

LAA Closure with WATCHMAN FLX

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Potential conflicts of interest

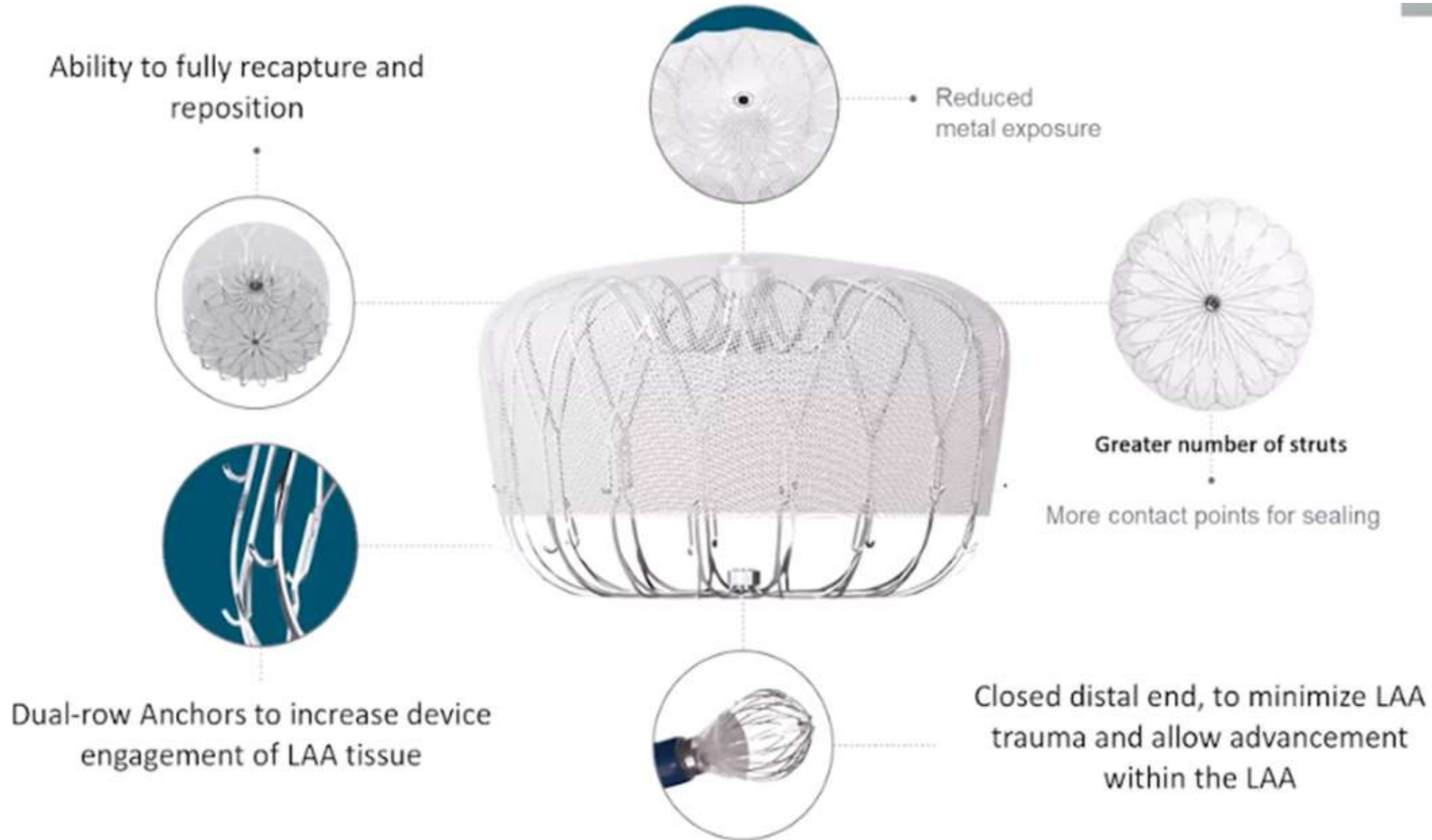
Speaker's name : Shunsuke Kubo

I have the following potential conflicts of interest to declare:

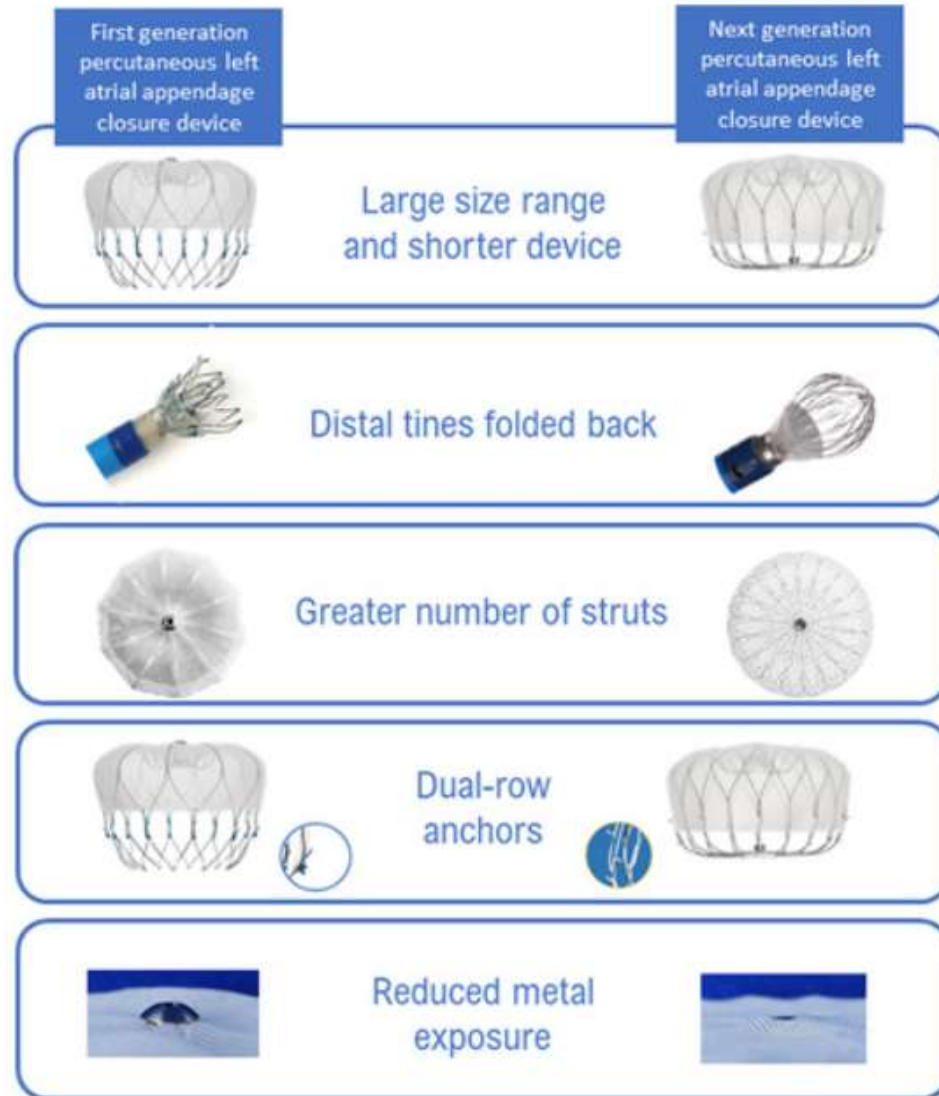
Clinical Proctor : Boston Scientific, Abbott Medical

