

Workflow

syngo EVAR Guidance

Preparation of Preprocedural CT Dataset

1. Use preprocedural CT dataset for EVAR planning

- ◆ Load respective CT dataset into 4D task card



- ◆ Select application syngo EVAR Guidance

2. Creation of vessel tree

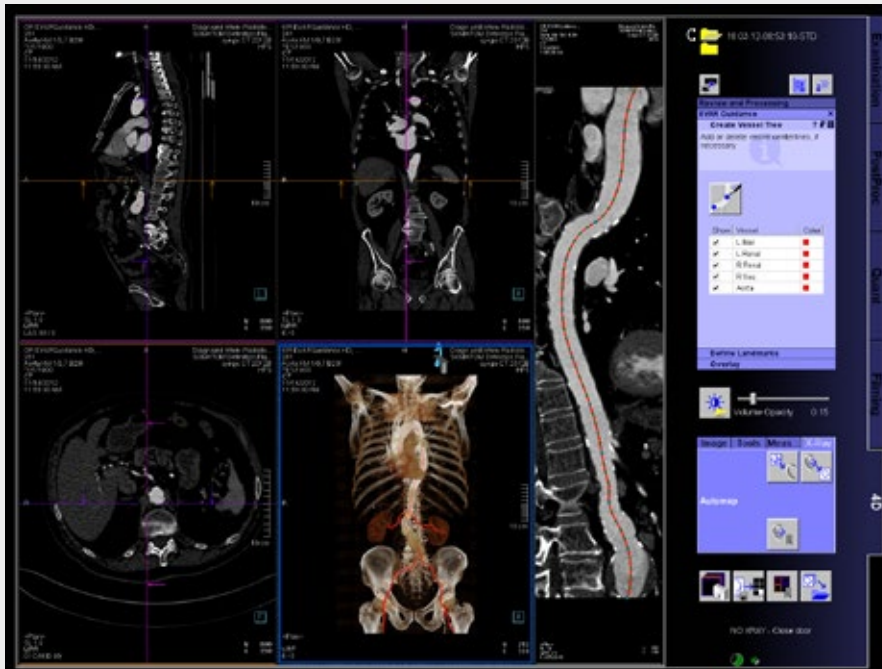
- ◆ The software detects the vessel wall of the aorta and all main branching vessels. Centerlines are calculated and all identified vessels are automatically labelled, shown in the **Create Vessel Tree** blind.

3. Complete the vessel tree by adding additional vessels



- ◆ Activate **Add vessel**

- ◆ Use 1-click segmentation by clicking on the most distal end of the branching vessel in one of the MPR segments. The vessel segments will be automatically detected.
- ◆ Rename the vessels added in the input field



