

**Case 26 Münster 2:
male, 71 years (F-M)**

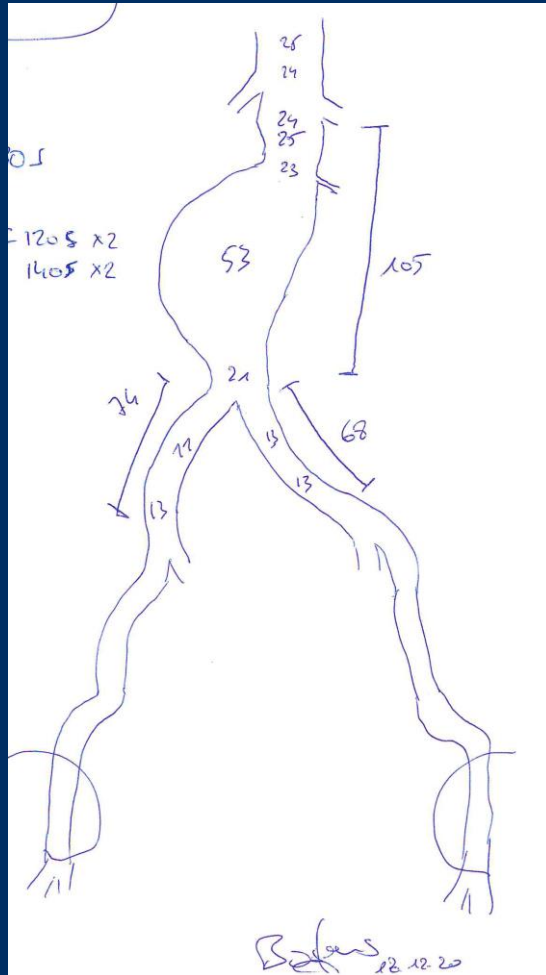
**EVAR imaging innovations for a safer
treatment**

Operators: M. Bosiers, M. Austermann

Case 26 Münster 2: male, 71 years (F-M)

- **Clinical data:**
 - Rapid growing infrarenal AAA (42-53 mm in 6 months)
- **Risk factors:**
 - CAD: PTCA 2018
 - Art. Hypertension
 - Diabetes

Case 26 Münster 2: male, 71 years (F-M)



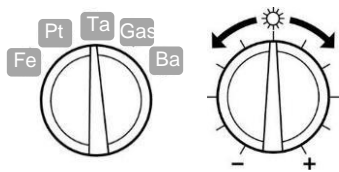
Case 26 Münster 2: male, 71 years (F-M)

- **Procedural steps:**
 - 1. Percutaneous access
 - 2. Imaging with Artis icono (Siemens)
 - 3. EVAR TREO (Terumo)
 - 4. Reliant Balloon (Medtronic)
 - 5. Groin closure (ProstarXL, Abbott)

Technical aspects to reduce radiation

Image guidance automatically according to the ALARA* principle

material Image Quality



300 million
database
entries

Up to 15,000
possible
combinations

OPTIQ
Algorithm



The surgeon defines

- the material for contrast optimization
- the image quality level for the procedure step

The OPTIQ algorithm

finds the best imaging parameter for the required image quality level automatically and independent of the clinical situation

*As low as reasonably achievable (ALARA) is a principle of radioprotection stating that whenever ionizing radiation has to be applied to humans, animals or materials exposure should be as low as reasonably achievable. It is fundamental to the principles of radiation protection.