Honoraria or consultation fees : Boston Scientific, Abbott Medical

WATCHMAN FLX Device



Change from Gen 2.5 to FLX



Treatable up to 31.5mm of LAA ostium
Device can be implanted for shallow LAA

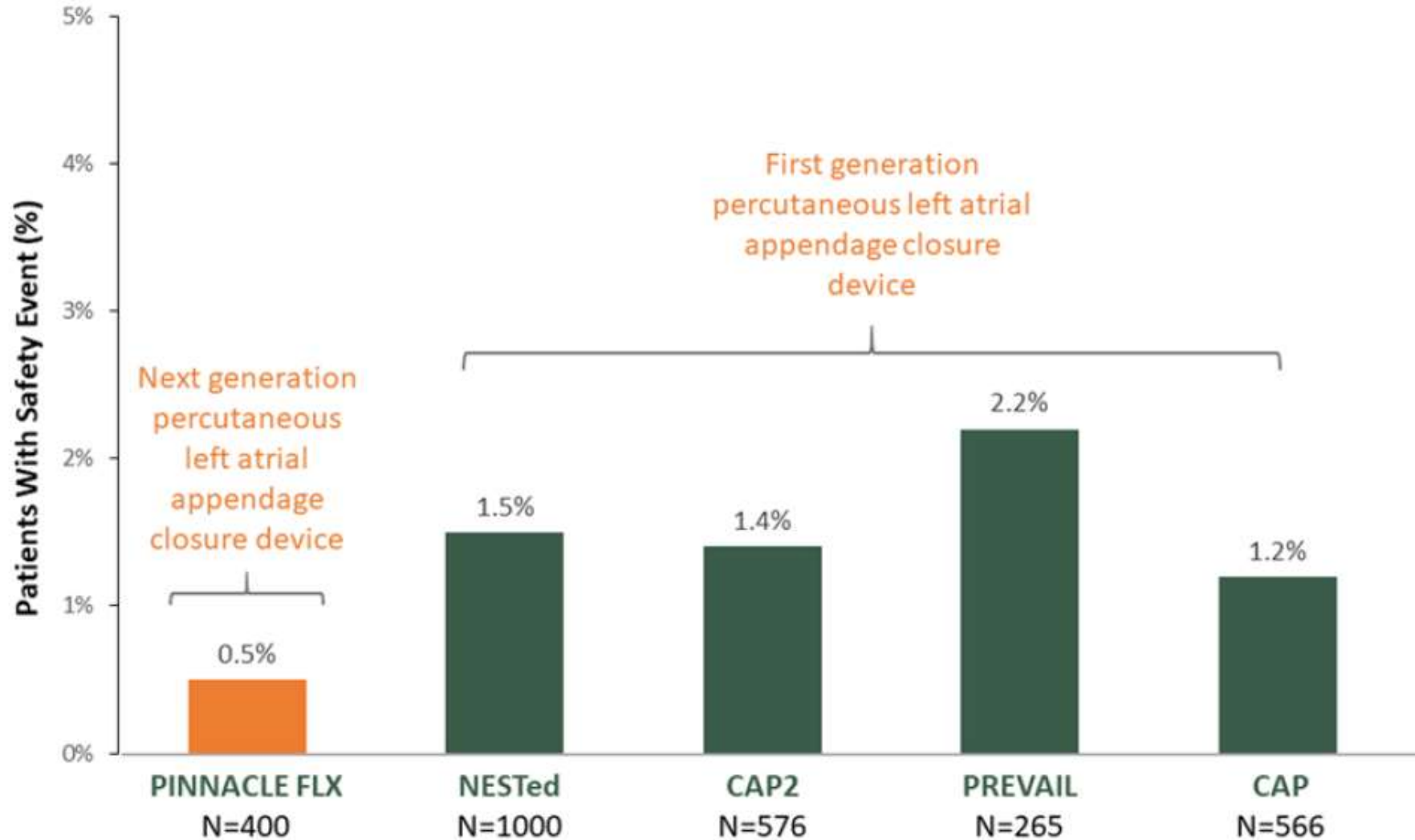
We can push the device after making FLX ball

Greater number of struts reduce peri-device leak

Increased anchor improve device stability

May improve endothelialization of the fabric

Safety of WATCHMAN FLX



FLX PINNACLE Trial

	N = 400
Implant success	98.8% (395/400)
Procedure-related stroke	0.5% (2/400)
Pericardial effusion	1.0% (4/400)
Number of devices used	1.2 ± 0.4
Complete seal @ 12 months	89.5%
DRT @ 24 months	1.8%

PROTECT AF



66.9%

4.0%

78 Years, Male

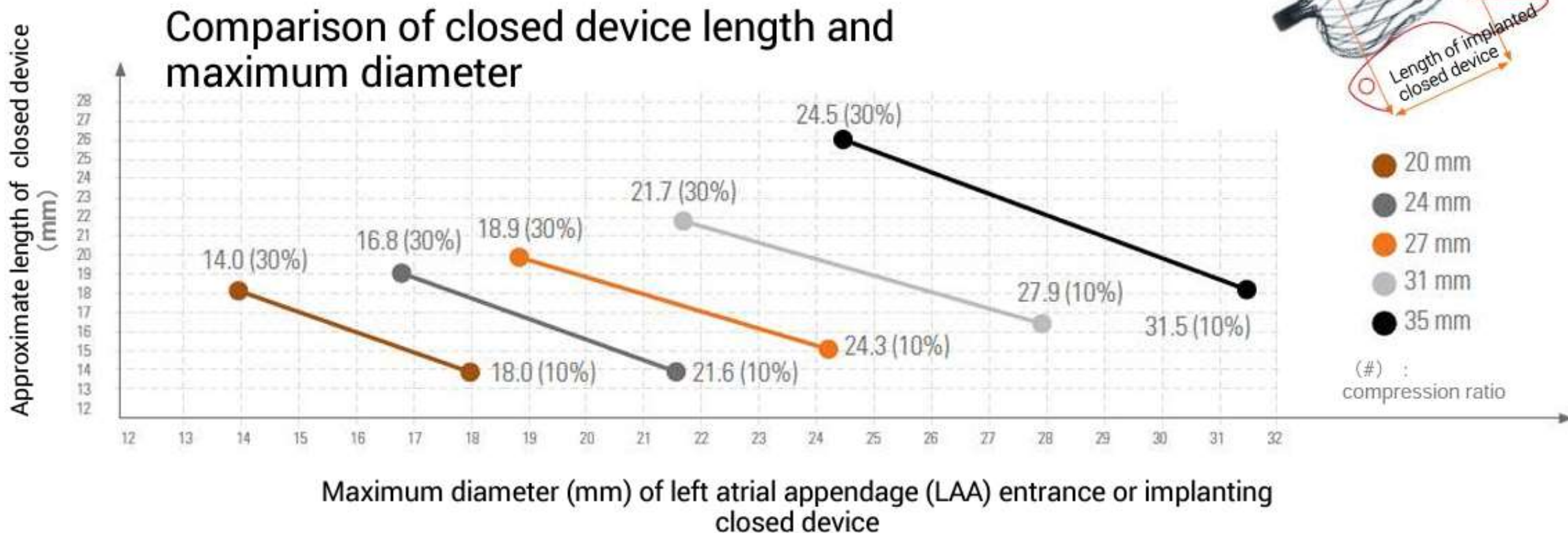
- Persistent Afib on DOAC
- Steroid user for Bechet disease
- History of gastric bleeding and ischemic stroke under DOAC
- Planned LAAC with WATCHMAN FLX device due to high risk of both bleeding and stroke

