TAVI monitorizado con SavvyWire

Dr. Ander Regueiro
Hospital Clínic de Barcelona

Caso Clínico

Mujer 80 años

- DM2, HTA, FA, EPOC
- Obesidad (IMC 34)
- SVAo en 2014. Mosaic 19 mm. Gradiente al alta 22 mmHg.

Caso Clínico

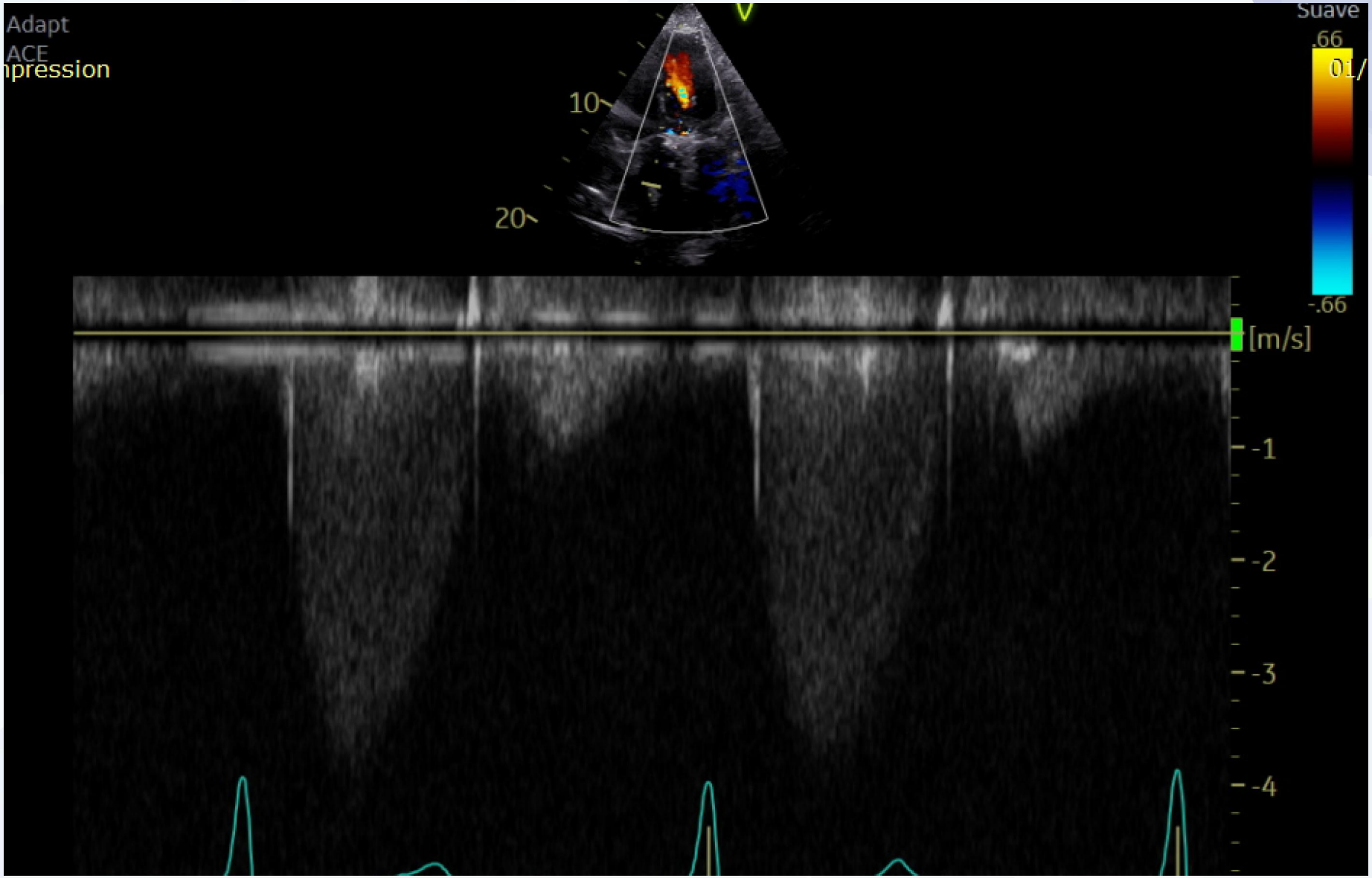
Mujer 80 años

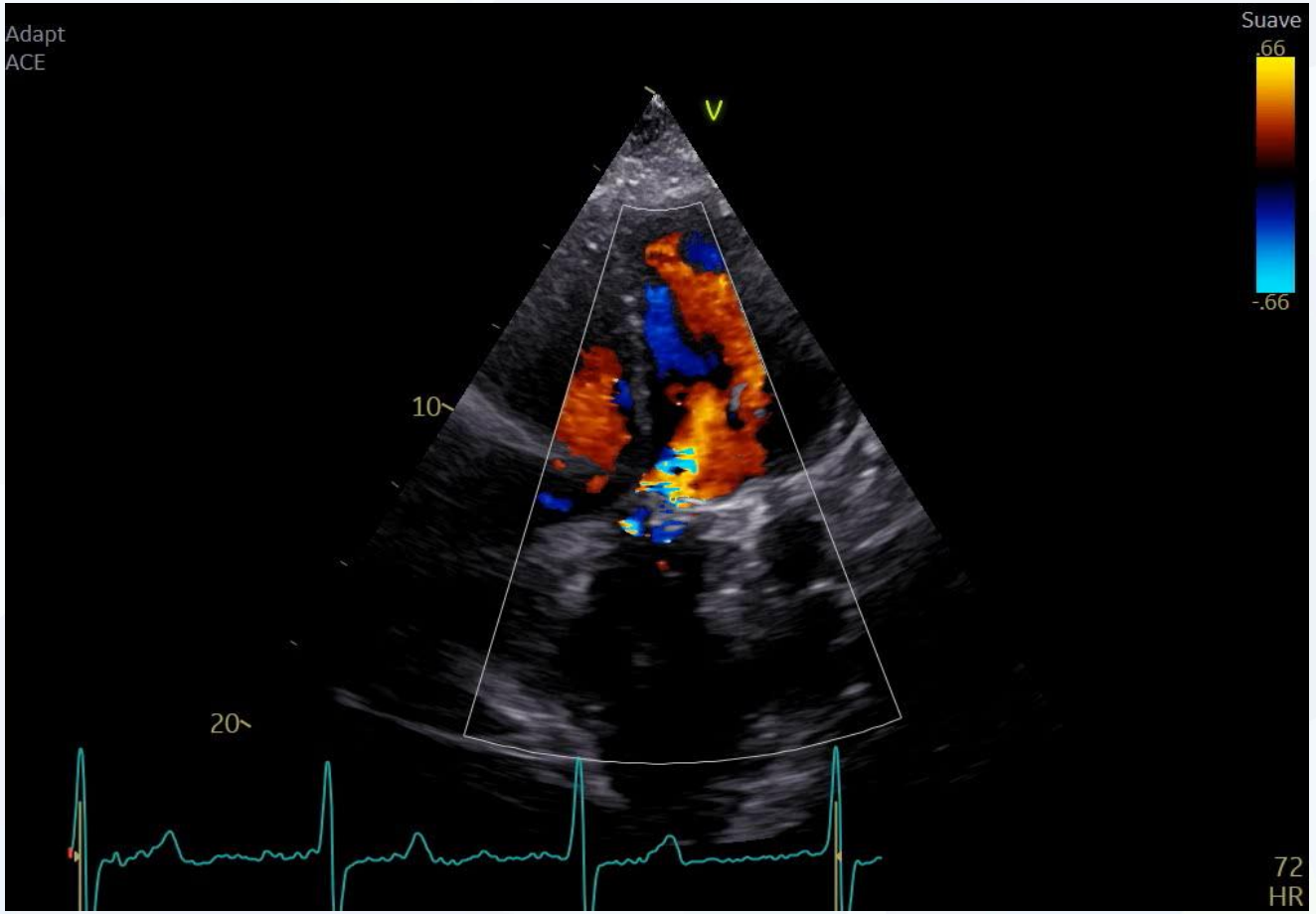
2022

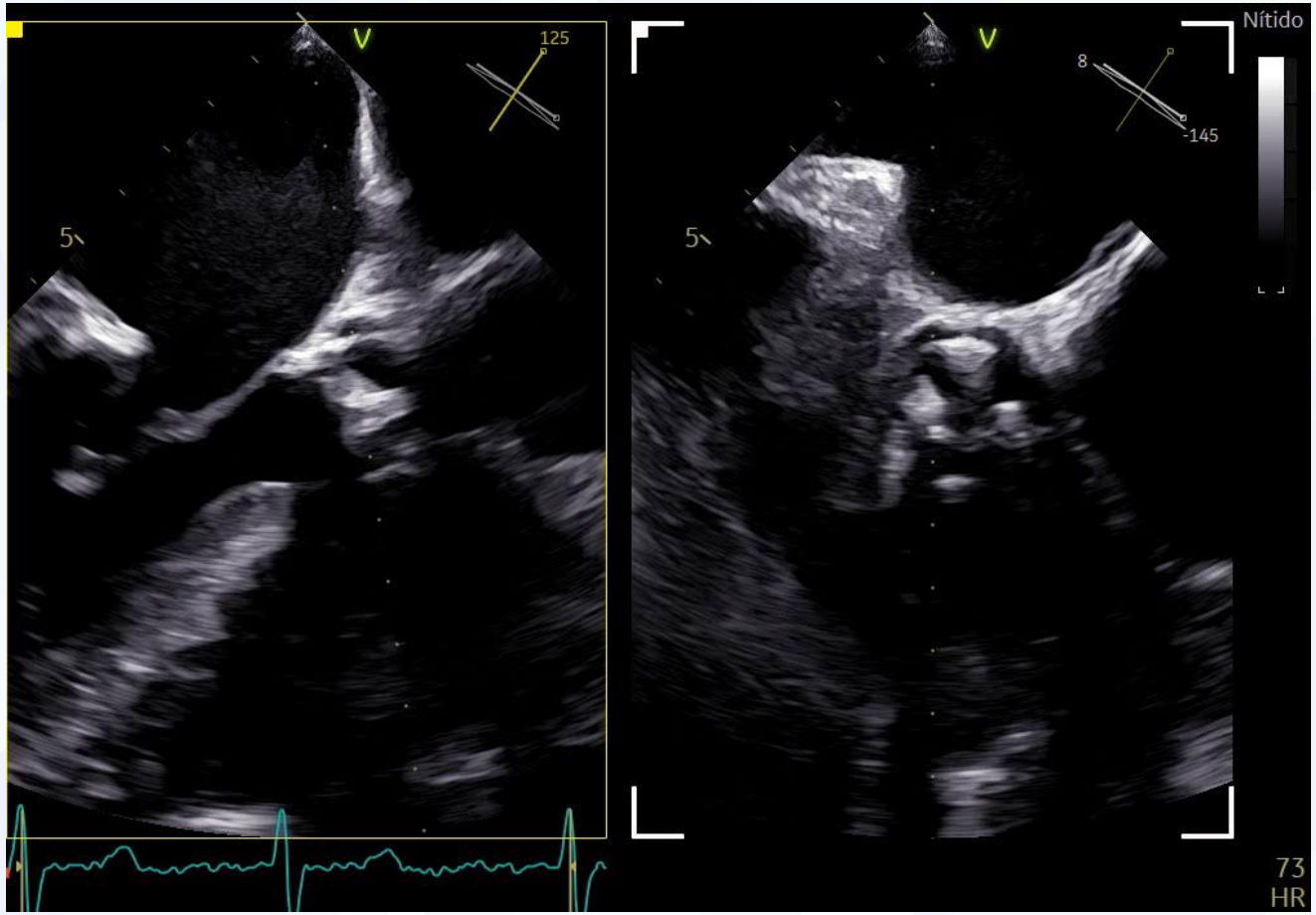
- Degeneración en forma de estenosis (Gmed 44 mmHg)
- Asintomática

2024

- Disnea progresiva hasta NYHA III


Adapt
ACE
mpression
10
20
Suave
.66
-.66
[m/s]
-1
-2
-3
-4


Adapt
ACE
V
Suave
.66
-.66
10
20
72
HR


V
125
5
V
8
-145
Nítido
5
73
HR

Caso Clínico

Degeneración bioprótesis (estenosis e insuficiencia)

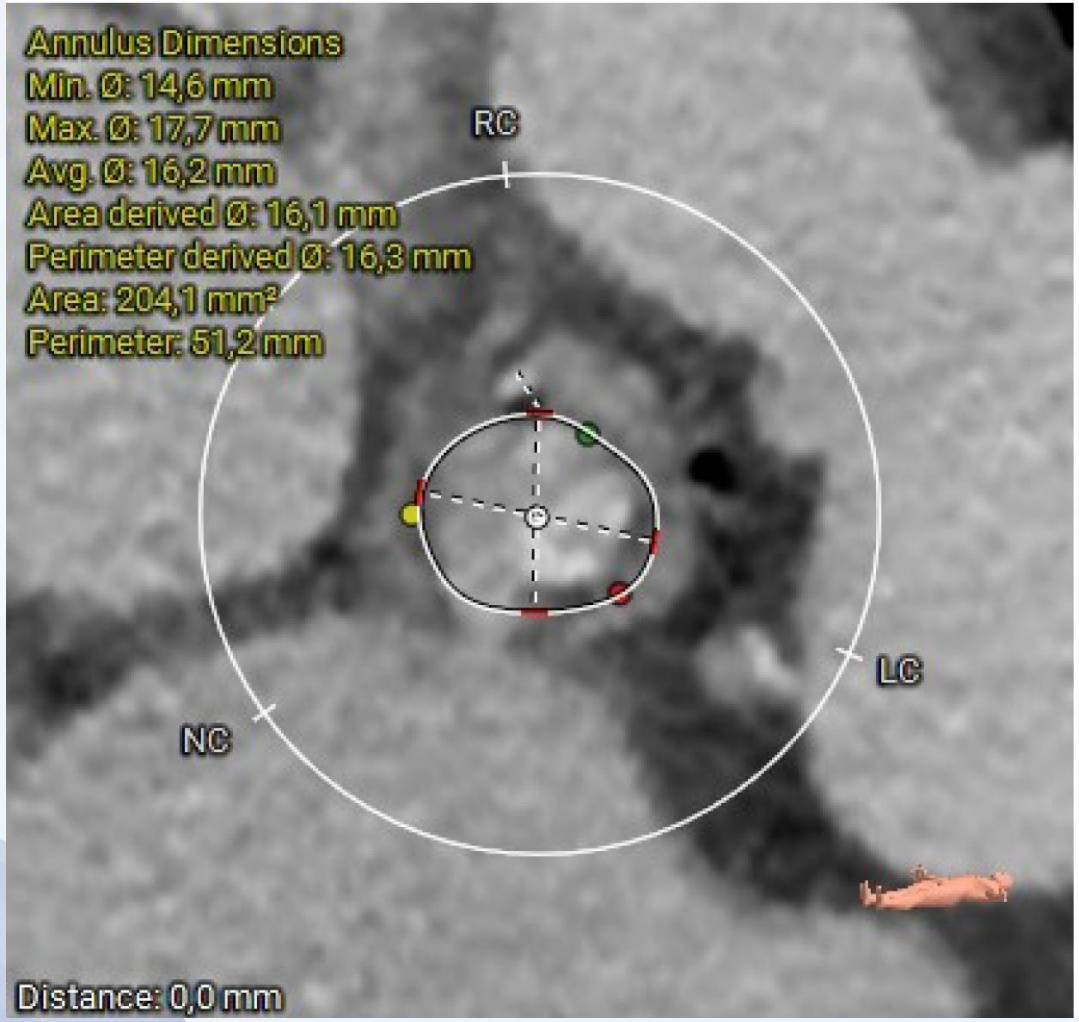
Insuficiencia cardiaca

Alto riesgo quirúrgico (edad, REDO, EPOC, obesidad)

