

Table S1 Newcastle-Ottawa quality assessment scale for included studies

First author year country	Selection	Comparability	Outcome	Total
Millis 1988 USA	4	1	2	7
Wood 1990 USA	3	2	1	6
Meister 1993 USA	4	2	3	9
Sandler 1997 Canada	4	2	2	8
Chardot 1999 France	3	2	2	7
Diem 2003 Belgium	4	2	2	8
Visser 2004 USA	4	2	2	8
Cowles 2008 USA	4	1	1	6
Tiao 2008 China	4	1	1	6
Guo 2010 China	3	2	2	7
Alexopoulos 2012 USA	4	1	3	8
Wang 2013 China	4	2	3	9
Celik 2014 Turkey	4	2	1	7
Neto 2015 Brazil	4	1	2	7
Chung 2015 China	4	1	2	7
Safwan 2016 India	4	1	2	7
Mohan 2016 India	4	1	1	6
Yang 2018 China	4	2	2	8
Li 2019 China	4	2	3	9
Chang 2021 China	4	1	3	8
Tambucci 2021 Belgium	4	1	2	7
Li 2022 China	4	1	2	7
Zhang 2022 China	4	1	2	7
Lemoine 2022 USA	4	2	3	9
Yoeli 2022 USA	4	1	2	7
Liu 2022 China	4	1	2	7

Table S2 Data summary information on indications for transplantation in children from each study

First author year country	Indications for liver transplantation
Millis 1988 USA	Not mentioned
Wood 1990 USA	Not mentioned
Meister 1993 USA	Not mentioned
Sandler 1997 Canada	Not mentioned
Chardot 1999 France	Liver failure (n=191)
Diem 2003 Belgium	Early liver failure (n=252)
	Digestive hemorrhage (n=26)
	Late liver failure (n=38)
	Recurrent cholangitis (n=12)
Visser 2004 USA	Failure to thrive (n=19)
	Inadequate drainage (n=16)
	Coagulopathy (n=12)
	Recurrent cholangitis (n=6)
	Portal hypertension (n=5)
	Gastrointestinal bleeding (n=4)
	Ascites (n=2)
	Portal vein thrombosis (n=1)
	Intractable pruritis (n=1)
Cowles 2008 USA	Not mentioned
Tiao 2008 China	Not mentioned
Guo 2010 China	Not mentioned
Alexopoulos 2012 USA	Not mentioned
Wang 2013 China	Not mentioned
Celik 2014 Turkey	Not mentioned
Neto 2015 Brazil	Not mentioned
Chung 2015 China	Portal hypertension (n=60)
Safwan 2016 India	Not mentioned
Mohan 2016 India	Not mentioned
Yang 2018 China	Not mentioned
Li 2019 China	Not mentioned
Chang 2021 China	Not mentioned
Tambucci 2021 Belgium	Not mentioned
Li 2022 China	Not mentioned
Zhang 2022 China	Not mentioned
Lemoine 2022 USA	Cholangitis (n=31; KPE [†] =31; pLT [‡] =0)
	Infections (other than cholangitis) (n=47; KPE [†] =41; pLT [‡] =6)
	Gastrointestinal bleeding (n=22; KPE [†] =20; pLT [‡] =2)
	Ascites or spontaneous bacterial peritonitis (n=30; KPE [†] =25; pLT [‡] =5)
	Malnutrition (n=28; KP [†] =24; pLT [‡] =4)
Yoeli 2022 USA	Not mentioned
Liu 2022 China	Jaundice (n=127; N-KP [§] =43; P-KP [¶] =84)
	Cholangitis (n=62; N-KP [§] =0; P-KP [¶] =62)
	GEV bleeding (n=30; N-KP [§] =1; P-KP [¶] =29)
	Severe hypersplenism (n=12; N-KP [§] =1; P-KP [¶] =11)
	Growth retardation (n=60; N-KP [§] =15; P-KP [¶] =45)
	Massive ascites (n=3; N-KP [§] =0; P-KP [¶] =3)
	Liver failure (n=32; N-KP [§] =14; P-KP [¶] =18)

[†], KPE = Kasai portoenterostomy; [‡], pLT = primary liver transplantation; [§], N-KP = non-Kasai procedure; [¶], P-KP = post Kasai procedure.