CHADS2: 5

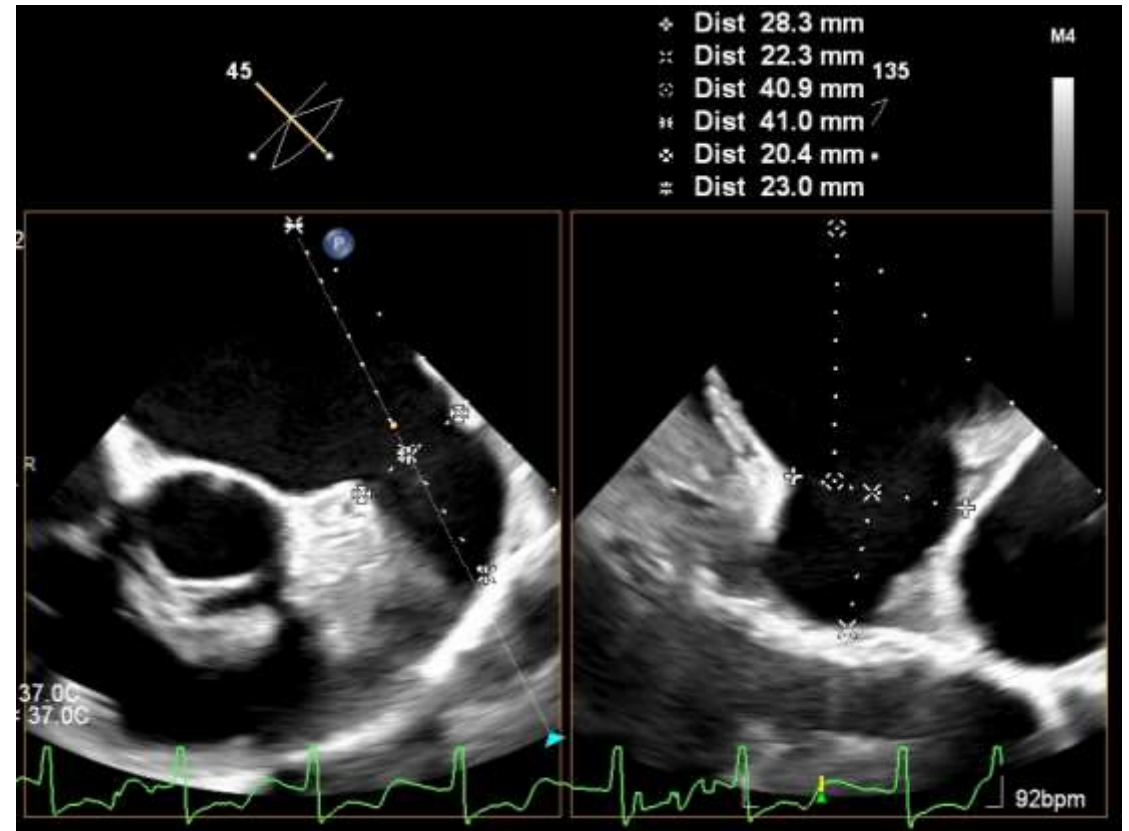
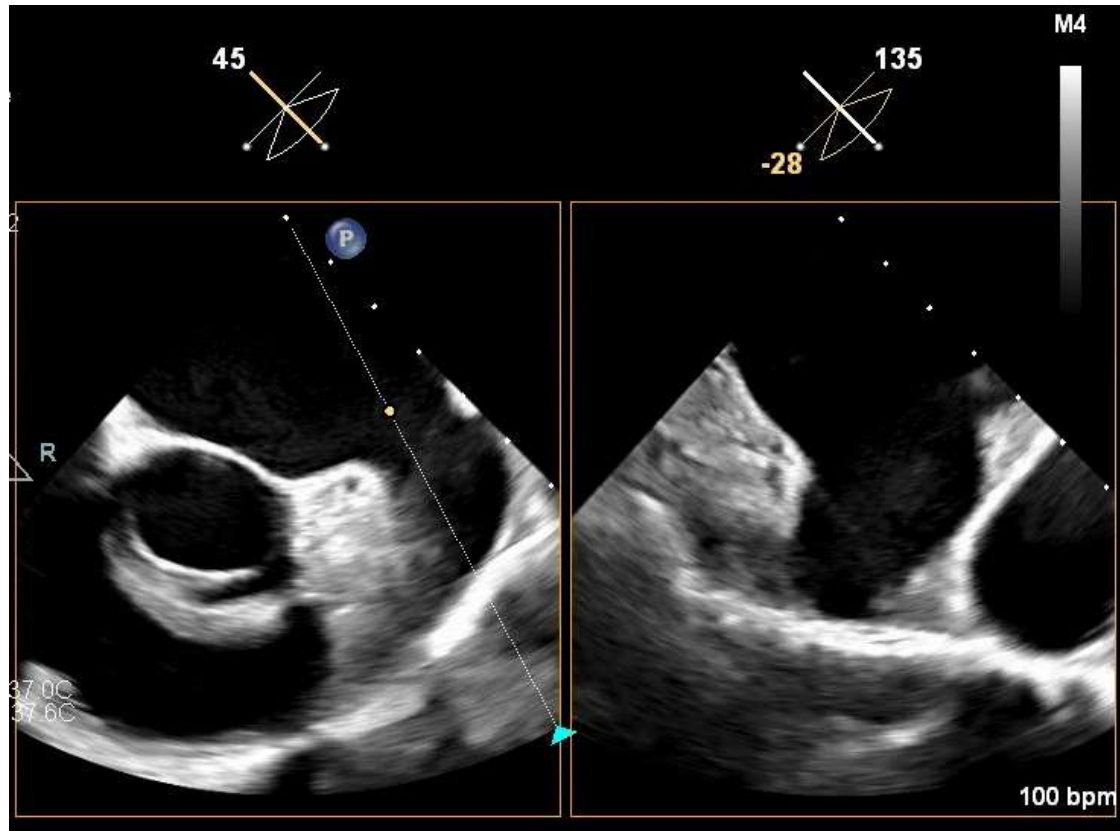
CHADS2VA2Sc: 7

HASBLED: 4

Sizing Chart of WATCHMAN FLX

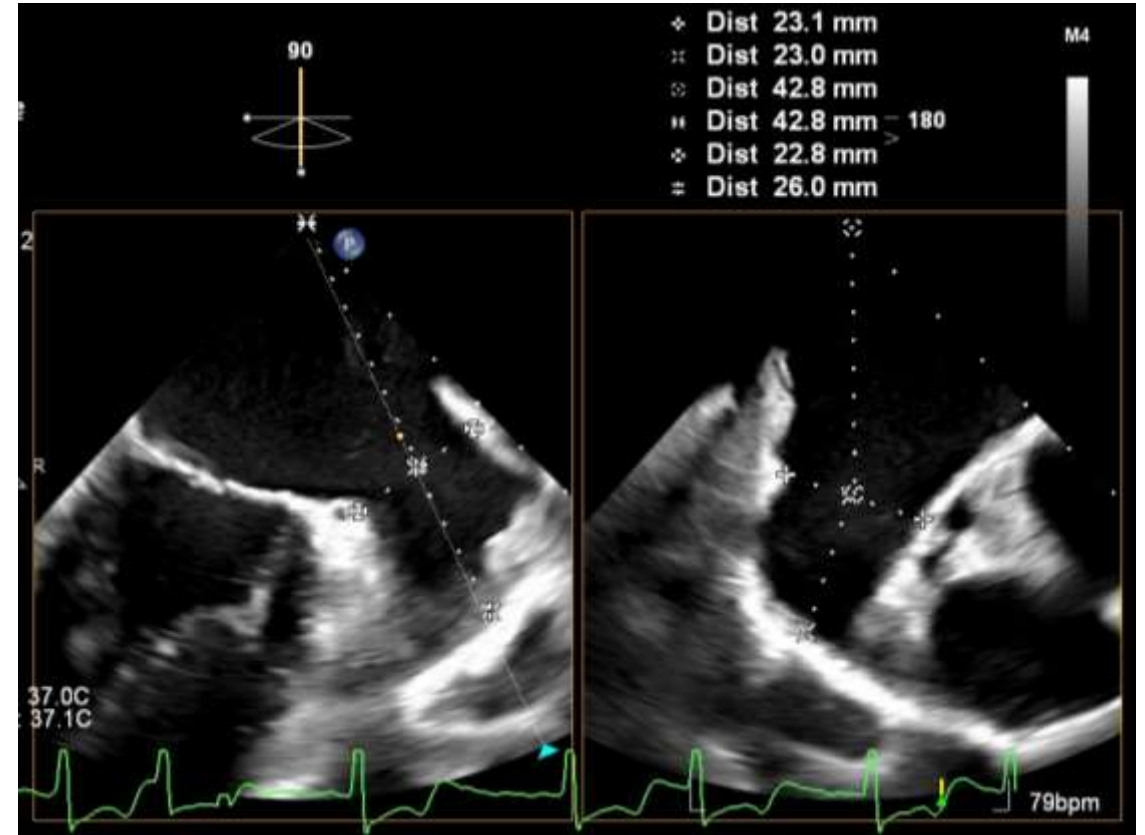
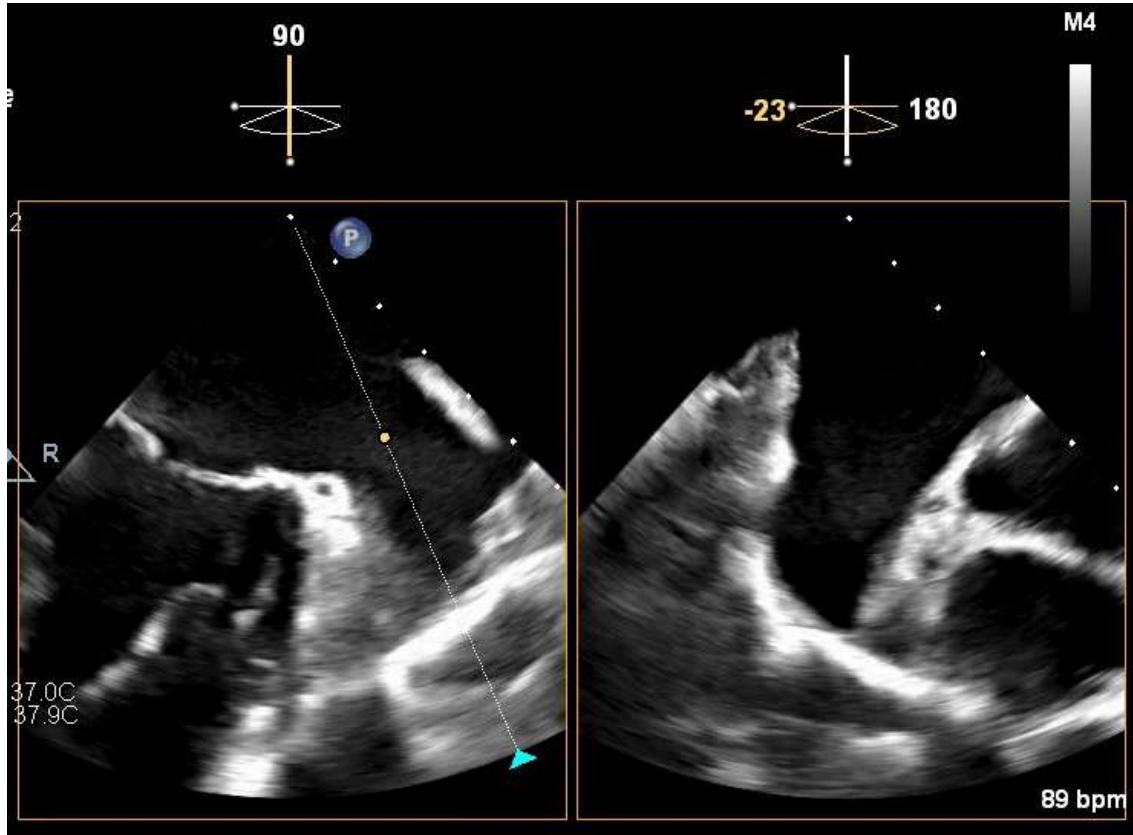


