

CoreValve® Evolut R™ Alternative Access

# SUBCLAVIAN APPROACH



富山大学附属病院 循環器センター

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# 89 years female

Ht. 142cm  
Wt. 42kg  
BSA. 1.30

**NYHA: 3**

Symptom: dyspnea on effort



## Risk Score

STS Score **6.3 %**

## Explain the reason why we chose TAVI

- **high age 89 y.o.**
- CSHA=4
- MMSE=26
- **Access tortuosity**

## AS Indices

mPG **55mmHg**  
Vmax **4.87 m/s**  
AVA **0.67cm<sup>2</sup>**  
AVAi **0.65cm<sup>2</sup>/m<sup>2</sup>**

## ECG

NSR

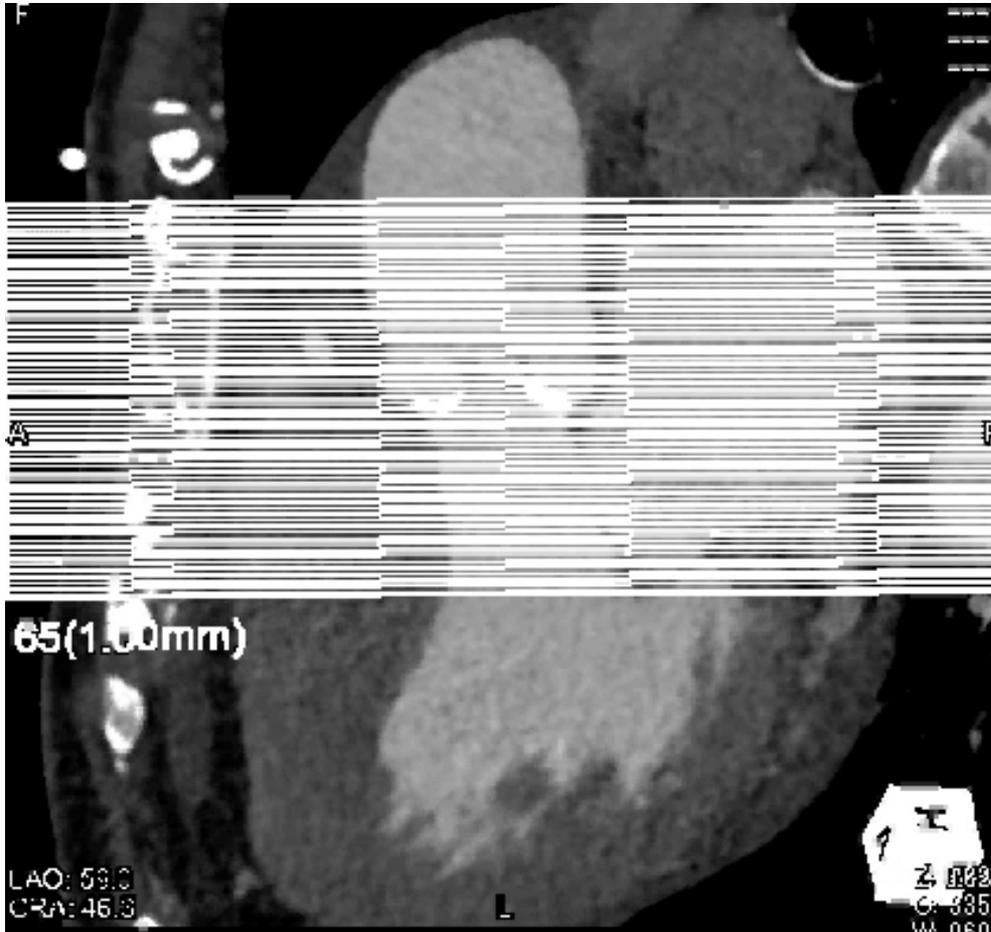
## Labs

Alb 3.9 g/dl  
Cre 0.86 mg/dl  
eGFR 60 ml/min/m<sup>2</sup>  
BNP 38.1 pg/ml  
Hb 9.3 g/dl  
Plt 22.2 X10<sup>4</sup>/μ

