

Evening Symposium

DA access

Laborde JC , MD

St.George's hospital, London , UK

TAVI Summit 2014, Seoul, August 8th

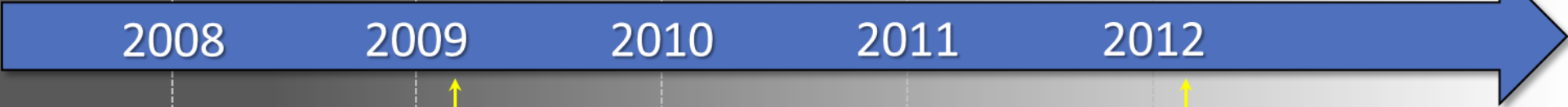
Progression of Direct Aortic (DA)

First CoreValve DA Implant
at German Heart Center Munich
June-2008
(R. Bauernschmitt)
Munich, Germany

First DA Implant
at Niguarda Ca' Granda Hospital
Dec-2009
(G. Bruschi)
Milan, Italy

First DA Implant
at Royal Brompton
May-2009
(N. Moat)
London, UK

CoreValve DA Approach
received CE Mark
Nov-2011



First CoreValve DA Publication
Feb-2009
R. Bauernschmitt¹

CoreValve DA Multicenter
Experience Publication
Jan-2012
N. Moat &
EU CoreValve Collaborative Group²

¹ Bauernschmitt R, Schreiber C, Bleiziffer S, et al. The Heart Surgery Forum. 2009; ² Moat N, Laborde JC, Bruschi G, et al. STS 2012

Access Selection

Strategy

- ✓ Percutaneous
- ✓ Local anesthesia

Femoral Access



Left Axillary Access

- ✓ Surgical cut-down
- ✓ Local / General anesthesia

Supra Aortic Arch Access



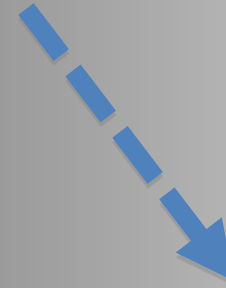
Direct aortic Access

- ✓ Surgical cut-down
- ✓ General anesthesia
- ✓ Thoracotomy



- ✓ Surgical cut-down
- ✓ General anesthesia
- ✓ Thoracotomy
- ✓ Ventriculotomy

Trans-apical Access



Direct Aortic TAVI

A familiar approach to treat more patients

Direct Aortic implantation expands patient access to TAVI

- Additional approach expands access for those patients who are not candidates for either the femoral or subclavian approach.
- Familiar access through a mini-sternotomy or mini-thoracotomy
- Pericardial dissection and direct heart muscle manipulation are not required



Bruschi G, et al. Direct Aortic Access Through Right Minithoracotomy for Implantation of Self-Expanding Aortic Bioprosthesis Valves ¹

“The direct aortic approach technique provides a direct access to the aortic annulus, allowing an easier manipulation and delivery of the device.”

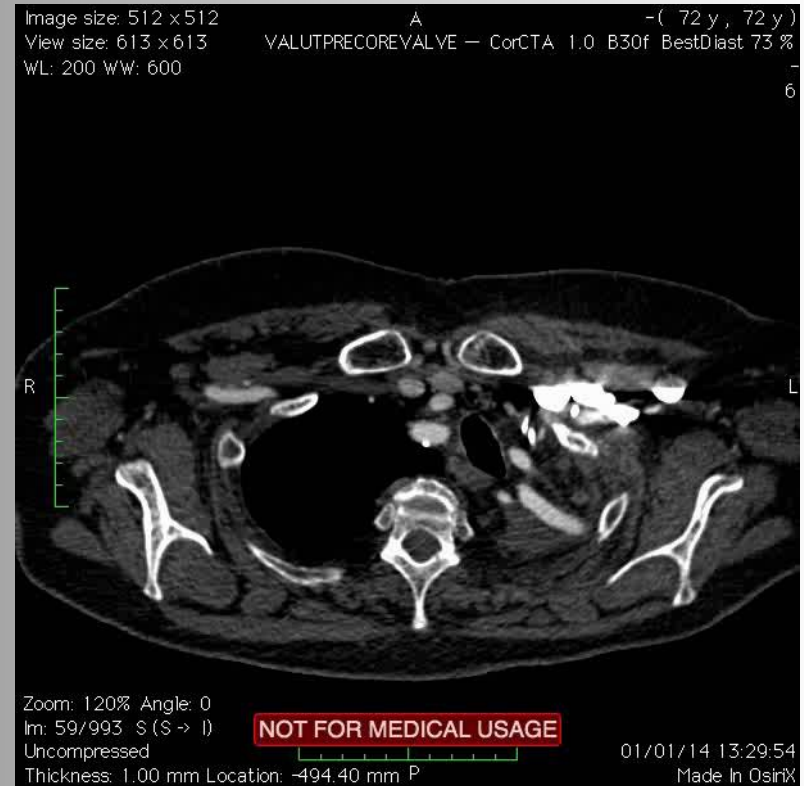
Bruschi G, De Maro F, Fratto P, et al.¹

Direct Aortic TAVI

A familiar approach to treat more patients

Direct Aortic implantation expands patient access to TAVI

- Rare anatomy or clinical challenges or contra-indications



“The direct aortic approach technique provides a direct access to the aortic annulus, allowing an easier manipulation and delivery of the device.”

Bruschi G, De Maro F, Fratto P, et al.¹

Direct Aortic Technique

1. Select route and aortic access site using a pre-operative CT.
 - > 6 cm from the valve basal plane and free of calcification.
2. Perform aortography with forceps on access site to evaluate distance to the basal plane and maximize coaxial alignment.
3. Use Seldinger technique or direct cannulation to access aorta.