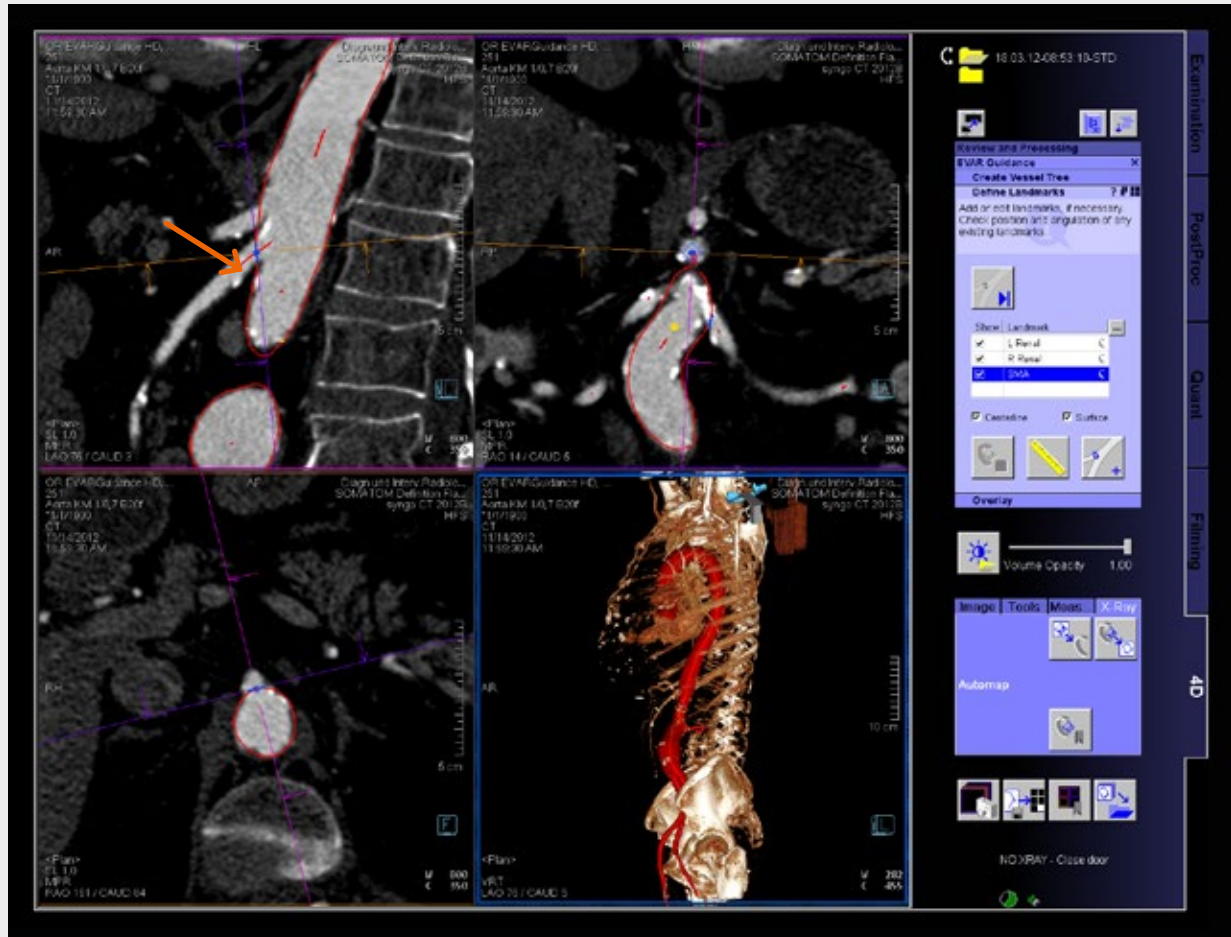
4. Verification of Landmarks

- ◆ Select the **Define Landmarks** tab card



- ◆ Switch along landmarks to verify the perpendicular views

- ◆ If needed, adjust the landmark position in the MPR segment directly by dragging to the correct position