LAA Measurement 45/135



Use biplane mode to measure the same plane of LAA ostium

LAA Measurement 0/90

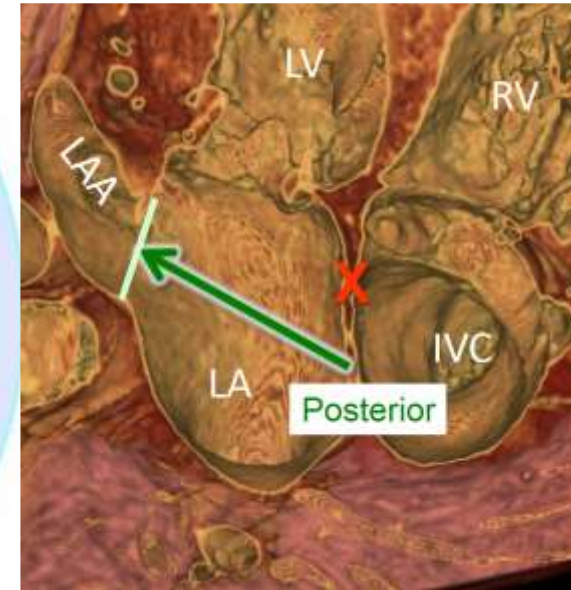
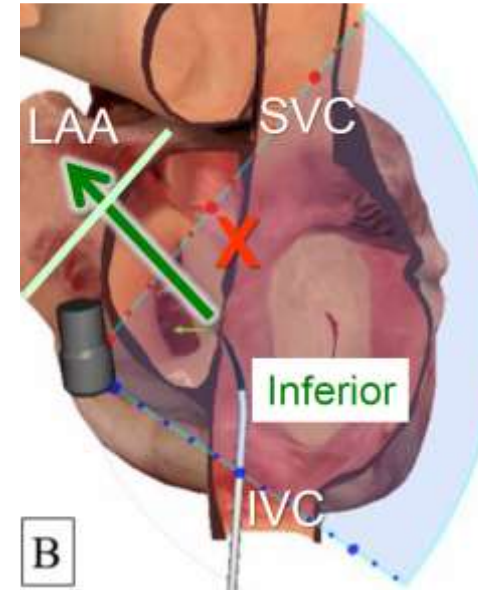
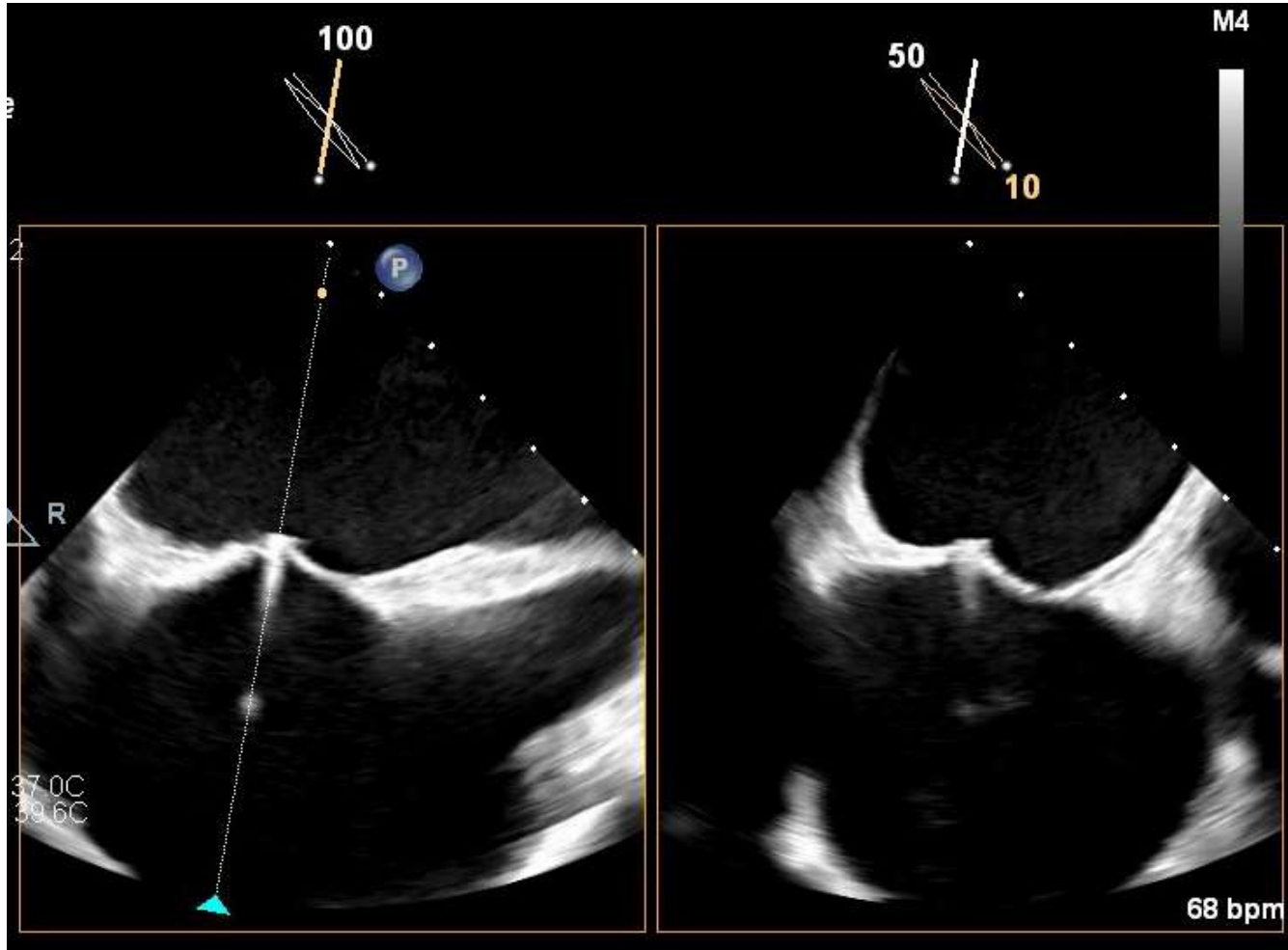


