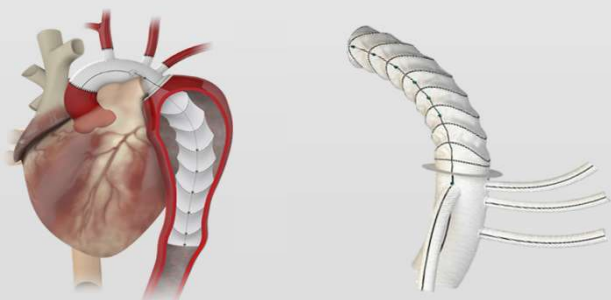




# Update on TAAA Hybrid Repair Using the Hybrid TAAA Device

**Sabine Wipper**

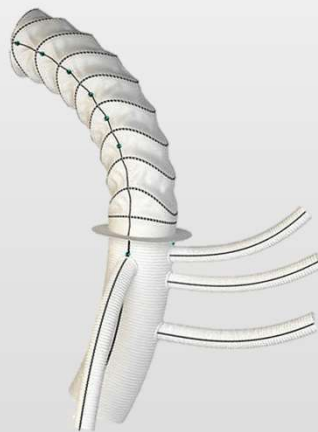
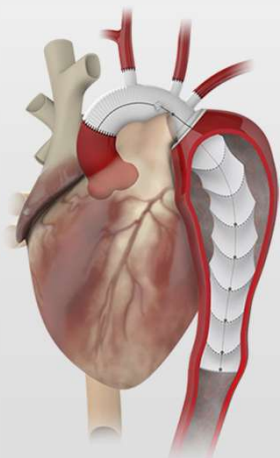
University Hospital Innsbruck





## Disclosures

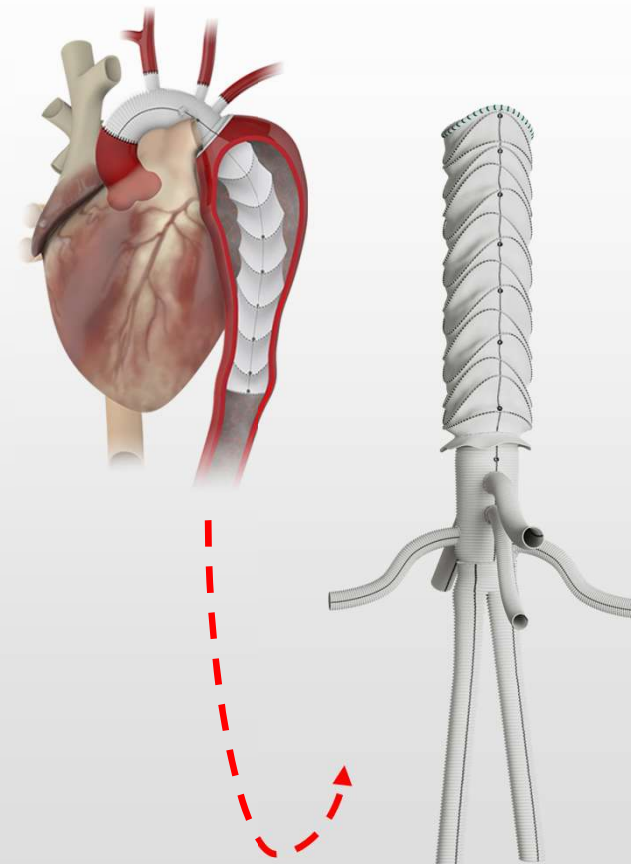
The graft development was supported by a research grant from Terumo Aortic

