**Supplement 4 -** Assessment of the quality of evidence using GRADE for the outcomes included in the meta-analysis

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| **Outcomes** | **Number of participants (studies)** | **Relative effect (CI 95%)** | **Potential absolute effects (95% CI)** | | | **Certainty of evidence** |
| **Conventional Therapy** | **Continuous lateral rotation therapy** | **Difference** |
| Mortality | 1267 (14 ECRs) | OR 1.04  (0.80, 1.34) | 28.3% | 29.1%  (24, 34.6) | 0.8% more  (4.3 fewer to 6.3 more) | ⨁◯◯◯  Very low a, b |
| Length of stay in ICU (days) | 970 (11 ECRs) | - | - | - | SMD -0.11  (-0.25, 0.02) | ⨁⨁⨁◯  Moderate c |
| Length of hospital stay (days) | 737 (8 ECRs) | - | - | - | SMD -0.10  (-0.31, 0.11) | ⨁◯◯◯  Very low b, d, e |
| Mechanical ventilation duration (days) | 1044 (10 ECRs) | - | - | - | SMD -0.17  (-0.29, -0.04) | ⨁⨁⨁◯  Moderate f |
| Incidence of pneumonia | 1145  (11 ECRs) | OR 0.39  (0.29, 0.52) | 32.3% | 15.7%  (12.1, 19.9) | 16.6% fewer  (20.1 fewer to 12.4 fewer) | ⨁⨁⨁◯  Moderate g |
| Pressure ulcers | 407  (4 ECRs) | OR 0.73  (0.34, 1.60) | 24.5% | 19.2%  (9.9, 34.2) | 5.4% fewer  (14.6 fewer to 9.7 more) | ⨁◯◯◯  Very low h, i, j |
| \*The risk in the intervention group (and its 95% confidence interval) is based on the assumed risk of the comparator group and the relative effect of the intervention (and its 95% CI). CI: Confidence interval; OR: Odds ratio; SMD: Standardized Mean Difference. | | | | | | |
| GRADE Working Group grades of evidence  High certainty: We are very confident that the true effect approximates the effect estimate.  Moderate certainty: We are moderately confident in the effect estimate: the true effect is likely to be close to the effect estimate, but there is a possibility that it could be substantially different.  Low certainty: Our confidence in the effect estimate is limited: the true effect may be substantially different from the effect estimate.  Very low certainty: We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the effect estimate. | | | | | | |
| Explanations  a. Nine studies with a high risk of bias in at least one of their domains and presenting concerns in all others (weight 70.3%) - minus two points.  b. 95% CI crosses the line of no effect - minus 1 point  c. Seven studies presented concerns in the selection bias domain, and a further five studies with high risk of bias found in other domains - minus one point  d. Four studies with high risk of bias distributed across the domains of selection, performance, detection and attrition - minus one point  e. Variation of overlap between the 95% CI and there was inconsistency (I2 = 48%; p = 0.06) - minus 2 points  f. Five studies with high risk of bias - minus one point  g. Despite the protective effect, seven studies presented a high risk of bias - minus one point  h. Three studies at high risk of bias with limitations in all domains (weight 83.2%) - minus two points  i. Variation of overlap between the 95% CI and I2 = 47% - minus 1 point  j. 95% CI crosses the line of no effect and optimal information size not reached - minus 2 points | | | | | | |