

n	Year pub.	PI	Location	Hospital	Age	M/F	Condition	Scaffold	Complications	Max Follow-up	Failure Mode	Citation
[1]	1896	Koenig					fistula	cutaneous flap + rib				[1]
1	1898	Bruns				M	stenosis	"tracheal cannula"		died 5 y	stricture & collapse	[2]
1	1927	Fairchild					trauma	skin tube				[1] [2]
1	1945	Crafoord						cutaneous flap containing costal cartilage				[2]
1	1948	Clagett	Rochester, MN	Mayo Clinic	55	M	tumor	polyethylene tube	bronchopneumonia at 4 d	died 6 d	tube blocked bronchus of upper lobe	[11]
1	1948	Longmire	Baltimore, MD	Johns Hopkins Hospital	10	M	trauma	Lucite stent prosthesis + tracheostomy tube	tried to remove tube at 10.5 m, had to replace	alive 10.5 m		[14] [25]
1	1948	Gibbon	Philadelphia, PA				tumor	pleura + costal cartilage	bronchoscopic dilation	alive 8 m		[9]
1	1948	Rob & Bateman	London, England	St. Thomas' Hospital		M	tumor	fascia lata + tantalum gauze	bronchial aspirations, cauterizing, polyp	alive 1 y		[1]
1	1950	Belsey	Bristol, England		42	F	tumor	steel wire + thigh fascia	tumor recurrence, patch leak	died 2 y	recurrence	[18]
1	1950	Belsey	Bristol, England		41	F	tumor	steel wire + thigh fascia	collapse, 50% narrowing	alive 1 y		[18]
1	1950	Jarvis	Seattle, WA		33	M	tumor	stainless steel tube	tried to remove tube at 1 y, had to replace	died 33 m	recurrence	[20]
1	1950	Holmes	Boise, ID			M	trauma	vitalium tube	multiple dilations, replaced w stainless steel	alive 1 m		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	29	F	TB	steel wire + fascia	bronchoscopies to clean secretions, removed some wire	alive 1 y		[19]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	38	F	TB	steel wire + fascia		alive 1 y		[19]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	24	F	TB	steel wire + fascia	tissue around graft collapsing	alive 1 y		[19]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	26	F	TB	steel wire + fascia	cut protruding wire	alive 1 y		[19]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	31	F	TB	steel wire + fascia	6 bronchial dilations	alive 1 y		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	28	F	TB	steel wire + fascia	cough, moderate bronchorrhea, daily mucus, granulation, protruding wire loops	alive 14 m		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	34	M	TB	steel wire + fascia	pneumonectomy at 1 y	alive 1 y		[21]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	30	M	TB	steel wire + fascia	little cough	alive 11 m		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	50	F	TB	steel wire + fascia		alive 10 m		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	49	F	TB	steel wire + fascia	mucous plug	alive 10 m		[20]
1	1950	Gebauer	Honolulu, HI	Leahi Hospital	26	F	TB	steel wire + fascia	edema and collapse, secretions	died 3.5 d	narrowed airway	[22]
1	1951	Gebauer	Honolulu, HI	Leahi Hospital			stenosis	dermal graft		alive 10 m		[16]
1	1951	Gebauer	Honolulu, HI	Leahi Hospital			stenosis	dermal graft		alive 4 m		[16]
2	1951	Ravitch	Baltimore, MD	Johns Hopkins Hospital			tumor	dermis + tantalum mesh		died 12 d	hemorrhage	[16]
1	1952	Clagett	Rochester, MN	Mayo Clinic	60	F	tumor	steel wire + fascia + gelatin sponge		alive 1 y		[12]
1	1952	Clagett	Rochester, MN	Mayo Clinic	59	M	tumor	polyethylene tube + fascia	widespread metastasis	died < 2 y	recurrence	[12]

1	1952	Clagett	Rochester, MN	Mayo Clinic	50	M	tumor	steel wire + fascia + gelatin sponge	considerable granulation around wire, narrowed lumen, cough	alive 11 m		[12]
1	1952	Cahan	New York, NY	Memorial Hospital	18	M	tumor	fascia lata + tantalum gauze, w tracheotomy	granulation tissue	alive 1 y 4 m		[17]
1	1952	Cotton & Penido	Beverly Hills, CA		58	M	tumor	stainless steel tube	polyp removals, reposition slipped tube, replaced tube	alive 16 m		[2]
1	1952	Cotton & Penido	Beverly Hills, CA		53	M	tumor	stainless steel tube		alive 6 m		[2]
1	1952	Cotton & Penido					aneurism	stainless steel tube		died 3 m		[2]