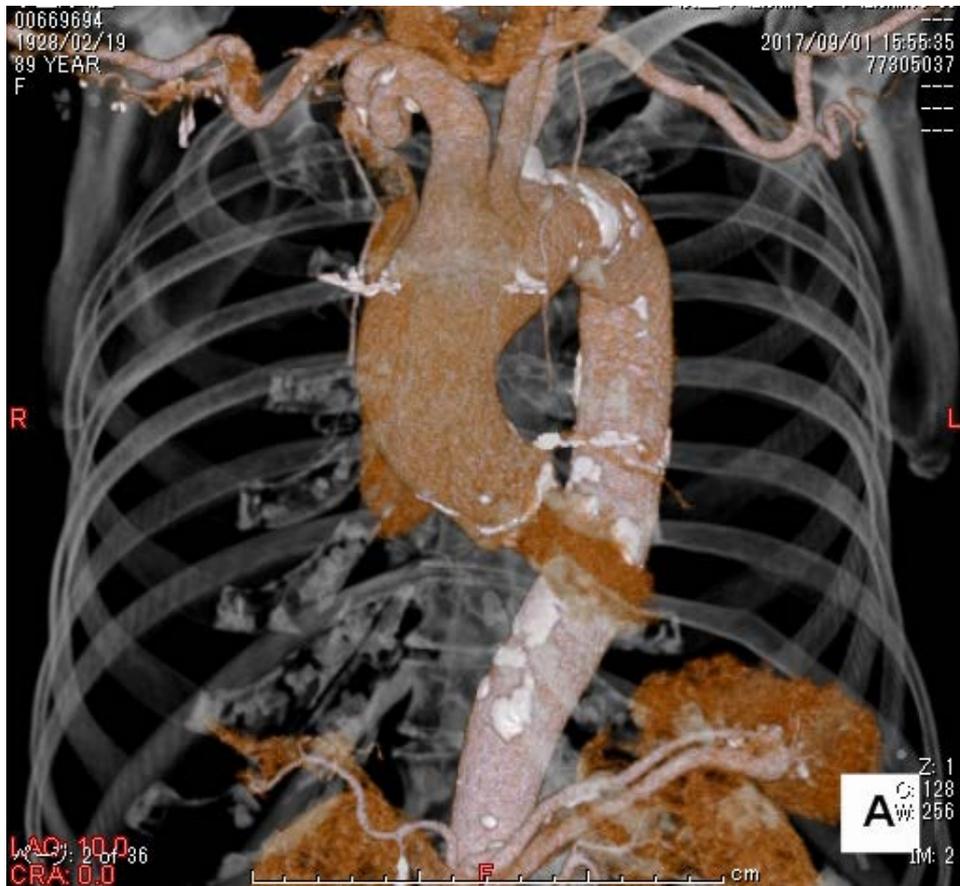
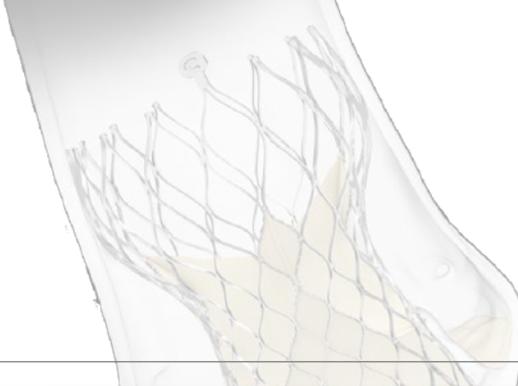
## UCG