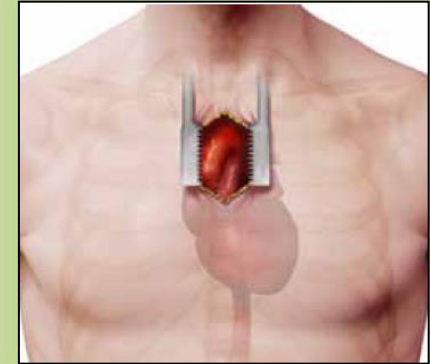
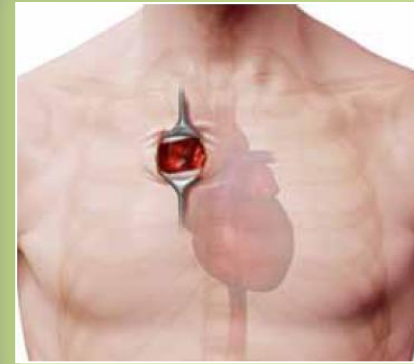
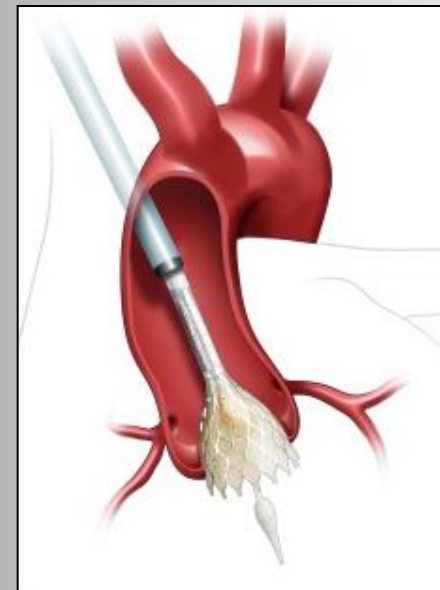
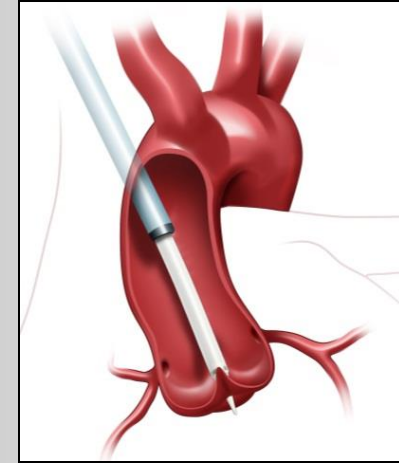
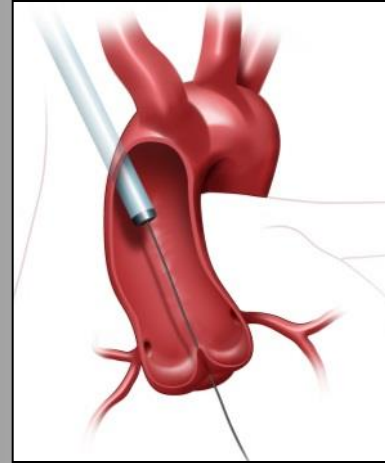


Image courtesy of Dr. Giuseppe Bruschi

Direct Aortic Technique

4. Perform guidewire-catheter exchange and insert introducer 2 cm into the aortic lumen.
5. Cross the native valve using the atraumatic tapered tip on the standard retrograde delivery system.
6. During deployment, full valve functionality and partial repositionability provide time for evaluation and adjustment.
7. Withdraw delivery catheter, remove introducer, and utilize purse-string sutures to maintain effective hemostasis.