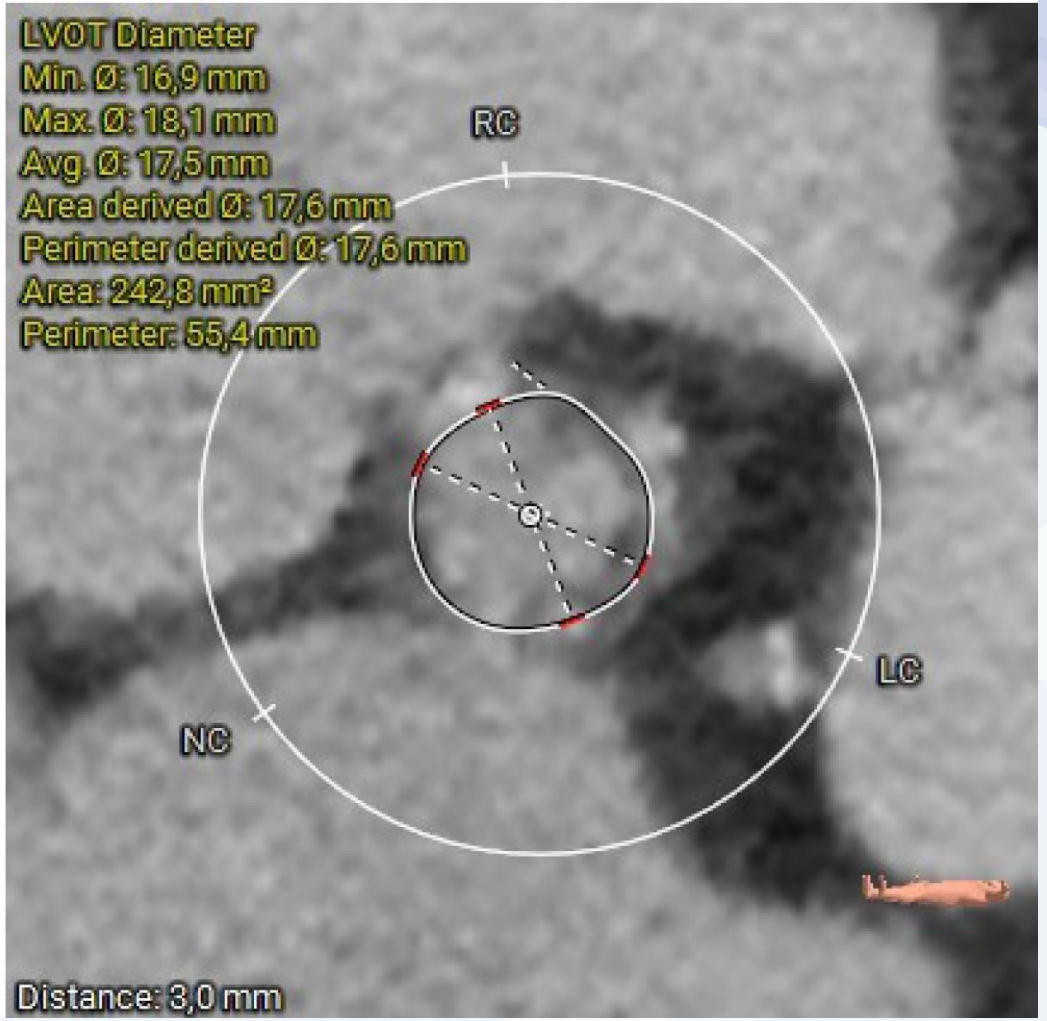
Caso Clínico

Valve in Valve

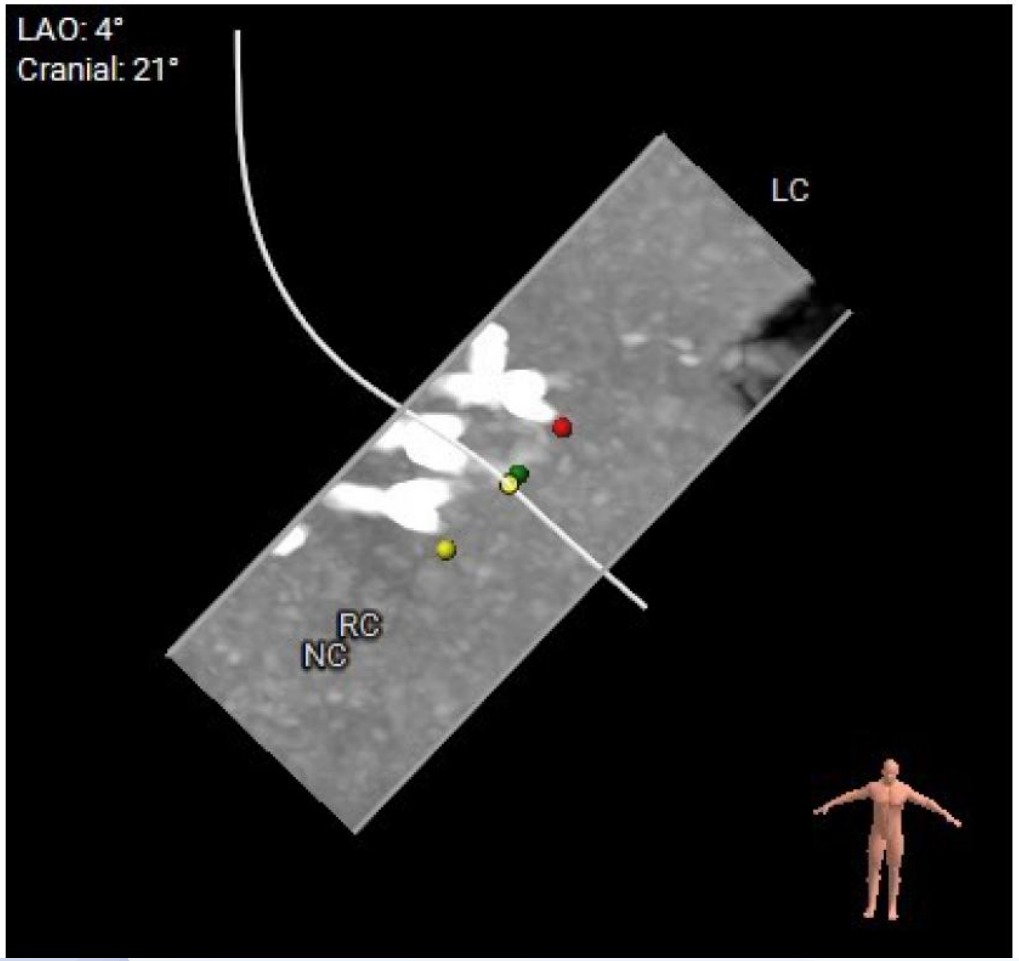
Annulus Base Diameter ES



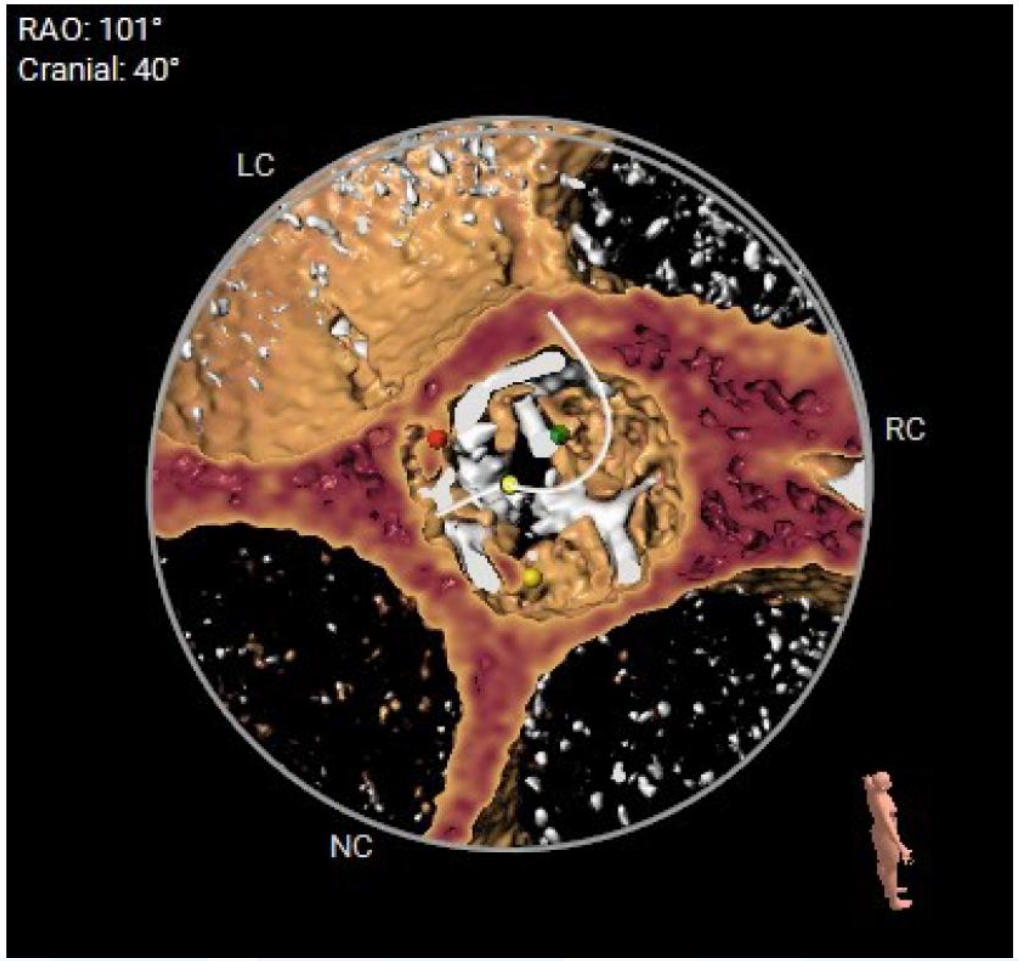
LVOT at 3mm depth



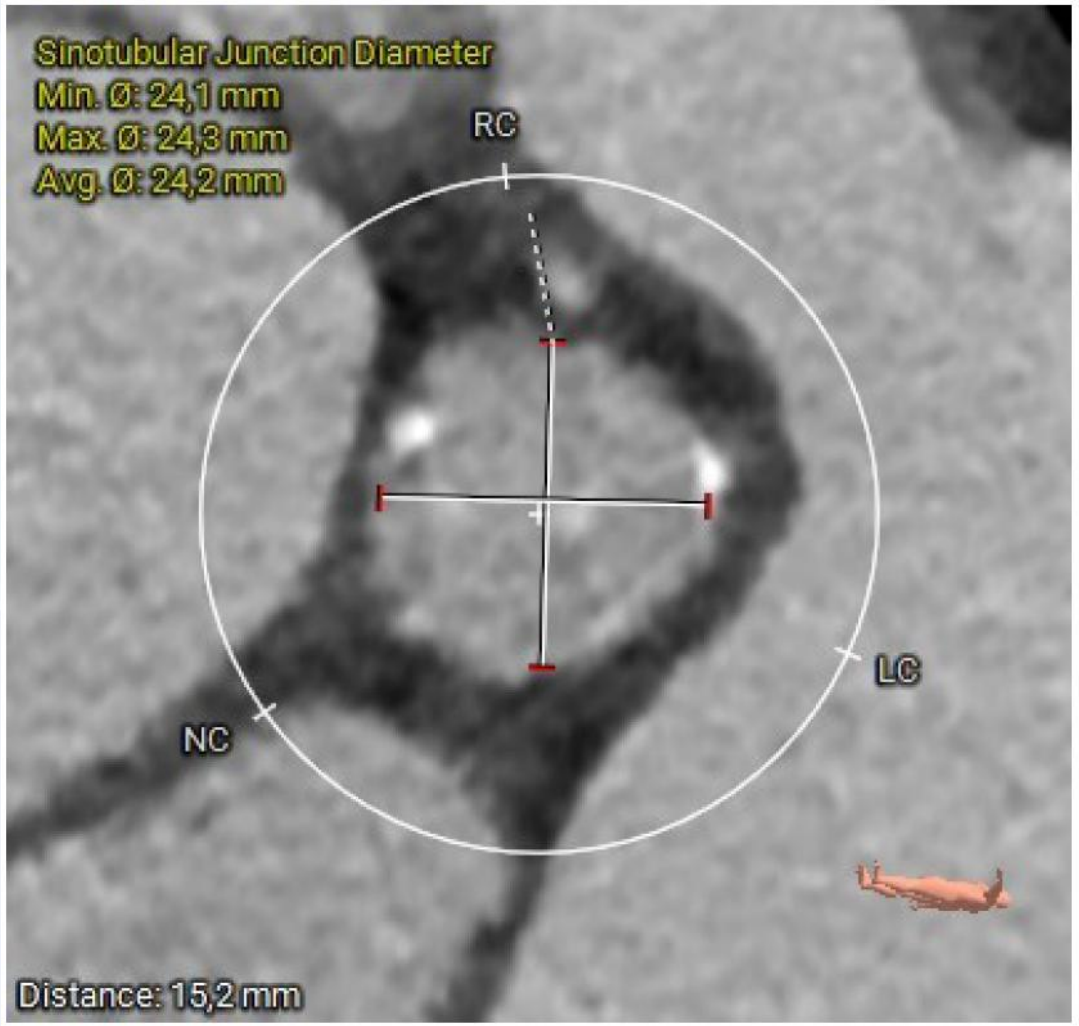
Hockey Puck (MIP)



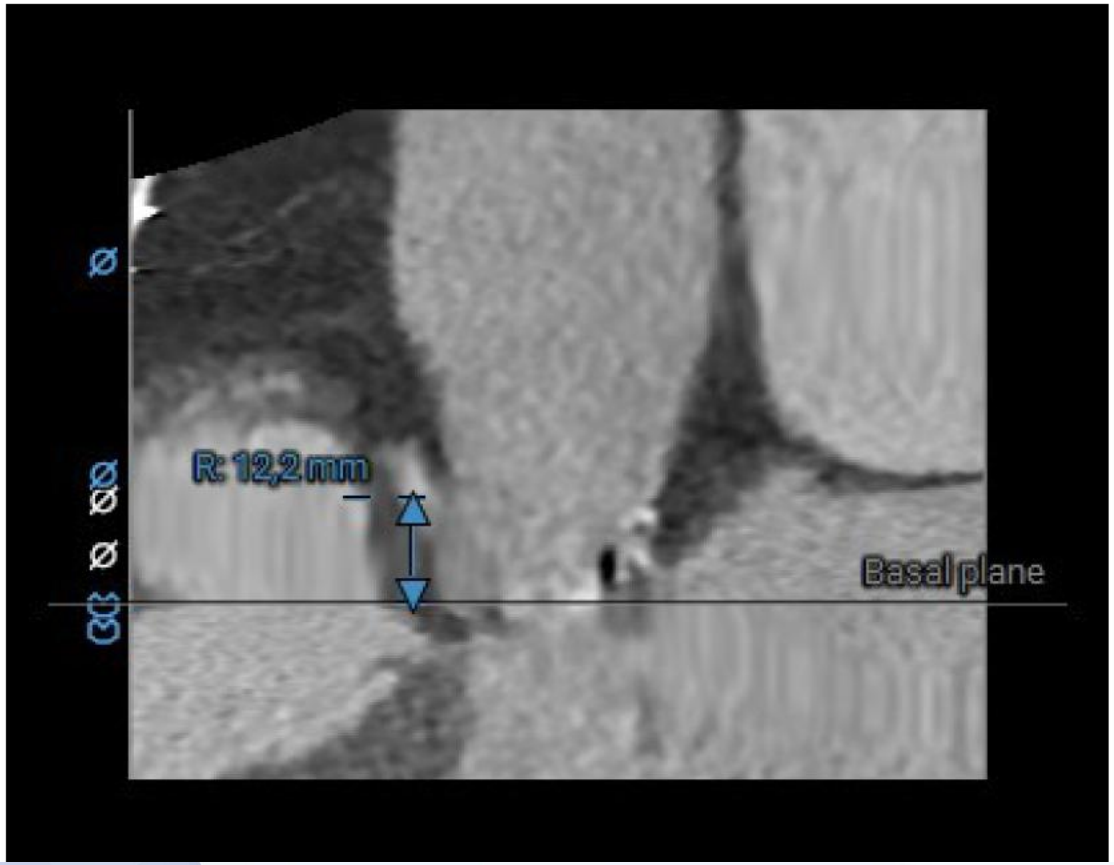
Hockey Puck (VR)



