

CQ10-1 (GRADE)

P: Critically ill patients under mechanical ventilation (sepsis, respiratory failure, heart failure, burn, major surgery)

I: Analgesia-first sedation protocol

C: Conventional management, hypnotic-based sedation protocol

O: Mortality, length of mechanical ventilation, ventilator free days, length of ICU stay, serious adverse event, delirium, agitation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
5	randomised trials	not serious	not serious	serious	serious	none	119/511 (23.3%)	126/501 (25.1%)	RR 0.93 (0.75 to 1.14)	18 fewer per 1,000 (from 63 fewer to 35 more)	⊕⊕○○ Low	CRITICAL
Length of mechanical ventilation												
6	randomised trials	serious	serious	serious	serious	none	554	536	-	MD 8.99 day lower (from 20.66 lower to 2.68 higher)	⊕○○○ Very low	CRITICAL
Ventilator free days												
1	randomised trials	not serious	not serious	serious	serious	none	55	58	-	MD 4.2 day higher (from 0.32 higher to 8.08 higher)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
6	randomised trials	serious	not serious	serious	serious	none	554	536	-	MD 15.15 hour lower (from 26.08 lower to 4.22 lower)	⊕○○○ Very low	CRITICAL
Serious complication												
7	randomised trials	not serious	not serious	serious	serious	none	47/647 (7.3%)	55/649 (8.5%)	RR 0.85 (0.58 to 1.23)	13 fewer per 1,000 (from 36 fewer to 19 more)	⊕⊕○○ Low	CRITICAL
Delirium												
1	randomised trials	serious	not serious	serious	serious	none	7/40 (17.5%)	9/39 (23.1%)	RR 0.76 (0.31 to 1.84)	55 fewer per 1,000 (from 159 fewer to 194 more)	⊕○○○ Very low	CRITICAL

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ10-2 (GRADE)

P: Patients under mechanical ventilation

I: Propofol or dexmedetomidine

C: Benzodiazepine

O: Agitation, length of mechanical ventilation, length of ICU stay, mortality, accidental extubation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Agitation												
2	randomised trials	serious	not serious	not serious	serious	none	78/317 (24.6%)	99/315 (31.4%)	RR 0.79 (0.62 to 1.01)	66 fewer per 1,000 (from 119 fewer to 3 more)	⊕⊕○○ Low	CRITICAL
Length of mechanical ventilation												
7	randomised trials	serious	serious	not serious	serious	none	668	546	-	MD 1.56 day lower (from 2.46 lower to 0.67 lower)	⊕○○○ Very low	CRITICAL
Length of ICU stay												
11	randomised trials	serious	not serious	not serious	serious	none	816	698	-	MD 2.06 day lower (from 2.72 lower to 1.39 lower)	⊕⊕○○ Low	CRITICAL
Mortality												
10	randomised trials	serious	not serious	not serious	not serious	none	190/848 (22.4%)	157/725 (21.7%)	RR 1.02 (0.85 to 1.23)	4 more per 1,000 (from 32 fewer to 50 more)	⊕○○○ Very low	CRITICAL
Accidental extubation												
3	randomised trials	serious	not serious	not serious	serious	none	20/179 (11.2%)	15/180 (8.3%)	RR 1.37 (0.74 to 2.54)	31 more per 1,000 (from 22 fewer to 128 more)	⊕⊕○○ Low	CRITICAL

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ10-3 (GRADE)

P: Patients under mechanical ventilation

I: Light sedation

C: Deep sedation

O: Length of mechanical ventilation, length of ICU stay, mortality, accidental extubation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Length of mechanical ventilation												
2	randomised trials	serious	not serious	not serious	serious	none	133	124	-	MD 2.49 day lower (from 4.43 lower to 0.54 lower)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
2	randomised trials	serious	not serious	not serious	serious	none	133	124	-	MD 3.34 day lower (from 6.09 lower to 0.60 lower)	⊕⊕○○ Low	CRITICAL
Mortality												
2	randomised trials	serious	not serious	not serious	serious	none	36/133 (27.1%)	39/124 (31.5%)	RR 0.82 (0.57 to 1.19)	57 fewer per 1,000 (from 135 fewer to 60 more)	⊕⊕○○ Low	CRITICAL
Accidental extubation												
1	randomised trials	serious	not serious	not serious	very serious	none	2/68 (2.9%)	4/60 (6.7%)	RR 0.44 (0.08 to 2.32)	37 fewer per 1,000 (from 61 fewer to 88 more)	⊕○○○ Very low	CRITICAL