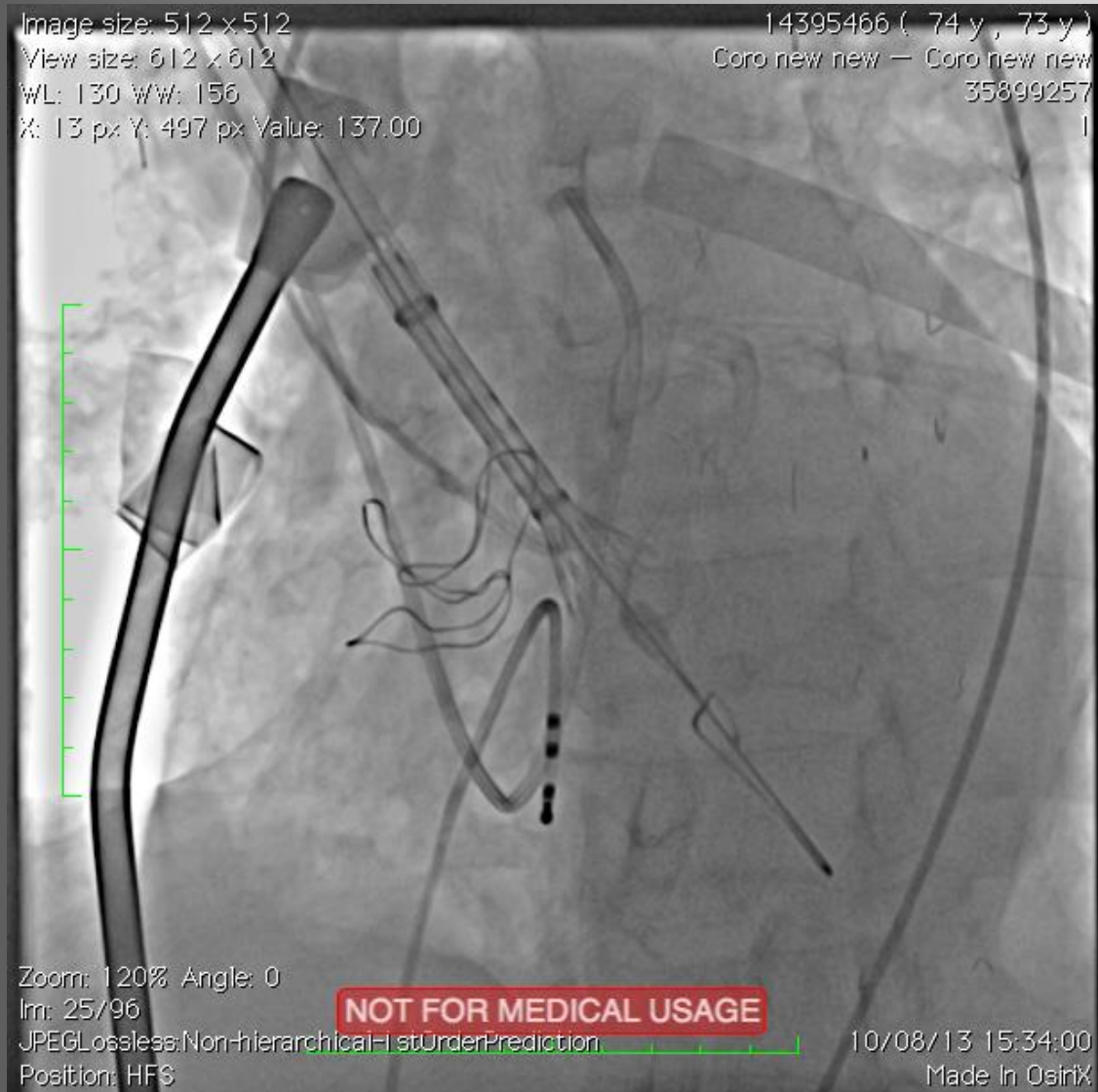
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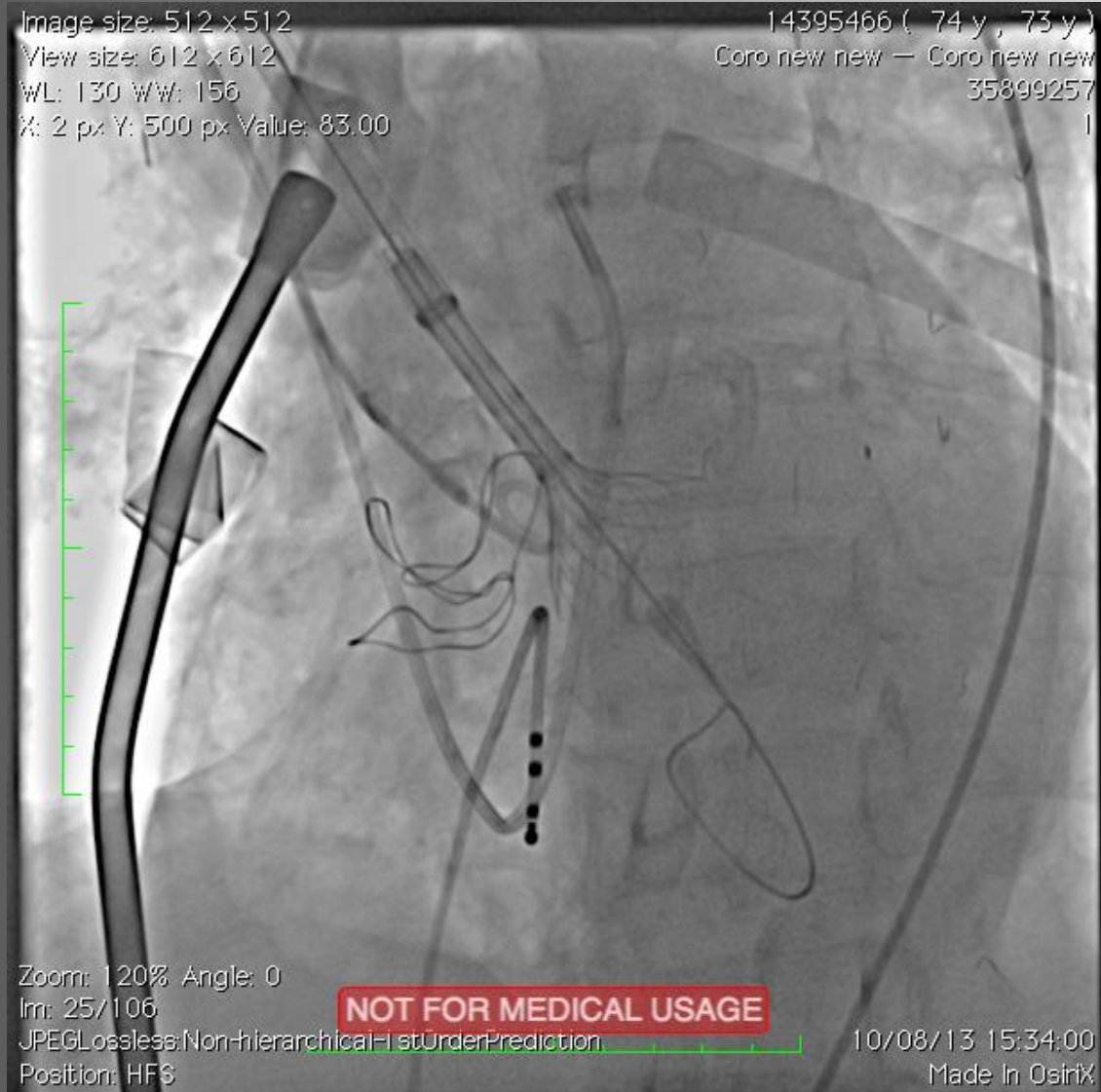
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