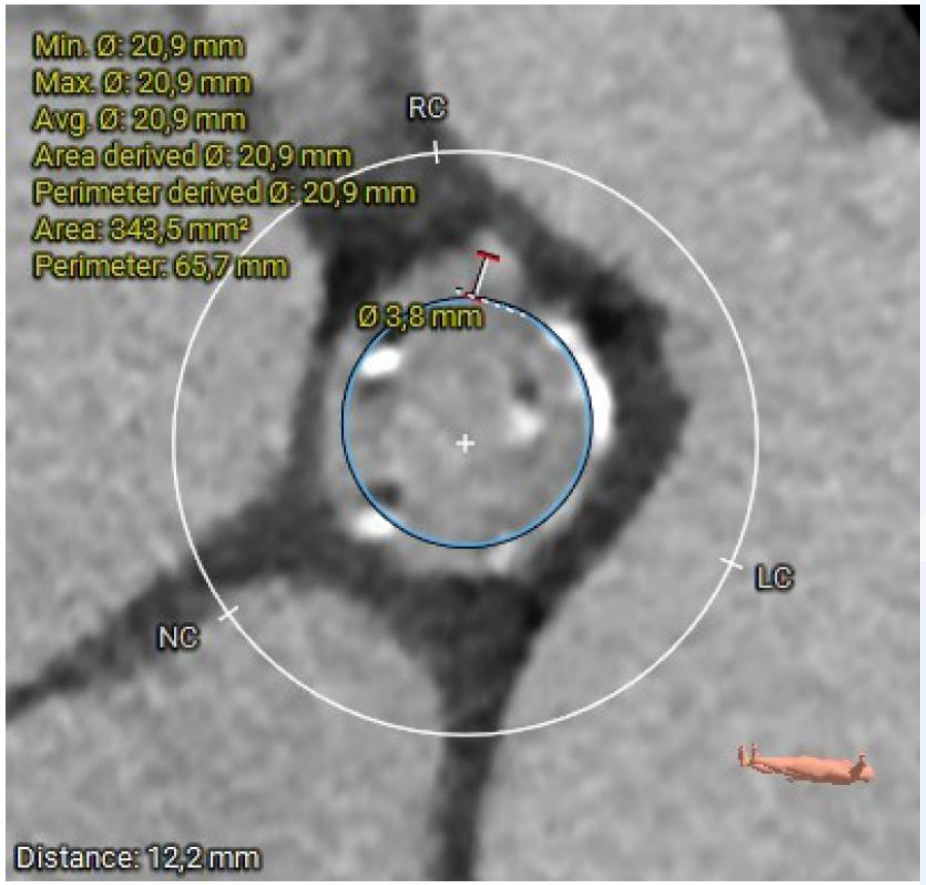
Sinotubular Junction



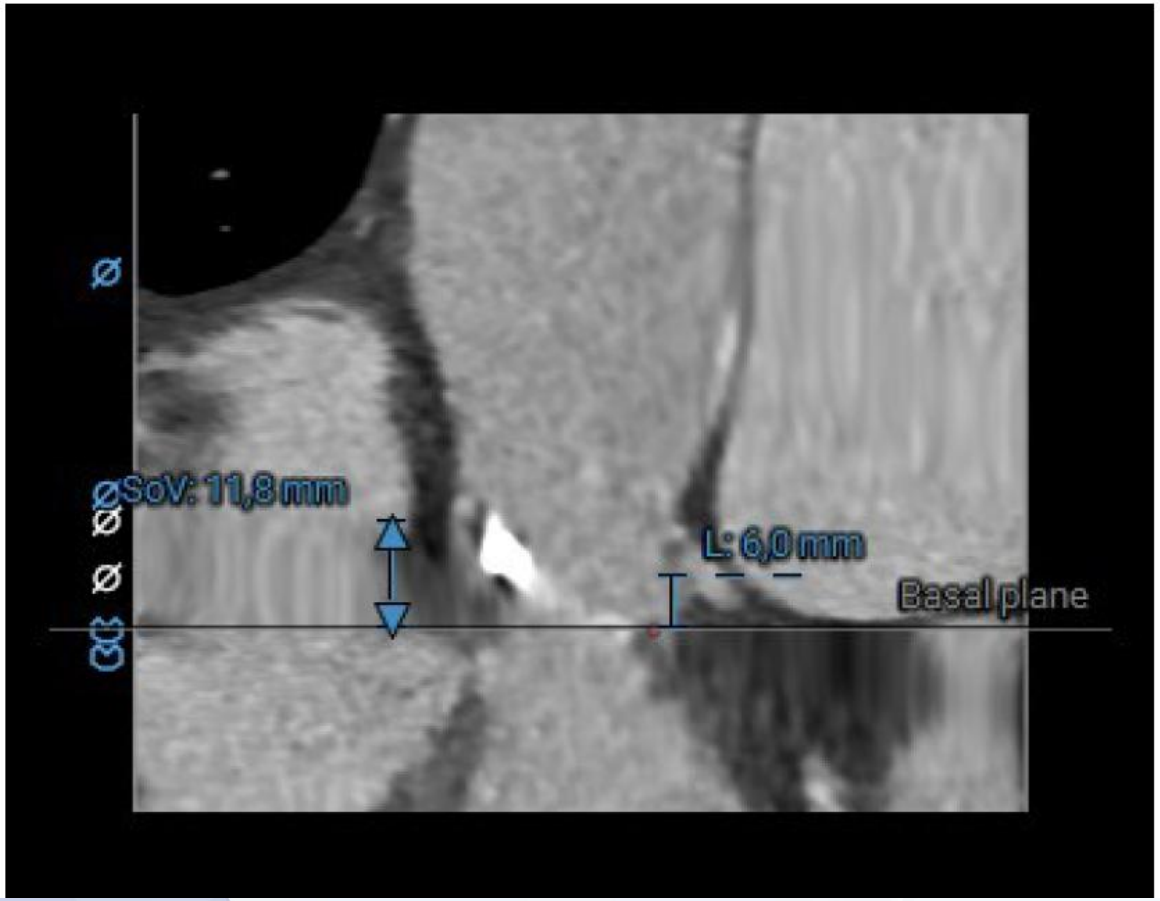
Annulus base to RCA



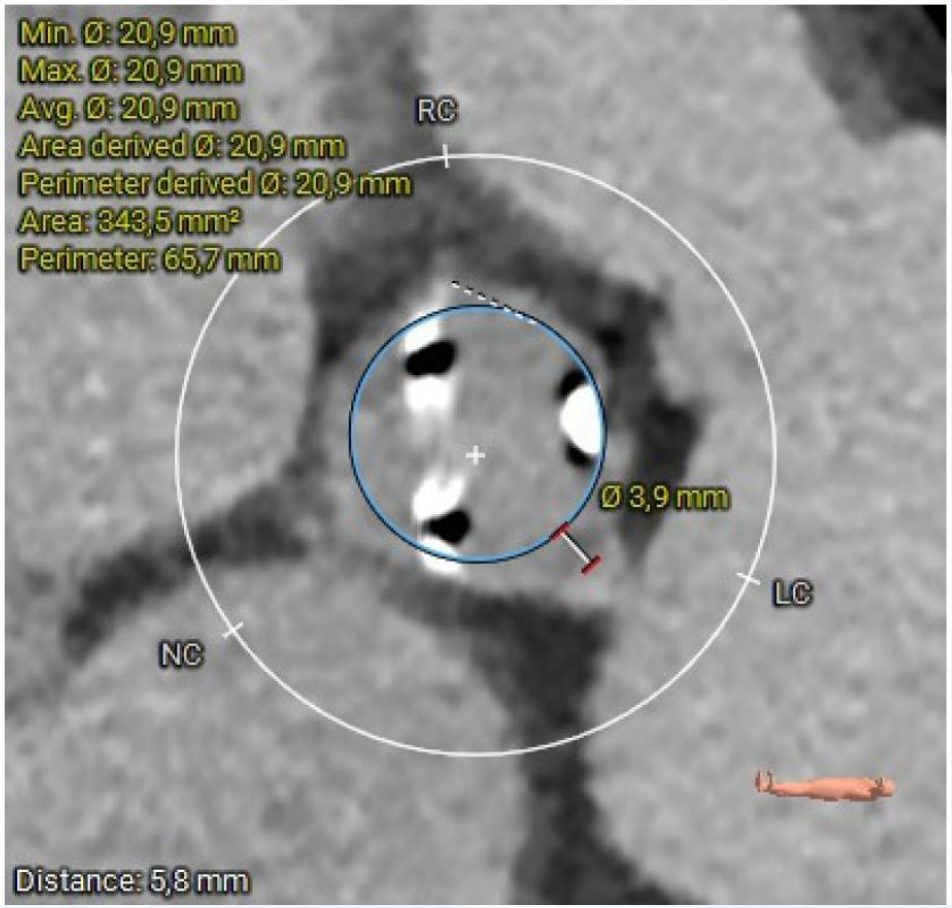
VTC ro RC

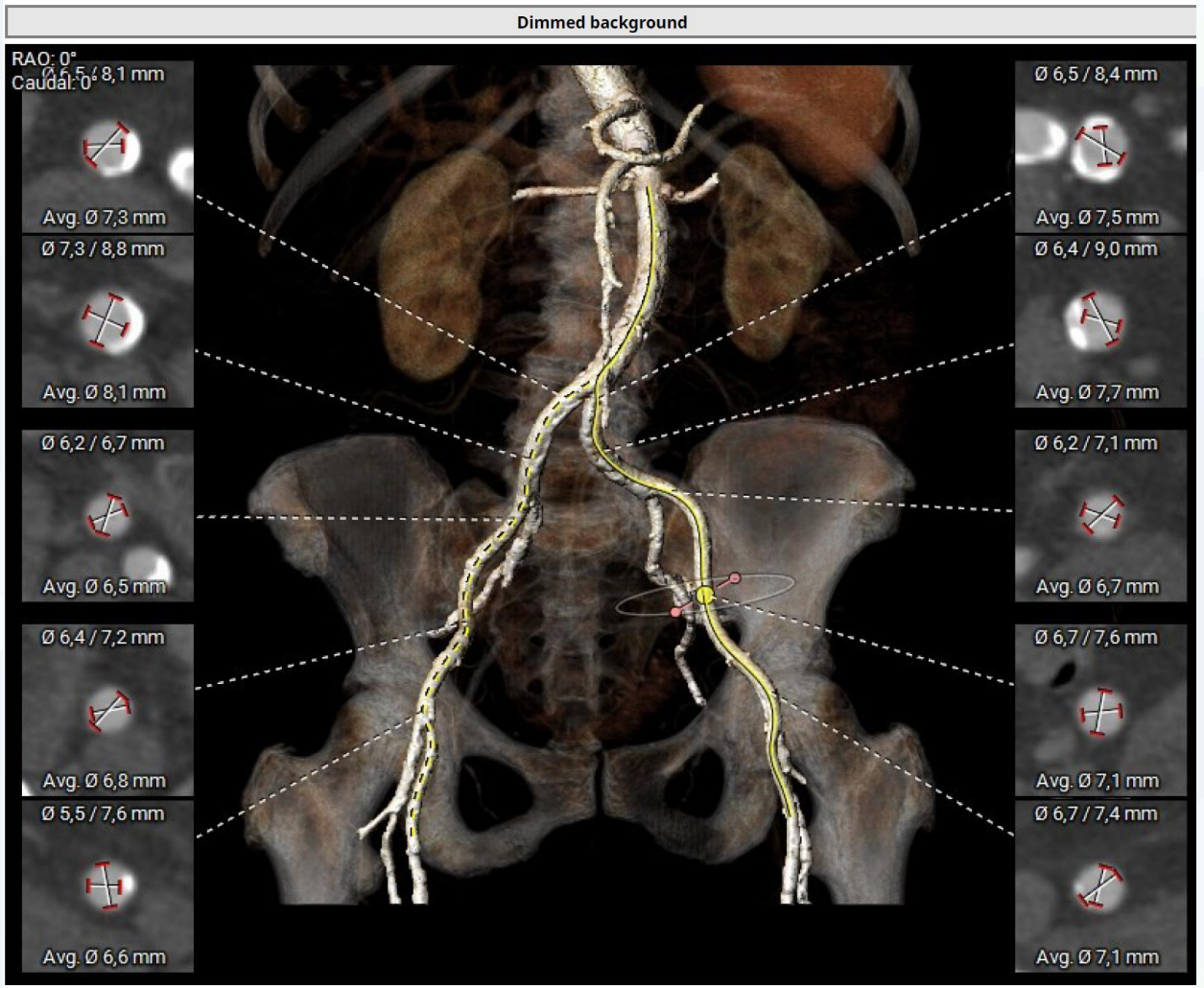


Annulus base to LM and STJ



VTC to LC




Dimmed background
RAO: 0°
Caudal: 0°
Ø 6,5 / 8,1 mm
Avg. Ø 7,3 mm
Ø 6,5 / 8,4 mm
Avg. Ø 7,5 mm
Ø 7,3 / 8,8 mm
Avg. Ø 8,1 mm
Ø 6,4 / 9,0 mm
Avg. Ø 7,7 mm
Ø 6,2 / 6,7 mm
Avg. Ø 6,5 mm
Ø 6,2 / 7,1 mm
Avg. Ø 6,7 mm
Ø 6,4 / 7,2 mm
Avg. Ø 6,8 mm
Ø 6,7 / 7,6 mm
Avg. Ø 7,1 mm
Ø 5,5 / 7,6 mm
Avg. Ø 6,6 mm
Ø 6,7 / 7,4 mm
Avg. Ø 7,1 mm

Caso Clínico

Obstrucción coronaria
Mismatch
Soporte (obesidad y prótesis aórtica 19 mm)

