

Table S1 Case by case overview over the patients including data on basic demographics, diagnoses, procedures, bacteria and outcomes

Patient number	Age (years)	Gender	Diagnosis	Symptoms	Type of previous aortic surgery	Previous non-aortic open surgery	Pathogen	Type of repair	Material used for reconstruction	Early complications	Complications during follow-up	Death (yes/no)
1	66	M	AEF	Bleeding	TEVAR	Esophagectomy	Enterococcus faecium	TAA	Bovine			No
2	72	M	Mycotic infrarenal PAU	Contained rupture	None		SA	Infrarenal	Bovine			No
3	62	M	PAD Fontaine IV, TAAA type III (endovascular repair planned)	Chronic cutaneous fistula greater trochanter + ischium	infrarenal bifurcated graft (aortobiliac)	Anus praeter, interposition graft for SMA aneurysm	Enterococcus faecalis, Corynebacterium tuberculostearicum, Bacteroides fragilis, Staphylococcus epidermidis	Infrarenal	Bovine+ Omniflow® II	Gluteal ischemia		No
4	68	M	Infected EVAR due to access psoas muscle	Recurrent fever	EVAR		SA, Staphylococcus haemolyticus	Juxtarenal	Bovine+ Omniflow® II	Pneumonia, sepsis, bleedig, death while on dialysis		Yes
5	84	M	Mycotic infrarenal AAA + iliac artery aneurysm	Contained rupture, sepsis			SA	Infrarenal	Bovine	Endocarditis -> refractory ventricular fibrillation, death while on dialysis		Yes
6	78	M	TAAA type IV	Contained rupture, sepsis	EVAR		Escherichia coli	TAAA type IV	Bovine + Omniflow® II	Pneumonia, sepsis, transient liver failure, transient dialysis		No
7	76	F	Large periprosthetic fluid collections	None	Infrarenal bifurcated graft (aortobifemoral)		Staphylococcus lugdunensis	infrarenal	Omniflow® II			No
8	52	M	Inflammatory TAAA type IV	None		Partial resection of ileum for perforation due to foreign body ingestion	Initially: none; after revision for paralytic ileus: Escherichia coli + VRE	TAAA type V	Bovine+ Omniflow® II			Yes
9	72	M	Mycotic infrarenal AAA	Abdominal pain			Listeria monocytogenes	Infrarenal	Omniflow® II			No
10	70	M	Type Ia endoleak, Aortitis	Unspecific symptoms/fatigue	BEVAR		Staphylococcus epidermidis	TAA	Bovine	Acute cardiac insufficiency		Yes
11	42	F	AEF, mediastinitis	Recurrent respiratory infections, cough, thoracic pain	Supracoronary repair of aortic arch and ascending aorta with reconstruction of aortic valve		Lactobacillus rhamnosus	ascending, arch + proximal descending	Bovine	Pneumonia, sepsis, transient dialysis, stroke, anastomotic insufficiency (gastric esophagoplasty)		No
12	67	M	Mycotic TAAA type V	Rupture, septic shock	TEVAR + Chimney celiac trunc		MRSA	TAAA type V	Bovine	Bleeding, sepsis, death while on dialysis		Yes
13	73	M	Infected EVAR	Unspecific symptoms/fatigue	EVAR		Propionibacterium acnes	Juxtarenal	Bovine+ Omniflow® II	Pneumonia, sepsis, transient dialysis	Repair of incisional hernia	Yes
14	69	M	Infected EVAR	Recurrent fever, sepsis	EVAR		Referring hospital: MRSA; authors' institution: Staphylococcus epidermidis	INFARENAL	BOVINE+ OMNIFLOW® II			No
15	66	M	ADF	Recurrent gastrointestinal bleeding requiring blood transfusion	Infrarenal tube graft (x2)		Initially: Escherichia coli; Candida glabrata; during relaparotomy after 3 weeks: VRE	Juxtarenal	Bovine	Bleeding, sepsis, extremity ischemia, compartment syndrome calf, death while on dialysis		Yes