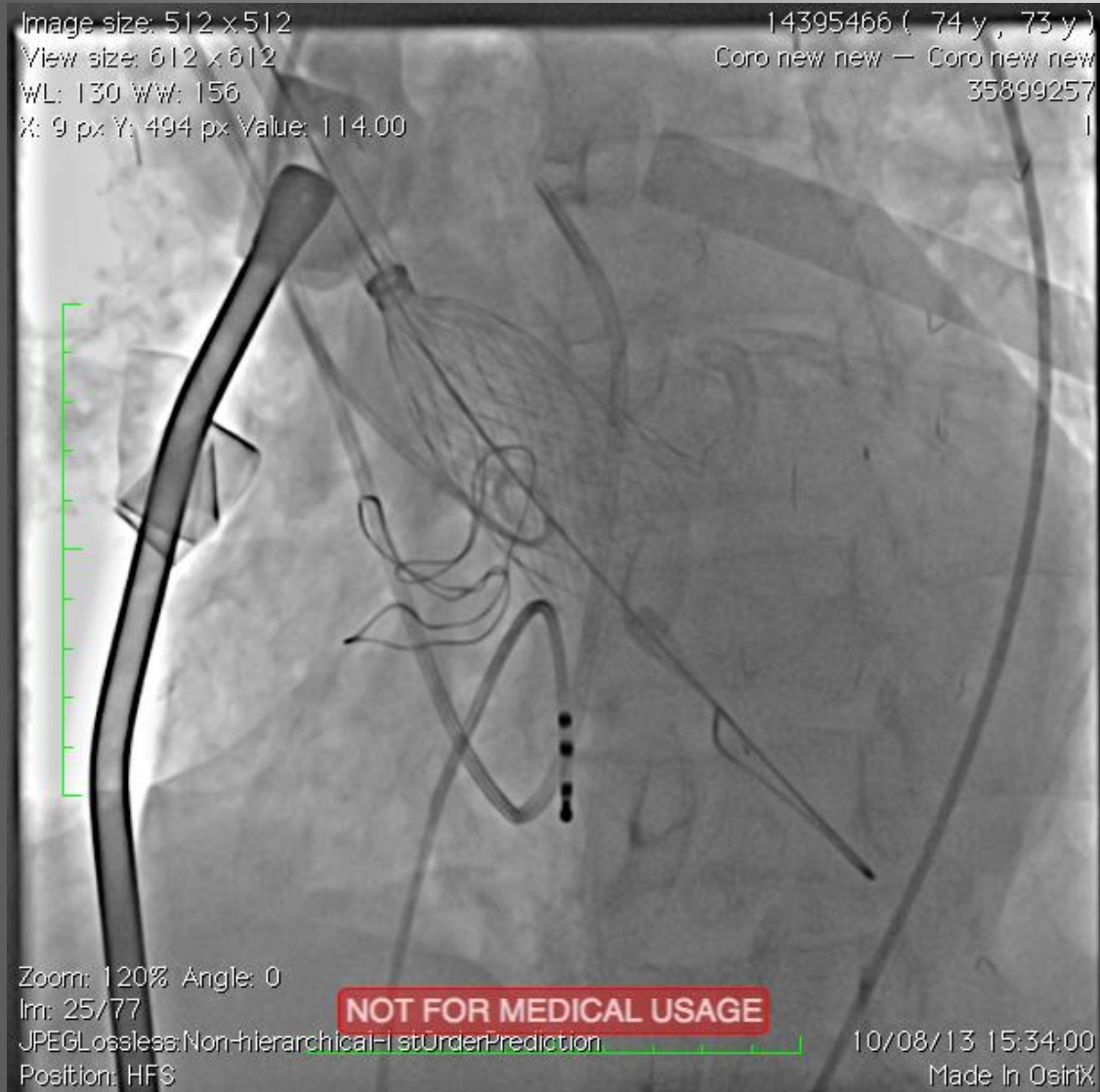
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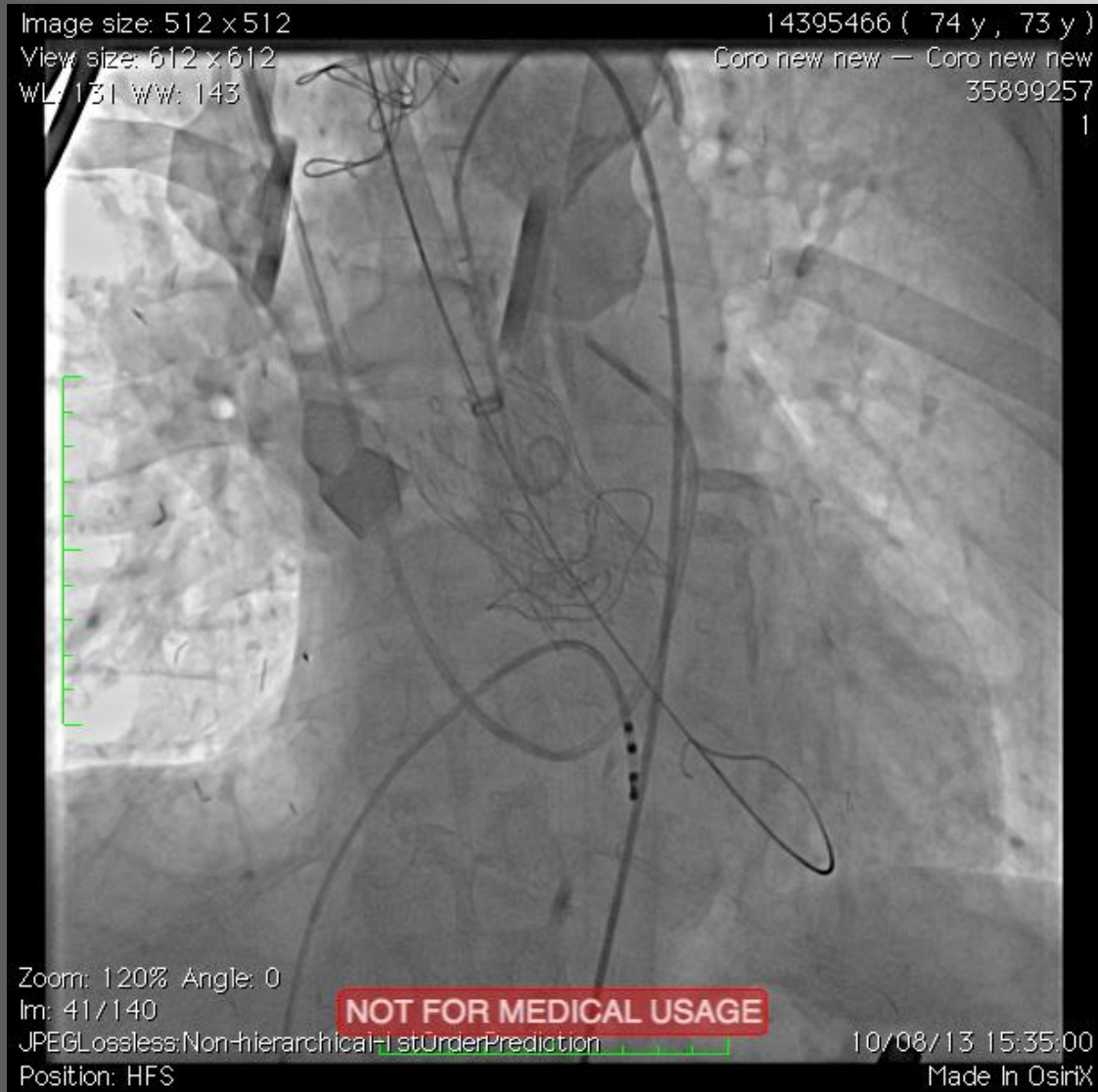
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