Caso Clínico

Obstrucción coronaria → Modificación de velo

Mismatch → Fractura de la prótesis

Soporte (obesidad y SVAo 19 mm) → Guía alto soporte

CSC 2024
CORONARY AND STRUCTURAL COURSE
CURSO CORONARIO Y ESTRUCTURAL
MADRID

10° ANIVERSARIO
6, 7 y 8 NOVIEMBRE
HOTEL RIU PLAZA DE ESPAÑA

Circulation:
Cardiovascular Interventions

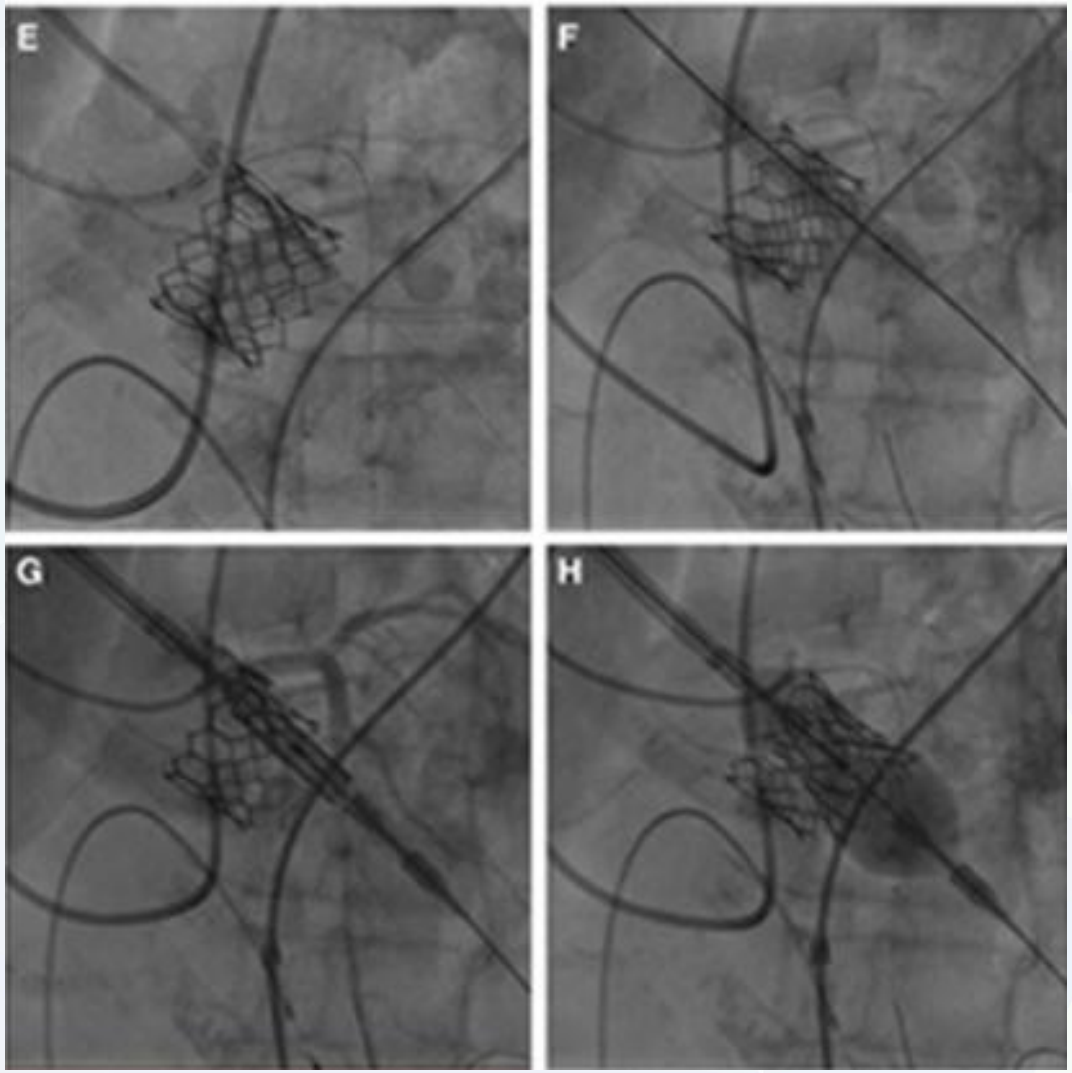
CASE REPORT | Originally Published 21 October 2022 |

Check for updates

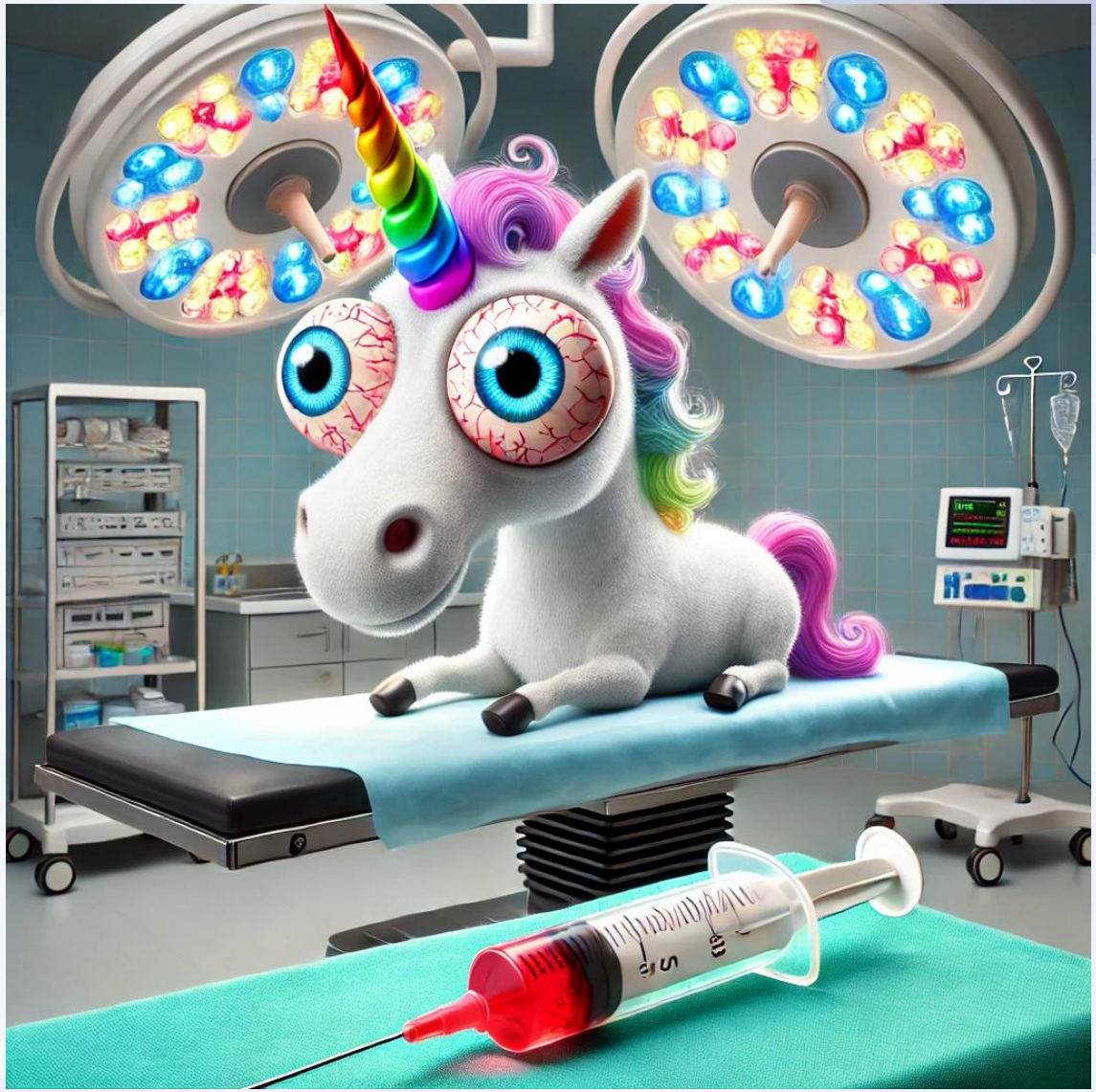
First-in-Human Undermining Iatrogenic Coronary Obstruction With Radiofrequency Needle (UNICORN) Procedure During Valve-in-Valve Transcatheter Aortic Valve Replacement

Kwong-Yue Eric Chan, MBBS, Daniel Tai-Leung Chan, MBBS, Cheung-Chi Simon Lam, MBBS, Michael Shu-Yue Sze, MBBS, Ka-Chun Un, MBBS, Chor-Cheung Frankie Tam, MBBS, Yui-Ming Lam, MBBS, and Chun-Ka Wong, MBBS