Technical aspects to reduce radiation for DSA by 90%



Dose/min : 6,5 Gy cm^2 *

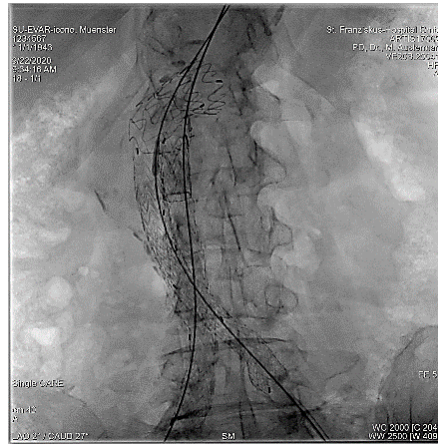
Dose/min : 71 Gy cm^2 *

- * Measured with water phantom that simulates the typical patient load, same FOV and framerate

Technical aspects to reduce radiation for Fluoro by 40%



2k live resolution



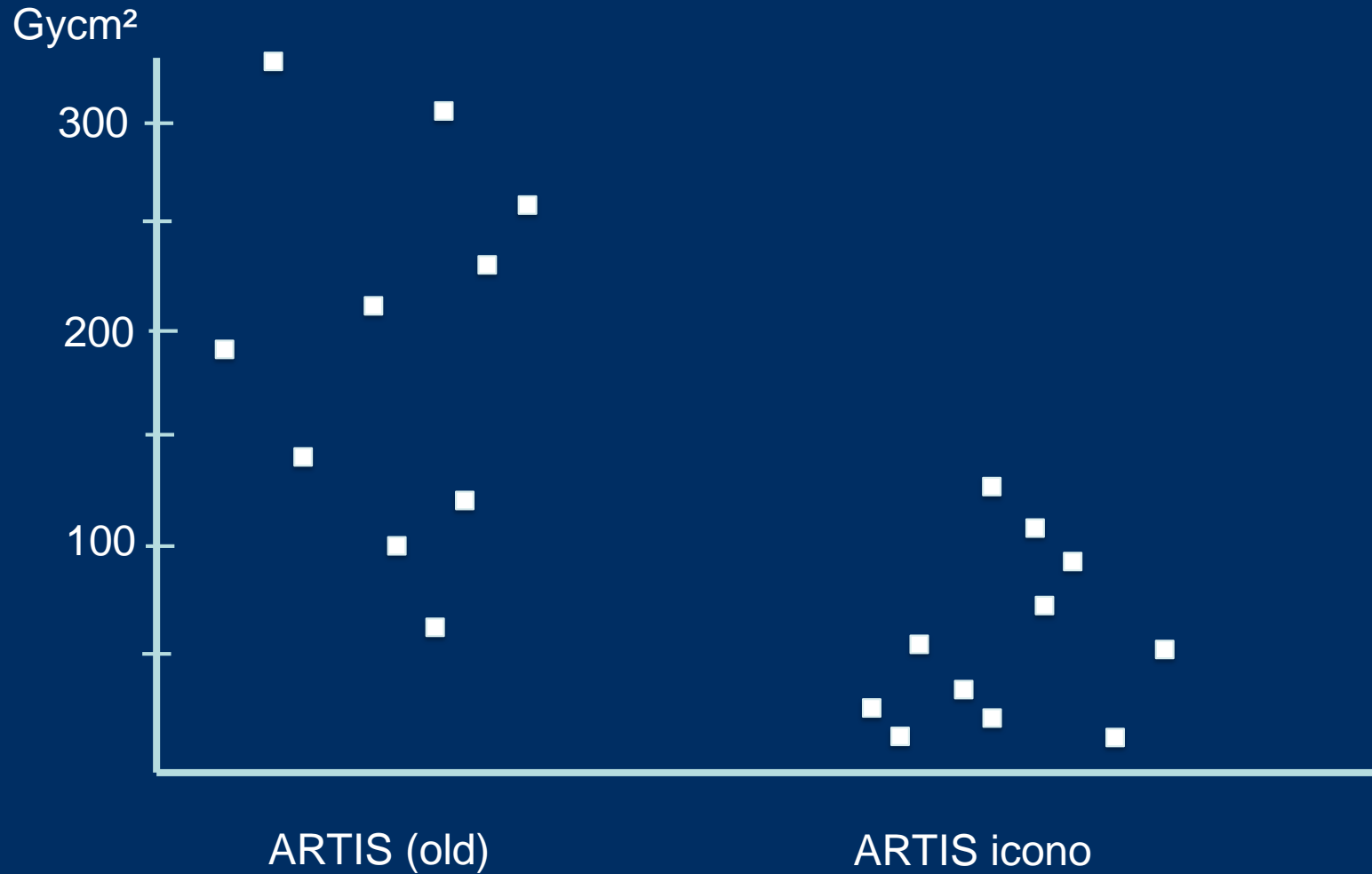
Dose/min : 1,35 Gy cm^2 *

Dose/min : 2,23 Gy cm^2 *

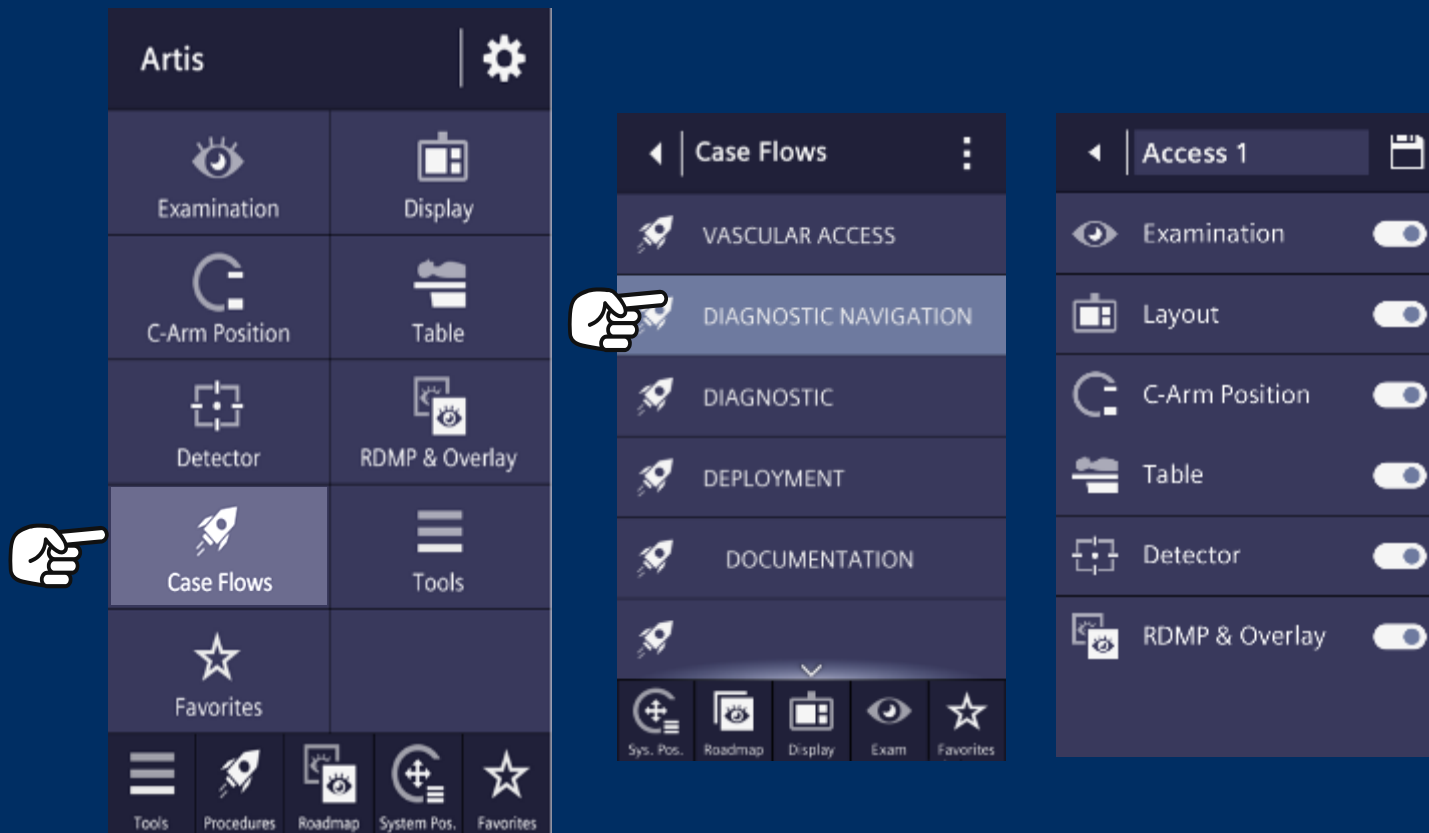
With reduced framerate even 0,48 Gy cm^2 possible