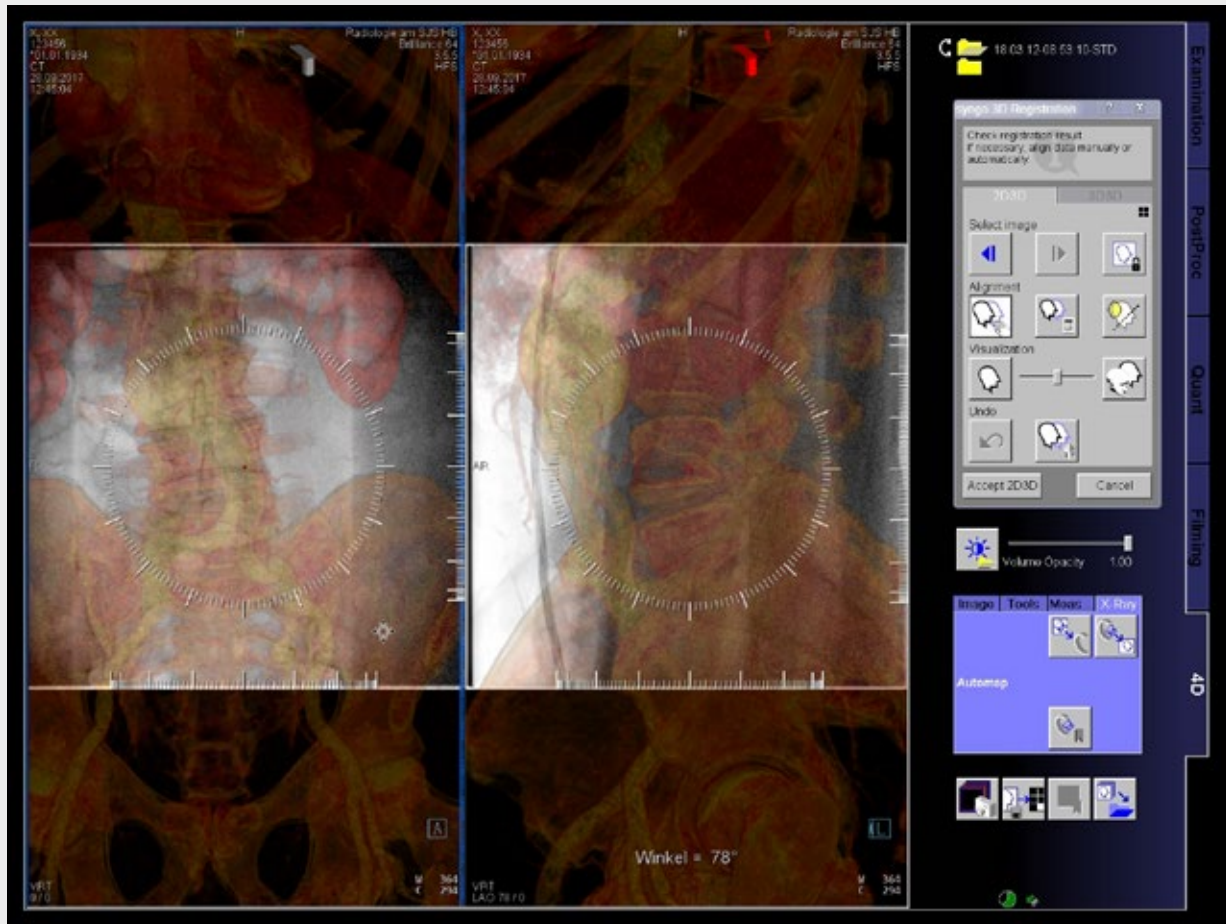
2D/3D Registration

1. Start syngo 2D/3D fusion

- ◆ Select the **Overlay** tab card
- ◆ Perform two fluoro projections in the frontal and lateral positions

2. Alignment of the fluoro projections with the CTA volume

- ◆ Align the volume with two 2D images by moving or rotating the volume in the side-by-side layout
- ◆ Accept 2D/3D alignment



Fusion Imaging

1. Overlay of 3D contours

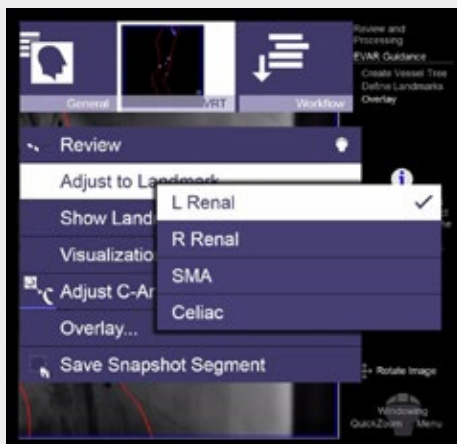


- ◆ To display contour information from the 3D volume on the live fluoroscopy image, select the **Overlay** tab card and activate the **Live** button



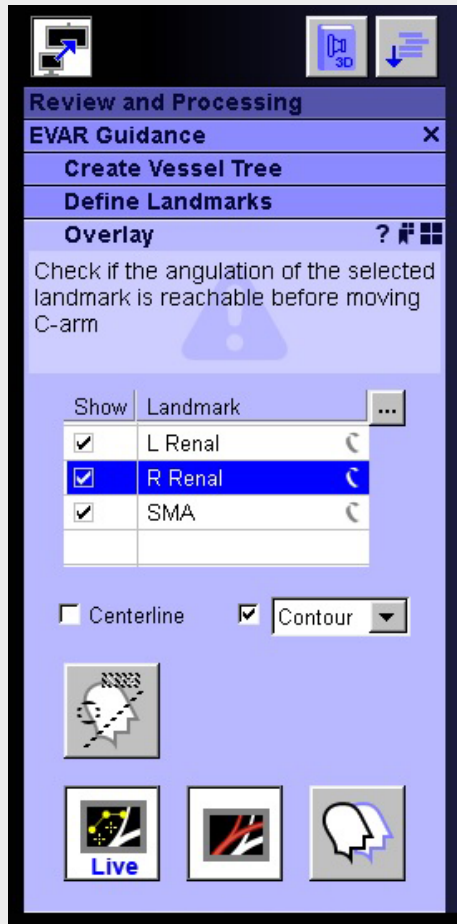
2. Choose the target vessel from the heads-up display

- ◆ Use the heads-up display menu and select the **VRT** onscreen menu and the submenu **Adjust to Landmark**
- ◆ Select the required vessel. The corresponding projection angulation is sent automatically to the C-arm.
- ◆ Deflect the joystick to drive the C-arm to the defined optimal viewing angle without any radiation



3. Choose the target vessel from the syngo X-Workplace

- ◆ Select the **Overlay** tab card
- ◆ Choose the required vessel/landmark from the list
- ◆ Deflect the joystick to drive the C-arm to the defined optimal viewing angle without any radiation



3D Assessment

1. Perform *syngo* DynaCT for immediate 3D assessment of the stent position
2. In case of endoleak type II detection, use the DynaCT data for treatment planning with *syngo* Needle Guidance