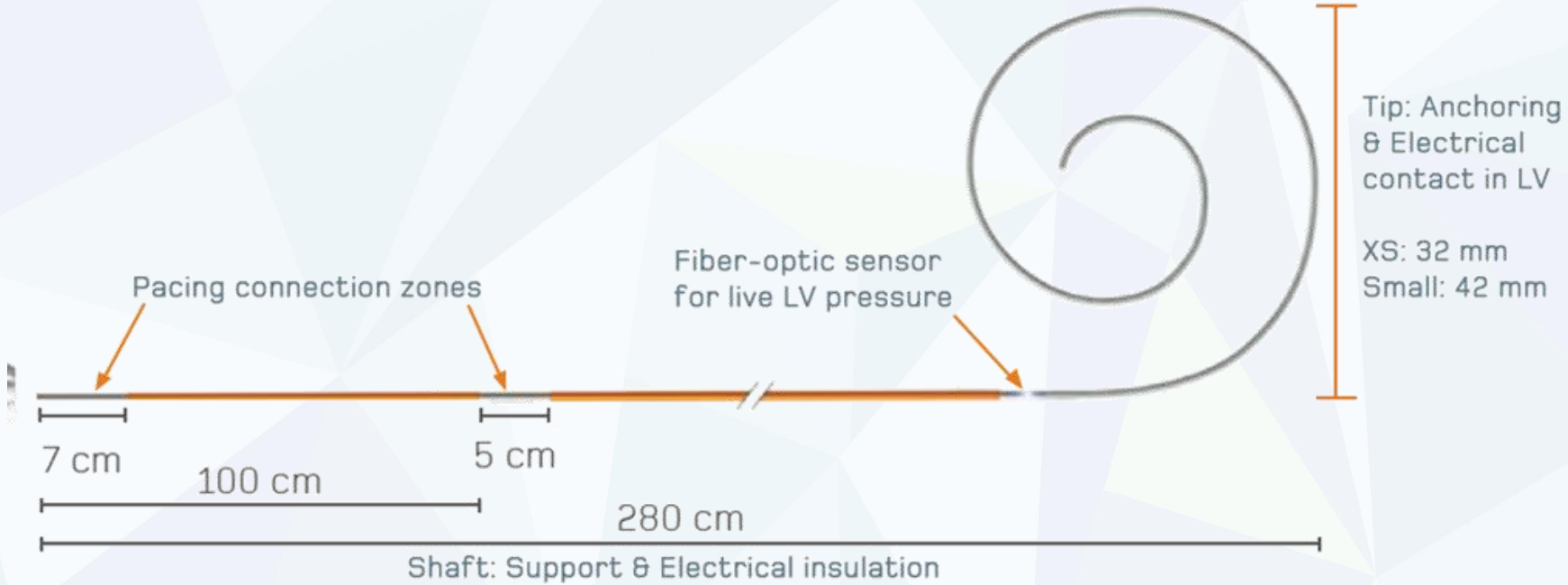
AUTHOR INFO & AFFILIATIONS


E
F
G
H

CRACK-UNICORN con Savvywire

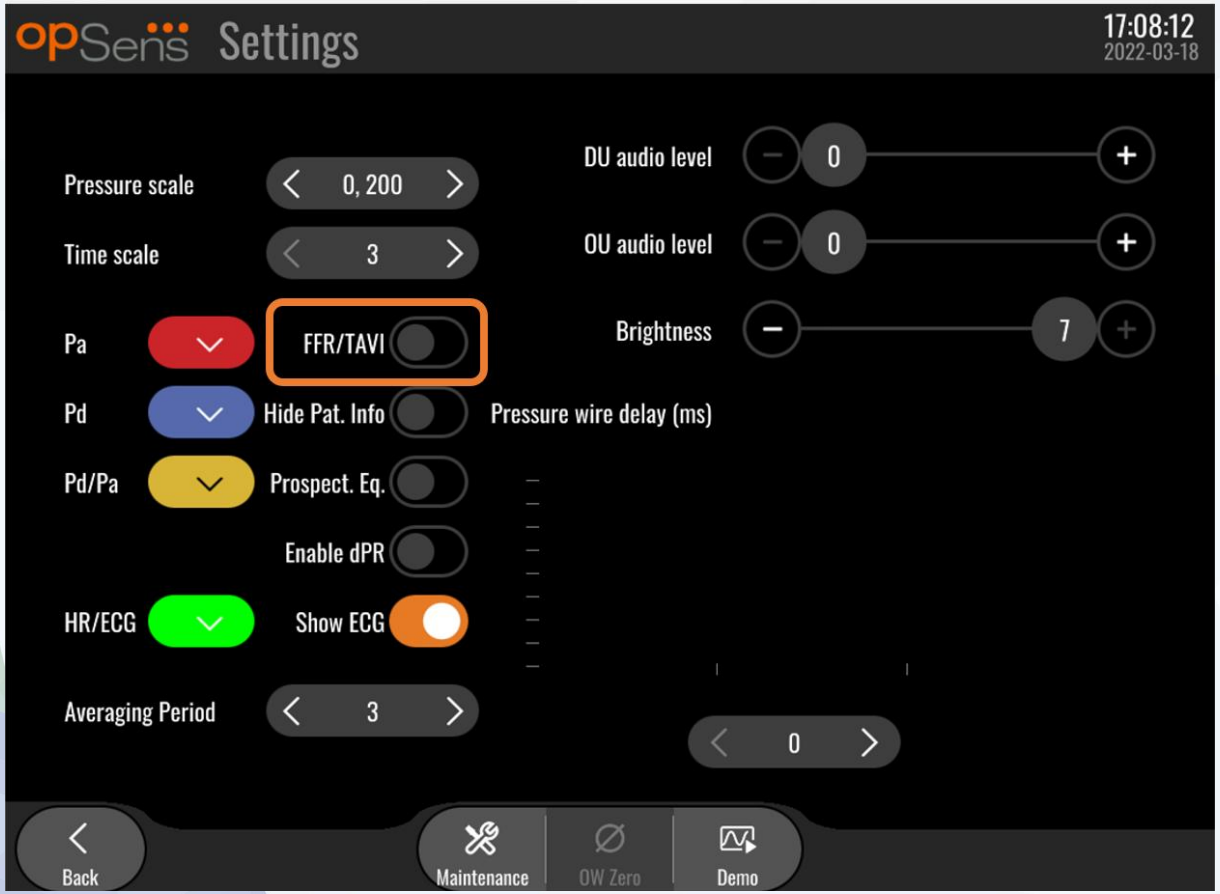


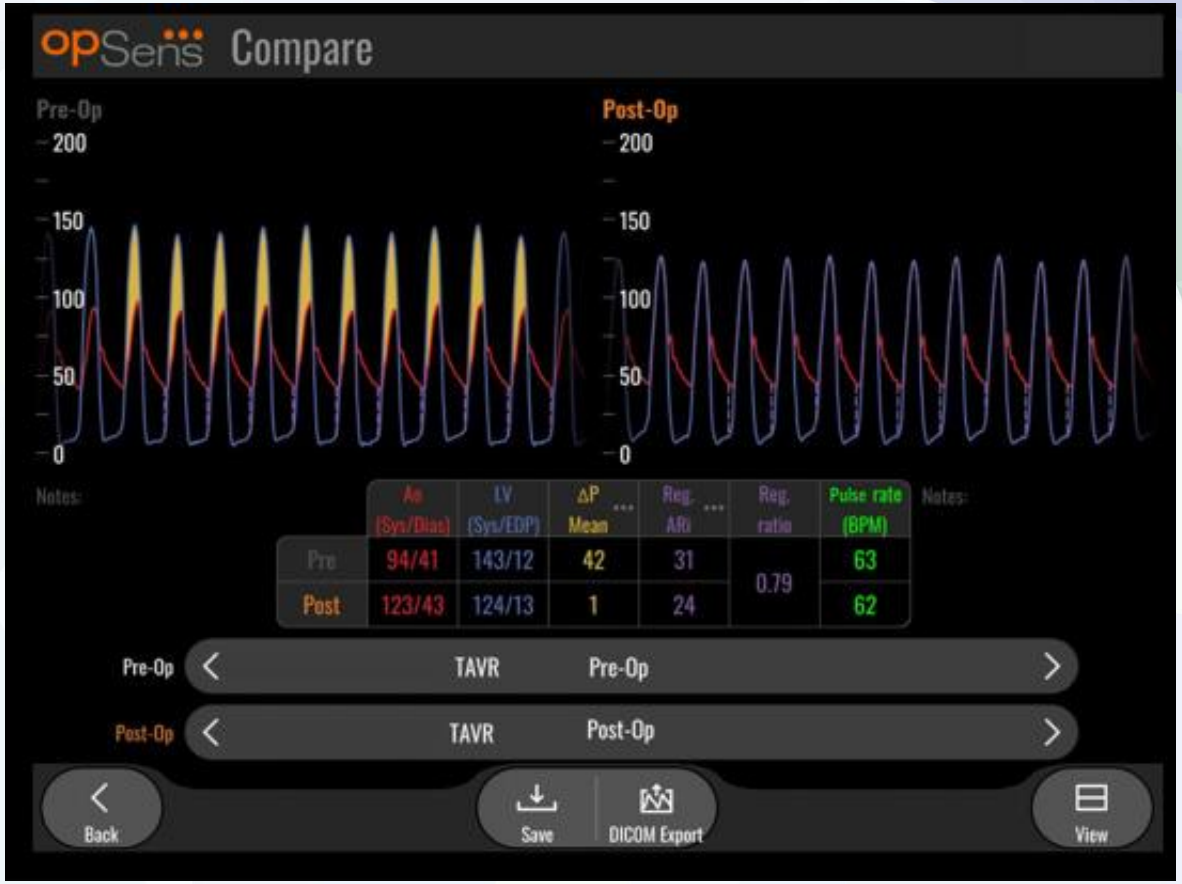
SAVVYWIRE

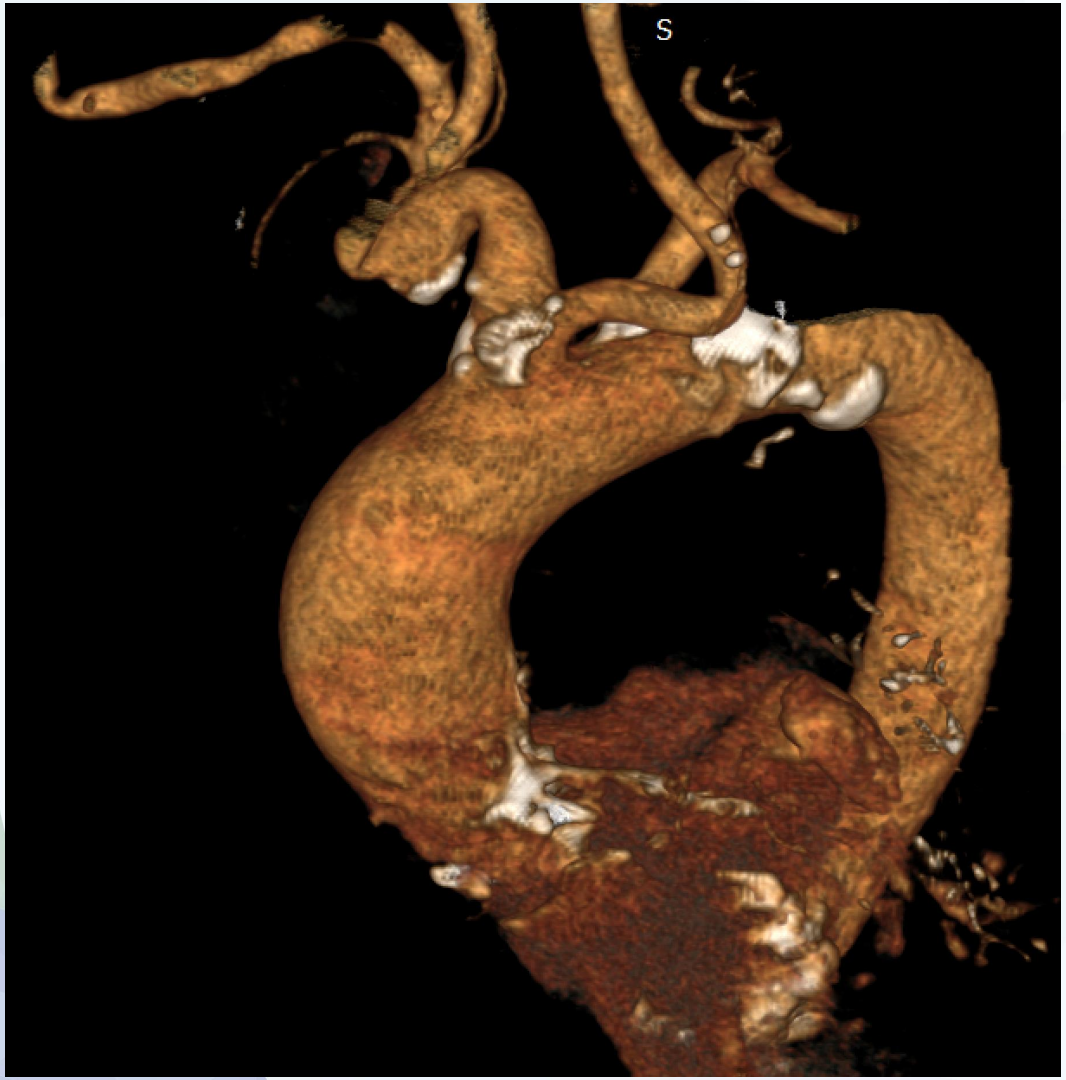


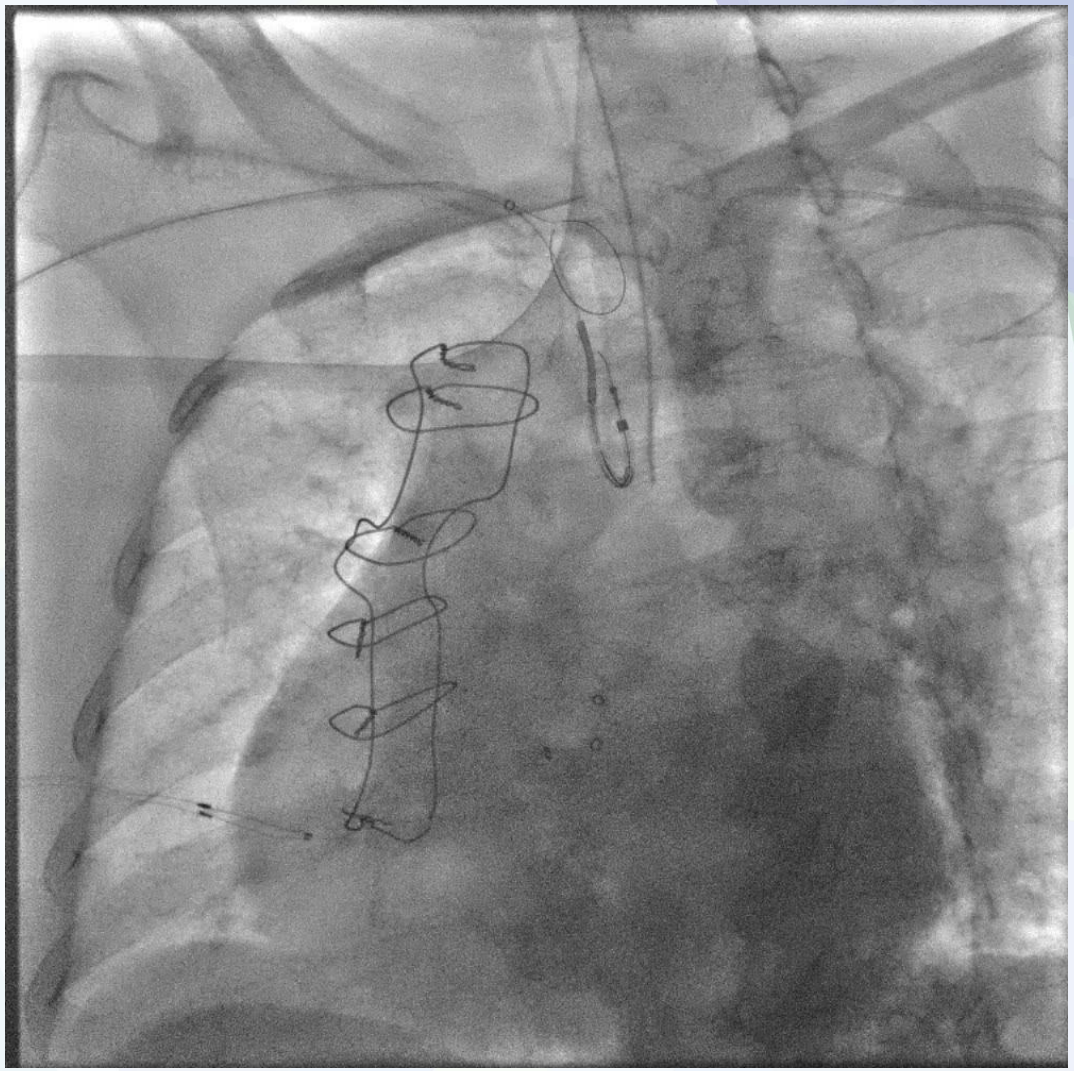
Shaft Stiffness
Safari < SavvyWire < Confida

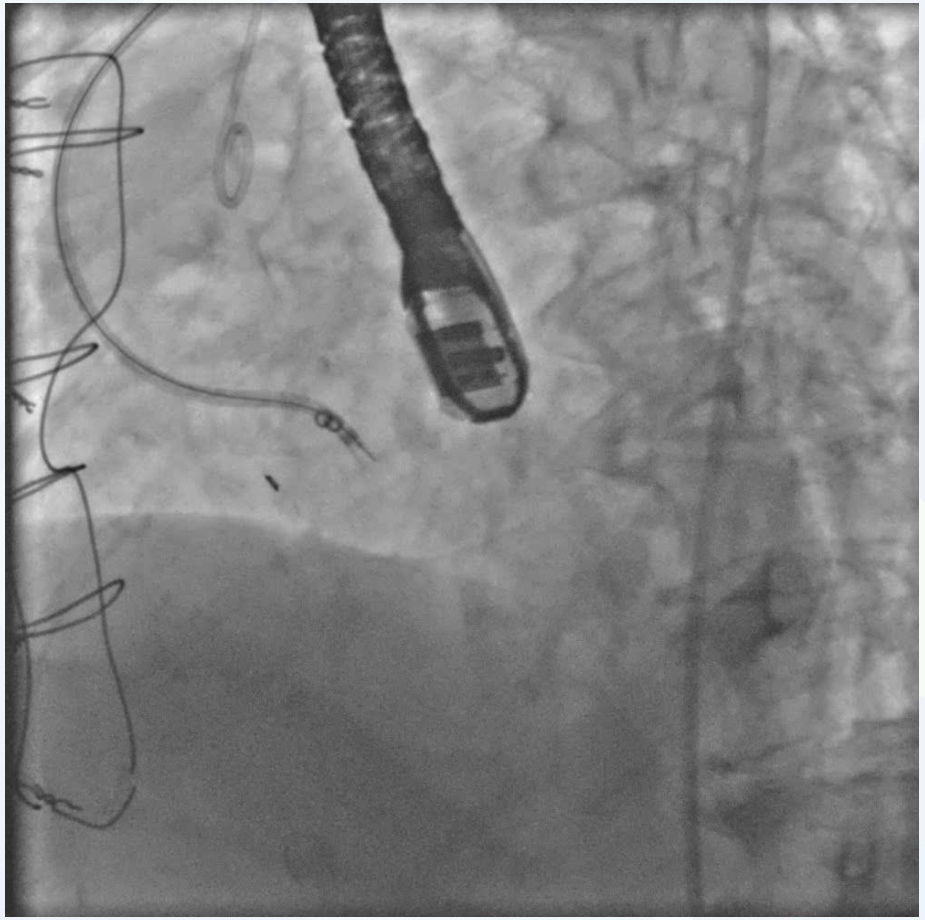
SAVVYWIRE

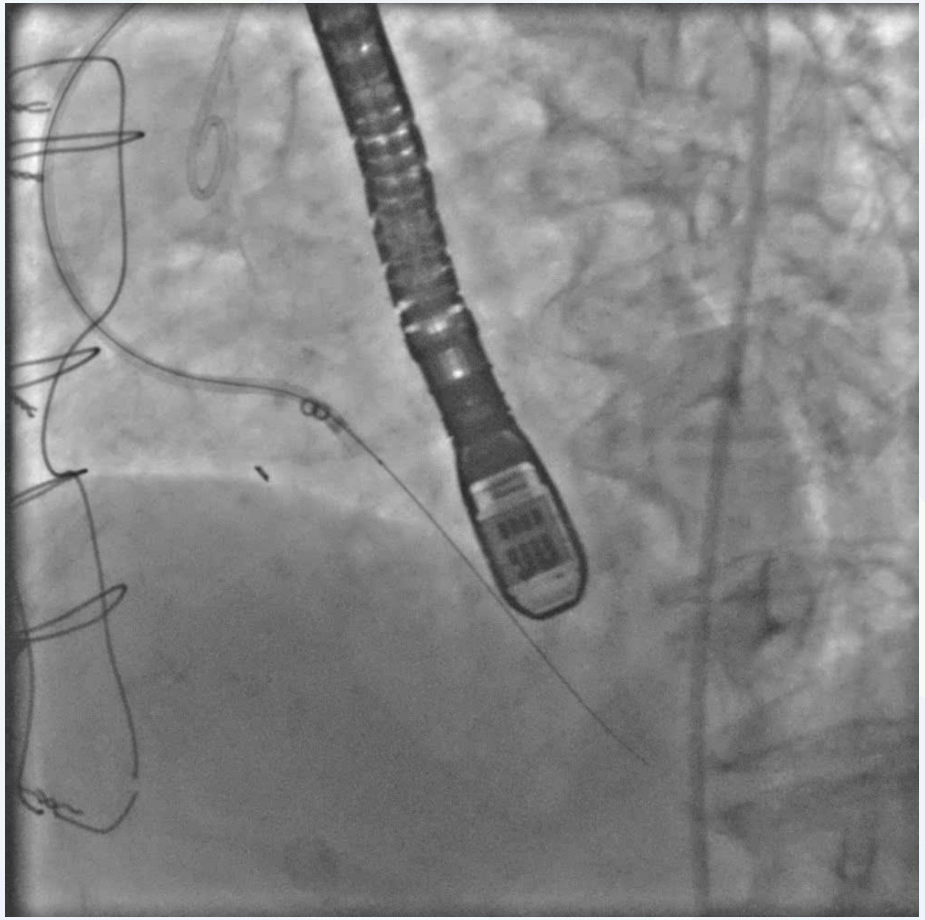

opSens Settings
17:08:12
2022-03-18
Pressure scale
0, 200
Time scale
3
Pa
FFR/TAVI
Pd
Hide Pat. Info
Pd/Pa
Prospect. Eq.
Enable dPR
HR/ECG
Show ECG
Averaging Period
3
DU audio level
0
OU audio level
0
Brightness
7
Pressure wire delay (ms)
0
Back
Maintenance
OW Zero
Demo