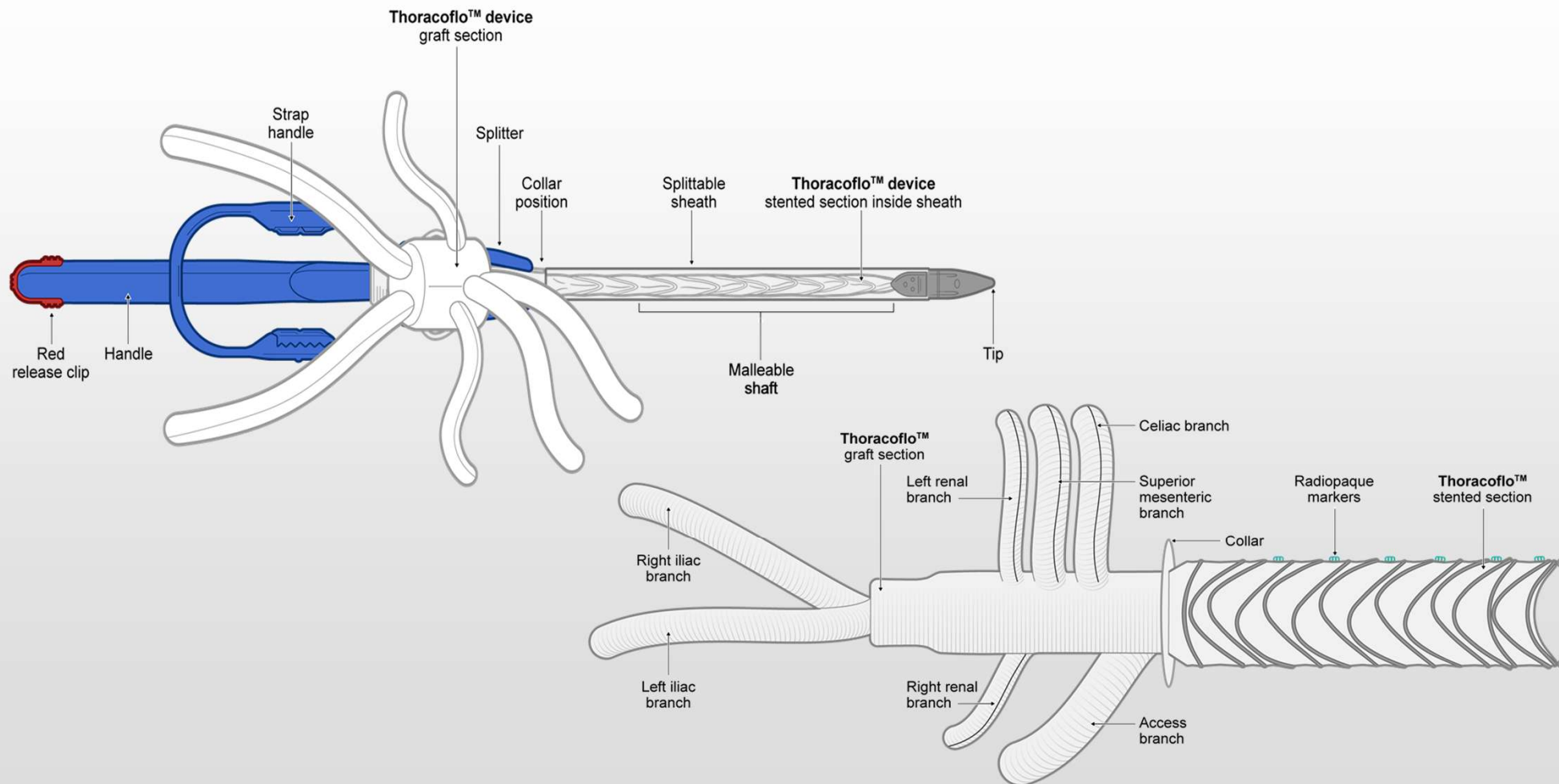




Aim of the **Thoracoflo Hybrid Device** for TAAA hybrid repair:

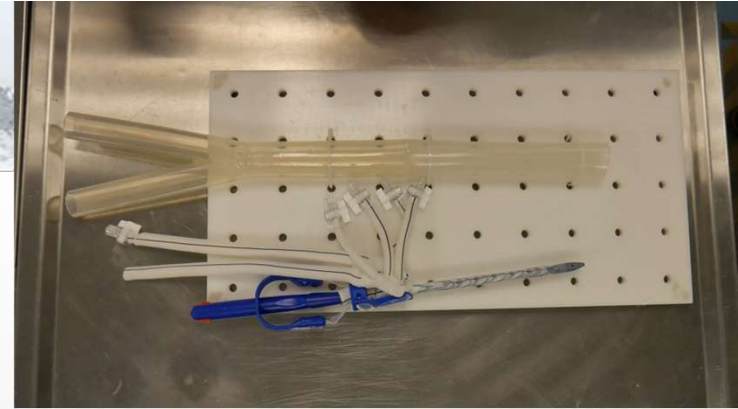
What?	How?
Avoid aortic crossclamping	
Avoid extracorporeal circulation	by retrograde distal perfusion of the visceral branches via iliac side-branch (SPIDER technique)
Avoid thoracotomy	by endovascular treatment of the thoracic part
Reduce risk of SCI	by reattachment of lumbar arteries
Enabling over-the wire implantation without radiation	by transesophageal ultrasound







