## Introducing a New Integrated Workflow with EVAR ASSIST

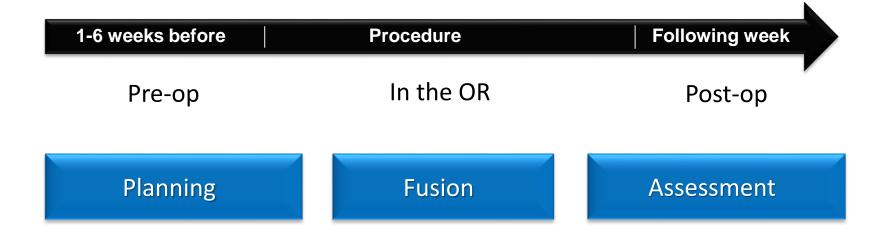
Haulon S, Herault A, Spear R, Martin-Gonzalez T, Clough R, Azzaoui R, Sobocinski J

**Aortic Center, Lille, France** 

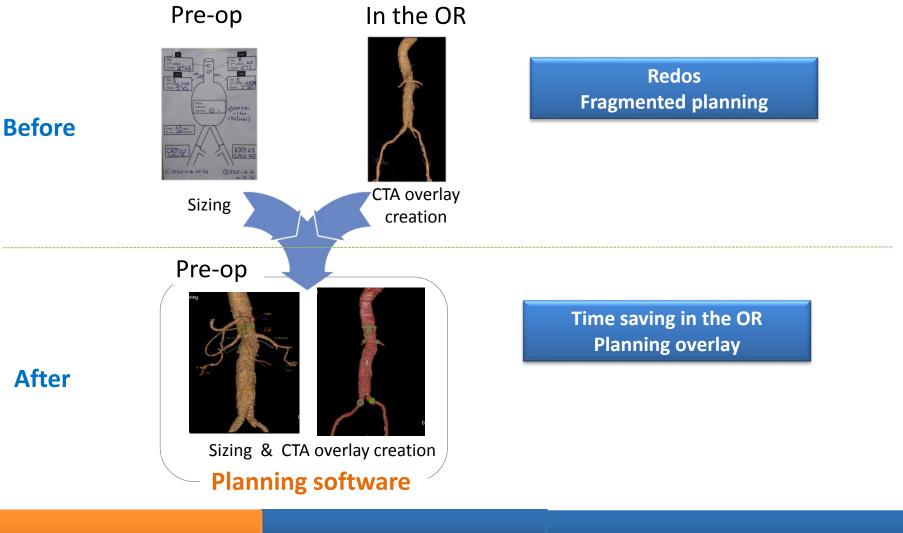
### Disclosures

Research support, Consulting
– Cook Medical, GE Healthcare

## Integrated EVAR workflow 3 levels of simplification



# Sizing and fusion preparation integrated into a planning software



Planning

Fusion

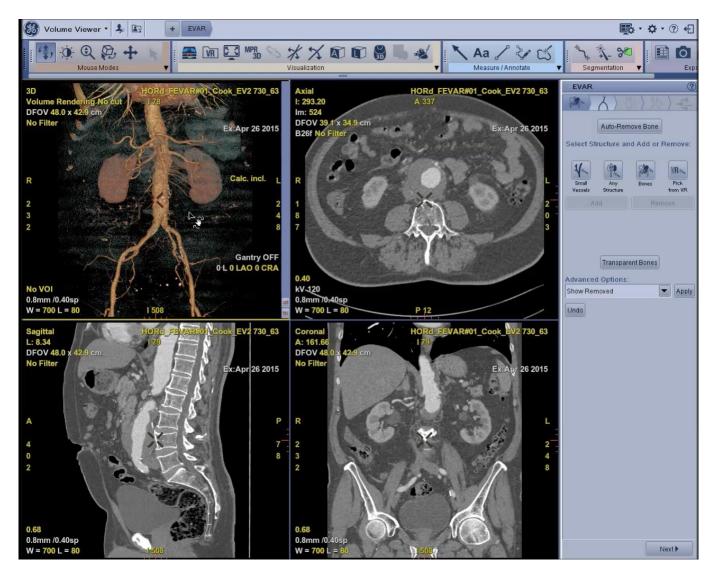
#### **EVAR ASSIST... automatic segmentation**