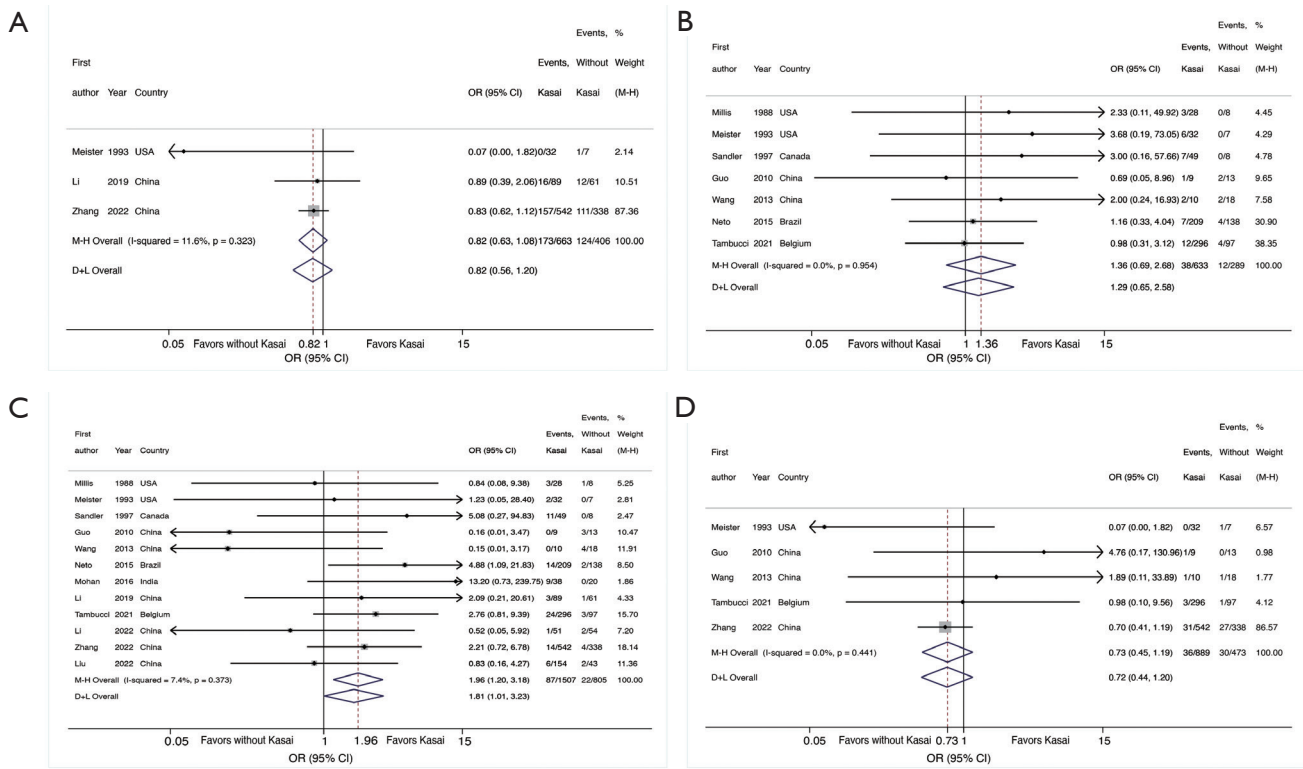


Figure S2 Forest plot of the meta-analysis of postoperative indicators. (A) Lymphatic fistula. (B) Bleeding. (C) Intestinal perforation. (D) Intestinal obstruction. Fixed effects model: M-H overall, random effects model: D + L overall. M-H, Mantel-Haenszel; D + L, DerSimonian and Laird; OR, odds ratio; CI, confidence interval.

