Association between hypocholesterolemia and mortality in critically ill patients

with sepsis: A systematic review and meta-analysis.

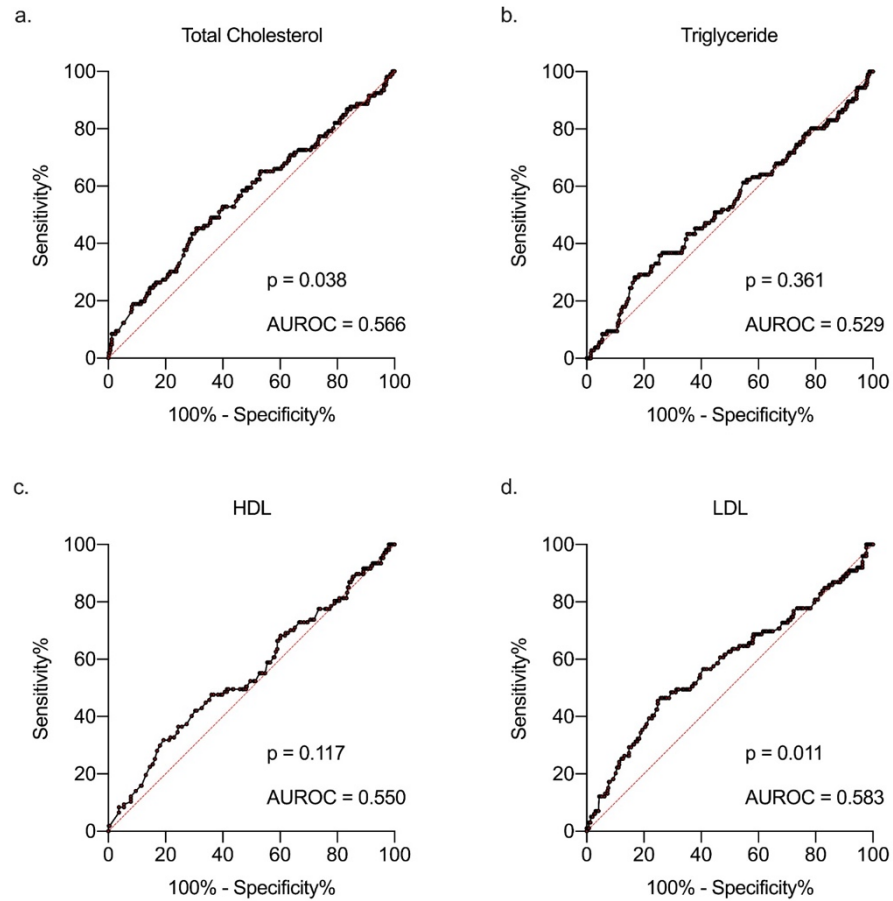**Supplemental material**

Table of contents

Supplemental Table 1. Characteristics of included studies

Study	Survival	Patients	Male n (%)	Age (y, mean/SD)	Origin of sepsis n (%)				Statins n (%)
					pulmonary	urinary	abdominal	other/not stratified	
Barlage (2009) (47)	survivors	104	72 (69.2)	56.5 ± 7.49				104 (100)	not reported
	non-survivors	47	36 (76.6)	59.25 ± 8.37				47 (100)	not reported
Berbee (2008) (48)	survivors	9	4 (44.4)	61.5 ± 5.77	7 (77.8)			2 (22.2)	not reported
	non-survivors	8	5 (62.5)	68.23 ± 1.09	5 (62.5)	1 (12.5)		2 (25)	not reported
Cetinkaya (2014) (49)	survivors	26	not reported	68.19 ± 13.88				26 (100)	prior use excluded
	non-survivors	53	not reported	72.97 ± 9.31				53 (100)	prior use excluded
Delirrad (2020) (50)	survivors	32	16 (50)	67.62 ± 11.24				32 (100)	prior use excluded
	non-survivors	56	32 (57.1)	73.70 ± 10.43				56 (100)	prior use excluded
Guirgis (2018, 2020, 2021) (13-15)	survivors	200	108 (54)	59.71 ± 15.57	57 (28.5)	50 (25)	39 (19.5)	54 (27)	64 (32)
	non-survivors	42	22 (52.4)	65.5 ± 12.89	17 (40.5)	8 (19)	10 (23.8)	7 (16.7)	15 (36)
Khaliq (2020) (56)	survivors	12	9 (75)	68 ± 16	7 (58)		5 (42)		2 (17)
	non-survivors	8	7 (88)	68 ± 13	5 (63)		3 (37)		3 (38)
Lee (2015) (7)	survivors	65	42 (64.6)	63.0 ± 16.6	45 (69.2)	5 (7.7)	11 (16.9)	4 (6.1)	prior use excluded
	non-survivors	52	31 (59.6)	62.3 ± 15.9	49 (94.2)		3 (5.8)		prior use excluded
Lekkou (2014) (51)	survivors	28	15 (53.6)	64.8 ± 3.2				28 (100)	not reported
	non-survivors	22	12 (54.5)	66.2 ± 6.5				22 (100)	not reported

Study	survival	n	gender n (%)	age	sepsis 1	sepsis 2	sepsis 3	sepsis 4	statin use
Levels (2007) (52)	survivors	15	not reported	60 ± 3				15 (100)	not reported
	non-survivors	11	not reported	60 ± 4				11 (100)	not reported
Memis (2007) (53)	survivors	55	not reported	41.7 ± 10.3	37 (66.1)	12 (21.4)	6 (10.7)	1 (1.8)	not reported
	non-survivors	41	not reported	67.9 ± 8.8	34 (82.9)	4 (9.8)	2 (4.9)	1 (2.4)	not reported
Sharma (2017, 2019) (16,17)	survivors	15	10 (66.6)	61.07 ± 16.07	15 (100)				not reported
	non-survivors	16	12 (75)	64.88 ± 13.29	16 (100)				not reported
Tanaka (2017) (54)	survivors	40	not reported	not reported				40 (100)	not reported
	non-survivors	10	not reported	not reported				10 (100)	not reported
Tanaka (2019) (18)	survivors	13	11 (84.6)	67.2 ± 11.96	4 (30.8)		8 (61.6)	1 (7.6)	2 (15)
	non-survivors	7	6 (85.7)	70.29 ± 9.6	1 (14.2)		3 (42.9)	3 (42.9)	1 (14)
Tanaka (2021) (19)	survivors	170	89 (52.4)	60.67 ± 16.4	22 (12.9)	33 (19.4)	72 (42.4)	43 (25.3)	58 (34)
	non-survivors	35	19 (54.3)	64.63 ± 13.64	7 (20)	2 (5.7)	15 (42.9)	11 (31.4)	5 (14)
Yamano (2016) (55)	survivors	72	42 (58.3)	62 ± 19	16 (22.2)	1 (1.4)	14 (19.4)	41 (57)	not reported
	non-survivors	19	14 (73.7)	68 ± 13	8 (42.1)		3 (15.8)	8 (42.1)	not reported

Study, survival, patient number, gender, age, origin of sepsis and statin use for all included 18 observational studies

Supplemental Figure 1:

a.

b.

c.

d.

Receiver operating characteristic curves showing association between admission cholesterol and triglyceride levels and survival combined for studies where individual patient parameters were available and provided by contacted corresponding authors.