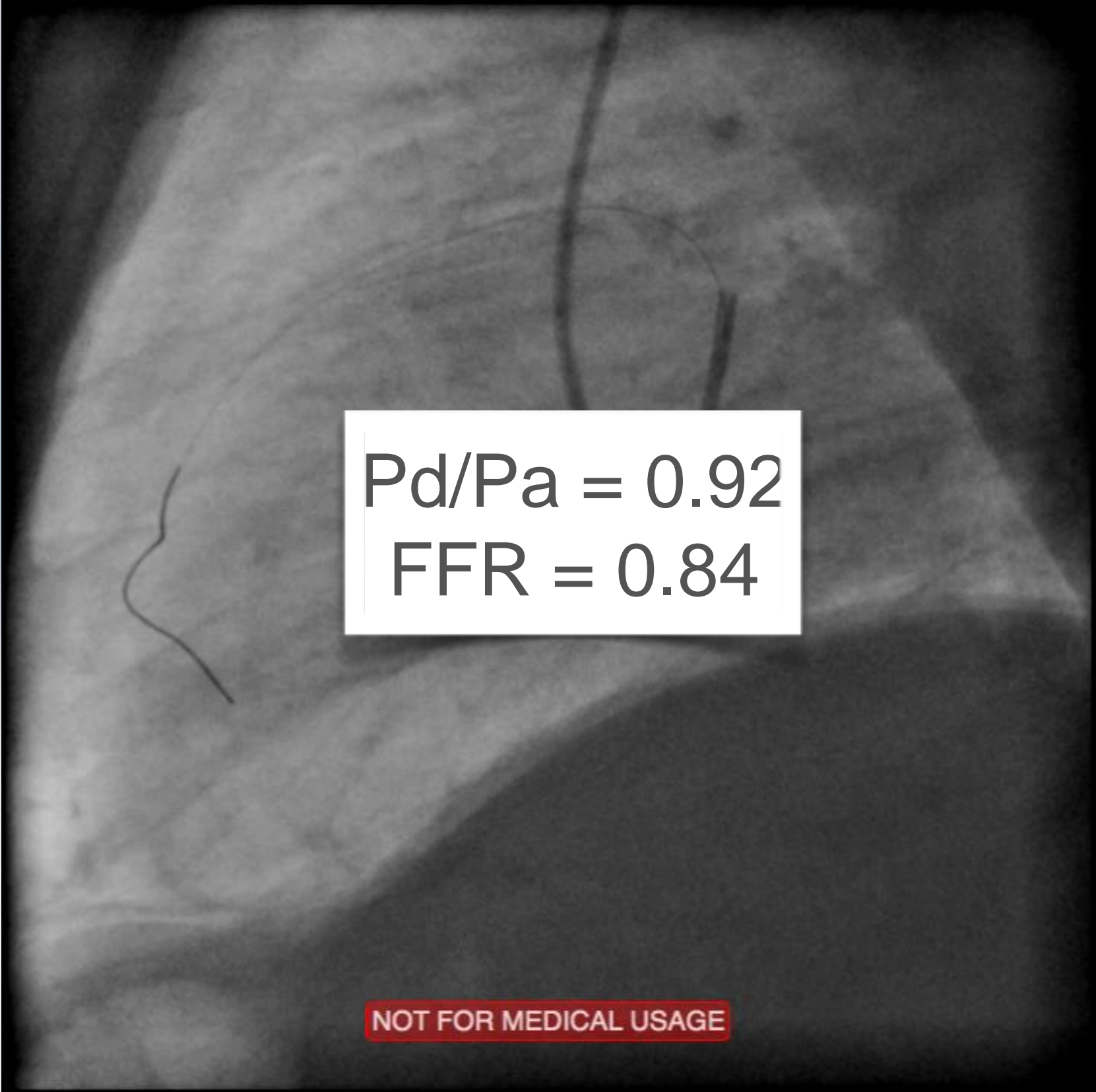


POST-STENT 2



NOT FOR MEDICAL USAGE

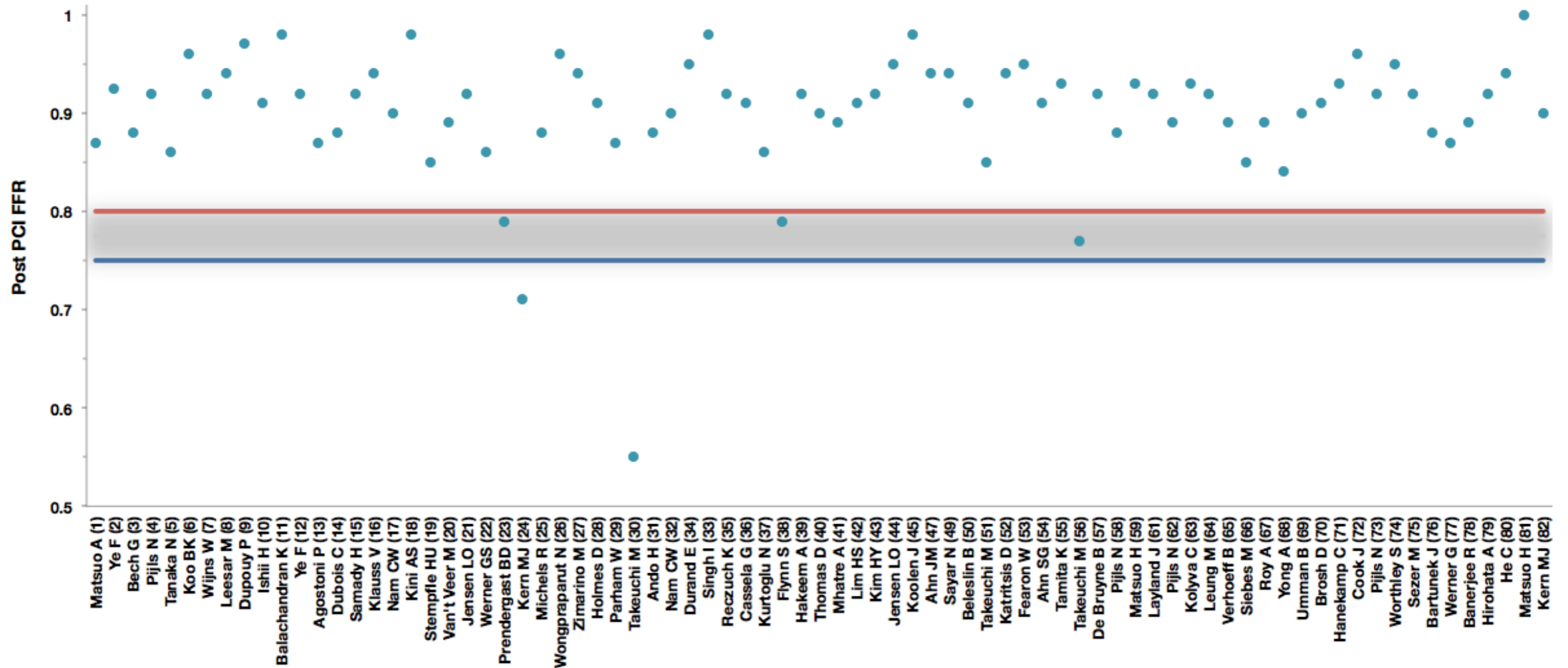
POST-STENT 2



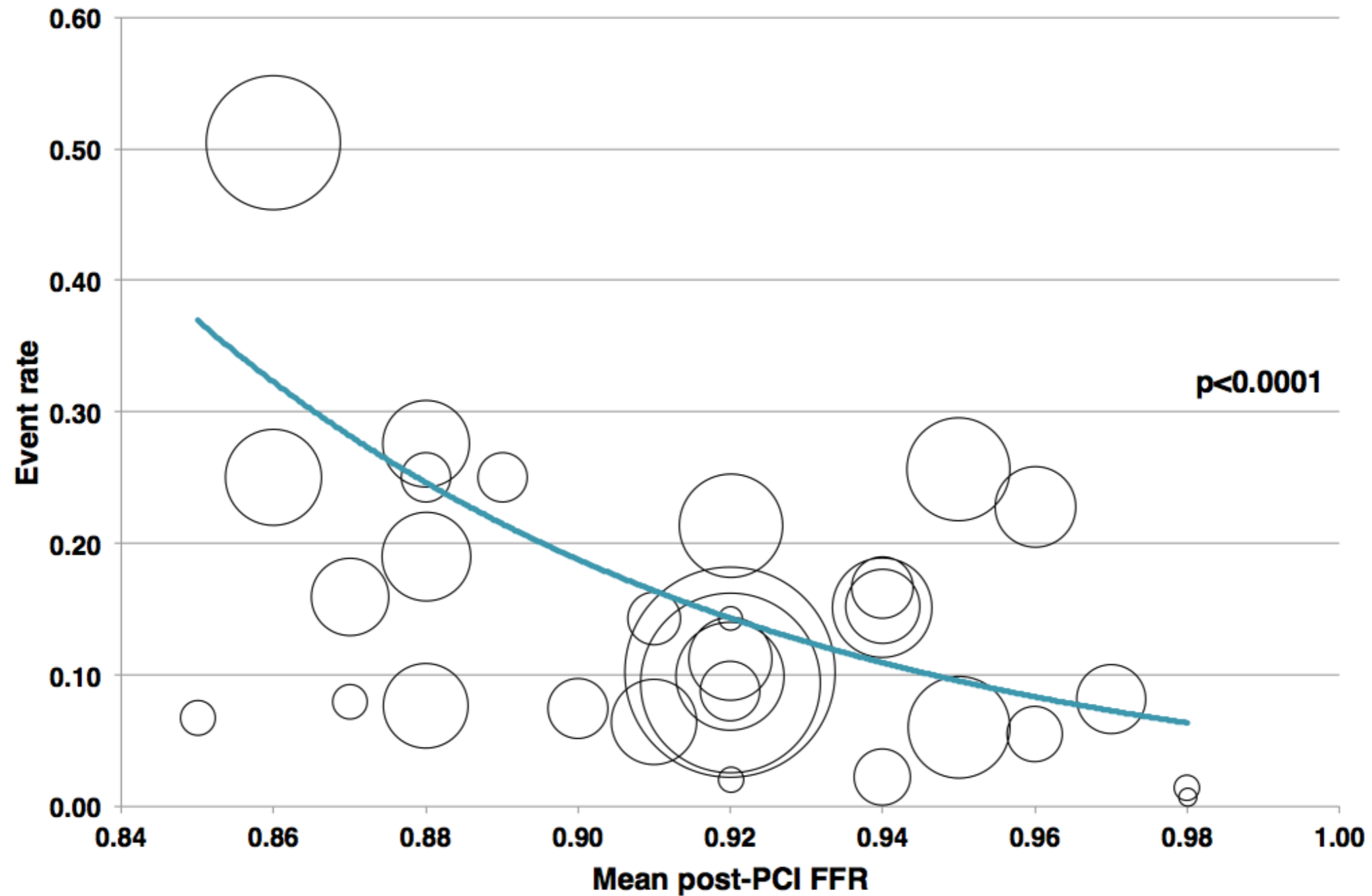
$Pd/Pa = 0.92$
 $FFR = 0.84$

NOT FOR MEDICAL USAGE

FFR POST-PCI



FFR POST-PCI AND MACE



CONCLUSION

- FFR post-stent generally higher than post-balloon in accordance with lower residual pressure gradient
- Atherosclerosis is a diffuse process, hence perfect (1.0) result unlikely
- Is there a relationship between immediate post-PCI and clinical outcomes ?
- Is there a threshold value ?