1	1952	Kergin	Toronto, Canada	Toronto General Hospital	51	M	tumor	pericardium patch + gelfoam strip // pedicle flap	roentgen therapy, heart attack	died 3 d	mucous plug blocked left bronchus	[72]
1	1953	Craig	Livermore, CA		63	M	tumor	polyethylene tube		died 5 d	right lung collapsed	[13]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	0.5	M	tumor	thigh fascia around foam rubber support		alive 10 d		[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	18	M	trauma	thigh fascia around foam rubber support		alive 6 m		[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	19	F	laryngitis	thigh fascia around foam rubber support		alive 6 w		[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	45	F	tumor	wire rods and pedicle flaps		alive 2 w		[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	62	F	stenosis	pedicle flap + skin graft around acrylic tube		alive 1 y		[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	56	M	tumor	dermis + tantalum mesh		died 12 d	hemorrhage	[15]
1	1954	Edgerton	Baltimore, MD	Johns Hopkins Hospital	41	M	tumor	dermis + tantalum mesh		died 3 m	mesh obstructing airway	[15]
1	1955	Abbott	Atlanta, GA	Emory University			tumor	pyrex glass tube + pleural graft	stenosis	died 9 m	recurrence	[34]
1	1956	Keshishian	Washington, DC		42	F	stricture	steel spring + fascia lata		died 2 d	suffocation by secretions	[23]
1	1956	Waterman	Knoxville, TN		20	F	trauma	stainless steel tube + dermal graft		died 10 d	hemorrhage	[23]
1	1956	Stranahan	Albany, NY		38	F	tumor	stainless steel mesh + pleuropericostial graft		alive 3.5 m		[23]
1	1958	Taber	Columbus, Ohio	Henry Ford Hospital	37	F	tumor	ivalon sponge + stainless steel spring		died 22 d	hemorrhage	[26]
1	1962	Ellis	Houston, TX	Jefferson Davis Hospital	49	M	tumor	marlex mesh tracheostomy	recurrence at 6 m	alive 2.5 y		[27]
1	1963	Beall	Houston, TX	St. Luke's Episcopal Hospital	61	F	tumor	marlex mesh		alive 4.5 m		[28]
1	1963	Kramish	Denver, CO	CU Medical Center	45	F	tumor	stainless steel mesh / marlex mesh	8 dilations, 1 replacement	alive 18 m		[24]
1	1963	Kramish	Denver, CO	CU Medical Center	57	M	tumor	marlex mesh		died 9 m	suffocation by secretions	[24]
1	1968	Pearson	Toronto, Canada	University of Toronto	15	F	tumor	marlex mesh	graft removed at 5 y	died 29 y	recurrence	[29] [36]
1	1968	Pearson	Toronto, Canada	University of Toronto	48	M	tumor	marlex mesh + internal mucosal graft		died 22 m	infection, granulation	[29]
1	1972	Neville	Chicago, IL	West Suburban Hospital		F	tumor	bifurcated silicone prosthesis	indefinite intubation	alive 11 y	pulmonary insufficiency	[37]
1	1974	Arbulu	Detroit, MI				stenosis			died 10 d	hemorrhage	[30]
8	1974	Arbulu	Detroit, MI				stenosis	+ pericardial flap		alive		[30]
1	1974	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died 2 w	hemorrhage	[30]

1	1974	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died 2 w	hemorrhage	[30]
1	1974	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died 2 w	hemorrhage	[30]
1	1974	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died 3 w		[30]
1	1974	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died 8 y	recurrence	[30]
1	1975	Moghissi	Hull, England	Castle Hill Hospital	38	M	tumor	marlex mesh + pericardium		alive 4 y		[31]
1	1975	Moghissi	Hull, England	Castle Hill Hospital	65	M	tumor	marlex mesh + pericardium		died 6 w	hemorrhage	[31]
1	1976	Neville	Newark, NJ	New Jersey Med School	49	F	tumor	bifurcated silicone prosthesis		alive 5 y		[38]
1	1976	Neville	Newark, NJ	New Jersey Med School	19	M	trauma	straight silicone prosthesis	graft migration	alive 16 m		[38]
1	1976	Neville	Newark, NJ	New Jersey Med School	31	M	tracheomalacia	straight silicone prosthesis		died 5 m	drug overdose	[38]
1	1976	Neville	Newark, NJ	New Jersey Med School	49	F	tumor	straight silicone prosthesis		alive		[38]
4	1976	Neville	Newark, NJ	New Jersey Med School			tumor	bifurcated silicone prosthesis		alive 1 y +		[38]