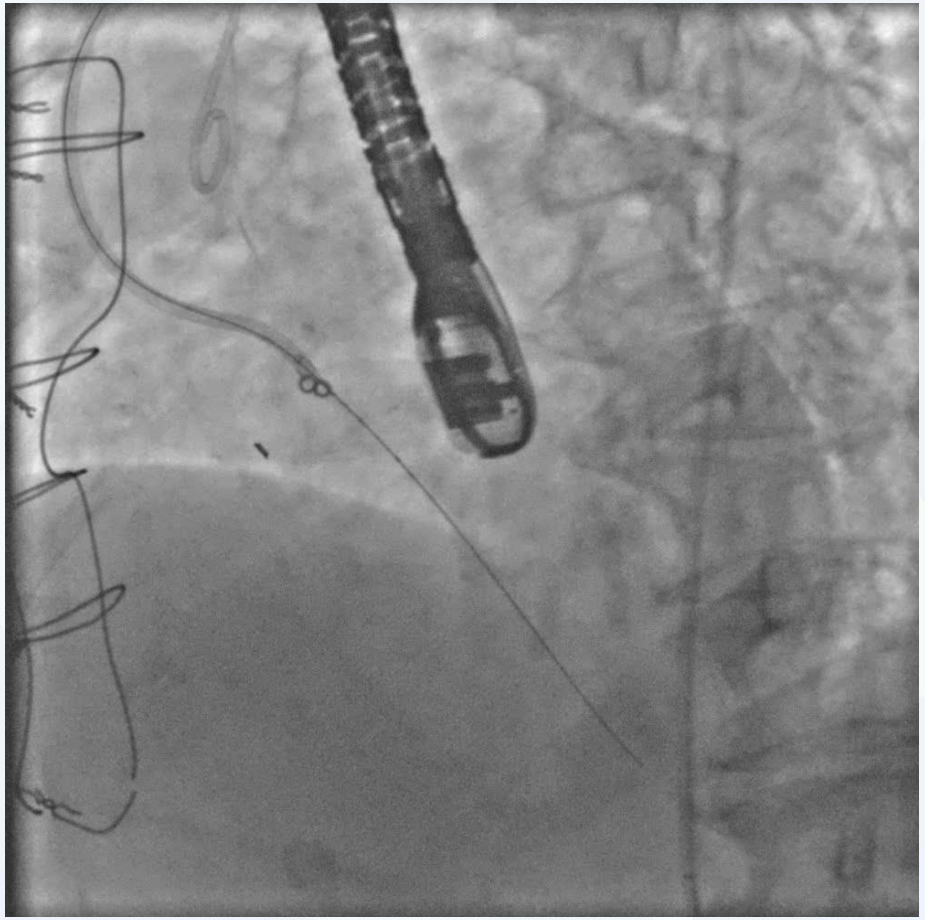

opSens Compare
Pre-Op
Post-Op
200
150
100
50
0
Notes:
Ao (Sys/Dias)
LV (Sys/EDP)
ΔP Mean
Reg. ...
Reg. ratio
Pulse rate (BPM)
Pre
94/41
143/12
42
31
0.79
63
Post
123/43
124/13
1
24
62
Pre-Op
TAVR
Pre-Op
Post-Op
TAVR
Post-Op
Back
Save
DICOM Export
View


S

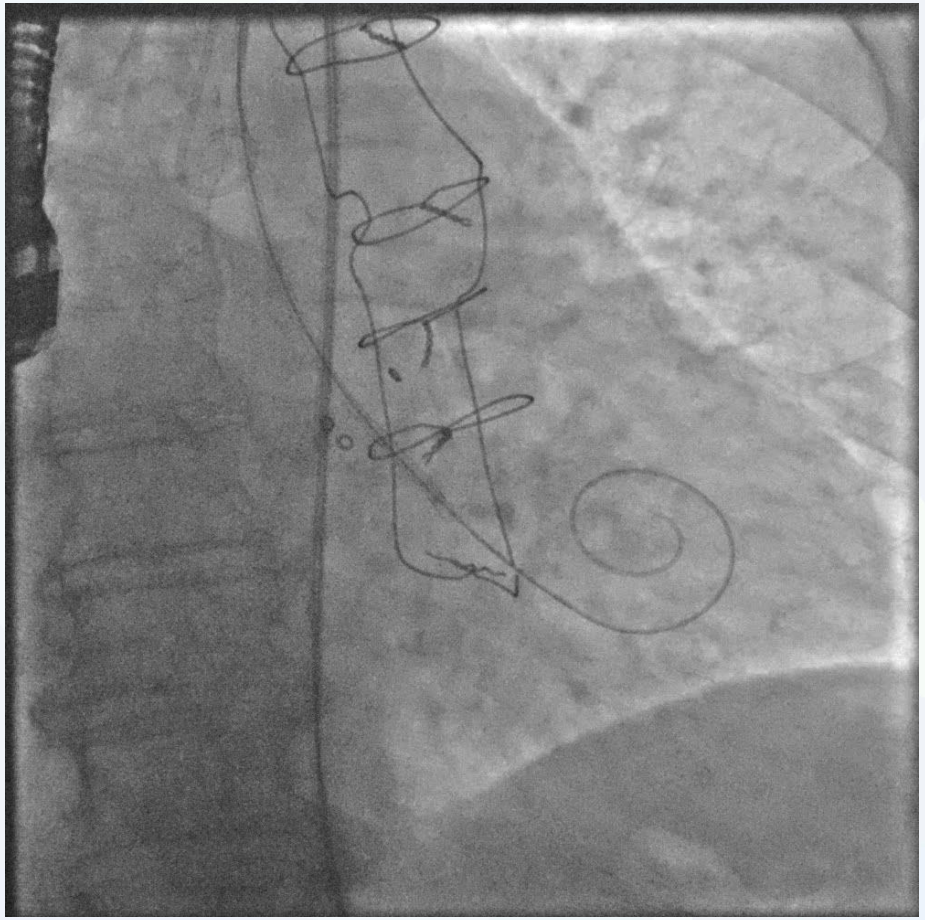








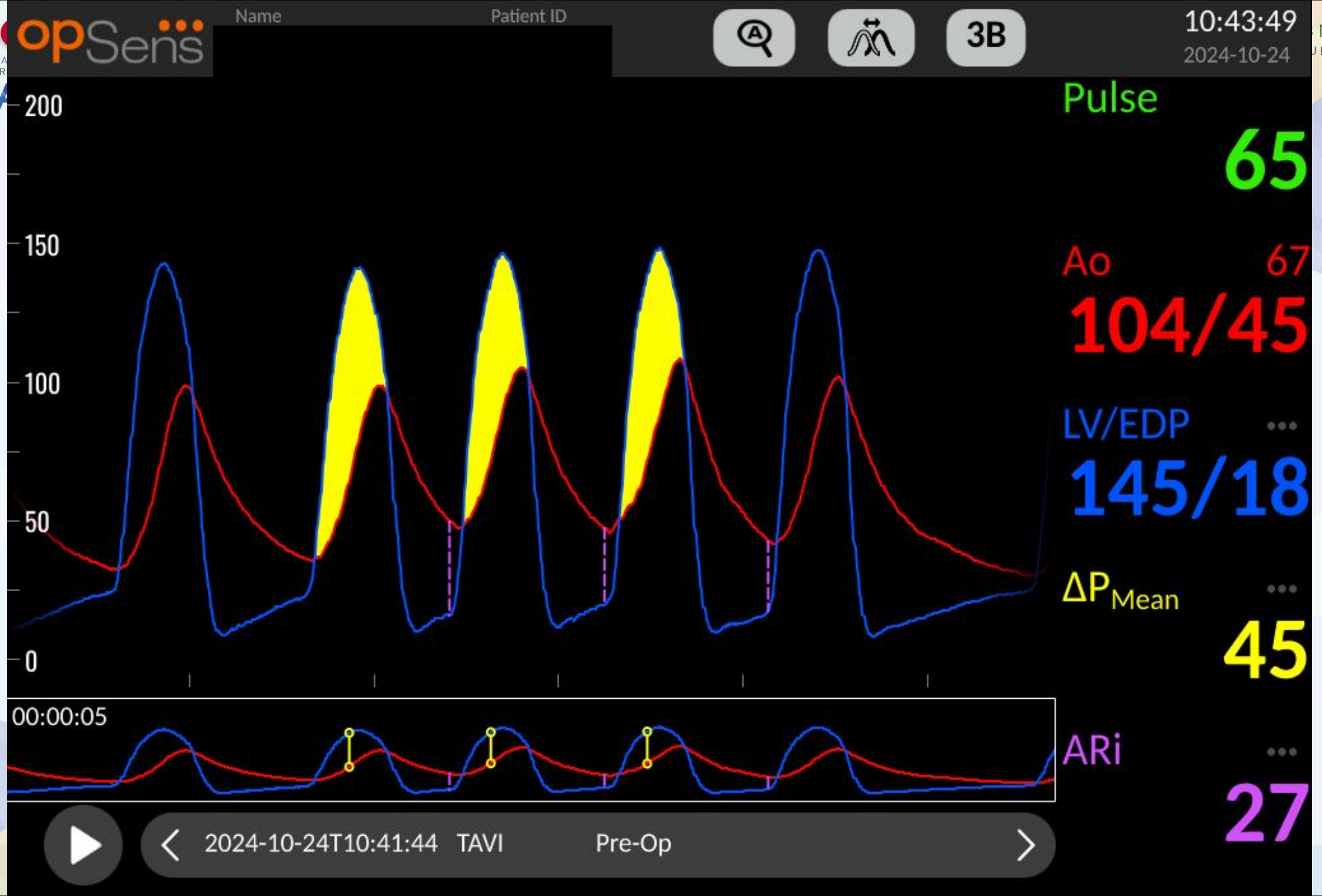
RE

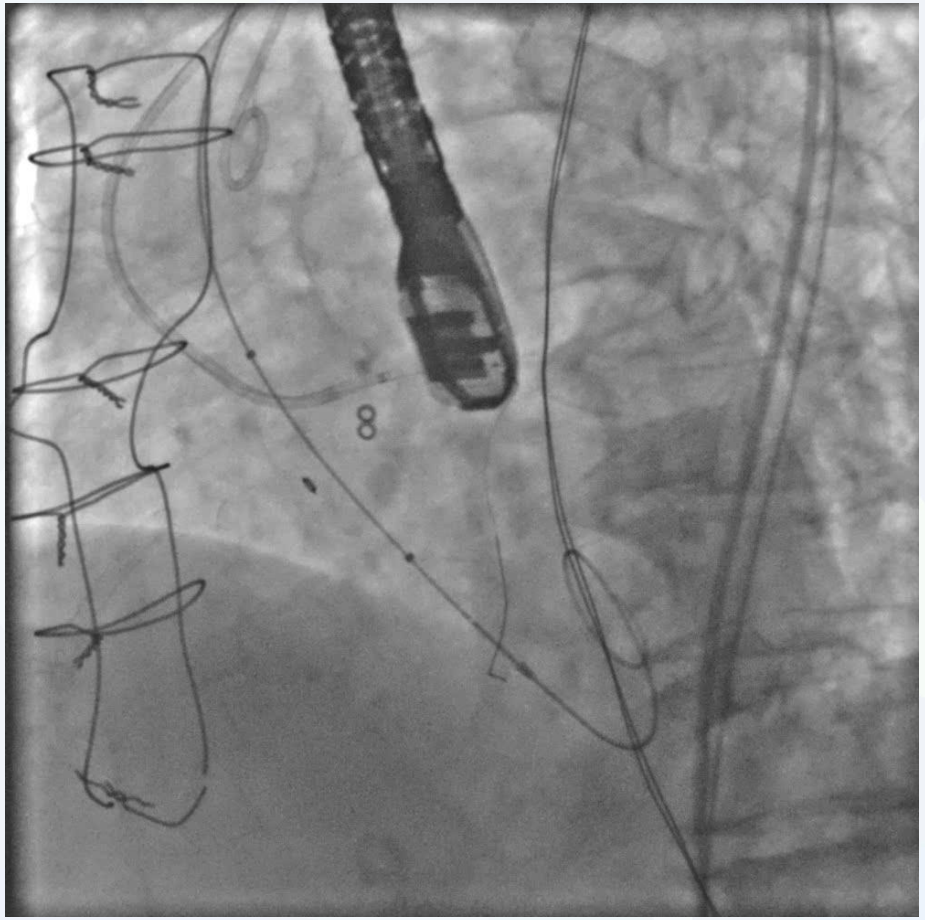



opSens
Name
Patient ID
3B
10:45:36
2024-10-24
200
150
100
50
0
Pulse
74
Ao
60
107/47
LV/EDP
136/17
ΔP Inst.
48
00:00:34
ARi
28
2024-10-24T10:35:23 TAVI
Pre-Op

[redacted]


HR
76
Ao
76
91/61
LV/EDP
108/18
ΔP Mean
33
ARi
27
175
150
125
100
75
50
25
0
00:00:02
Sequence
Type
Information
#
Position
Pd/Pa
dPR
Description
2024-10-24T10:35:23
TAVI
Unselected,Pre-Op,Unselected
2024-10-24T10:36:30
TAVI
Other,Pre-Op,Unselected
2024-10-24T10:41:30
TAVI
Unselected,Unselected,Unselected
Stop
Zoom In
Reset View
Save
Export
Print
Exit