Planning

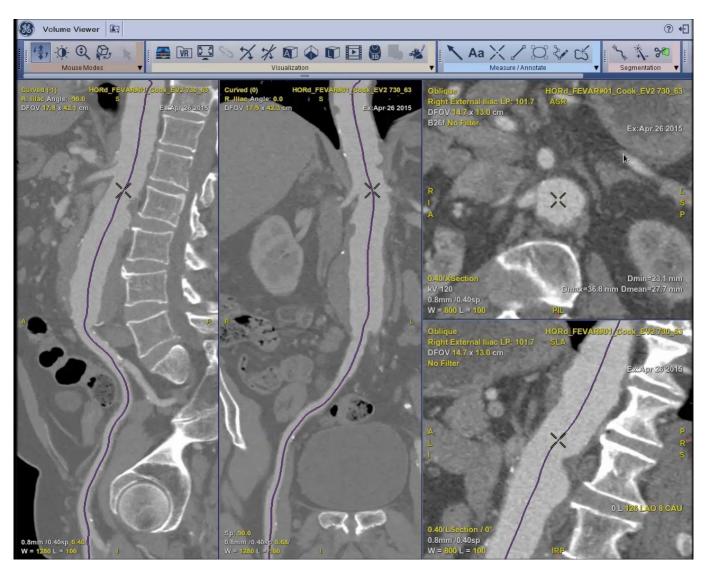
Fusion

#### **EVAR ASSIST... automatic vessels tracking**



Planning

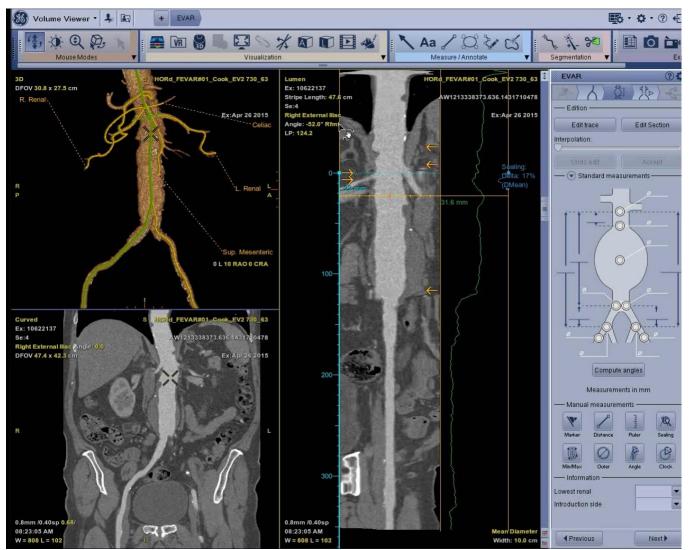
#### **EVAR ASSIST ... smooth centerline edition**



Planning

Fusion

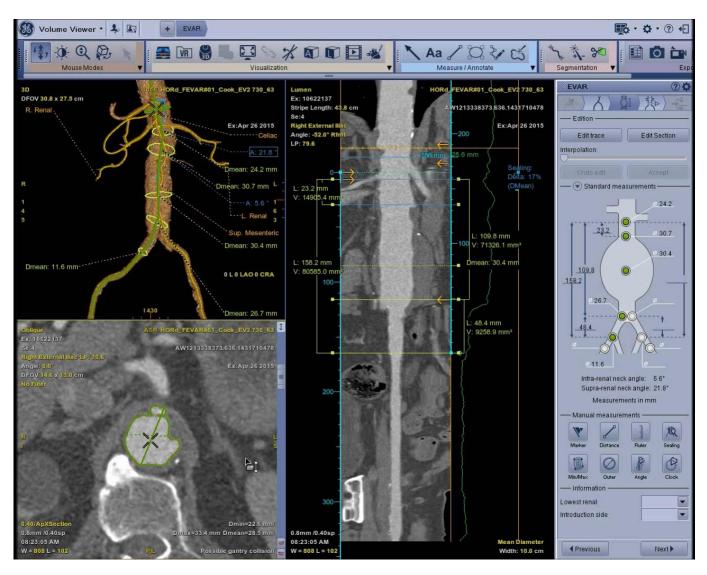
# EVAR ASSIST ... automatic ostia detection & key measurements