16	53	M	Infected TEVAR	Sepsis	TEVAR + Chimney left subclavian artery		SA	TAA + left subclavian bypass	Bovine+ Omniflow® II	Pneumonia, sepsis, malignant hypertension due to stenosis distal anastomosis		No
17	28	F	High-grade carcinoma of fallopian tube	Hemorrhagic shock		extensive abdominal tumor resection (total exenteration, deperitonealization, lymphadenectomy, ileum conduit, kolostoma endst.), two revisions for bleeding 7 and 8 days postoperatively	Initially: Candida albicans, during revision surgery: VRE	infrarenal	Omniflow® II	bleeding, minor subarachnoidal bleeding, deep venous thrombosis, death while on dialysis		Yes
18	62	M	Ureteral fistula	Weight loss, nausea, unspecific abdominal pain	Infrarenal bifurcated graft (aortobiliac)		None	Infrarenal	Omniflow® II		Campylobacter jejuni infection, urinary infection with Enterococcus faecium	No
19	45	M	Inflammatory infrarenal PAU	Contained rupture			None	Juxtarenal	Omniflow® II			No
20	77	M	mycotic aneurysm brachiocephalic trunc	sepsis, tracheal compression			SA, Enterococcus faecium	ascending + right carotid and right subclavian bypass	bovine+ Omniflow® II	pneumonia, sepsis		Yes
21	72	M	ADF	Sepsis	Infrarenal bifurcated graft (aortobiliac)		Streptococcus constellatus ; Streptococcus oralis	Infrarenal	bovine+ Omniflow® II			No
22	58	M	Mycotic juxtarenal plaque rupture	Rupture			Streptococcus pneumoniae	Juxtarenal	bovine+ Omniflow® II			No
23	57	M	Infected aortobifemoral graft	Sepsis	Infrarenal bifurcated graft (aorto-biliac), infrarenal bifurcated graft (aortobifemoral)		Candida albicans, Candida glabrata, Hafnia alvei	Infrarenal	Omniflow® II	Bleeding, sepsis, death while on dialysis		Yes
24	76	M	Infected EVAR, Type I EL		EVAR		Propionibacterium acnes; Staph. Haemolyticus	Infrarenal	Omniflow® II			No
25	71	F	TAAA Type V	Contained rupture			Strept. Pneumoniae	TAAA type V	bovine+ Omniflow® II	Mesenteric ischemia, death while on dialysis		Yes
26	71	F	Infected aortobifemoral graft	None	Infrarenal aortobifemoral		None	Juxtarenal	Omniflow® II			No
27	61	M	Infrarenal AAA + juxtarenal PAU	Contained rupture			SA; C. alb., E. coli, Enterococcus avium, Morg, morgani, Enterococcus faecium	Juxtarenal	bovine+ Omniflow® II	Pneumonia, sepsis, extremity ischemia, compartment syndrome calf, transient dialysis		No
28	59	M	AEF	Bleeding, sepsis	TEVAR		MRSA, VRE	TAA	Bovine	Pneumonia, sepsis, parapertosis, transient dialysis		No

AAA, abdominal aortic aneurysm; ADF, aortoduodenal fistula; AEF, aorto-esophageal fistula; ATBAD, acute type B aortic dissection; BEVAR, branched endovascular aortic repair; C. alb., Candida albicans; E. coli, Escherichia coli; EL, endoleak; EVAR, endovascular aortic repair; f, female; m, male; Morg, Morgani, Morganiella morgani; MRSA, multi-resistant staphylococcus aureus; PAU, penetrating aortic ulcer; SA, staphylococcus aureus; Strept., streptococcus; TAA, thoracic aortic aneurysm; TAAA, thoracoabdominal aortic aneurysm; TEVAR, thoracic endovascular aortic repair; VRE, vancomycin-resistant enterococcus.