opSens
Name
Patient ID
3B
10:43:49
2024-10-24
Pulse
65
200
150
100
50
0
Ao
67
104/45
LV/EDP
145/18
ΔPMean
45
00:00:05
ARi
27
2024-10-24T10:41:44 TAVI
Pre-Op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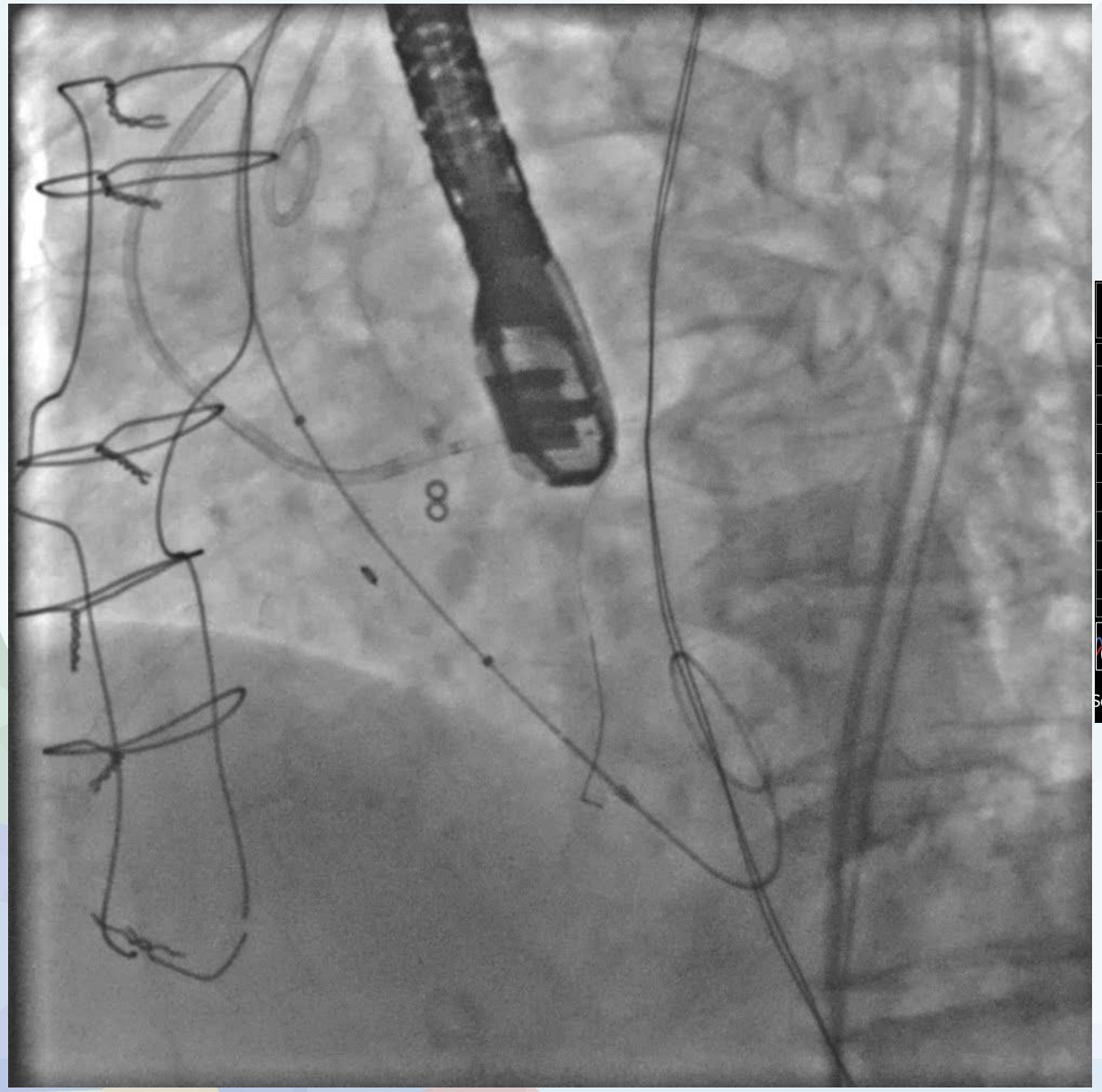
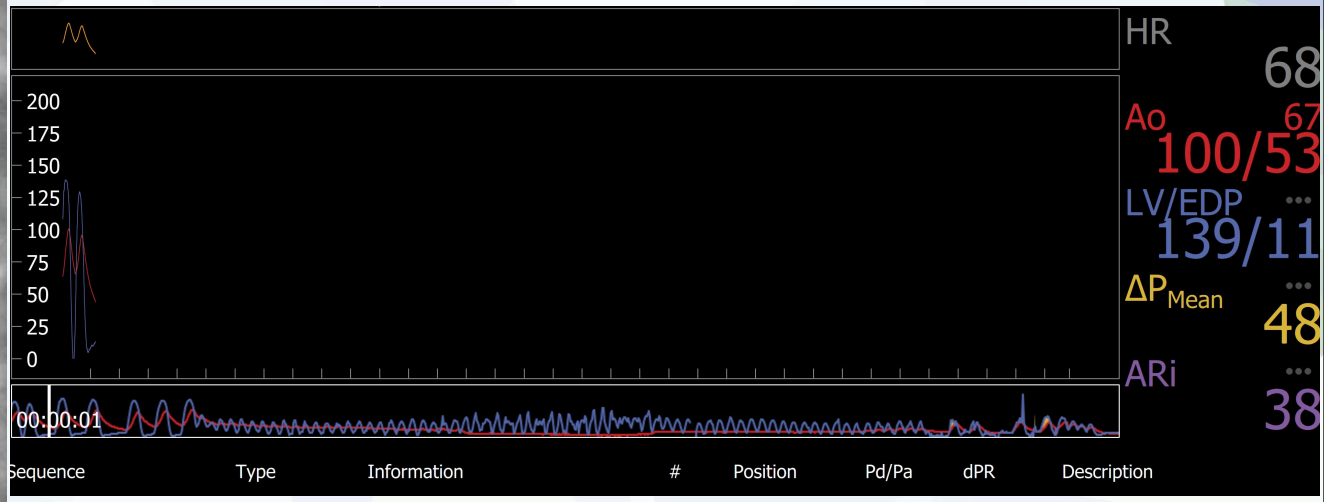
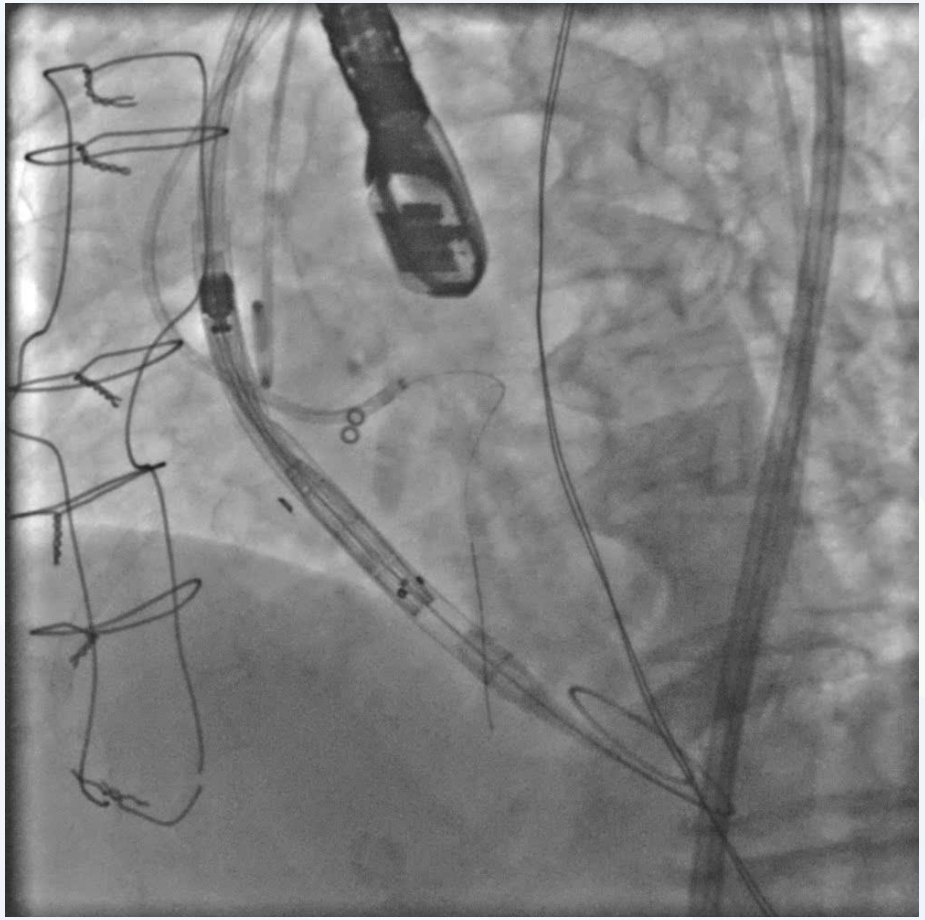
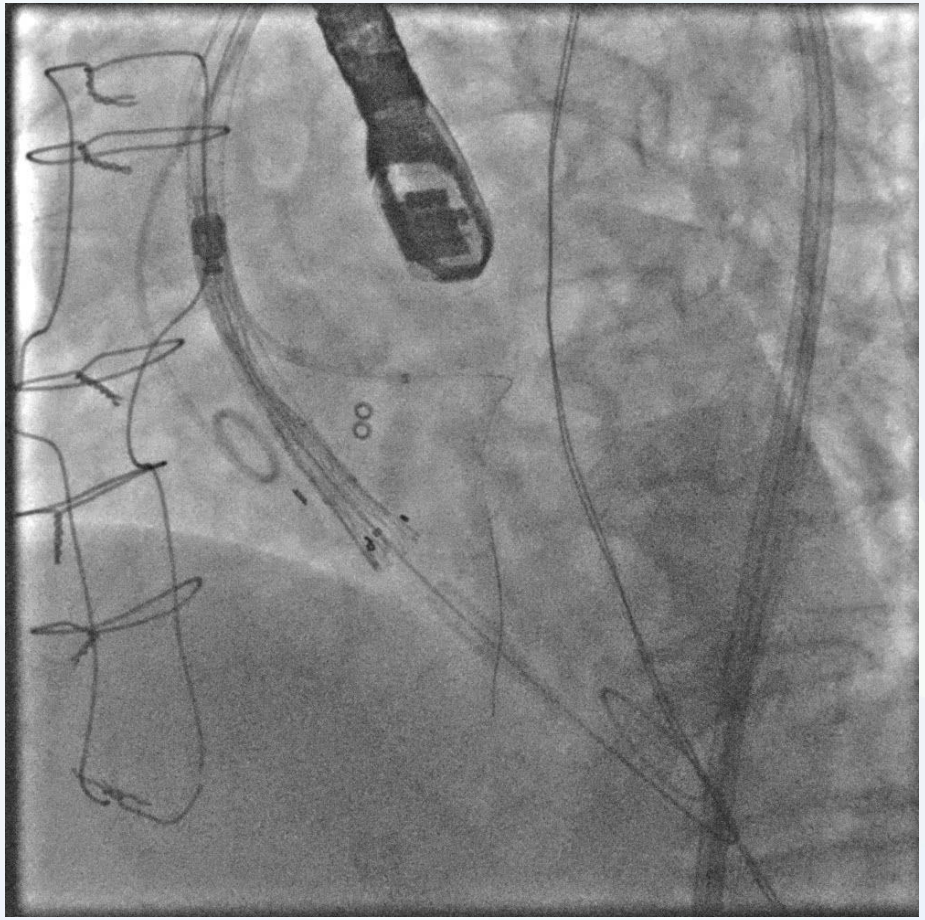
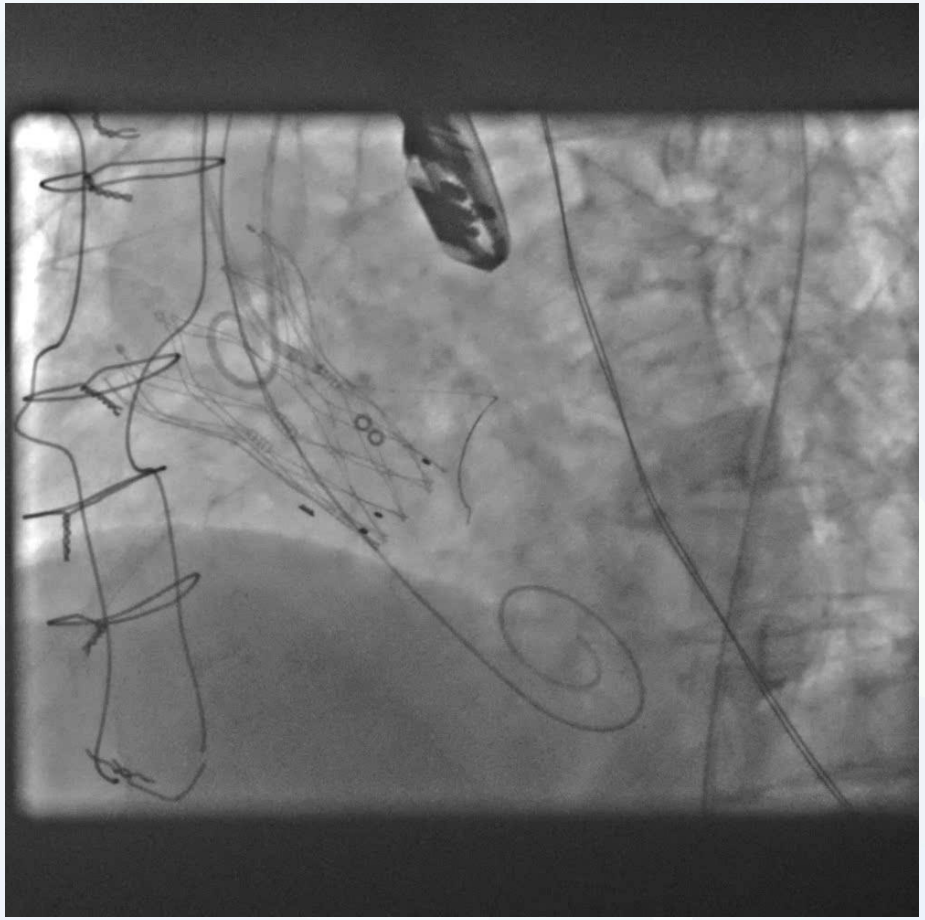
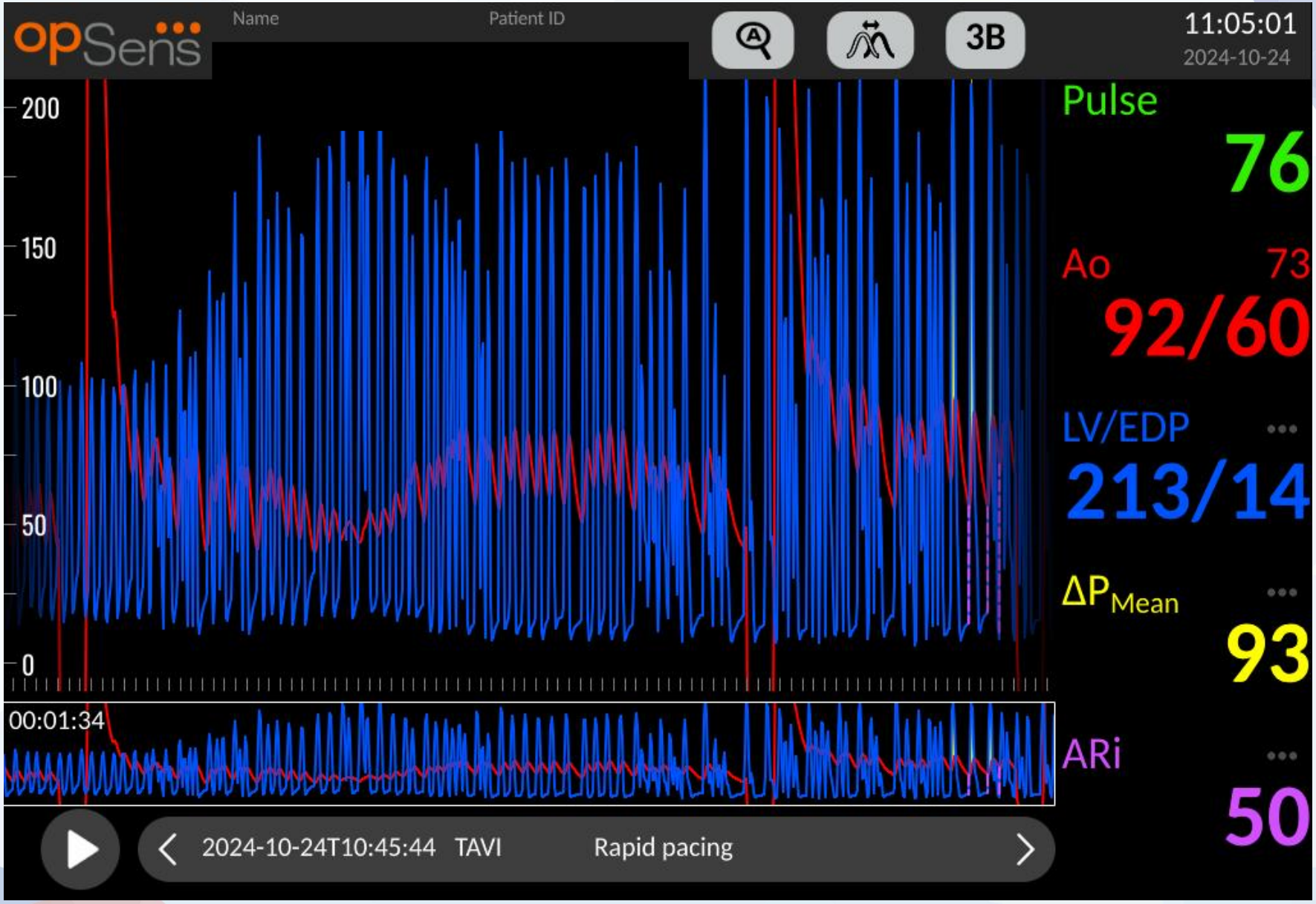


