

Supplemental Table 3 Quality assessment based on laboratory test and clinical indexes of the ω-3 PUFAs support in patients undergoing liver operation.

Quality assessment								No of patients (I/C)	Effect		Quality	Importance
Outcomes	Design	No of studies	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations		Relative (95% CI)	Absolute		
Liver function												
AST [47, 49, 51, 53, 55]	RCT	5	serious ^{1,2}	no serious	no serious	serious ³	none	184/186	—	MD 42.72 lower (71.91 to 13.52 lower)	⊕⊕OO LOW	Important
ALT [47, 49, 51, 53-55]	RCT	6	serious ^{1,2}	no serious	no serious	no serious	none	341/341	—	MD 38.9 lower (65.44 to 12.37 lower)	⊕⊕⊕O MODERATE	Important
Tbil [47, 49, 51, 53-55]	RCT	6	serious ^{1,2}	no serious	no serious	no serious	none	341/341	—	MD 0.97 lower (2.5 lower to 0.57 higher)	⊕⊕⊕O MODERATE	Important
Alb [47, 49, 51, 53-55]	RCT	6	serious ^{1,2}	no serious	no serious	no serious	none	341/341	—	MD 0.42 higher (0.26 to 0.57 higher)	⊕⊕⊕O MODERATE	Important
Makers of inflammation												
WBC [49, 54, 55]	RCT	3	serious ^{1,2}	no serious	no serious	no serious	none	218/216	—	MD 0.93 lower (1.6 to 0.26 lower)	⊕⊕⊕O MODERATE	Important
TNF-α [50, 52, 53]	RCT	3	serious ^{1,2}	no serious	no serious	serious ³	none	64/65	—	MD 0.01 lower (15.08 lower to 15.06 higher)	⊕⊕OO LOW	Important
IL-6 [49, 50, 52, 53]	RCT	4	serious ^{1,2}	no serious	no serious	serious ³	none	105/106	—	MD 11.37 lower (14.62 to 8.13 lower)	⊕⊕OO LOW	Important
IL-2 [49, 50]	RCT	2	serious ^{1,2,3}	no serious	no serious	no serious	none	59/59	—	MD 20.72 lower (50.34 lower to 8.89 higher)	⊕⊕OO LOW	Important
Markers of immune system												
IgA [47, 49, 52]	RCT	3	serious ^{1,2}	no serious	no serious	serious ³	none	89/89	—	MD 0.2 higher (0 to 0.4 higher)	⊕⊕OO LOW	Important

Supplemental Table 3 (continued)

Outcomes	Design	No of studies	Quality assessment					No of patients (I/C)	Effect		Quality	Importance
			Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations		Relative (95% CI)	Absolute		
IgG [47, 49]	RCT	2	serious ^{1,2}	no serious	no serious	serious ³	none	74/74	—	MD 0.36 lower (1.47 lower to 0.75 higher)	⊕⊕OO LOW	Important
IgM [47, 49, 52]	RCT	3	serious ^{1,2}	no serious	no serious	serious ³	none	89/89	—	MD 0 higher (0.11 lower to 0.1 higher)	⊕⊕OO LOW	Important
CD3 [49, 52]	RCT	2	serious ^{1,2}	no serious	no serious	serious ³	none	56/56	—	MD 0.94 higher (6.76 lower to 8.64 higher)	⊕⊕OO LOW	Important
Clinical indexes												
Infection [47, 49, 51, 53, 54]	RCT	5	serious ^{1,2}	no serious	no serious	no serious	none	321 (36)/ 321 (71)	OR 0.44 (0.28 to 0.71)	110 fewer per 1000 (from 59 fewer to 148 fewer)/ 98 fewer per 1000 (from 43 fewer to 152 more)	⊕⊕⊕O MODERATE	Critical
biliary leakage [51, 54]	RCT	2	serious ^{1,2}	no serious	no serious	no serious	none	216 (11)/ 215 (15)	OR 0.71 (0.32 to 1.59)	19 fewer per 1000 (from 46 fewer to 37 more)/ 18 fewer per 1000 (from 43 fewer to 34 more)	⊕⊕⊕O MODERATE	Critical
Duration of hospital stay [47, 49, 51, 53, 54]	RCT	5	serious ^{1,2}	no serious	no serious	serious ³	none	182/184	—	MD 2.17 lower (3.04 to 1.3 lower)	⊕⊕OO LOW	Important
Mortality [47, 49, 51, 53, 54]	RCT	5	serious ^{1,2,3}	no serious	no serious	serious ⁴	none	321 (2)/ 321 (9)	OR 0.25 (0.06 to 1.03)	21 fewer per 1000 (from 26 fewer to 1 more)/ 13 fewer per 1000 (from 16 fewer to 1 more)	⊕⊕OO LOW	Critical

Abbreviations: AST aspartate aminotransferase; ALT alanine aminotransferase; Tbil total bilirubin; Alb albumin; WBC white blood cell; TNF tumor necrosis factor alpha; IL-6 interleukin-6; IL-2 interleukin-2;

IgA Immunoglobulin A; IgG Immunoglobulin G; IgM Immunoglobulin M; CD3 CD3 – lymphocytes.

¹ In included studies, at least one element for the risk of bias is considered to have limitations in design. ² Timing and duration of intervention were inconsistent. ³ Low sample size (n < 400). ⁴ The time of follow up was different.