1	1976	Neville	Newark, NJ	New Jersey Med School			tumor	bifurcated silicone prosthesis		died 3 w	pulmonary insufficiency	[38]
1	1976	Neville	Newark, NJ	New Jersey Med School			tumor	bifurcated silicone prosthesis	granulomas	died 15 m	recurrence	[38]
1	1976	Neville	Newark, NJ	New Jersey Med School			tumor	bifurcated silicone prosthesis	granulomas	died 18 m	recurrence	[38]
5	1976	Neville	Newark, NJ	New Jersey Med School			tumor / stricture	straight silicone prosthesis		alive		[38]
1	1976	Neville	Newark, NJ	New Jersey Med School			tumor / stricture	straight silicone prosthesis		died 14 d	hemorrhage	[38]
4	1976	Neville	Newark, NJ	New Jersey Med School			tumor / stricture	straight silicone prosthesis	granulomas, graft migration, right pneumonectomy	died < 2 y	arrhythmia, recurrence	[38]
1	1976	Neptune	Boston, MA		65	M	tumor	silicone prosthesis		alive 6 m		[38]
1	1976	Mark	Stanford, CA		68	M	tumor	silicone prosthesis	difficult cough	alive < 1 m		[38]
1	1979	Rose	Cologne, West Germany	ENT Clinic, University Hospital Cologne	21	M	stenosis	heterotopic/orthotopic allotransplant		alive 9 w		[49]
1	1985	Vogt-Moykopt	Germany		49	M	tumor	silicone prosthesis		died 2 m	heart failure	[39]
1	1985	Vogt-Moykopt	Germany		29	F	tumor	silicone prosthesis (bifurcated)	sputum retention, vocal cord paralysis, metastasis	died 4 m	recurrence	[39]
1	1985	Vogt-Moykopt	Germany		55	M	tumor	silicone prosthesis (bifurcated)	severe venous bleeding during procedure	died 10 d	cardiorespiratory insufficiency	[39]
1	1985	Vogt-Moykopt	Germany		55	F	tracheomalacia	silicone prosthesis	erosion (goretex patch was meant to prevent this, but ended up causing it)	died 15 d	hemorrhage	[39]
1	1985	Vogt-Moykopt	Germany		55	M	tumor	silicone prosthesis	loosening of prosthesis	died 7 m	septicemia	[39]
1	1985	Vogt-Moykopt	Germany		54	M	tracheomalacia	silicone prosthesis	sputum retention, loosening of prosthesis, changed prosthesis	died 10 m	hemorrhage	[39]
1	1985	Vogt-Moykopt	Germany		58	M	tumor	silicone prosthesis		died 4 m	recurrence	[39]
1	1985	Vogt-Moykopt	Germany		50	M	tumor	silicone prosthesis (bifurcated)	granulation tissue, laser coagulation	alive 13 m		[39]

1	1985	Vogt-Moykopt	Germany		63	M	tumor	silicone prosthesis (bifurcated)	sputum retention, necrosis of upper anastomosis	died 8 d	cardiorespiratory insufficiency	[39]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)		died 1 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)		died 2 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)	changed graft periodically over 5 y	died 11 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)	suture granuloma	alive 5 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)	suture granuloma	alive 3 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)	shift of prosthesis	alive 1.5 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)	shift of prosthesis	alive 2.5 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis (bifurcated)		died 2 y	recurrence	[40]
6	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		lost to follow-up		[40]
3	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis	anastomotic granuloma	died 3 y		[40]
3	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis	anastomotic granuloma	died 7 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis	subglottic granuloma, tracheotomy	died 2 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis	subglottic granuloma	died 3 y		[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 5 y	dehiscence	[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 15 y	pulmonary insufficiency	[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 6 m	stroke	[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 1 y	arrhythmia	[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 10 m	MI	[40]
1	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			benign disease	silicone prosthesis		died 1 y	pneumonia	[40]