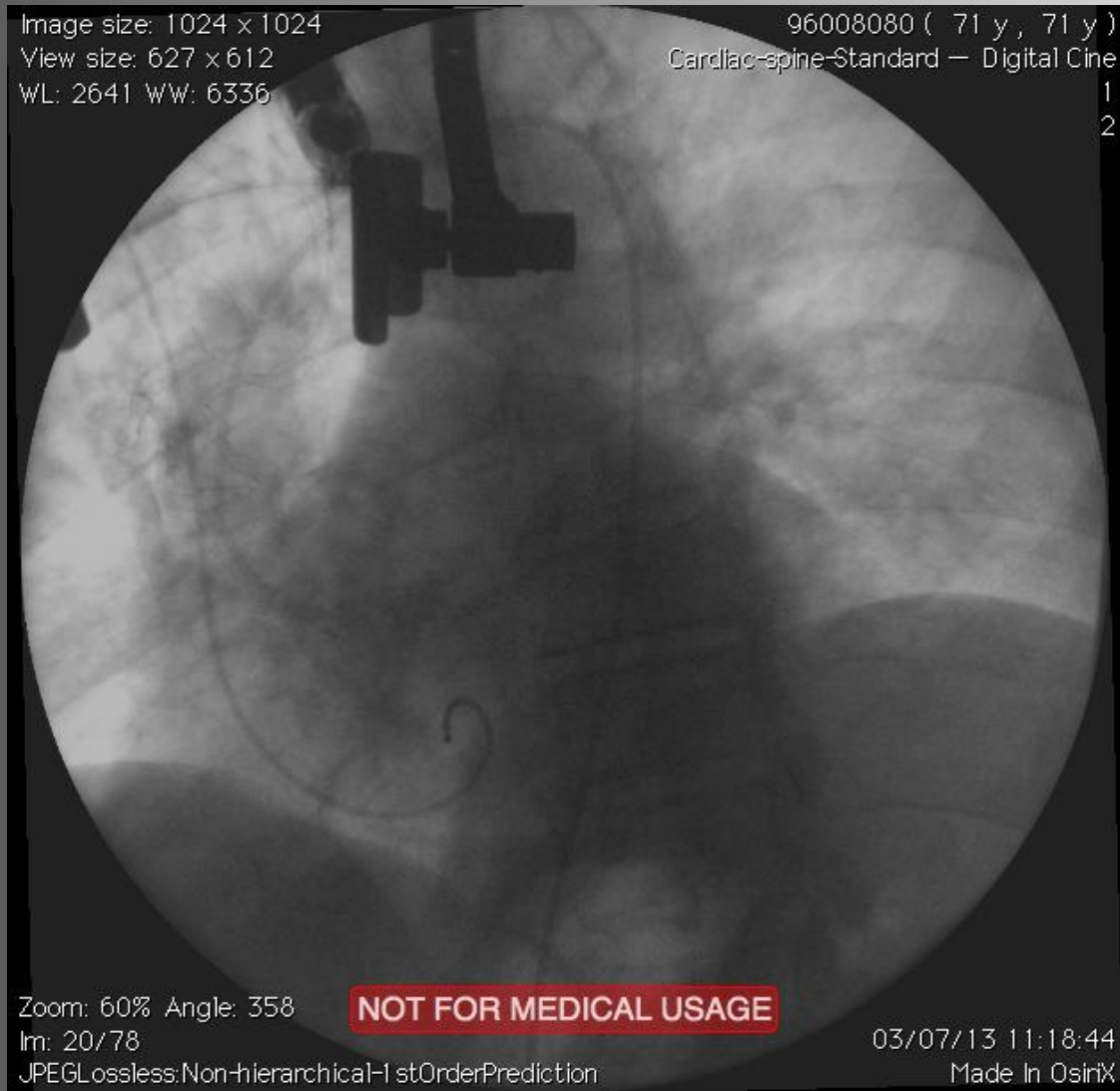
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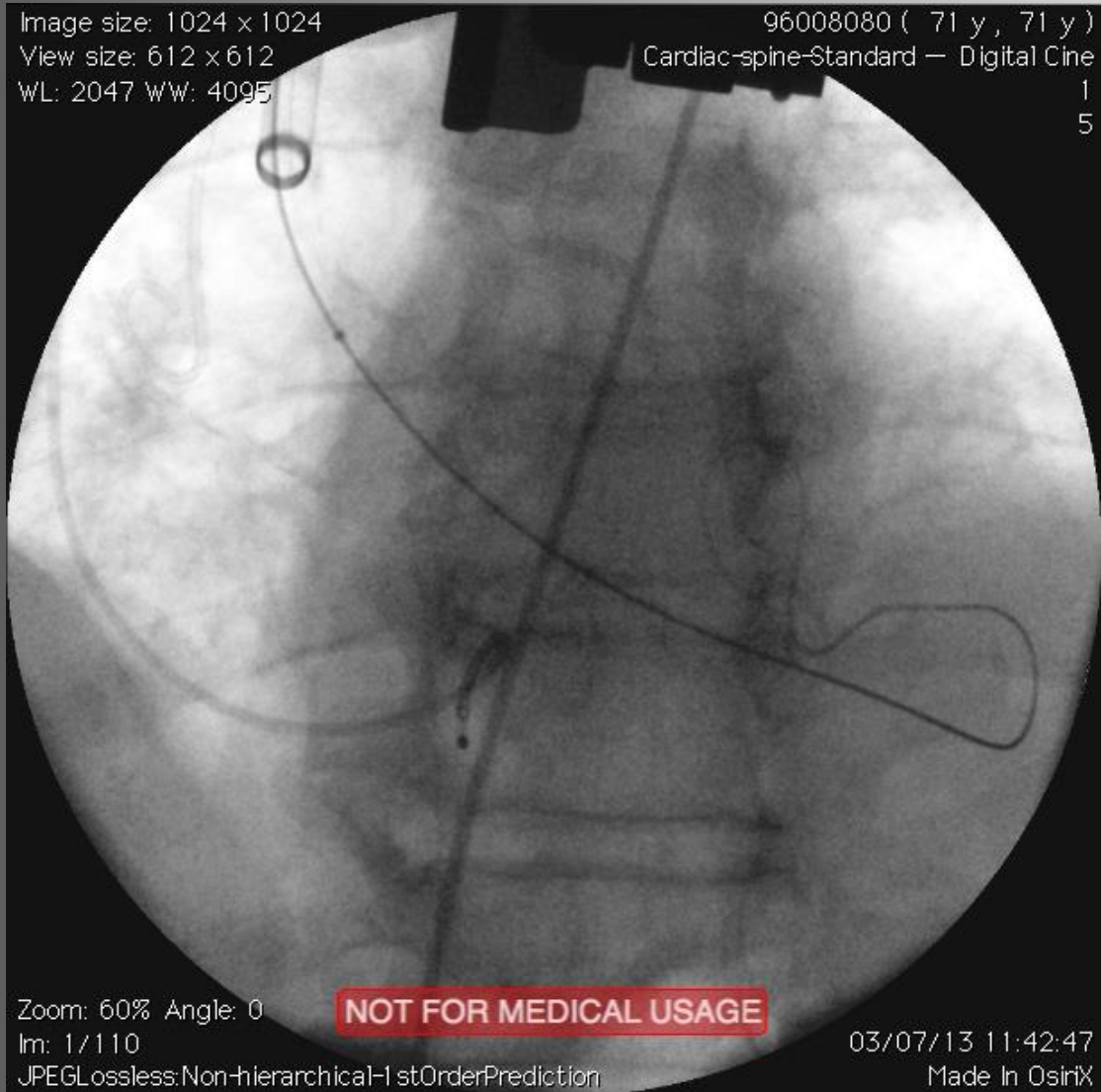
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