

Author/Year/Journal	ECLS Timing	ECLS Mode	Age (yrs)	Gender	Diagnosis	ECLS Reason	ECLS Days	Outcome
Dell'Amore et al. 2006 Transplantation Proceedings	Pre-op	VA	23	Male	Cardiomyopathy, irreversible liver dysfunction	Heart failure on maximal inotropic support, simultaneous ECLS and intra-aortic balloon pump	n/a	No major complications
Sato et al. 2009 Pediatric Transplantation	Pre-op	VA	2	Female	Propionic acidemia	Atrioventricular block, cardiac arrest	7	Liver transplant 3 months after completion of ECLS. No major complications
Monsel et al. 2011 Critical Care	Pre-op	VV	51	Male	ETOH cirrhosis, HPS	ARDS	13	Liver transplant on ECLS 5 days after initiation. No major complications
Son et al. 2012 Pediatric Transplantation	Pre-op	VA	5	Female	Wilson disease	Pulmonary hemorrhage	5	Liver transplant on ECLS 5 hours after initiation. No major complications
Nandhabalan et al. 2016 Liver Transplantation	Pre-op	VV	11	Male	Wilson disease	Hypoxemia, vasoplegic shock	11	Liver transplant on ECLS shortly after initiation. No major complications
	Pre-op	VV	17	Female	Acetaminophen overdose	Persistent hyperlactatemia on high-dose pressor support and 100% FIO ₂	5	Liver transplant on ECLS 48 hours after initiation. 5 liters blood loss. Expired due to severe septic shock, hepatic artery thrombosis, and multi-system organ failure
	Post-op	VV	11	Female	Hepatoblastoma, rejection	ARDS with refractory hypoxemia on high frequency oscillatory ventilation	26	Left frontoparietal hemorrhage with no residual deficit at follow-up
Jeng et al, 1994 Transplantation Proceedings	Post-op	n/a	37	Male	Hemochromatosis, Hepatitis B	ARDS	n/a	Expired on postop day 28 with large right and small left intracerebral hematoma
Fleming et al. 2008 Liver Transplantation	Post-op	VV	12	Male	Autoimmune hepatitis, HPS	Lung injury, infection, hypoxemic biliary complications	18	No major complications
Landsman et al. 2010 Anesthesia & Analgesia	Post-op	VV	3	Female	Biliary atresia	Portal vein thrombosis, pulmonary edema	2	Expired due to multi-system organ failure
Stratta et al. 2013 Transplantation Proceedings	Post-op	VV	43	Male	ETOH cirrhosis, hemosiderosis	ARDS, portopulmonary hypertension	11	No major complications
Yoo et al. 2013 Korean Journal of Anesthesiology	Post-op	VV	49	Female	HCC, Hepatitis B	Intraoperative cardiac arrest during liver transplant	2.7	Expired due to graft failure, sepsis
Auzinger et al. 2014 Liver Transplantation	Post-op	VV	44	--	ETOH cirrhosis, HPS	Lung injury, infection, hypoxemic biliary complications	21	No major complications
Chan-Dominy et al. 2015 International Journal Artificial Organs	Post-op	VA	7	Female	Biliary atresia, HPS	Cardiac arrest, pulmonary HTN	n/a	Failed decannulation at 10 days, recannulated, intra-abdominal bleeding. Expired due to multi-system organ failure
Sharma et al. 2015 International Journal Artificial Organs	Post-op	VV	60	Female	Nonalcoholic steatohepatitis, HPS	refractory hypoxemia, persistent intrapulmonary shunting despite increased ventilator support	13	Hemothorax evacuation, cannula repositioning for patent foramen ovale, early tracheostomy
Tejani et al. 2015 Liver Transplantation	Post-op	VA	61	Male	HCC, Hepatitis B	Intraoperative cardiac arrest during liver transplant	2	No major complications
Gedik et al. 2015 Experimental and Clinical Transplantation	Post-op	VA	0.7	Male	Biliary atresia	Klebsiella pneumonia, maximum inotropic support, mechanical ventilation	n/a	Severe collapse following graft failure on ECLS day 3. Expired due to multi-system organ failure
	Intra-op	VA	69	Female	Aspergillosis pneumonia	Replacement for cardiopulmonary bypass intraoperatively	7	Expired due to refractory septic shock
Szocik et al. 2002 Anesthesiology	Intra-op	VA	54	Female	Primary biliary cirrhosis	Massive pulmonary embolism with clot in right atrium, right ventricle, and mitral valve	Intra-op	IVC thrombus one week after discharge. Expired due to multi-system organ failure
Scheiermann et al. .2016 Journal Cardiothoracic and Vascular Anesthesia	Intra-op	VA	24	Male	Pulmonary HTN, liver cirrhosis	Replacement for cardiopulmonary bypass intraoperatively	3	Repeat thoracotomy on post-op day 1 for bleeding, hemothorax evacuation at post-op day 23

ECLS extracorporeal life support, VA venoarterial, VV venovenous, -- not described in manuscript, ETOH alcohol, HPS Hepatopulmonary syndrome, HCC hepatocellular carcinoma, HTN hypertension, ARDS acute respiratory distress syndrome, n/a not applicable

Online Supplemental Table I: Previous case reports of ECMO use in liver transplant