Max LAA diameter = 28.3mm

31mm has risk of undercompression if the shoulder protrudes

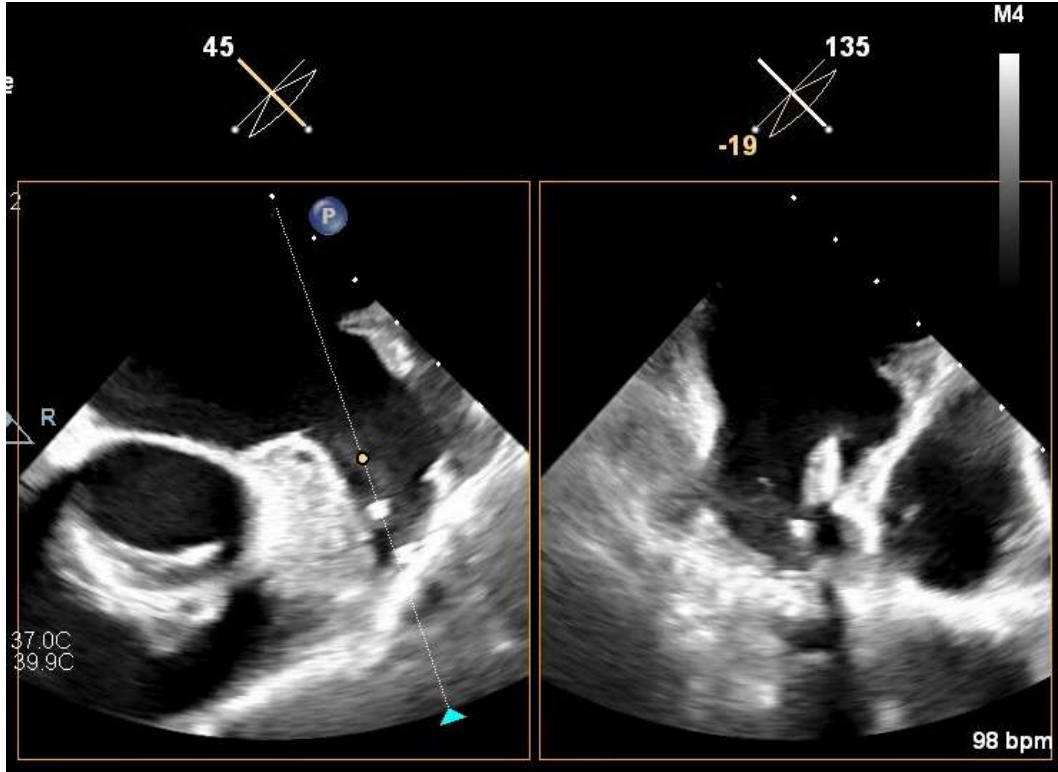
Select 35mm WATCHMAN FLX device

Transseptal Puncture

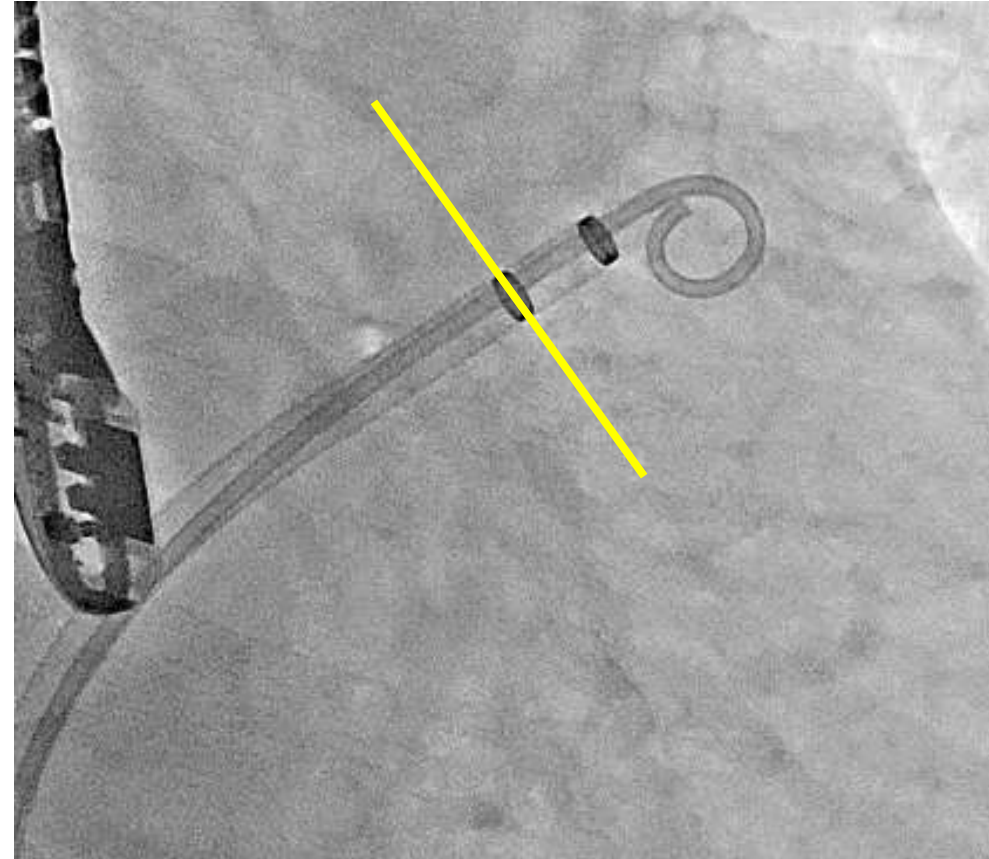


Should puncture inferior and posterior/mid
Easy to make coaxial to LAA ostium
LA pressure = 16mmHg

LAA Angio and Sheath Position

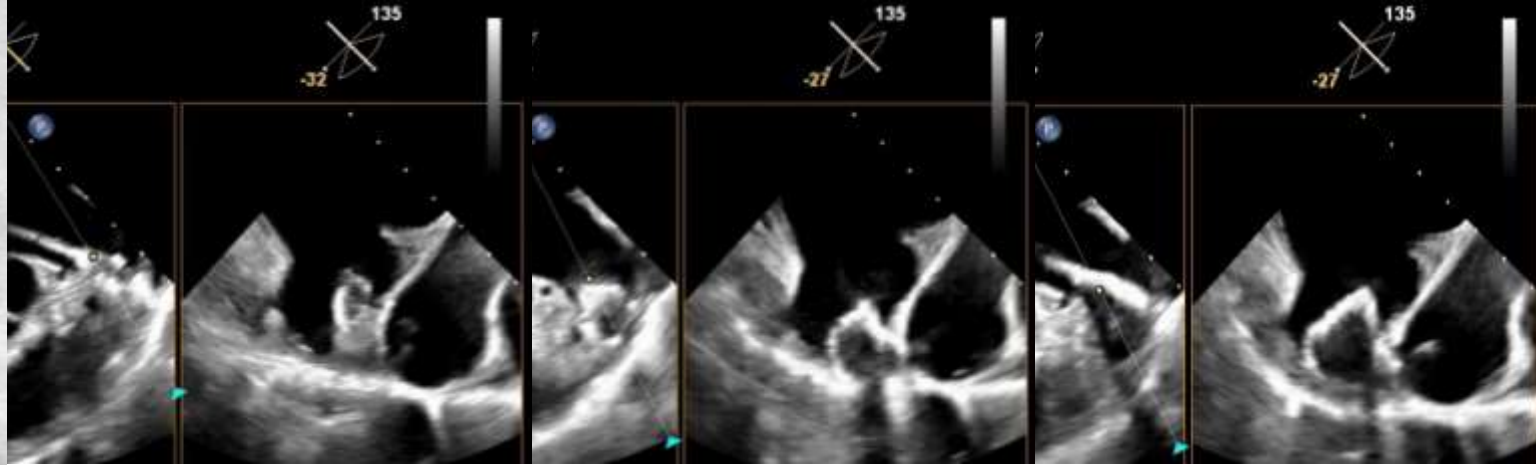


Insert access sheath to the LAA using pigtail catheter
Select anterior lobe by turning the sheath counterclockwise



Access sheath is coaxial to landing zone
Don't push the sheath too much

Device Implantation



1. Unsheath and make FLX ball
2. Recognize FLX ball in TEE
3. Push the sheath to move the FLX ball at distal position
4. Deploy the device with unsheath or advance the device
5. Push the sheath to expand the device

Tug Test



PASS criteria

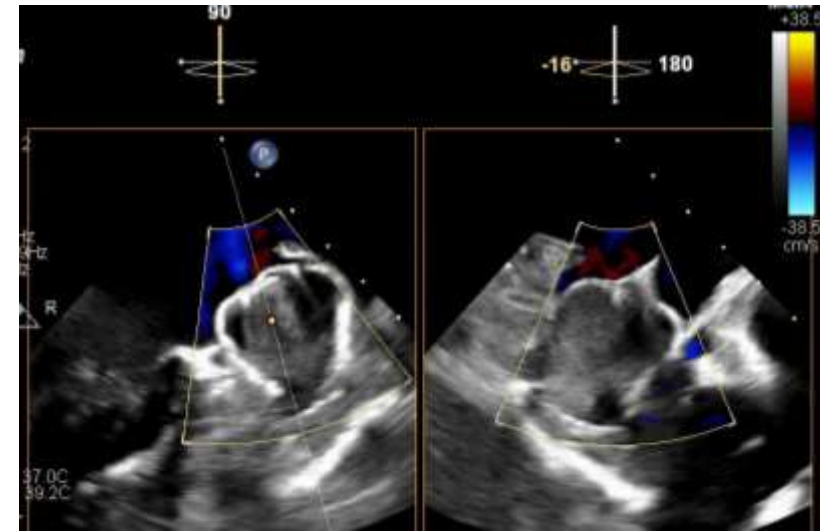
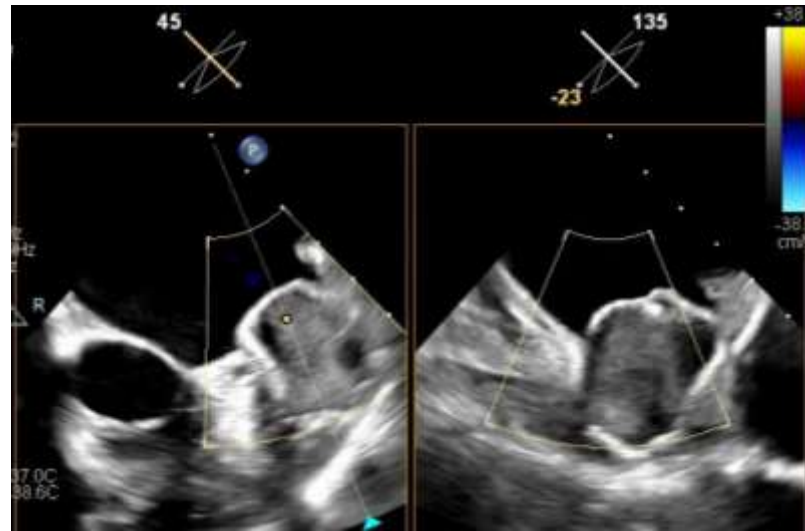
- position
- anchor
- size
- seal