#### Planning

**Fusion** 

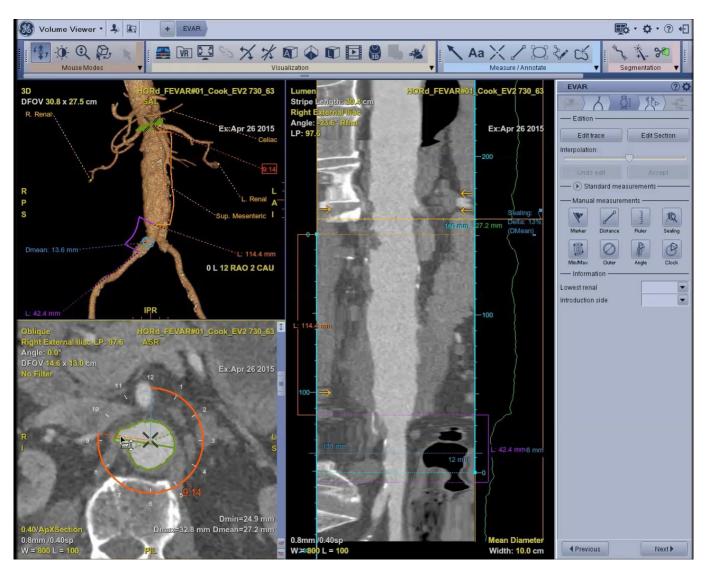
#### **EVAR ASSIST ... automatic clock positions**



Planning

Fusion

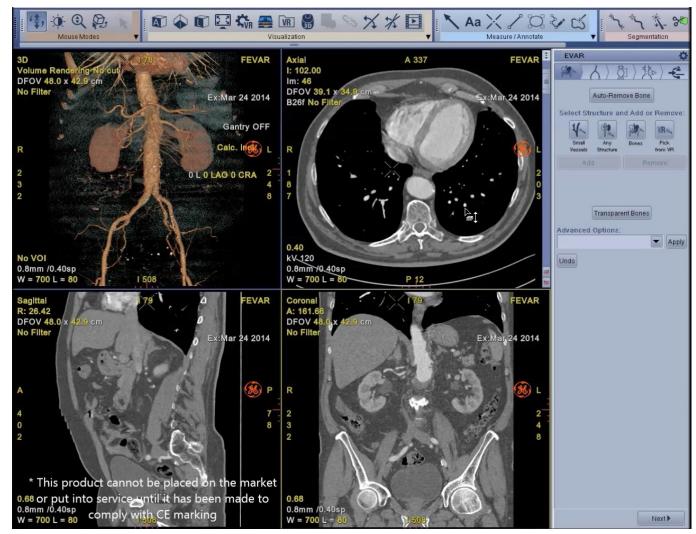
#### **EVAR ASSIST ... automatic report generation**



Planning

Fusion

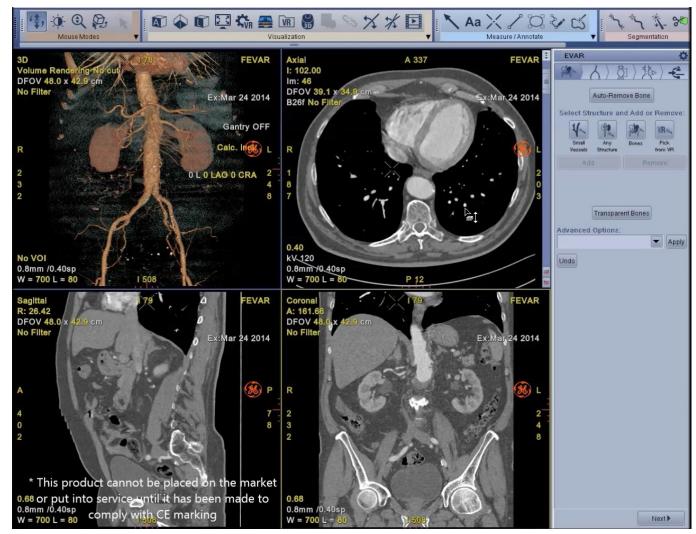
### **EVAR ASSIST ... automatic fusion preparation 3D models and optimal angulations**