EF:46%  
Dd/s: 53/40  
**AR: mild~moderate**  
MR: mild

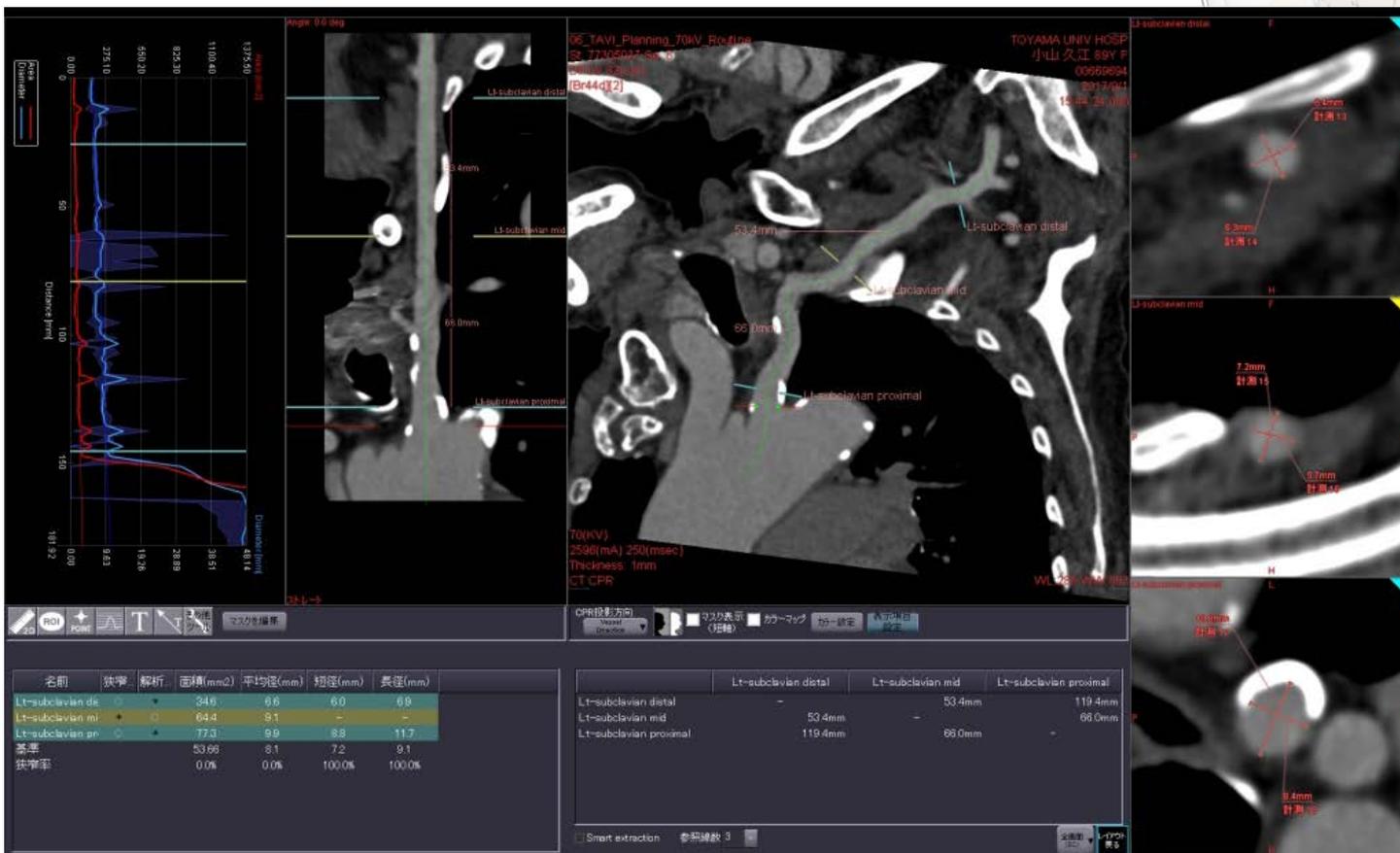
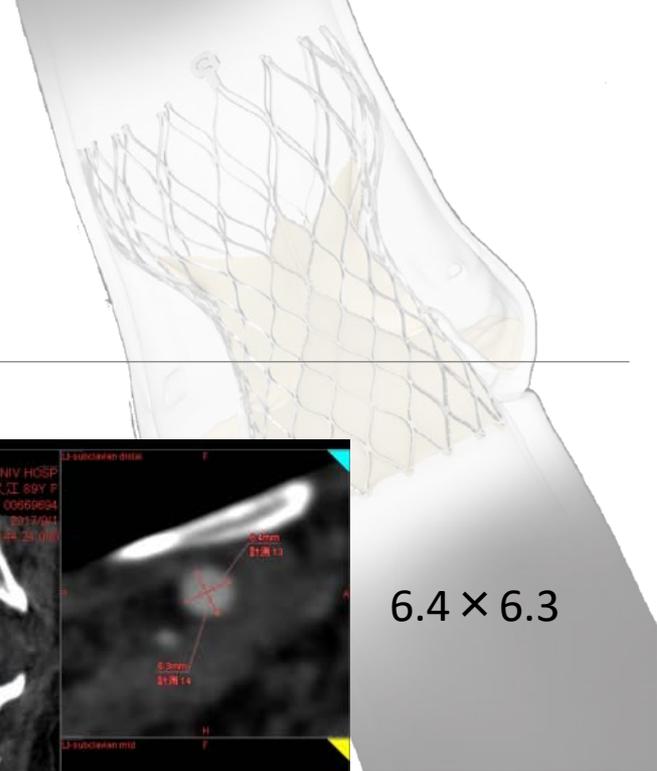
# Aortic valve complex



# Access



# Access



6.4 × 6.3

7.2 × 5.7

10.8 × 8.4

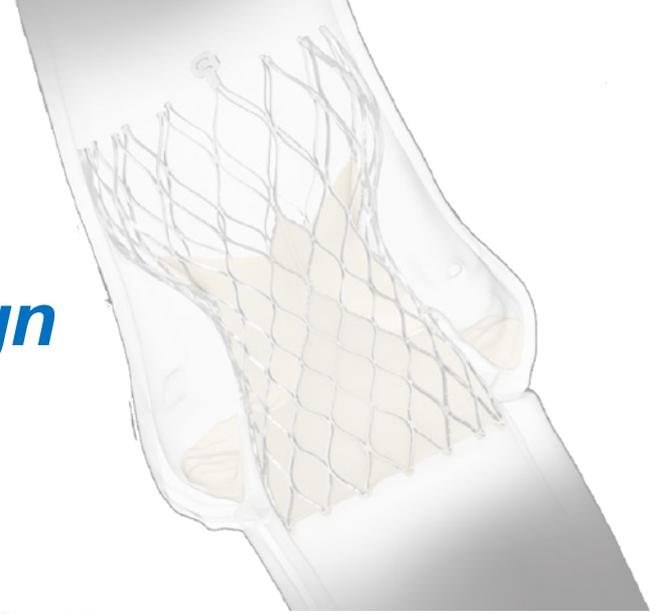
# Question: アプローチおよびvalve 選択

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1. Femoral
2. Subclavian (Evolut R)
3. Apical (Sapien 3)
4. Direct Aorta (Evolut R)