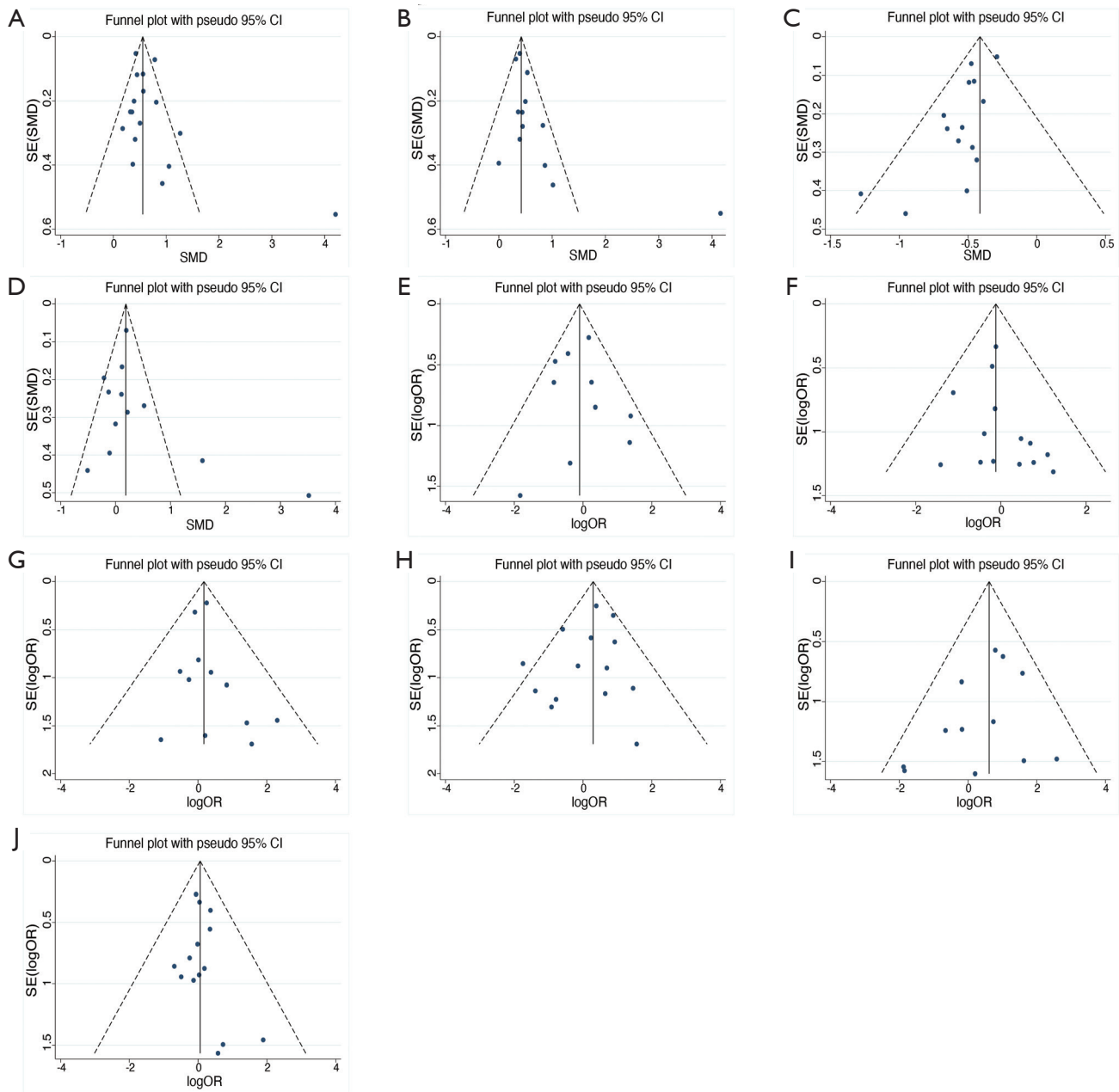


Figure S3 Plot of funnel. (A) Age at surgery. (B) Weight at surgery. (C) PELD score. (D) Operation time. (E) Reoperation. (F) Hepatic artery complications. (G) Portal vein complications. (H) Biliary complications. (I) Intestinal perforation. (J) 1-year survival rate. SE, standard error; SMD, standardized mean difference; CI, confidence interval; PELD, pediatric end-stage liver disease; OR, odds ratio.