Pull the device cable to check the stability of the anchor

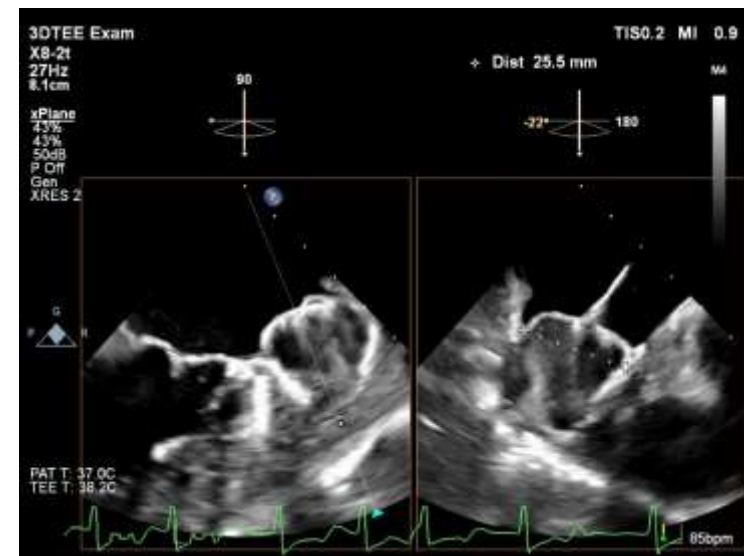
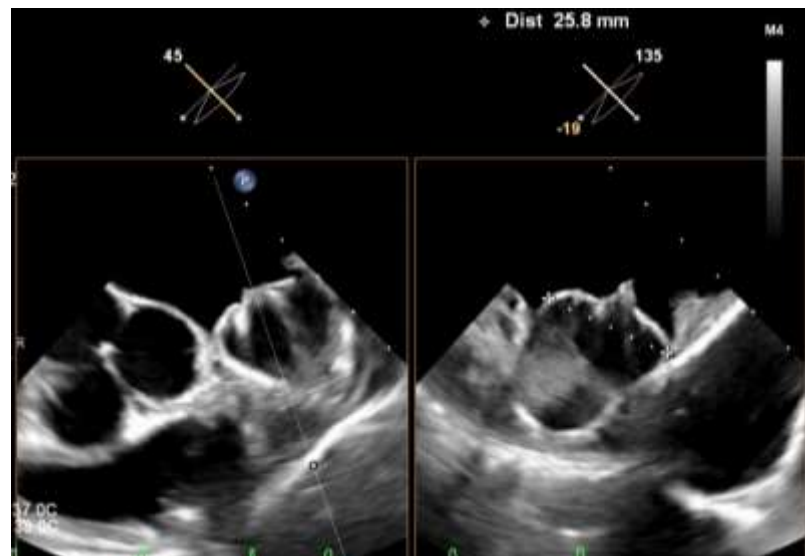
Device surface is soft and move to proximal as usual, but distal anchor is stable

Assessment of Peri-device Leak and Compression

Peri-device
leak



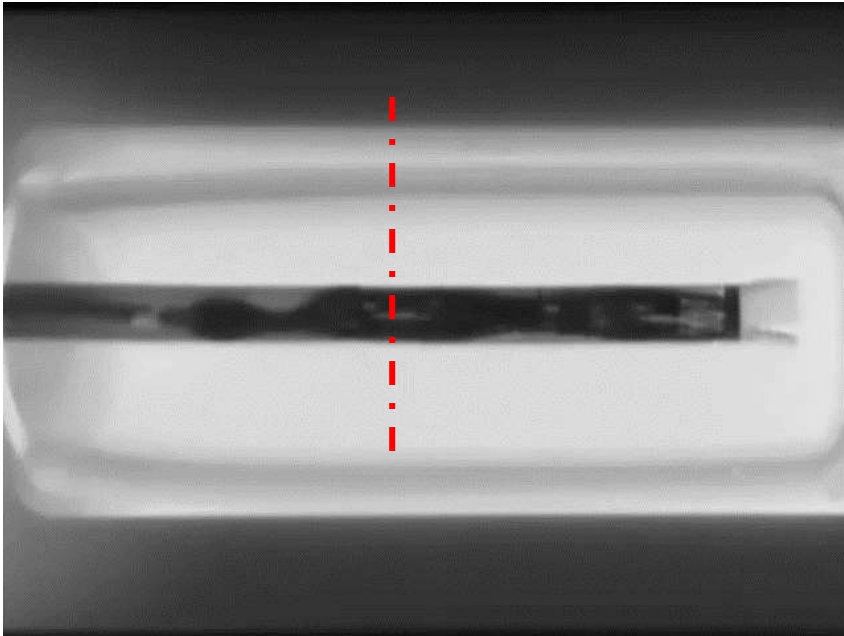
Device
compression



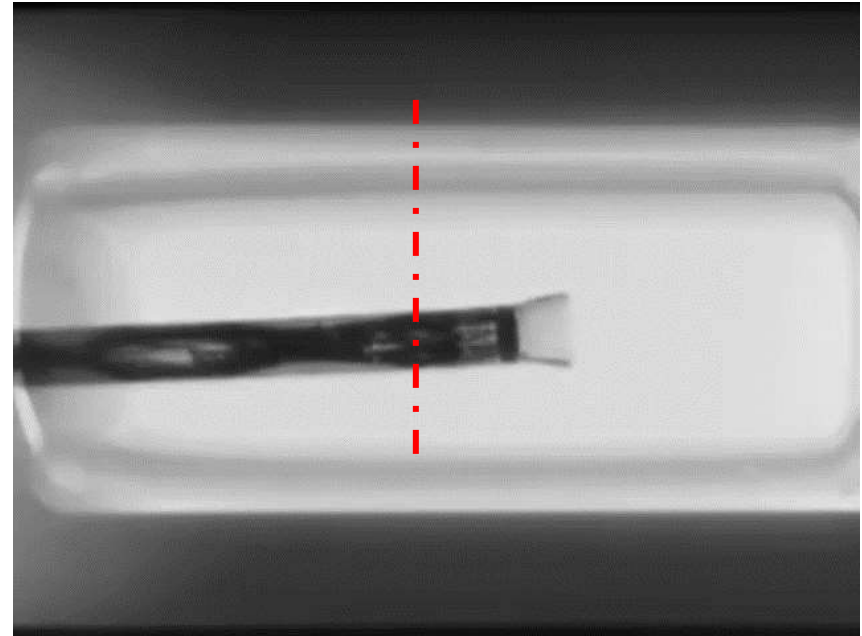
Peri-device leak and device compression should be assessed at 4 angles.