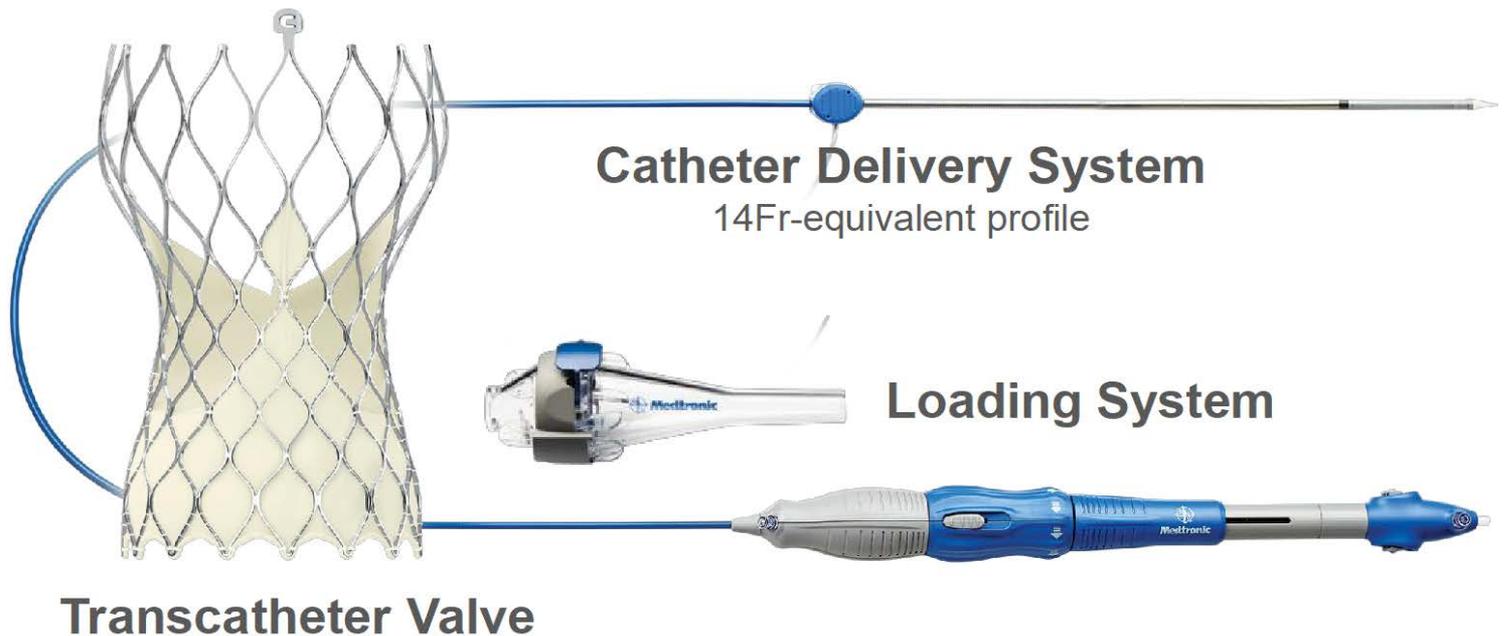


- ✓ ***Self-Expanding Frame***
- ✓ ***Supra Annular Valve Design***
- ✓ ***Porcine Pericardial Tissue***



## CoreValve Evolut R System

Recapturable valve and delivery catheter with loading system

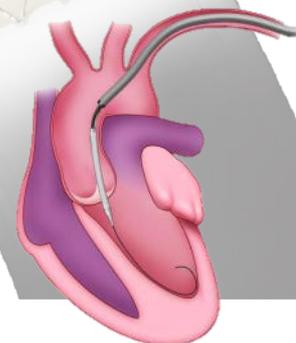


# EVOLUT<sup>®</sup> R 3つの異なるアクセスルート

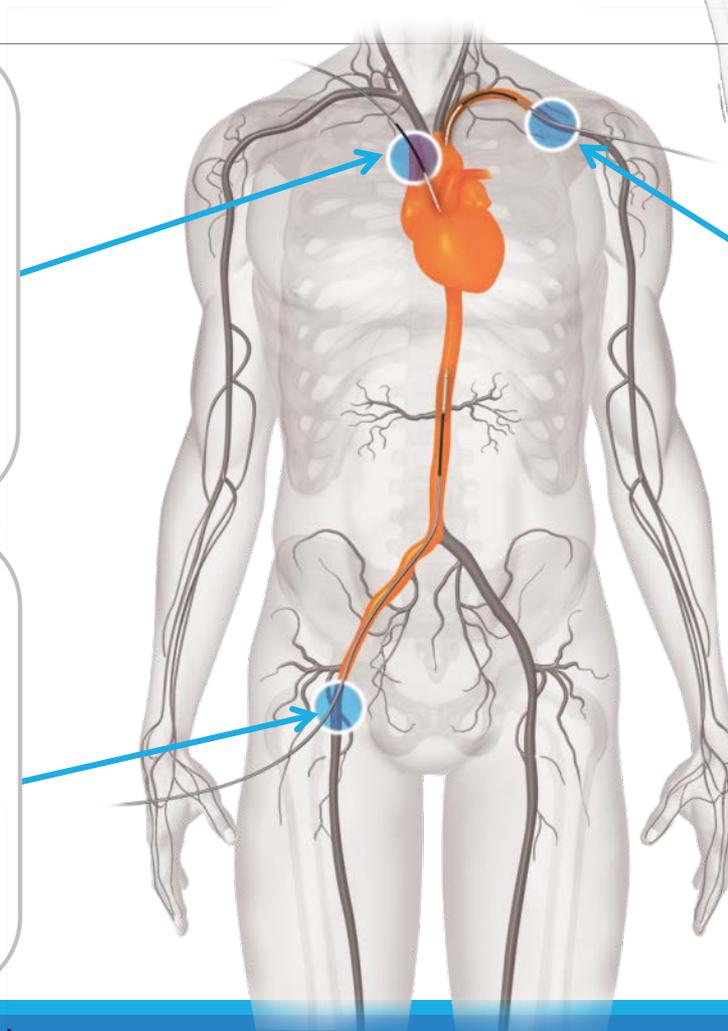
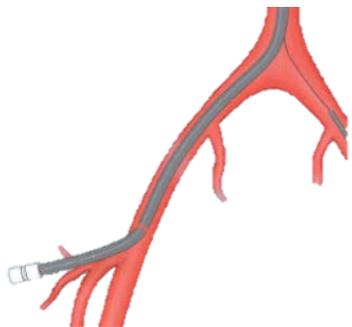
直接大動脈