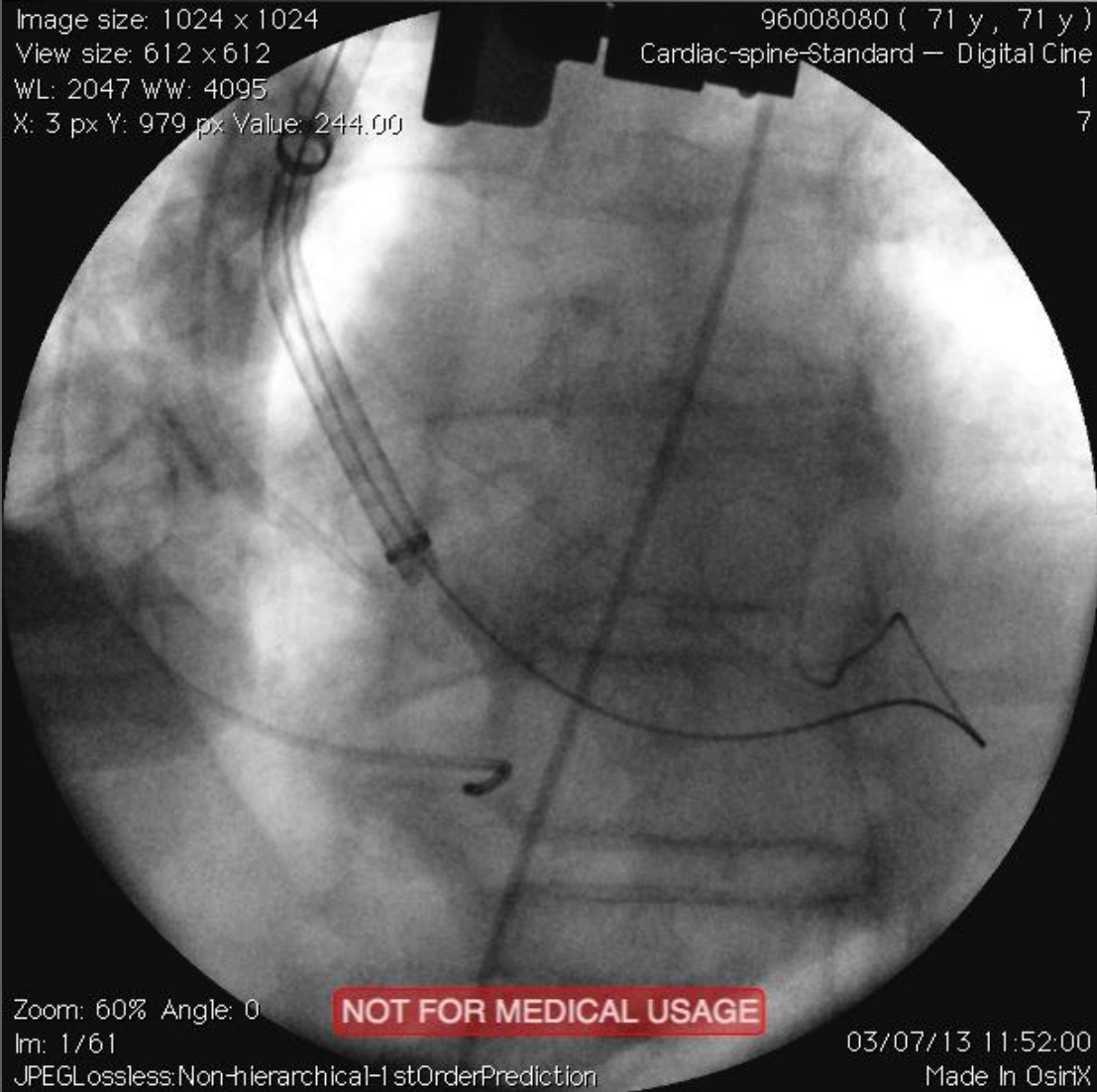
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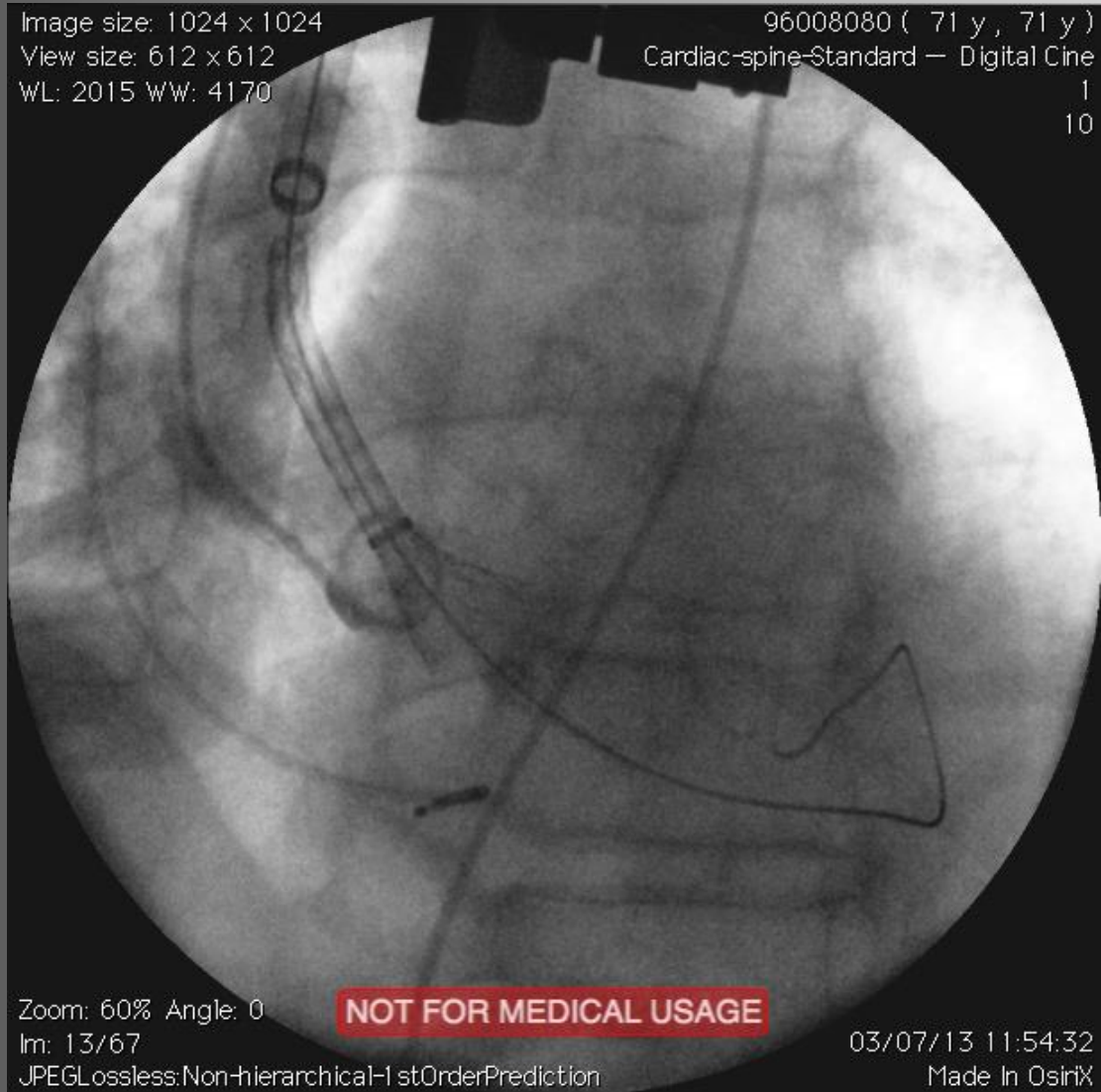
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