Planning

**Fusion** 

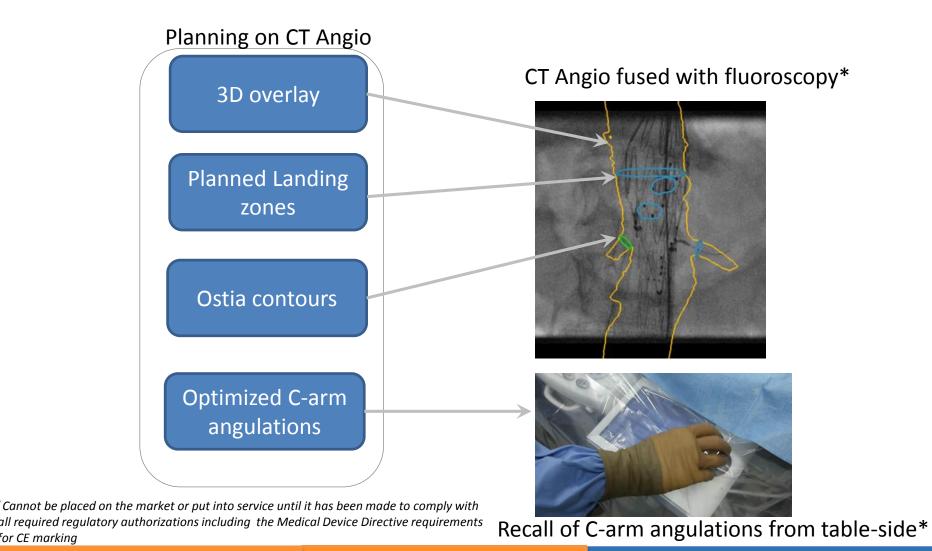
### **EVAR ASSIST ... automatic fusion preparation 3D models and optimal angulations**



Planning

**Fusion** 

#### Planning automatically exported to the C-arm



for CE marking

Planning

Fusion

#### Easy bi-view registration for 2D-3D fusion



#### **Register pre Op CT from Table Side**

#### **Reposition anatomy without fluoro**



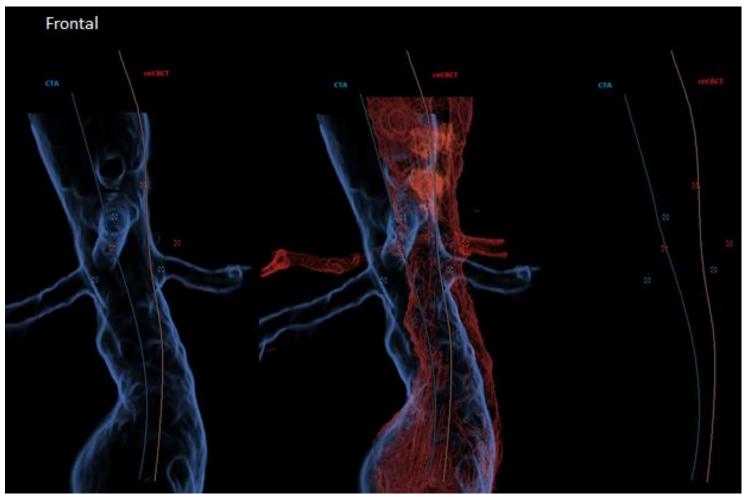
Planning

Fusion

#### Evaluation of Visceral Artery Displacement by Endograft Delivery System Insertion

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### **Endograft opening**



Planning

Fusion

## Endograft opening



Planning

Fusion

#### **SMA** canulation



Automatic Reposition of table and gantry without fluoroscopy using preset working view for SMA