鎖骨下動脈



大腿動脈



# 当院で施行したSA症例



**Case 1**

**AAA(+)**

**Tortuosity(-)**



**Case 2**

**DAAA(+)**

**Tortuosity(-)**



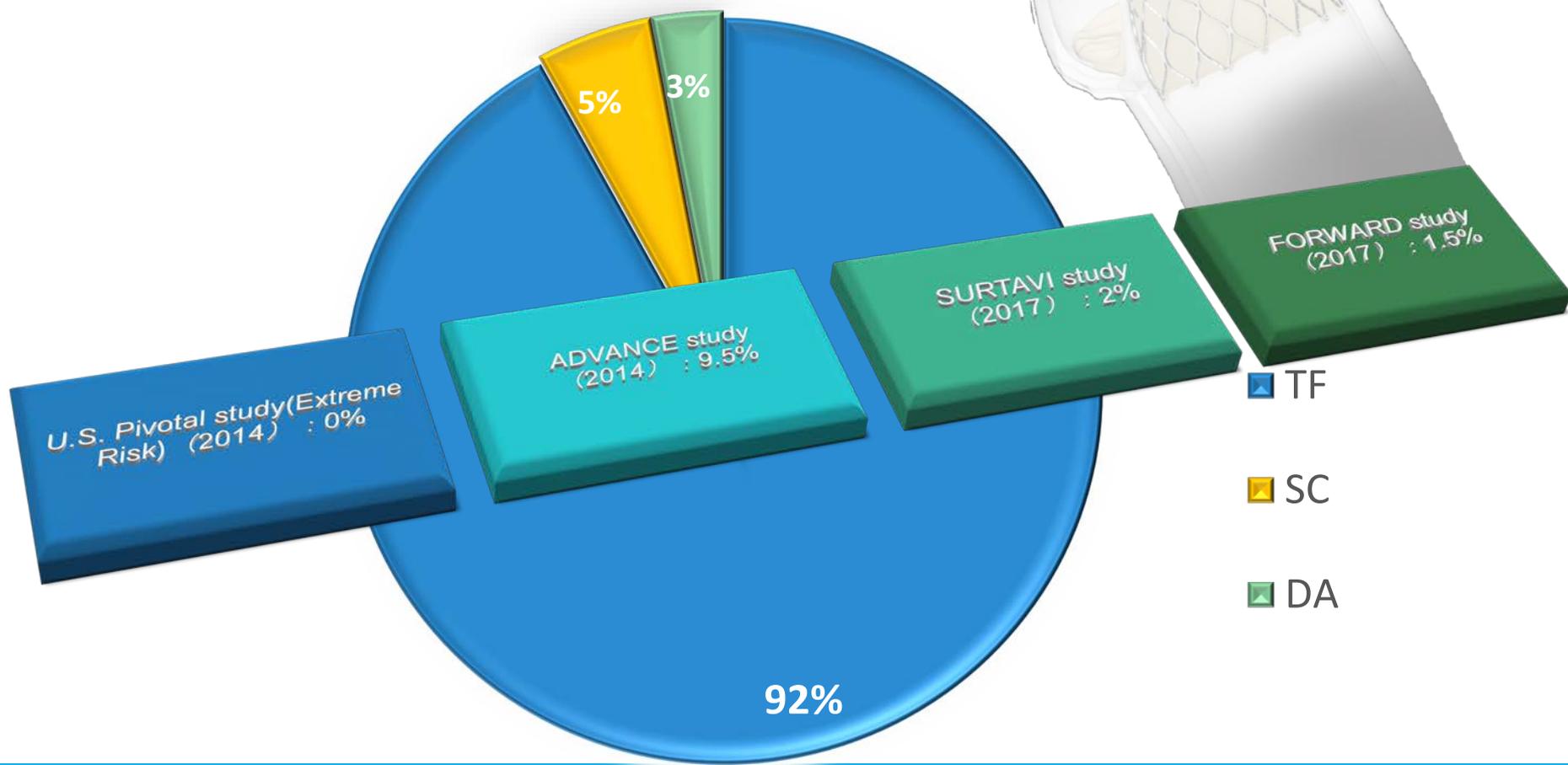
**Case 3**

**CIAA(+)**

**Tortuosity(+)**