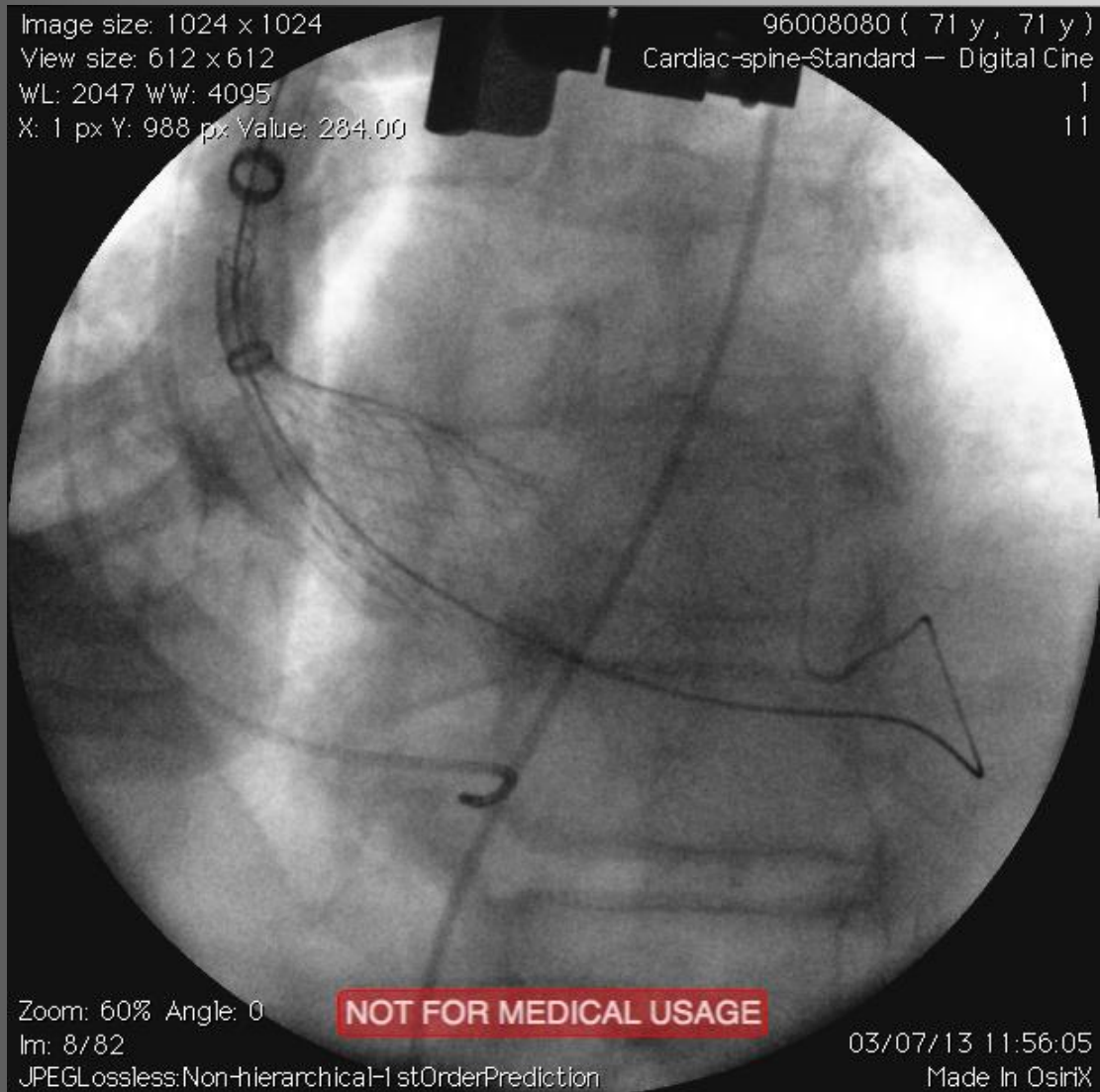
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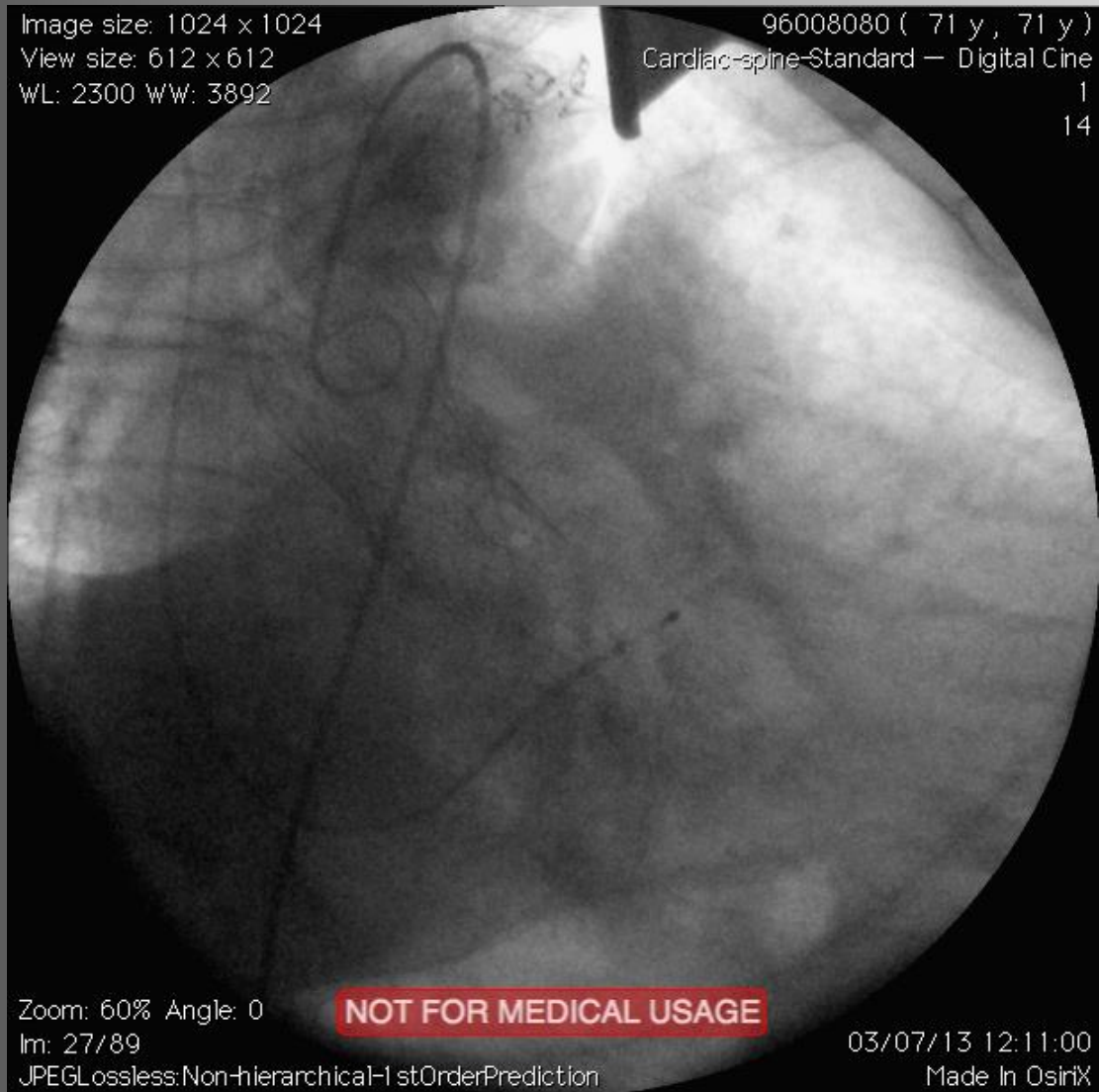
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Case 2