- * Measured with water phantom that simulates the typical patient load, same FOV and framerate

First clinical results

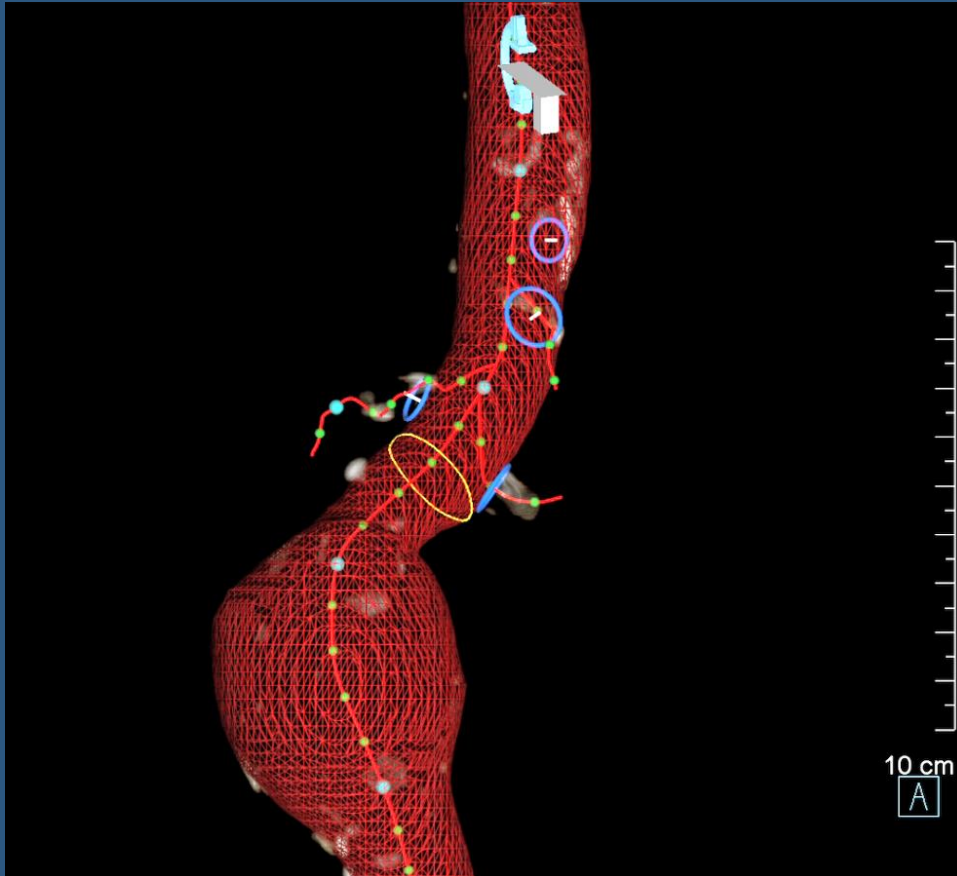


Standardization enabled by Case Flows



One Click instead of 6 Clicks

Integrated Fusion Imaging



**Automated segmentation of
Aorta and branching vessels**

Centerlines

**Ostia rings
with optimal angulation**

Landingzones