5	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis		survived 1-8 y	2x recurrence	[40]
2	1990	Neville, W. E.	Newark, NJ	New Jersey Med School			tumor	silicone prosthesis		died 1.5 y	recurrence	[40]
1	1993	Levashov	St. Petersburg, Russia		24	F	stenosis	preserved allograft – Eurocollins solution	graft necrosis, rejection, stenting	alive 1 y		[47]
1	1996	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh		died at 2 w	hemorrhage	[32]
1	1996	Pearson	Toronto, Canada	University of Toronto			tumor	marlex mesh	pneumonia	died at 10 d	dehiscence	[32]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	16.6		trauma	preserved allograft - formalin		alive 9.96 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	17.5		trauma	preserved allograft - formalin		alive 7.47 y		[3]

1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	18.3		trauma	preserved allograft - formalin		alive 6.76 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	9.5		trauma	preserved allograft - formalin		alive 9.11 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	6.4		trauma	preserved allograft - formalin		alive 5.64 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	6.7		trauma	preserved allograft - formalin		alive 8.16 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	11.5		trauma	preserved allograft - formalin		died	cardiac failure	[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	4		trauma	preserved allograft - formalin		alive 5.03 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	4.1		congenital stenosis	preserved allograft - formalin		alive 4.76 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	5.6		congenital stenosis	preserved allograft - formalin		alive 1.37 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	11.4		prolonged intubation	preserved allograft - formalin		alive 4.41 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	9.7		prolonged intubation	preserved allograft - formalin	stented tracheostomy tube	alive 0.39 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	13.4		prolonged intubation	preserved allograft - formalin	stent	alive 2.06 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	15.5		prolonged intubation	preserved allograft - formalin	still being treated	alive 2 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	17.9		prolonged intubation	preserved allograft - formalin	still being treated	alive 1.59 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	5		congenital stenosis	preserved allograft - formalin		alive 1.38 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital	5.6		trauma	preserved allograft - formalin	still being treated	alive 0.43 y		[3]

				for Children (GOSH)								
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	1.6		congenital stenosis	preserved allograft - formalin		alive 0.44 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	5.1		congenital stenosis	preserved allograft - formalin		died 18 m	GI problems	[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	8.2		congenital stenosis	preserved allograft - formalin		alive 1.88 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	1.5		congenital stenosis	preserved allograft - formalin		alive 1.71 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	0.4		congenital stenosis	preserved allograft - formalin		died 10 d	hemorrhage	[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	0.4		congenital stenosis	preserved allograft - formalin	still being treated	alive 1.2 y		[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	0.5		congenital stenosis	preserved allograft - formalin		died 3.5 m	airway failure	[3]