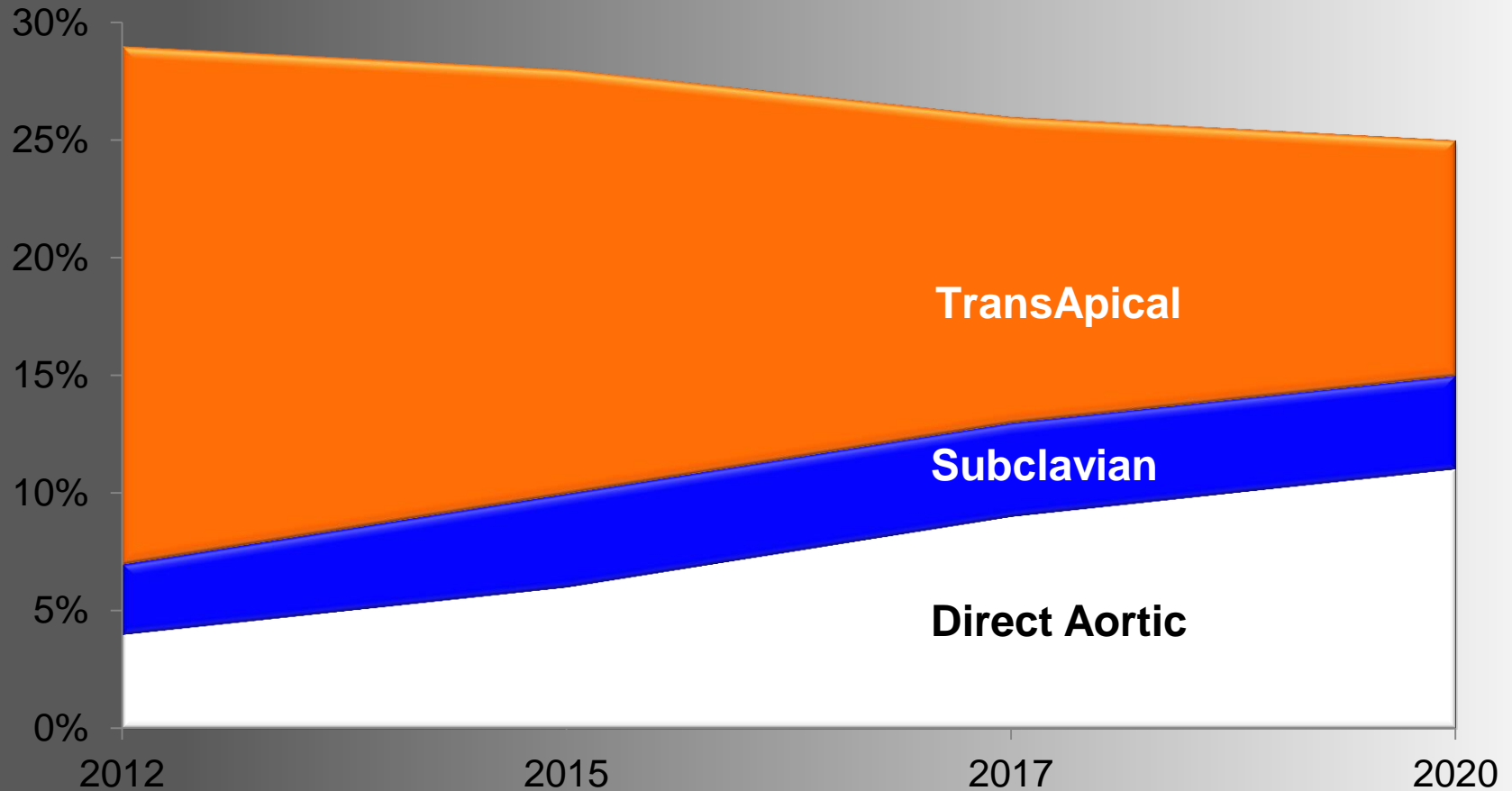


Case 2



Non-Femoral Access Trends

1 in 4 Patients Will Continue to Benefit From Non-TF access



Conclusions

- Options are Critical for TAVI Patient Success
 - Vascular limitations and anatomical challenges are common in the TAVI population
- Alternative Access Options are Safe and Feasible
- Subclavian and Direct Aortic Implantation Show Positive Results
 - High procedural success
 - Positive long-term outcomes
- Heart teams need the right options to achieve the best outcomes with every patient