Two Implantation Method

Deployment technique of FLX ball

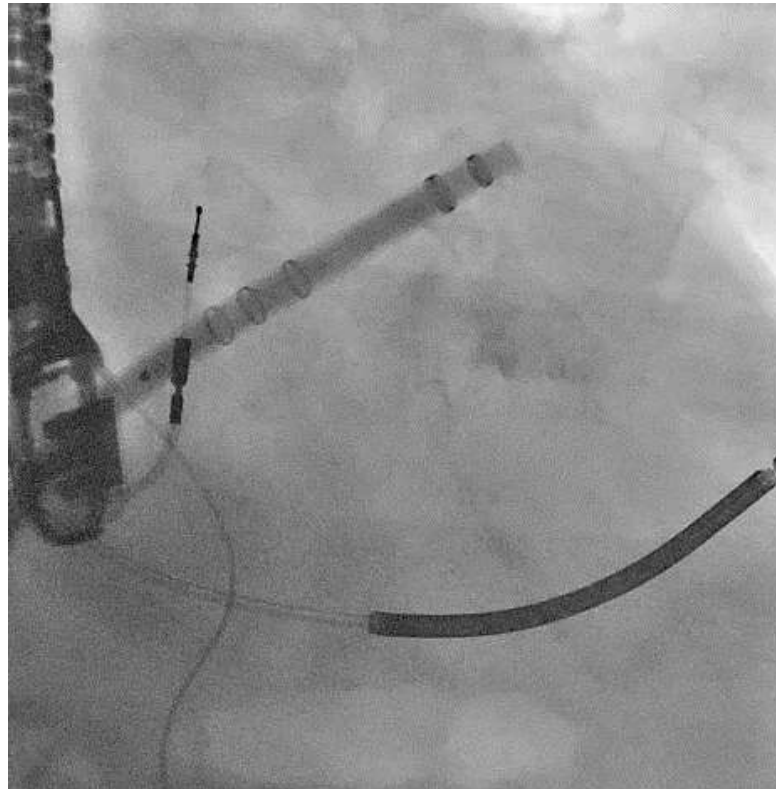
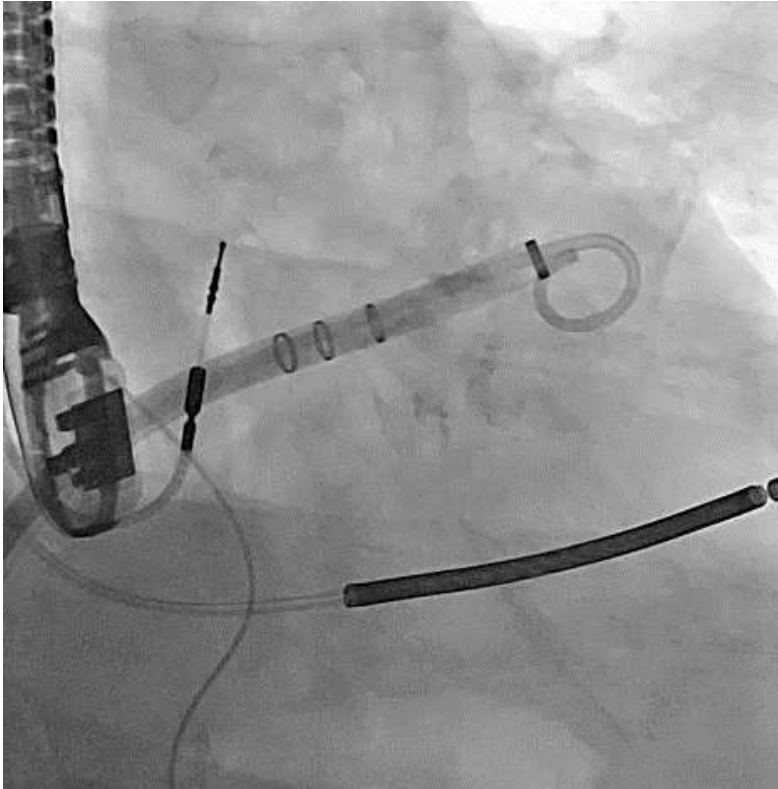


Unsheath method

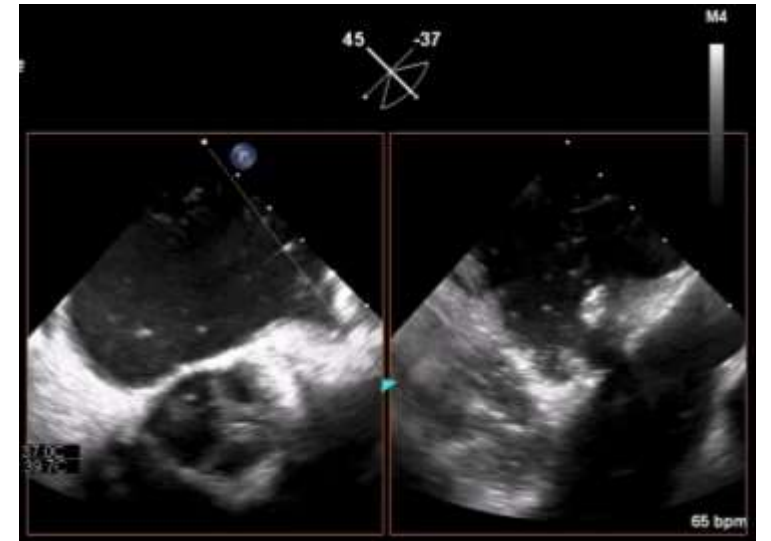
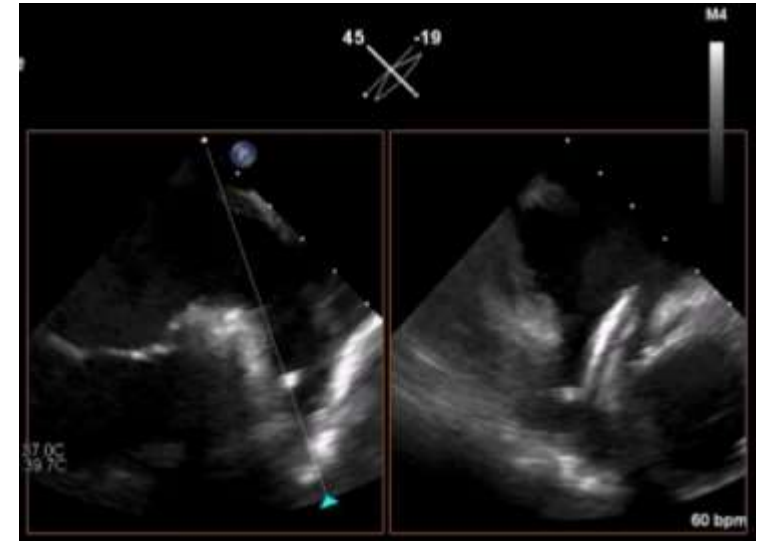


Advance method

Advance Method

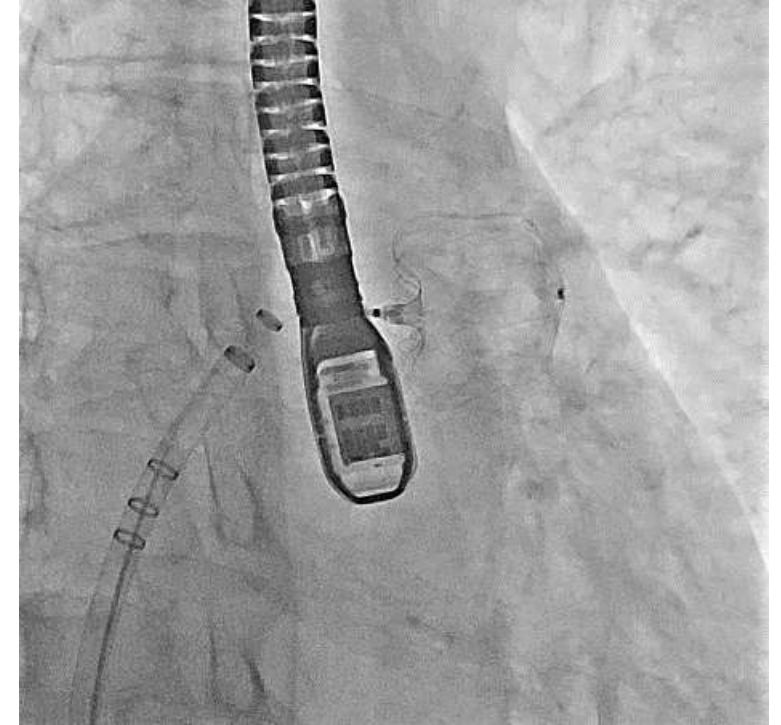
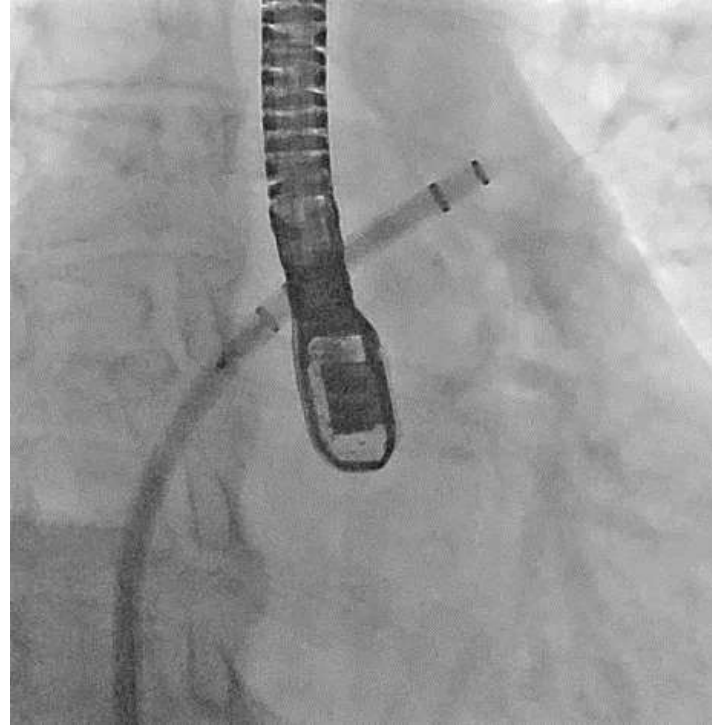
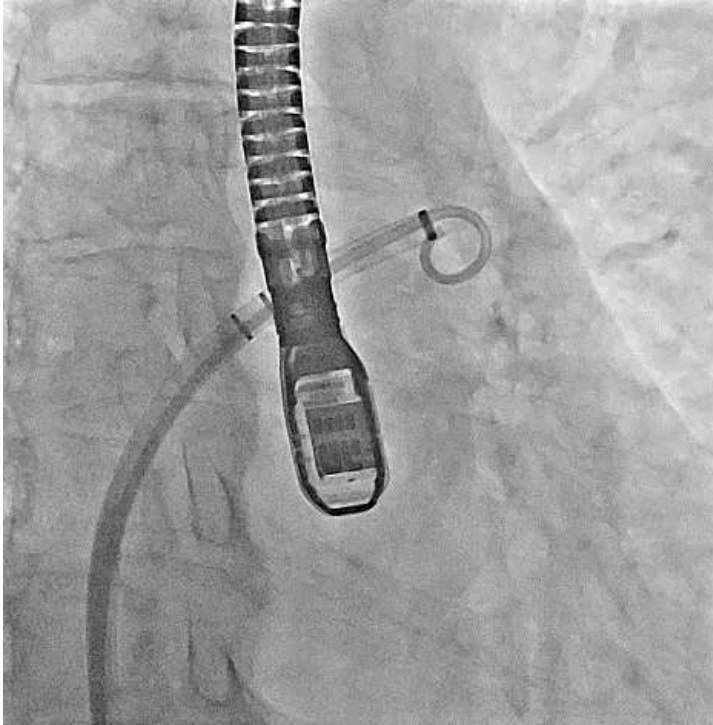