1	1996	Jacobs	London, England	Great Ormond Street, Hospital for Children (GOSH)	1.5	F	congenital stenosis	preserved allograft - formalin	silicone stent	alive 16 m		[3]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	0.2		congenital stenosis (complete tracheal rings)	autograft w pericardial patch		alive 20 m		[6]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	0.4		congenital stenosis (complete tracheal rings)	autograft		alive 14 m		[6]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	0.2		congenital stenosis (complete tracheal rings)	autograft w pericardial patch	stenosis at pericardial patch, stent and tracheostomy at 4 m	alive 12 m		[6]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	0.1		congenital stenosis (complete tracheal rings)	autograft w pericardial patch		alive 10 m		[6]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	1		congenital stenosis (complete tracheal rings)	autograft w pericardial patch		alive 5 m		[6]
1	1998	Backer	Chicago, IL	Children's Memorial Hospital	0.7		congenital stenosis (complete tracheal rings)	autograft		alive 2 m		[6]

1	1999	Jacobs	North America		15.3		trauma	fixed allograft	stent, malacia	alive 2.44 y		[4]
1	1999	Jacobs	North America		29		trauma	fixed allograft	stent, malacia	alive 2.37 y		[4]
1	1999	Jacobs	North America		11.8		congenital stenosis	fixed allograft	stent, restent, granulation	alive 2.1 y		[4]
1	1999	Jacobs	North America		39.4		tumor	fixed allograft		died 12 d	hemorrhage	[4]
1	1999	Jacobs	North America		2.6		congenital stenosis	fixed allograft	tracheostomy	alive 0.92 y		[4]
1	1999	Jacobs	North America		21		stenosis	fixed allograft	tracheostomy	alive 0.57 y		[4]
1	1999	Jacobs	International		1.7		congenital stenosis	fixed allograft		died 4 m	hemorrhage	[4]
1	1999	Jacobs	International		2.8		prolonged intubation	fixed allograft	stenosis, replacement graft	alive 5 m - 14 y (over 26 patients)		[4]
1	1999	Jacobs	International		4.7		prolonged intubation	fixed allograft		alive 5 m - 14 y (over 26 patients)		[4]
1	1999	Jacobs	International		8.2		trauma	fixed allograft		alive 5 m - 14 y (over 26 patients)		[4]
1	2001	Vogt-Moykopt	Germany		55.5		tumor	silicone prosthesis		died 5 d	mediastinitis	[41]
1	2001	Hoffman	Philadelphia, PA		38	F	stricture	aortic autograft	tracheostomy	alive 1 y		[58]
33	2003	Delaere	Leuven, Belgium	University Hospital Leuven			tumor	heterotopic/orthotopic allotransplant			5 recurrences of which 4 died	[50]
5	2003	Delaere	Leuven, Belgium	University Hospital Leuven			tumor	heterotopic/orthotopic allotransplant		alive 8 m		[50]
1	2004	Klepetko	Vienna, Austria	University Hospital of Vienna	57	M	prolonged intubation	heterotopic/orthotopic allotransplant		alive 31 m		[56]
1	2005	Spaggiari	Milan, Italy	European Institute of Oncology	38	M	tumor	autograft	stenosis & stent, ARDS & MV at 21 d	alive 24 m		[5]
1	2005	Olias	Lisbon, Portugal	Portuguese Cancer Institute	25	M	prolonged intubation	heterotopic/orthotopic autograft	pooling of secretions at upper anastomosis	alive 6 m		[57]
1	2006	Azorin	Limoges, France	Academic Hospital of Limoges	68	M	tumor	aortic autograft	granulation at proximal anastomosis, stent, stent migration	died 6 m	pneumonia, ARDS	[62]
1	2009	Davidson	Johannesburg, South Africa	University of Witwatersrand	33	M	trauma	aortic autograft		died 10 d	dehiscence, mediastinitis	[59]
1	2010	Wurtz	Lille, France	Academic Hospital of Lille	46	M	tumor	aortic allograft	dehiscence, sternoplasty, esophageal fistula	died 45 m	recurrence	[60]
1	2010	Wurtz	Lille, France	Academic Hospital of Lille	17	M	tumor	aortic allograft	esophageal fistula, acute anterior spinal cord ischemia	died 26 m	hemorrhage (during re-op)	[60]
1	2010	Wurtz	Lille, France	Academic Hospital of Lille	30	M	tumor	cryopreserved aortic allograft	multiple stent replacements, pneumonia, tracheotomy, partial disruption of lower anastomosis	alive 42 m		[60]
1	2010	Wurtz	Lille, France	Academic Hospital of Lille	27	F	tumor	cryopreserved aortic allograft	necrosis from fungal infection, retransplantation, graft disruption, tracheostomy, fistula between neocarina and esophagus, ARDS & MV	alive 34 m		[60]

1	2010	Wurtz	Lille, France	Academic Hospital of Lille	52	M	tumor	cryopreserved aortic allograft		alive 34 m		[60]