## Patient selection

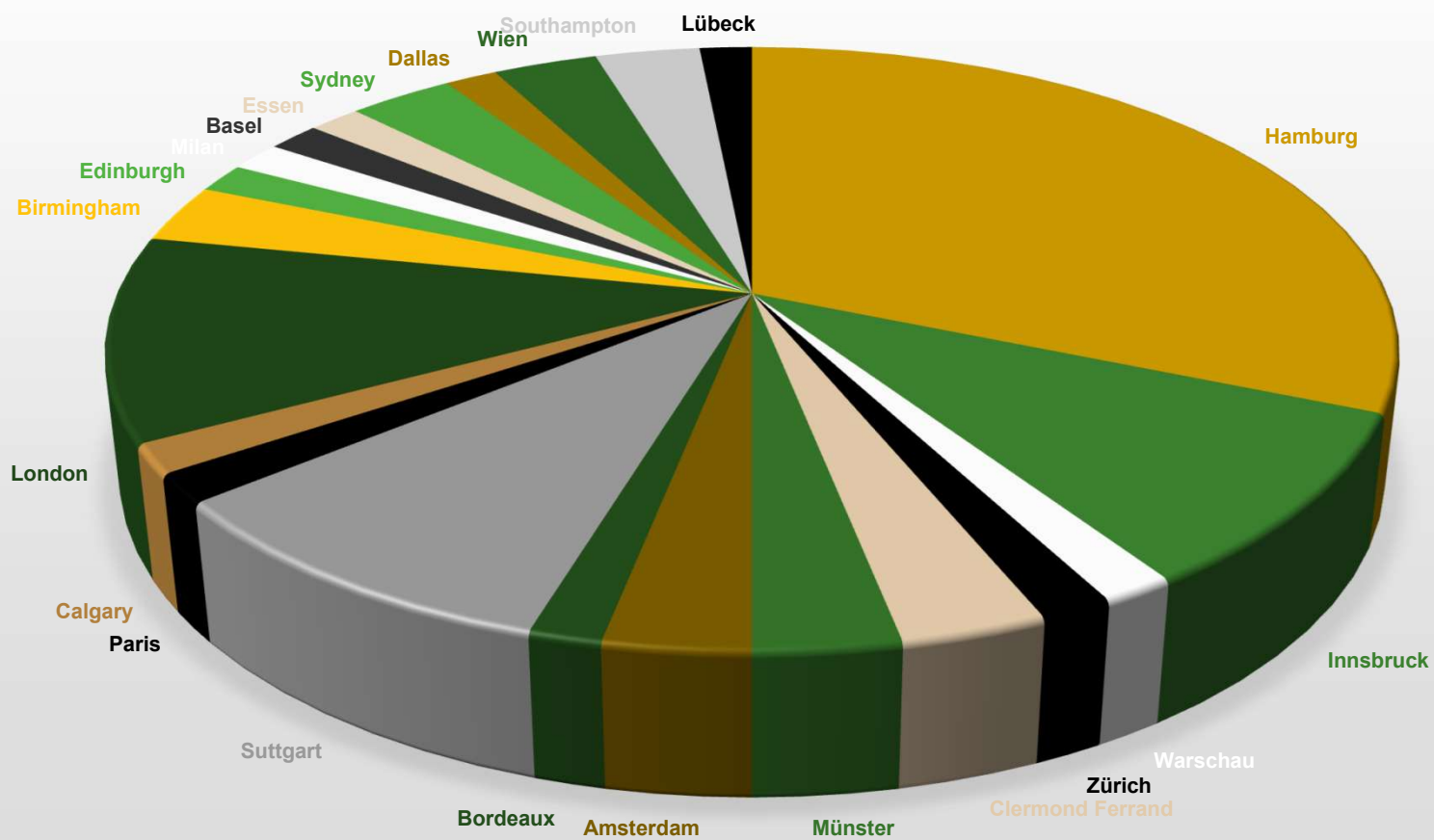


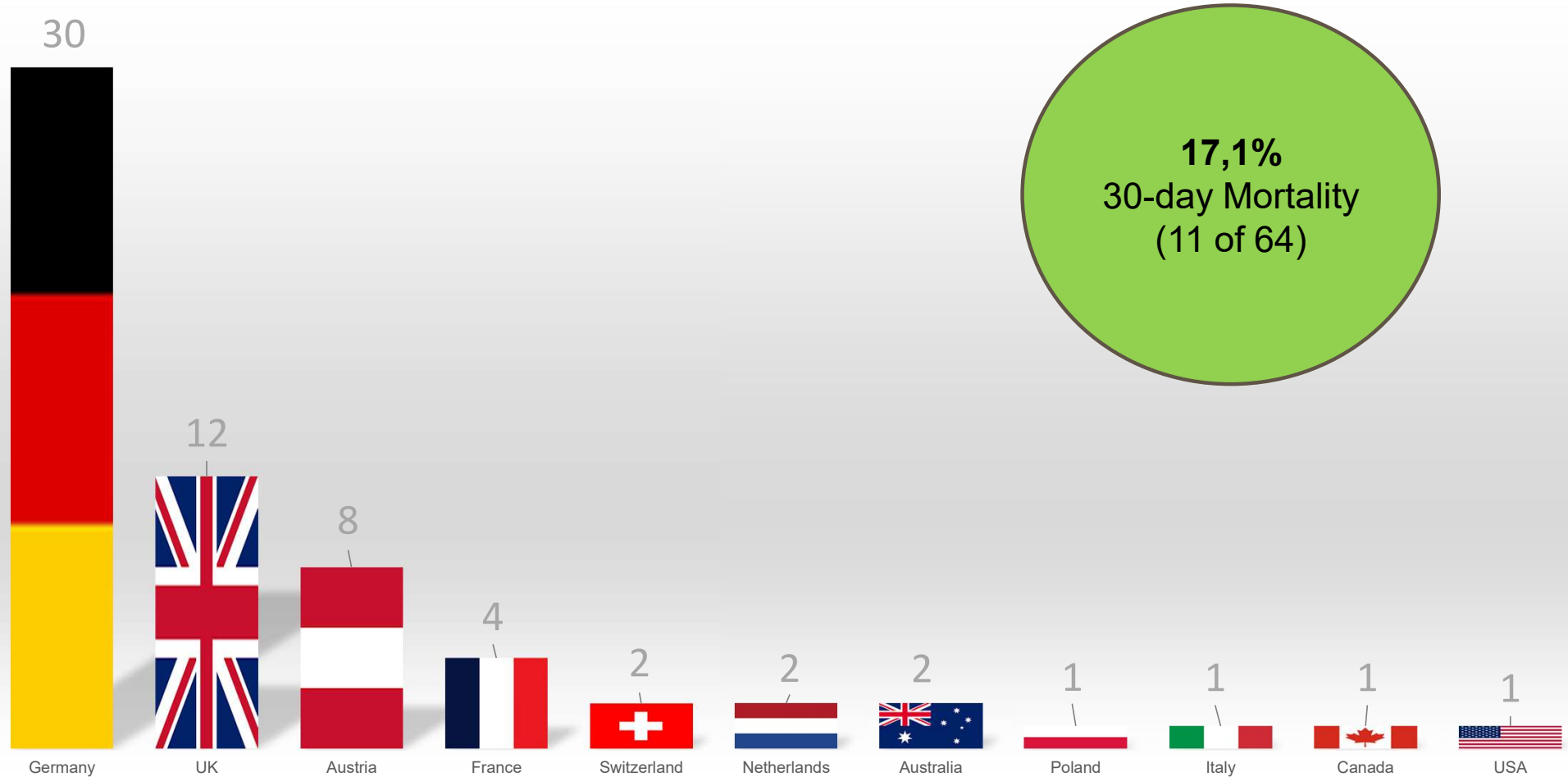
- Patients with connective tissue disease and landing zone (e.g. FET)
- Patients with prior open or endovascular aortic treatment
- Previous thoracotomy
- Anatomically difficult for solely endovascular repair (e.g. no access, narrow true lumen, kinking, landing zone, thrombus load)
- Staged repair for extend II or native extend III TAAA but not for extend IV
- **Landing zone for Thoracoflo in descending thoracic aorta mandatory (e.g. by TEVAR, FET...)**





### PATIENTS N=64





Dr. Foteh, Dallas 8<sup>th</sup> april 2025





THORACOFLO™ DELIVERY SYSTEM



- Interdisciplinary team (open and endovascular approach)
- Choice of guidewire
- CPB/ rapid transfusion backup for bailout
- Monitoring of contralateral femoral artery blood pressure
- Stick with deployment steps (configure guide wire, perform systemic side pressure <100mmHg during deployment, avoid any manipulation within the aortic arch, avoid any kinking during manipulation)
- Most complex surgical part is collar anastomosis
- TEE guidance is feasible, but if you're highly experienced in stenting a TAO, a hybrid OR may be preferred
- Transsection of aorta for collar anastomosis might be helpful (mandatory)
- Adequate diameter of very fragile tissue - leave primary E/S anastomosis and suture the graft in place
- Bleeding control: Risk of backbleeding from intercostal arteries in dissection of performing a new iliac anastomosis
- Puncture of aorta perpendicular to vessel in order to achieve optimal deployment of collar
- Long main body available if distal anastomosis is in aorta
- Perform incision on tip of the device during insertion via purse string and CO reduction
- In high thrombus load you can also open the aorta and perfuse the visceral arteries with perfusion catheters from inside
- Clipping/ ligation of intercostal arteries



- Do not deploy the stentgraft too close to supraaortic vessels to avoid air embolism
- For treatment of endoleaks graft can also be deployed through stentgraft and infradiaphragmatic part can be removed





Thank you very much