Planning	Fusion	Assessment

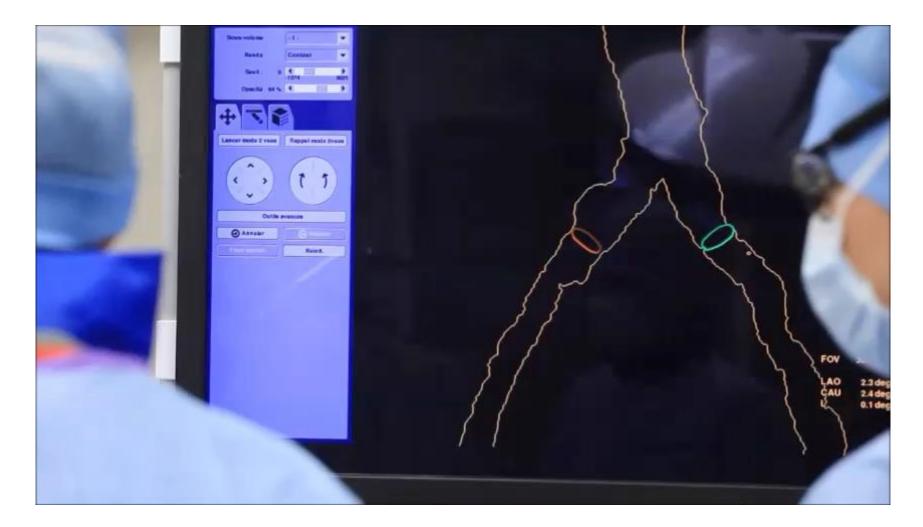
### **Bridging stent deployment**



Planning

Fusion

#### **Iliac bifurcated components**



Planning

Fusion

#### **Completion CBCT assessment**

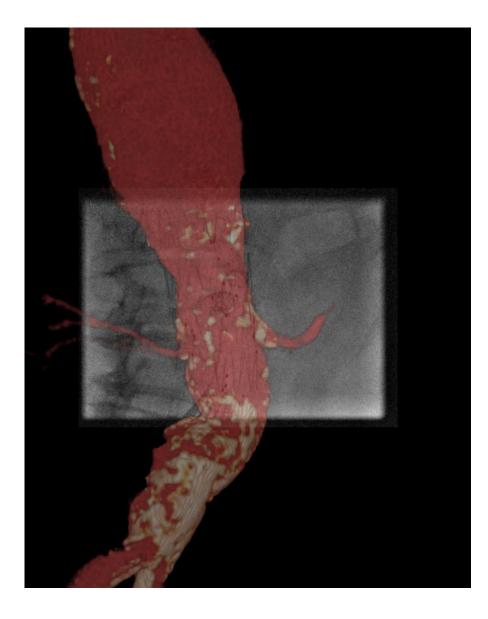


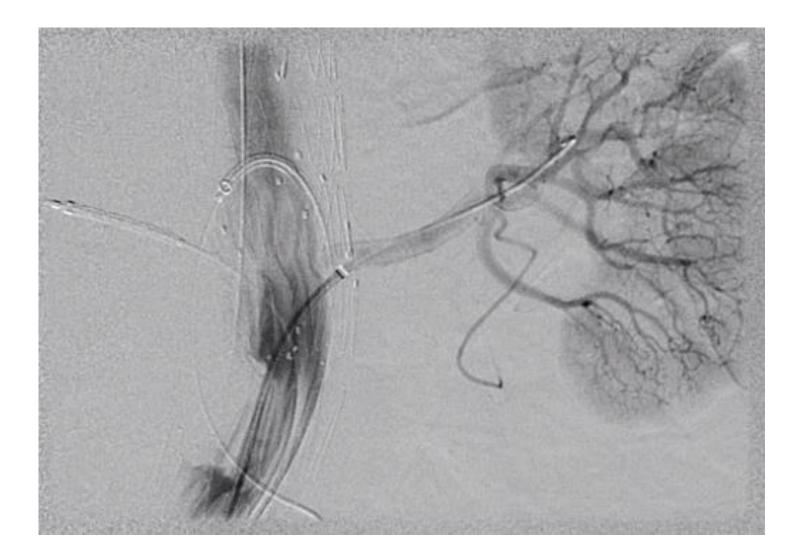
Easy acquisition with wide-bore C-arm of Discovery IGS 730