1	2010	Wurtz	Lille, France	Academic Hospital of Lille	35	M	tumor	cryopreserved aortic allograft		alive 26 m		[60]
1	2010	Delaere	Leuven, Belgium	University Hospital Leuven	55	F	stenosis	heterotopic/orthotopic allotransplant		alive 1 y		[51]
1	2011	Martinod	Bobigny, France	Publique-Hôpitaux de Paris	78	M	tumor	cryopreserved aortic allograft		alive 1 y		[63]
1	2012	Delaere	Leuven, Belgium	University Hospital Leuven	45	F	stenosis	heterotopic/orthotopic allotransplant	stricture			[52] [54]
1	2012	Delaere	Leuven, Belgium	University Hospital Leuven	17	M	stenosis	heterotopic/orthotopic allotransplant	stricture, tracheotomy			[52] [54]
1	2012	Delaere	Leuven, Belgium	University Hospital Leuven	64	M	tumor	heterotopic/orthotopic allotransplant		alive 2 y		[52] [53] [54]
1	2012	Elliott	London, England	Great Ormond Street, Hospital for Children (GOSH)	10	M	congenital stenosis	decellularized allograft	25 secretion clearings & stentings	alive 4 y		[65]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	52	M	tumor	reinforced forearm free flap	ARDS	alive 75 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	38	F	tumor	reinforced anterolateral thigh free flap	ARDS	alive 66 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	53	F	tumor	reinforced bifurcated forearm free flap	ARDS, never extubated	died 23 d		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	38	M	tumor	reinforced bifurcated forearm free flap	ARDS treated w VV ECMO, never extubated	died 41 d		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	50	F	tumor	reinforced forearm free flap		alive 41 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	68	M	stenosis	reinforced forearm free flap + closed fistula	ARDS, endotracheal stenting	alive 34 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	40	F	tumor	reinforced forearm free flap		died 16 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	68	M	tumor	reinforced forearm free flap	ARDS	alive 20 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	66	F	stenosis	reinforced forearm free flap	ARDS, tracheostomy	alive 18 m		[7]
1	2013	Fabre (& Kolb)	Villejuif, France	Institut Gustave Roussy	45	M	tumor	reinforced forearm free flap		died 6 m	hemorrhage	[7]
1	2015	Zhang	Shenyang, China	Shengjing Hospital	52	F	tumor	stented autograft	mild edema around anastomoses	died 14 m	hemoptysis	[33]
1	2015	Zhang	Shenyang, China	Shengjing Hospital	39	M	stenosis	stented autograft	mild edema around anastomoses	alive 84 m		[33]
1	2015	Zhang	Shenyang, China	Shengjing Hospital	38	F	tumor	stented autograft	mild edema around anastomoses	alive 84 m		[33]
1	2015	Zhang	Shenyang, China	Shengjing Hospital	28	M	tumor	stented autograft	mild edema around anastomoses	alive 84 m		[33]
1	2015	Zhang	Shenyang, China	Shengjing Hospital	31	M	tumor	stented autograft	mild edema around anastomoses	alive 84 m		[33]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	66	M	tumor	heterotopic/orthotopic allotransplant		alive 146 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	64	M	tumor	heterotopic/orthotopic allotransplant		alive 145 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	42	M	tumor	heterotopic/orthotopic allotransplant		alive 143 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	54	M	tumor	heterotopic/orthotopic allotransplant		alive 142 m		[55]



1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	55	M	tumor	heterotopic/orthotopic allotransplant		died 33 m	other cause	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	63	F	tumor	heterotopic/orthotopic allotransplant	tracheocutaneous fistula & wound infection	alive 128 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	58	F	tumor	heterotopic/orthotopic allotransplant	pneumonia	alive 126 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	64	M	tumor	heterotopic/orthotopic allotransplant	tracheocutaneous fistula & pneumonia	alive 126 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	58	M	tumor	heterotopic/orthotopic allotransplant	