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ10-4 (GRADE)

P: Critically ill patients under mechanical ventilation (sepsis, respiratory failure, heart failure, burn, major surgery)

I: Dexmedetomidine, haloperidol, atypical antipsychotics, statin

C: Placebo

O: Mortality, cognitive disorder after ICU discharge, delirium, length of delirium (delirium free days), length of ICU stay, serious adverse event

Dexmedetomidine

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
4	randomised trials	serious	not serious	not serious	serious	none	148/530 (27.9%)	164/531 (30.9%)	RR 0.91 (0.76 to 1.09)	28 fewer per 1,000 (from 74 fewer to 28 more)	⊕⊕○○ Low	CRITICAL
Cognitive disorder after ICU discharge (modified telephone interview for cognitive status: TICS-m)												
1	randomised trials	serious	not serious	serious	serious	none	221	213	-	MD 4.7 higher (from 3.78 higher to 5.62 higher)	⊕○○○ Very low	CRITICAL
Length of delirium												
1	randomised trials	serious	not serious	not serious	very serious	none	50	50	-	MD 0.2 day lower (from 0.86 lower to 0.46 higher)	⊕○○○ Very low	CRITICAL
Delirium												
7	randomised trials	serious	serious	not serious	not serious	none	128/829 (15.4%)	247/829 (29.8%)	RR 0.48 (0.32 to 0.72)	155 fewer per 1,000 (from 203 fewer to 83 fewer)	⊕⊕○○ Low	CRITICAL
Serious adverse events (acute coronary syndrome, pneumonia)												
2	randomised trials	serious	not serious	not serious	serious	none	3/130 (2.3%)	10/131 (7.6%)	RR 0.31 (0.09 to 1.11)	53 fewer per 1,000 (from 69 fewer to 8 more)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
5	randomised trials	serious	serious	not serious	serious	none	570	571	-	MD 1.55 day lower (from 3.82 lower to 0.72 higher)	⊕○○○ Very low	IMPORTANT

Dexmedetomidine

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Haloperidol

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
7	randomised trials	not serious	not serious	serious	not serious	none	190/1199 (15.8%)	192/1172 (16.4%)	RR 0.97 (0.81 to 1.16)	5 fewer per 1,000 (from 31 fewer to 26 more)	⊕⊕⊕○ Moderate	CRITICAL
Length of delirium												
3	randomised trials	not serious	not serious	serious	serious	none	174	173	-	MD 0.02 higher (from 0.23 lower to 0.27 higher)	⊕⊕○○ Low	CRITICAL
Delirium free days												
2	randomised trials	not serious	not serious	not serious	serious	none	803	777	-	MD 0.66 lower (from 1.42 lower to 0.11 higher)	⊕⊕⊕○ Moderate	CRITICAL
Delirium												
5	randomised trials	not serious	not serious	serious	serious	none	316/1093 (28.9%)	326/1066 (30.6%)	RR 0.89 (0.70 to 1.13)	34 fewer per 1,000 (from 92 fewer to 40 more)	⊕⊕○○ Low	CRITICAL
Serious adverse events												
2	randomised trials	not serious	not serious	not serious	very serious	none	5/803 (0.6%)	6/777 (0.8%)	RR 0.80 (0.24 to 2.66)	2 fewer per 1,000 (from 6 fewer to 13 more)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
7	randomised trials	not serious	not serious	serious	not serious	none	1180	1153	-	MD 0.07 lower (from 0.26 lower to 0.11 higher)	⊕⊕⊕○ Moderate	IMPORTANT