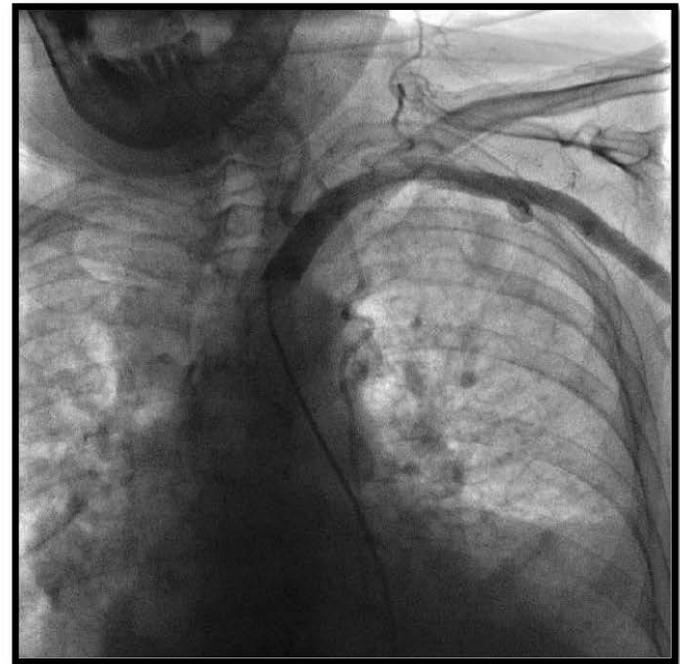
# アクセス部位割合（日本）



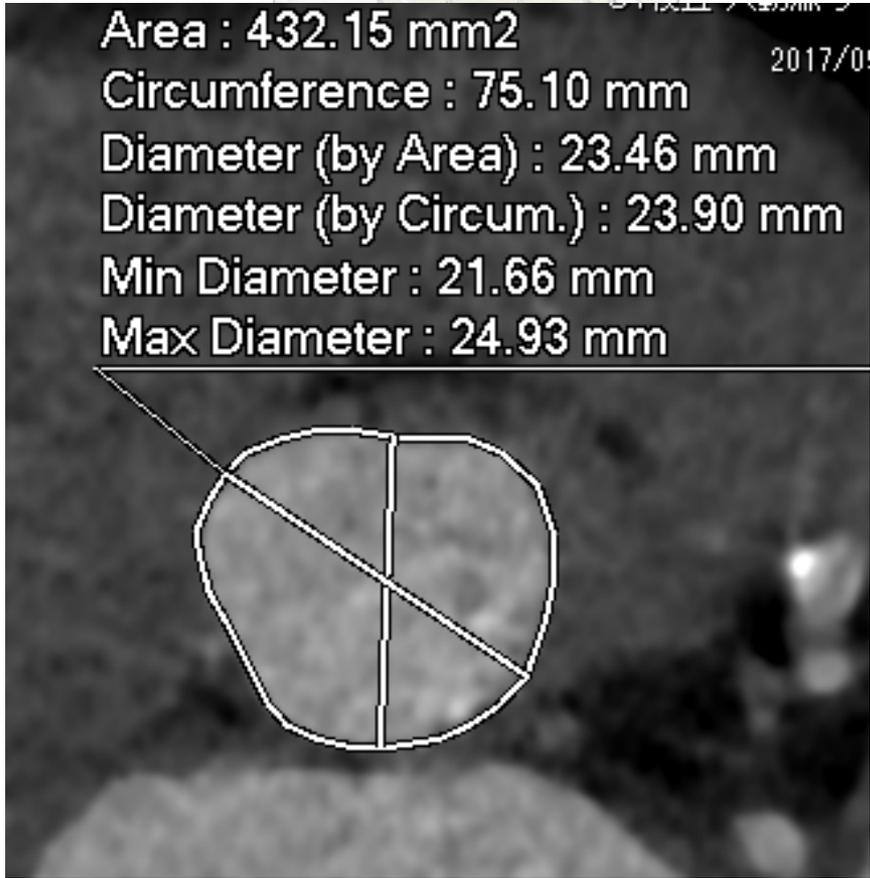
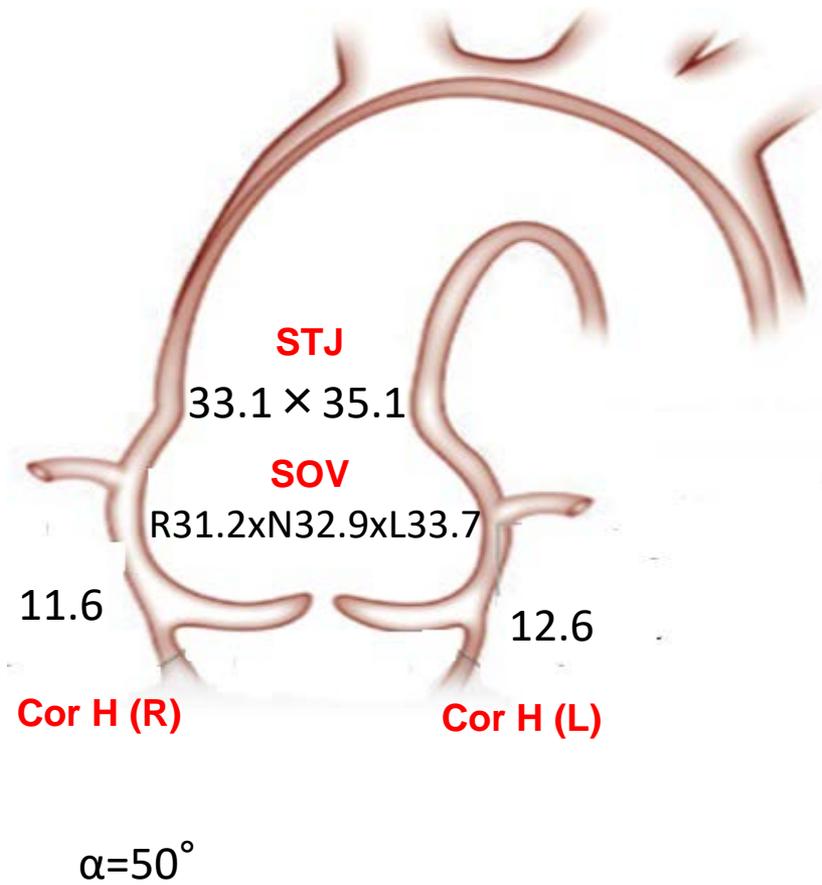
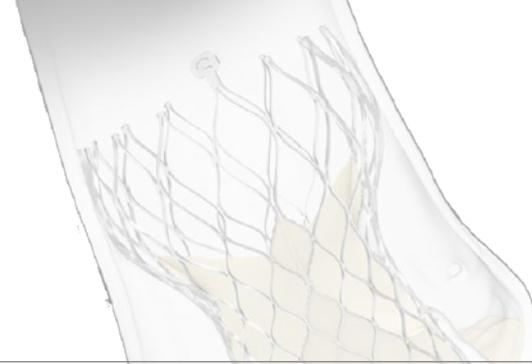
# Rationale for Subclavian approach