If you push the device too much, a tip of device directed to posterior. (Not coaxial to LAA ostium)



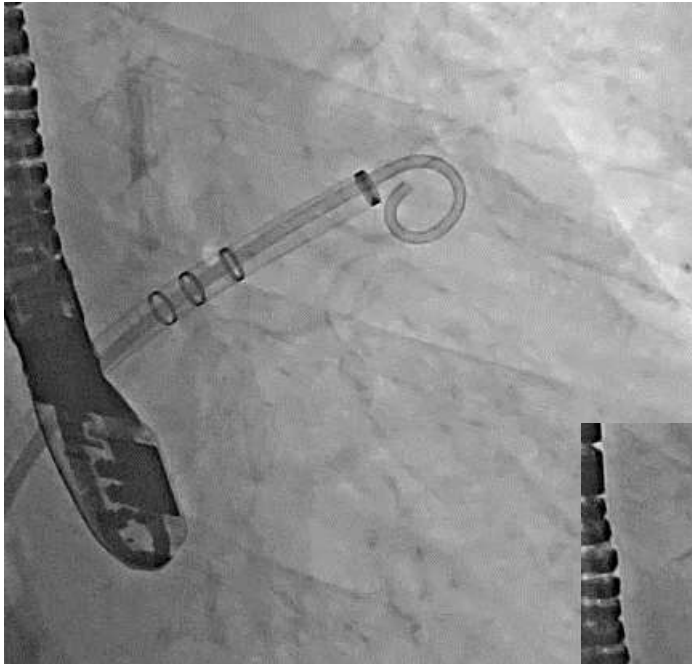
Combination Method

- WATCHMAN FLX

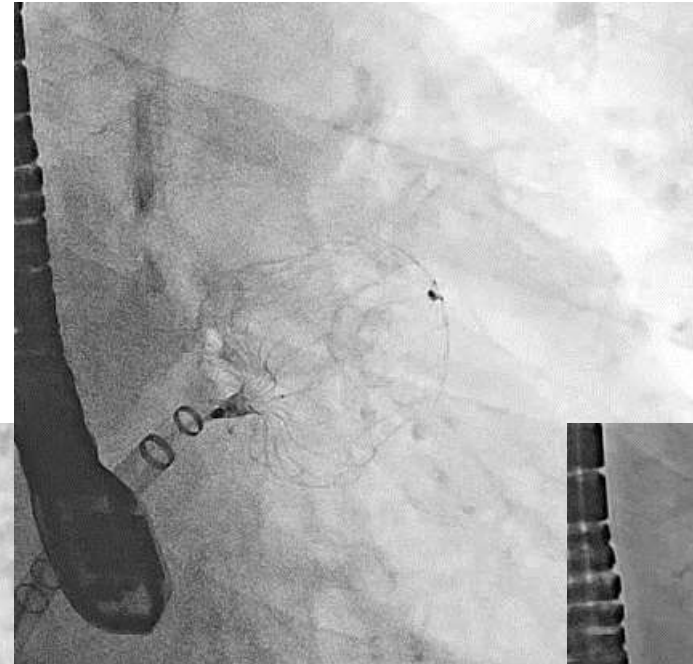


Make the FLX ball and advance the access sheath (not device) to distal.
Unsheath before directing posterior and deploy.

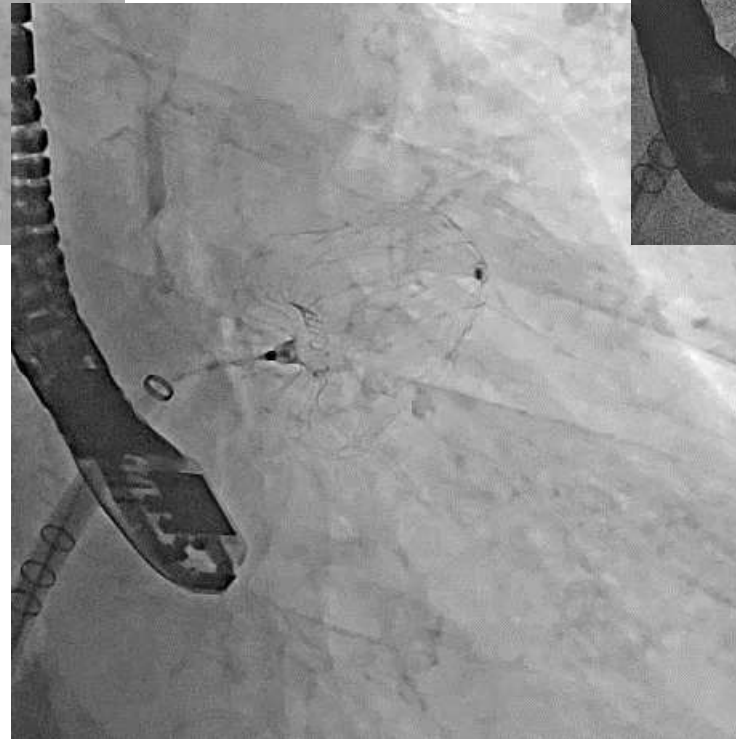
Recapture



Deploy 31mm FLX

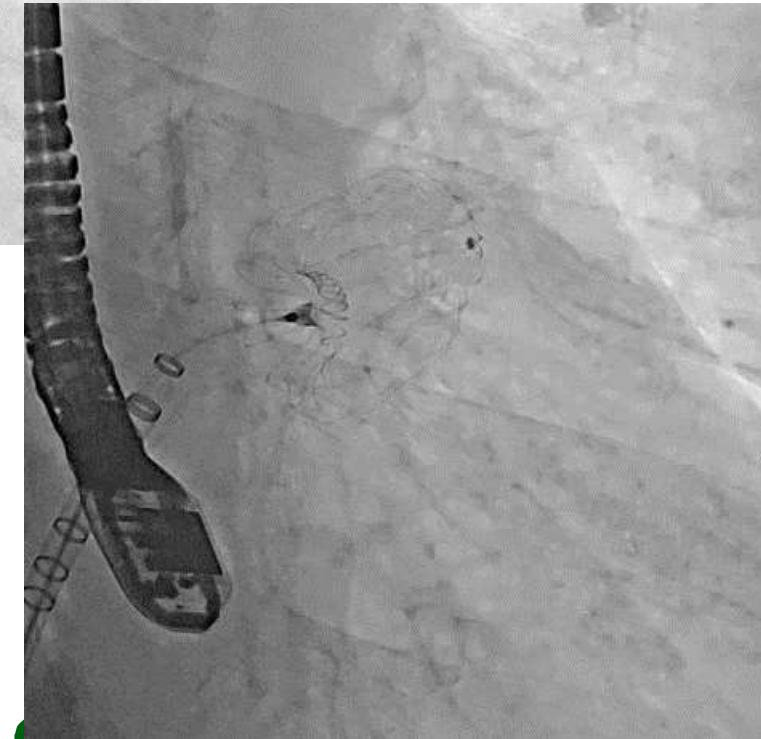


Recapture
Back to FLX ball and
advance the sheath more
distal and deploy



Device came out by tug
test

Tug test again
Good anchoring



Summary

- LAA closure with WATCHMAN FLX is safe and controlled procedure.
 - Larger ranges of LAA can be closed.
 - Sizing based on the LAA measurement is important.
 - Combination implantation is recommended to be coaxial to LAA.
 - Easy to be recaptured and redeploy.
 - Better sealing and healing is expected.