tracheostomy	alive 125 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	57	M	tumor	heterotopic/orthotopic allotransplant		died 34 m	other cause	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	60	M	tumor	heterotopic/orthotopic allotransplant	tracheocutaneous fistula	died 38 m	recurrence	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	63	M	tumor	heterotopic/orthotopic allotransplant		alive 122 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	52	F	tumor	heterotopic/orthotopic allotransplant		alive 116 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	71	M	tumor	heterotopic/orthotopic allotransplant	tracheostomy, percutaneous endoscopic gastrostomy & pneumonia	died 56 m	other cause	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	65	M	tumor	heterotopic/orthotopic allotransplant		alive 113 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	61	M	tumor	heterotopic/orthotopic allotransplant		alive 103 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	57	M	tumor	heterotopic/orthotopic allotransplant	wound infection	alive 98 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	48	F	tumor	heterotopic/orthotopic allotransplant	tracheocutaneous fistula	alive 96 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	71	M	tumor	heterotopic/orthotopic allotransplant	total laryngectomy	died 37 m	other cause	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	68	F	tumor	heterotopic/orthotopic allotransplant	total laryngectomy	died 74 m	other cause	[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	59	M	tumor	heterotopic/orthotopic allotransplant	bleeding & wound infection	alive 81 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	57	M	tumor	heterotopic/orthotopic allotransplant		alive 55 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	67	M	tumor	heterotopic/orthotopic allotransplant		alive 54 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	47	M	tumor	heterotopic/orthotopic allotransplant	pneumonia & tracheocutaneous fistula	alive 53 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	73	M	tumor	heterotopic/orthotopic allotransplant	total laryngectomy, pneumonia & wound infection	alive 50 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	71	M	tumor	heterotopic/orthotopic allotransplant	tracheostomy	alive 46 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	54	M	tumor	heterotopic/orthotopic allotransplant	weak voice & pneumonia	alive 25 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	57	M	tumor	heterotopic/orthotopic allotransplant	weak voice	alive 24 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	67	M	tumor	heterotopic/orthotopic allotransplant	tracheostomy, percutaneous endoscopic gastrostomy, wound infection, & pneumonia	alive 15 m		[55]
1	2016	Loos, Delaere	Leuven, Belgium	University Hospital Leuven	65	F	tumor	heterotopic/orthotopic allotransplant	tracheostomy	alive 12 m		[55]
1	2017	Elliott	London, England	Great Ormond Street, Hospital for Children (GOSH)	15	F	congenital stenosis	decellularized allograft	stricture, collapse	died 15 d	hypothesized acute extrinsic compressive event	[66]

1	2017	Martinod	Bobigny, France	Hôpitaux de Paris	58	F	prolonged intubation	cryopreserved aortic allograft	acute laryngeal edema, stent bacterial infection & removal, closed tracheostomy	alive 67 m		[61]
1	2017	Martinod	Bobigny, France	Hôpitaux de Paris	33	M	prolonged intubation	cryopreserved aortic allograft	stent granuloma & removal, closed tracheostomy	alive 55 m		[61]
1	2018	Kolb	Villejuif, France	Institut Gustave Roussy	12	F	congenital stenosis	dorsi free flap + chondrocartilage ribs autograft	daily aspirations	alive 44 m		[8]
1	2018	Thomet	Geneva, Switzerland	Geneva University Hospital	35	M	tumor	stented autograft	stent removed 4 m	died 27 m	recurrence	[10]
1	2018	Thomet	Geneva, Switzerland	Geneva University Hospital	70	M	tumor	stented autograft		alive 3 y		[10]
<b>290 Total</b>												