

Author(s):

Question: indirect calorimetry compared to predictive equation (weight based energy calculation) for energy expenditure

Setting: ICU

Bibliography:

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Indirect calorimetry	predictive equation (weight based energy calculation)	Relative (95% CI)	Absolute (95% CI)		
Delivered energy												
5	randomised trials	not serious	serious ^a	not serious	serious ^b	none	478	478	-	MD 406.66 higher (7.73 lower to 821.05 higher)	⊕⊕○○ Low ^{a,b}	IMPORTANT
Daily energy balance												
4	randomised trials	not serious	serious ^a	not serious	serious ^b	none	422	420	-	MD 343.9 higher (44.12 lower to 731.93 higher)	⊕⊕○○ Low ^{a,b}	IMPORTANT
ICU mortality												
3	randomised trials	not serious	not serious	not serious	serious ^c	publication bias strongly suspected ^d	64/284 (22.5%)	66/292 (22.6%)	RR 1.00 (0.74 to 1.35)	0 fewer per 1,000 (from 59 fewer to 79 more)	⊕⊕○○ Low ^{c,d}	CRITICAL
H mortality												
3	randomised trials	not serious	not serious	not serious	serious ^c	publication bias strongly suspected ^d	24/86 (27.9%)	33/87 (37.9%)	RR 0.80 (0.44 to 1.46)	76 fewer per 1,000 (from 212 fewer to 174 more)	⊕⊕○○ Low ^{c,d}	CRITICAL
Infection												
4	randomised trials	not serious	serious ^a	not serious	serious ^b	none	116/464 (25.0%)	104/411 (25.3%)	RR 1.17 (0.79 to 1.74)	43 more per 1,000 (from 53 fewer to 187 more)	⊕⊕○○ Low ^{a,b}	CRITICAL
MV days												
6	randomised trials	not serious	not serious	not serious	not serious	none	422	418	-	MD 0.86 higher (0.08 higher to 1.65 higher)	⊕⊕⊕⊕ High	IMPORTANT

CI: confidence interval; MD: mean difference; RR: relative risk

Supplement Fig. 15. GRADE Summary of Findings generated using GRADEpro GDT for indirect calorimetry-guided versus predictive equation-guided energy provision in critically ill adult patients (KQ9).