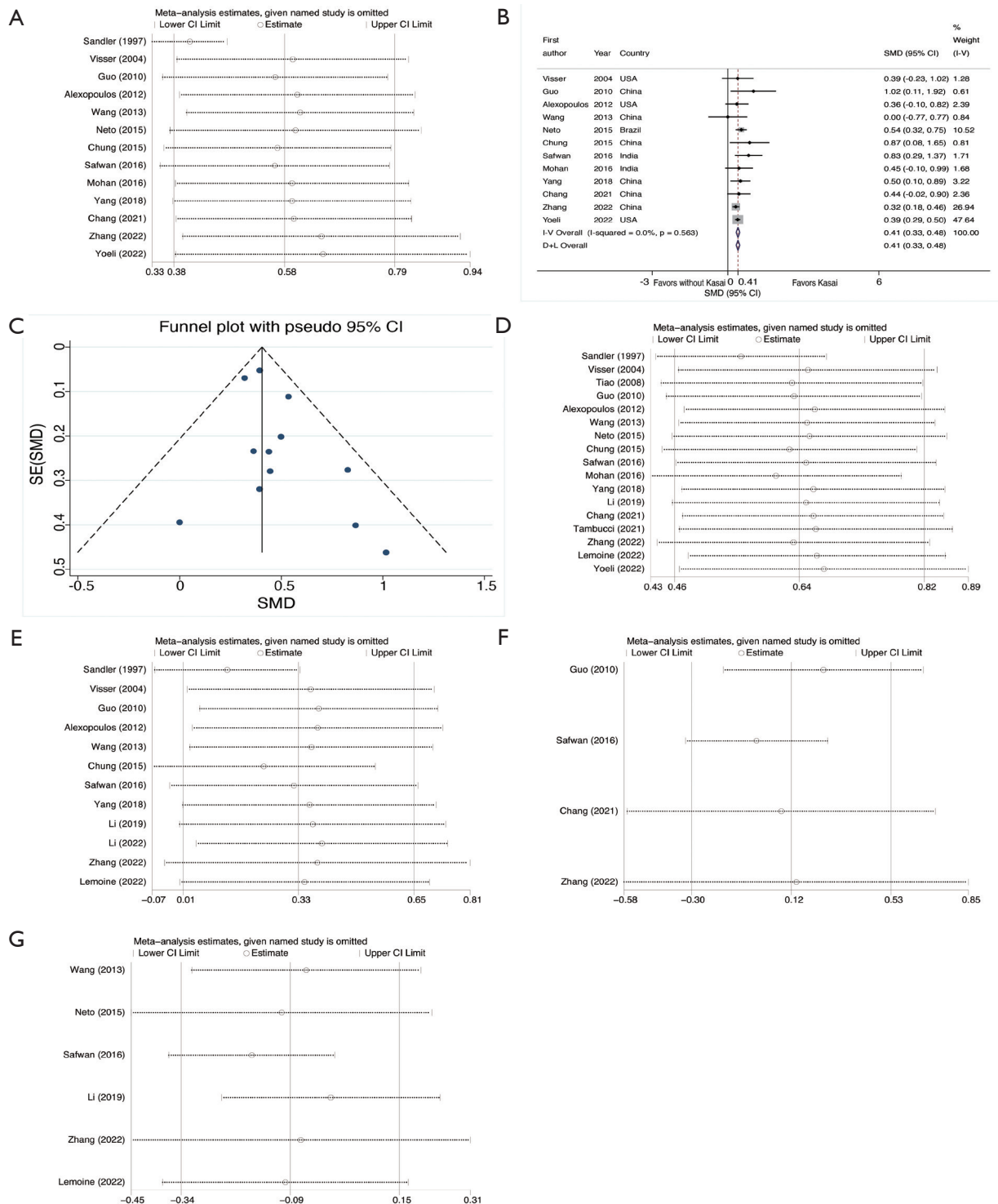


Figure S4 Sensitivity analysis. (A) Sensitivity analysis of weight at surgery. (B) Forest plot of meta-analysis of surgical weight after excluding one study. (C) Funnel plot of meta-analysis of surgical weight after excluding one study. (D) Sensitivity analysis of age at surgery. (E) Sensitivity analysis of operation time. (F) Sensitivity analysis of intraoperative blood transfusion. (G) Sensitivity analysis of length of ICU stay. Fixed effects model: I-V overall, random effects model: D + L overall. I-V, Inverse-Variance; D + L, DerSimonian and Laird; SMD, standardized mean difference; CI, confidence interval; SE, standard error; ICU, intensive care unit.