Planning

Fusion

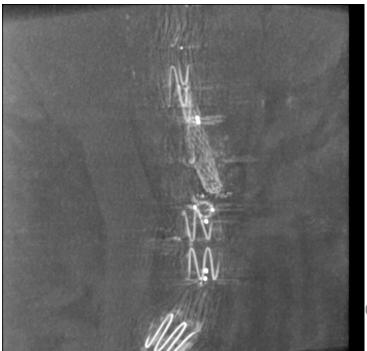


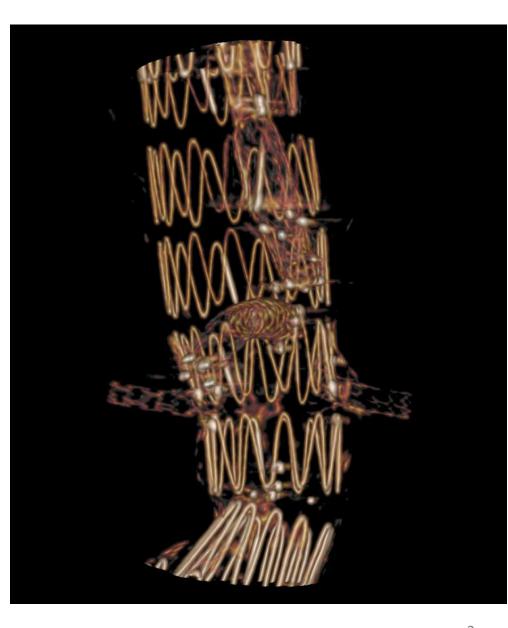


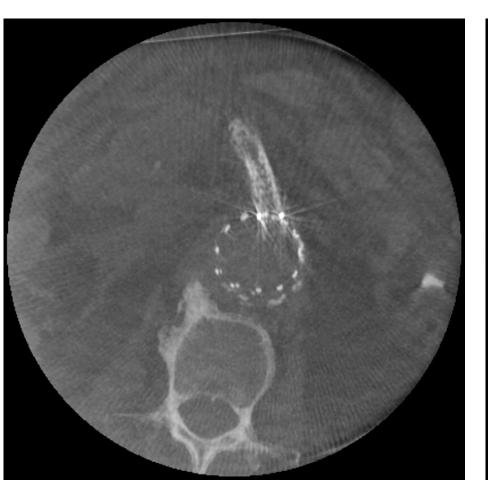




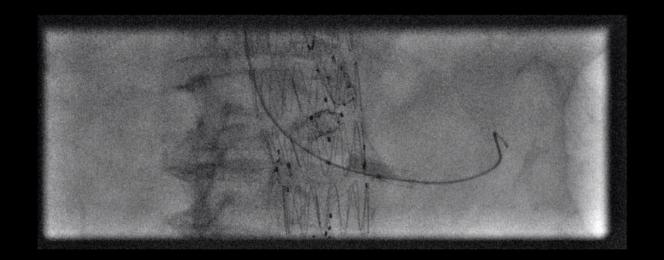






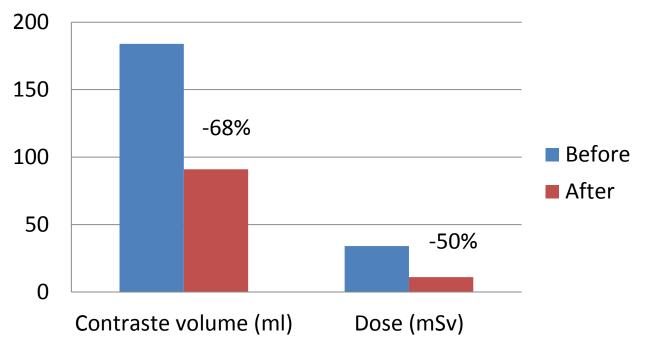






# Significant reduction in overall dose and contrast

Contrast and dose to patients during their hospital stay



Planning	Fusion	Assessment

## Conclusion

- More than 700 cases performed using 2D/3D Fusion since 2012
- Ease of use and accuracy of sizing and fusion are crucial for routine use
- Integrated workflow of new EVAR ASSIST optimizes the use of pre-op data
- Leveraging 3D capabilities from sizing to fusion to assessment with Cone beam CT help to reduce dose and contrast throughout patients' hospital stay