Haloperidol

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Atypical antipsychotics

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
1	randomised trials	not serious	not serious	serious	very serious	none	4/30 (13.3%)	6/36 (16.7%)	RR 0.80 (0.25 to 2.57)	33 fewer per 1,000 (from 125 fewer to 262 more)	⊕○○○ Very low	CRITICAL
Length of delirium												
2	randomised trials	not serious	not serious	serious	serious	none	37	53	-	MD 0.01 day higher (from 1.13 lower to 1.16 higher)	⊕⊕○○ Low	CRITICAL
Delirium free days												
1	randomised trials	not serious	not serious	serious	very serious	none	30	36	-	MD 3.73 higher (from 1.01 lower to 8.47 higher)	⊕○○○ Very low	CRITICAL
Delirium												
2	randomised trials	not serious	not serious	serious	serious	none	14/114 (12.3%)	37/1113 (32.7%)	RR 0.38 (0.22 to 0.66)	203 fewer per 1,000 (from 255 fewer to 111 fewer)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
3	randomised trials	not serious	not serious	serious	serious	none	100	116	-	MD 0.03 day lower (from 0.67 lower to 0.61 higher)	⊕⊕○○ Low	IMPORTANT

Atypical antipsychotics

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Statin

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
1	randomised trials	not serious	not serious	not serious	serious	none	30/71 (42.3%)	22/71 (31.0%)	RR 1.36 (0.88 to 2.12)	112 more per 1,000 (from 37 fewer to 347 more)	⊕⊕⊕○ Moderate	CRITICAL
Cognitive disorder after ICU discharge												
1	randomised trials	very serious	not serious	serious	very serious	none	19/53 (35.8%)	29/77 (37.7%)	RR 0.95 (0.60 to 1.51)	19 fewer per 1,000 (from 151 fewer to 192 more)	⊕○○○ Very low	CRITICAL
Delirium free days												
1	randomised trials	not serious	not serious	not serious	serious	none	71	71	-	MD 1.1 lower (from 4.74 lower to 2.54 higher)	⊕⊕⊕○ Moderate	CRITICAL
Delirium												
1	randomised trials	not serious	not serious	not serious	serious	none	66/71 (93.0%)	67/71 (94.4%)	RR 0.99 (0.90 to 1.07)	9 fewer per 1,000 (from 94 fewer to 66 more)	⊕⊕⊕○ Moderate	CRITICAL
Length of ICU stay												
1	randomised trials	very serious	not serious	serious	serious	none	164	165	-	MD 1 day higher (from 0.84 lower to 2.84 higher)	⊕○○○ Very low	IMPORTANT
Serious adverse events												
1	randomised trials	not serious	not serious	not serious	very serious	none	0/71 (0.0%)	0/71 (0.0%)	not estimate		⊕⊕○○ Low	CRITICAL

Statin

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ10-5 (GRADE)

P: Critically ill patients under mechanical ventilation (sepsis, respiratory failure, heart failure, burn, major surgery)

I: Dexmedetomidine, haloperidol, atypical antipsychotics

C: Placebo

O: Mortality, cognitive disorder after ICU discharge, delirium, length of delirium (delirium free days), length of ICU stay, serious adverse event

Dexmedetomidine

Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
1	randomised trials	serious	not serious	not serious	very serious	none	2/39 (5.1%)	0/32 (0.0%)	RR 4.13 (0.21 to 82.95)	0 more per 1,000 (from 0 fewer to 0 more)	⊕○○○ Very low	CRITICAL
Length of ICU stay												
1	randomised trials	serious	not serious	not serious	very serious	none	39	32	-	MD 1.37 day lower (from 3.82 lower to 1.08 higher)	⊕○○○ Very low	IMPORTANT