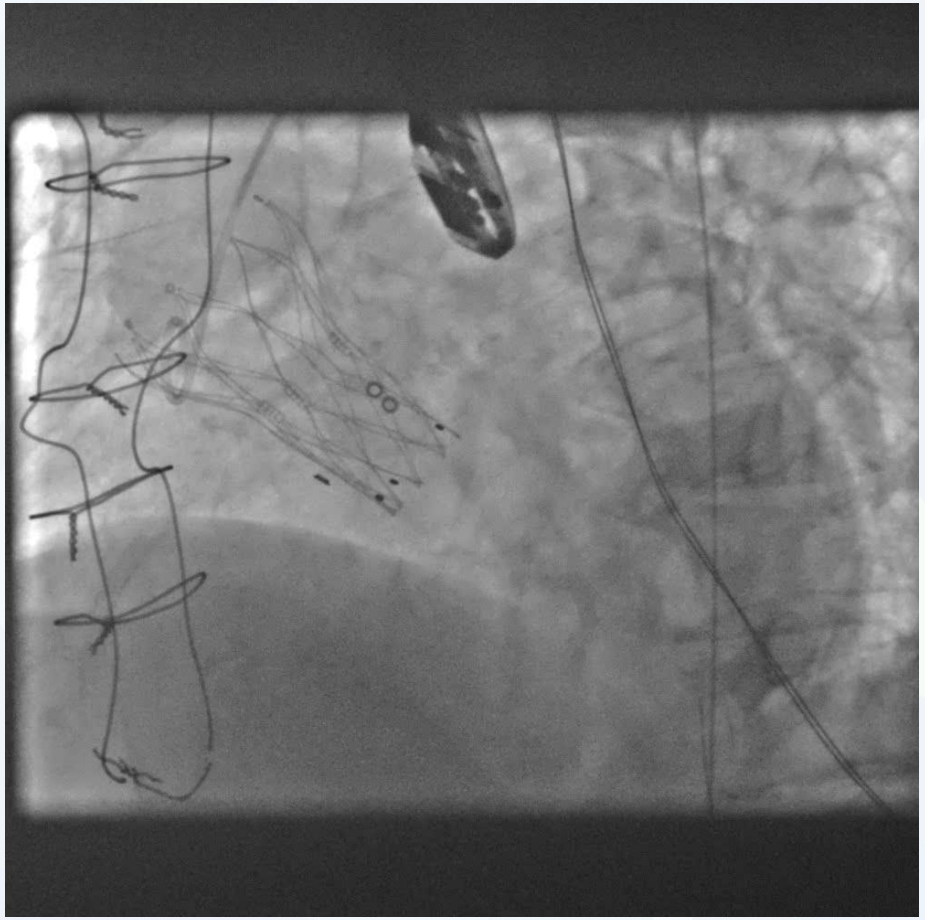

HR
68
Ao
67
100/53
LV/EDP
139/11
ΔP Mean
48
ARi
38
200
175
150
125
100
75
50
25
0
00:00:01
Sequence
Type
Information
#
Position
Pd/Pa
dPR
Description



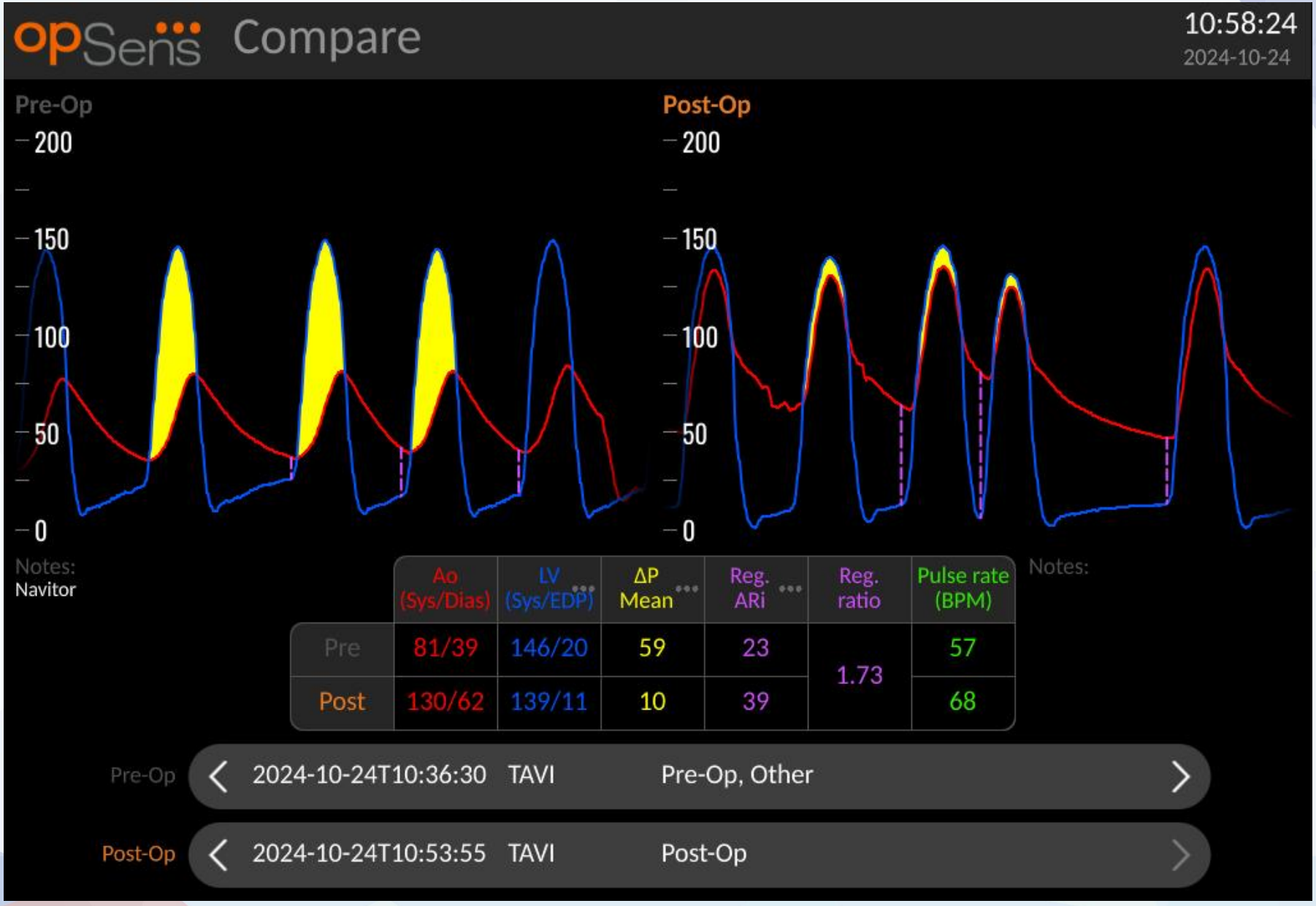


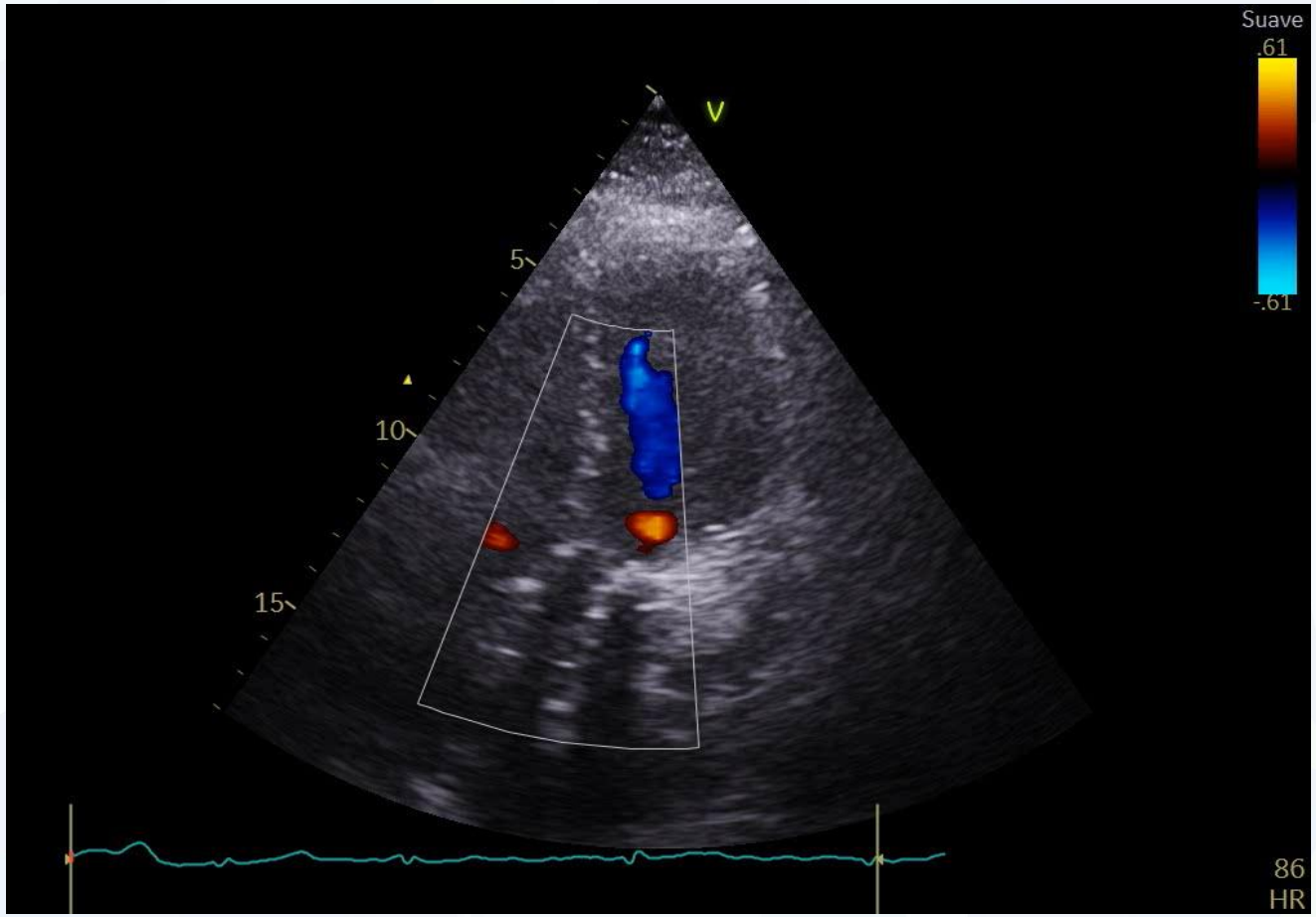


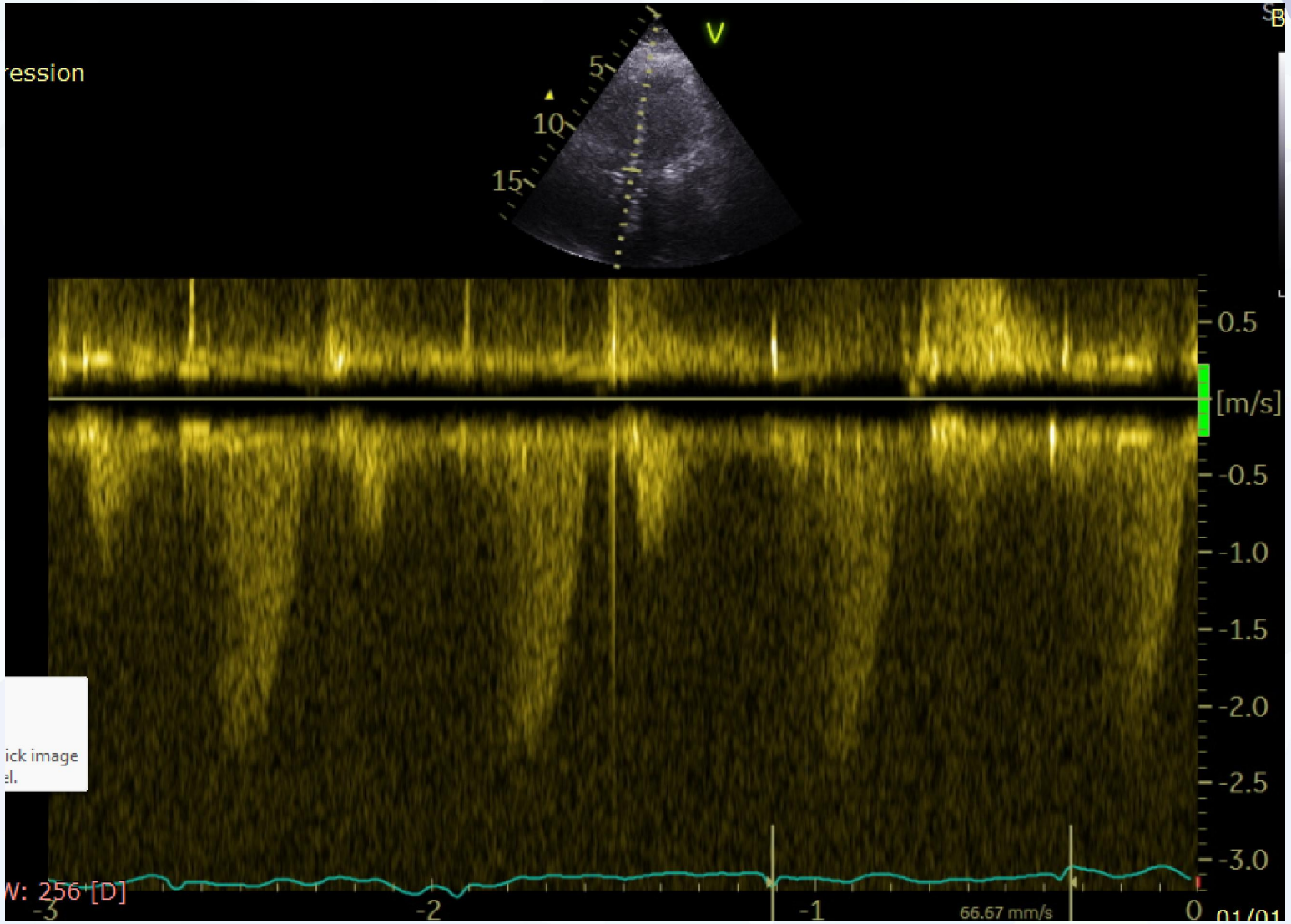

opSens
Name
Patient ID
3B
11:05:01
2024-10-24
200
150
100
50
0
Pulse
76
Ao
73
92/60
LV/EDP
213/14
ΔP Mean
93
00:01:34
ARi
50
2024-10-24T10:45:44 TAVI
Rapid pacing




opSens
Name
Patient ID
3B
10:56:21
2024-10-24
200
150
100
50
0
Pulse
68
Ao
79
130/62
LV/EDP
139/11
ΔP Mean
10
00:00:08
ARi
39
2024-10-24T10:53:55 TAVI
Post-Op


opSens
Compare
10:58:24
2024-10-24
Pre-Op
Post-Op
200
150
100
50
0
Notes:
Navitor
Notes:
Ao (Sys/Dias)
LV (Sys/EDP)
ΔP Mean
Reg. ARi
Reg. ratio
Pulse rate (BPM)
Pre
81/39
146/20
59
23
1.73
57
Post
130/62
139/11
10
39
68
Pre-Op
2024-10-24T10:36:30
TAVI
Pre-Op, Other
Post-Op
2024-10-24T10:53:55
TAVI
Post-Op


Suave
.61
-.61
V
5
10
15
86
HR


ression
V
5
10
15
0.5
[m/s]
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
ick image
el.
W: 256 [D]
-3
-2
-1
66.67 mm/s
0
01/01

Conclusiones

- **SavvyWire**
  - Guía alto soporte
  - Monitorización peri-procedimiento
    - Toma de decisiones
    - Simplificación del procedimiento
- **CRACK-UNICORN**
  - Opción para VIV válvulas pequeñas con riesgo obstrucción coronaria