TF-TAVI困難な症例、大動脈起始部の屈曲が強いHorizontal Aorta等の症例に対して良好なアプローチ

- Subclavian implantation expands patient access to TAVI
  - A subclavian approach provides an alternative for TAVI for patients whose iliofemoral anatomy is compromised due to atherosclerosis, calcifications, or tortuosity
  - Subclavian arteries are often viable in patients with compromised femoral and/or iliac arteries
  - Subclavian access also often presents a better access angle for patients with extremely angulated or horizontal anatomies

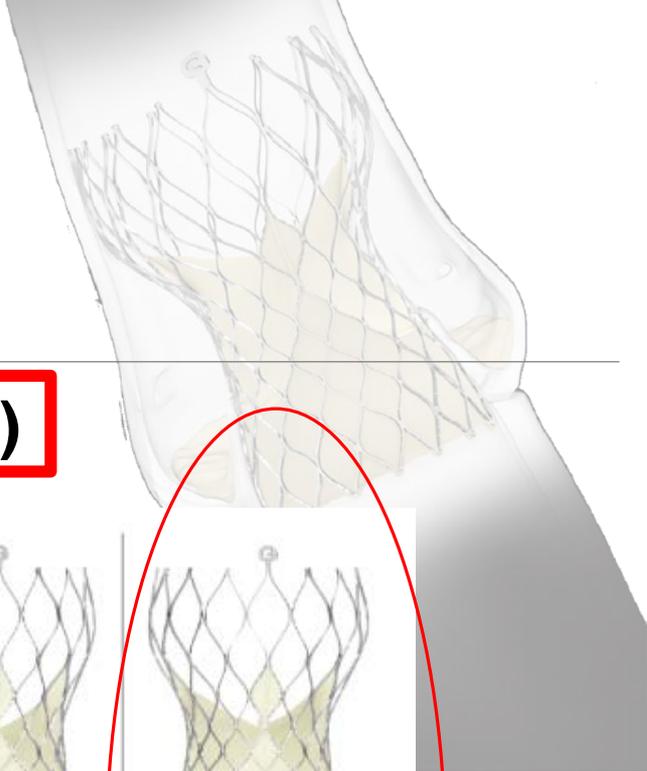