Dexmedetomidine

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Haloperidol

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
1	randomised trials	not serious	not serious	not serious	serious	none	73/192 (38.0%)	63/184 (34.2%)	RR 1.11 (0.85 to 1.45)	38 more per 1,000 (from 51 fewer to 154 more)	⊕⊕⊕○ Moderate	CRITICAL
Length of delirium												
1	randomised trials	not serious	not serious	not serious	serious	none	192	184	-	MD 0.34 day lower (from 1.18 lower to 0.5 higher)	⊕⊕⊕○ Moderate	CRITICAL
Delirium free days												
1	randomised trials	not serious	not serious	not serious	very serious	none	192	184	-	MD 0.33 day higher (from 1.33 lower to 1.99 higher)	⊕⊕○○ Low	CRITICAL
Length of ICU stay												
1	randomised trials	not serious	not serious	not serious	very serious	none	192	184	-	MD 0.33 day lower (from 1.92 lower to 1.26 higher)	⊕⊕○○ Low	IMPORTANT

Haloperidol

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

Atypical antipsychotics

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality												
2	randomised trials	not serious	not serious	not serious	very serious	none	67/208 (32.2%)	66/202 (32.7%)	RR 0.99 (0.75 to 1.30)	3 fewer per 1,000 (from 82 fewer to 98 more)	⊕⊕○○ Low	CRITICAL
Length of delirium												
2	randomised trials	not serious	serious	not serious	serious	none	208	202	-	MD 1.75 day lower (from 4.31 lower to 0.81 higher)	⊕⊕○○ Low	CRITICAL
Delirium free days												
1	randomised trials	not serious	not serious	not serious	serious	none	190	184	-	MD 1 day higher (from 0.52 lower to 2.52 higher)	⊕⊕⊕○ Moderate	CRITICAL
Length of ICU stay												
2	randomised trials	not serious	not serious	not serious	serious	none	208	202	-	MD 1.1 day lower (from 2.48 lower to 0.28 higher)	⊕⊕⊕○ Moderate	IMPORTANT

Atypical antipsychotics

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

CQ10-6 (GRADE)

P: Critically ill patients under mechanical ventilation (sepsis, respiratory failure, heart failure, burn, major surgery)

I: Improvement of sleep (sleeping mask, earplug, improvement of circadian rhythm), promotion of awaking (glasses, hearing aid, improvement of disorientation), relaxation

C: No intervention

O: Mortality, cognitive disorder after ICU discharge, delirium, length of delirium (delirium free days), length of ICU stay, serious adverse event

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment	Placebo	Relative (95% CI)	Absolute (95% CI)		
Mortality (longest observational period)												
4	randomised trials	serious	not serious	not serious	serious	none	80/447 (17.9%)	83/437 (19.0%)	RR 0.92 (0.70 to 1.22)	15 fewer per 1,000 (from 57 fewer to 42 more)	⊕⊕○○ Low	CRITICAL
Cognitive disorder after ICU discharge (MMSE)												
1	randomised trials	very serious	not serious	not serious	very serious	none	18	14	-	MD 0.2 higher (from 1.27 lower to 1.67 higher)	⊕○○○ Very low	CRITICAL
Delirium free days												
2	randomised trials	very serious	not serious	not serious	serious	none	404	395	-	MD 0.01 day higher (from 1.22 lower to 1.24 higher)	⊕○○○ Very low	CRITICAL
Delirium												
6	randomised trials	serious	serious	not serious	serious	none	156/510 (30.6%)	151/518 (29.2%)	RR 0.85 (0.49 to 1.45)	44 fewer per 1,000 (from 149 fewer to 131 more)	⊕○○○ Very low	CRITICAL
Length of ICU stay												
5	randomised trials	very serious	not serious	not serious	serious	none	457	447	-	MD 0.14 day lower (from 1.06 lower to 0.79 higher)	⊕○○○ Very low	IMPORTANT

	JUDGEMENT						
PROBLEM	No	Probably no	Probably yes	Yes		Varies	Don't know
DESIRABLE EFFECTS	Trivial	Small	Moderate	Large		Varies	Don't know
UNDESIRABLE EFFECTS	Large	Moderate	Small	Trivial		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	Low	Moderate	High			No included studies
VALUES	Important uncertainty or variability	Possibly important uncertainty or variability	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favors the comparison	Probably favors the comparison	Does not favor either the intervention or the comparison	Probably favors the intervention	Favors the intervention	Varies	Don't know
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	Probably yes	Yes		Varies	Don't know