# Aortic valve area

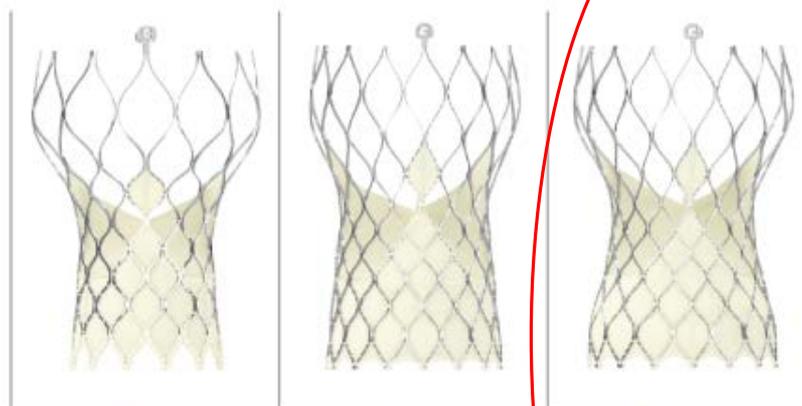


# Valve Size

**Peri = 74.4 ~ 75.1(23.5~23.9mm)**



Evolut R

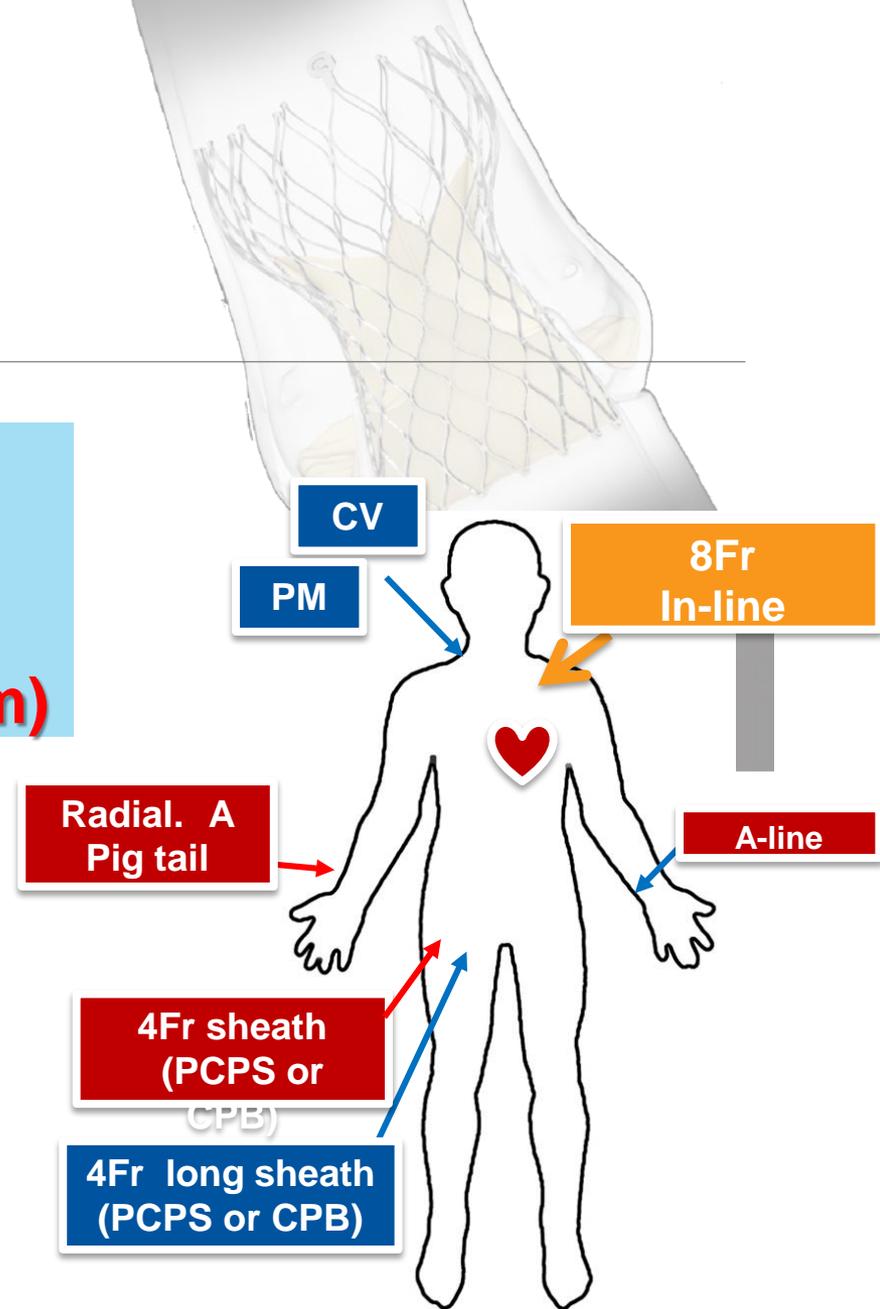


サイズ	23mm	26mm	29mm
アクセス血管径	5.0mm		
弁輪径	18-20mm	20-23mm	23-26mm
弁輪外周長 <sup>†</sup>	56.5-62.8mm	62.8-72.3mm	72.3-81.7mm
バルサルバ洞直径	≥ 25mm	≥ 27mm	≥ 29mm
バルサルバ洞の高さ	≥ 15mm	≥ 15mm	≥ 15mm

<sup>†</sup> 弁輪外周長=弁輪径 x π

**Pre dilatation: 18 mm**

**Valve size: Evolut R 29 mm  
(Post: max 20mm)**







# Video 供覧



***Thank you for your attention!!***

