| **PICO #5. A thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol compared to structured multi-modal pain therapy per institutional protocol alone for adults age >65 years old s with ≥3 rib fractures and dyspnea or refractory pain****Bibliography:**  |
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| **Certainty assessment** | **Summary of findings** |
| **Participants(studies)Follow-up** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Publication bias** | **Overall certainty of evidence** | **Study event rates (%)** | **Relative effect(95% CI)** | **Anticipated absolute effects** |
| **With structured multi-modal pain therapy per institutional protocol alone**  | **With a thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol** | **Risk with structured multi-modal pain therapy per institutional protocol alone**  | **Risk difference with a thoracic epidural catheter and structured multi-modal pain therapy per institutional protocol** |
| **Pneumonia** |
| 98(3 RCTs) | seriousa | not seriousb | seriousc | not serious | none | ⨁⨁◯◯Low | 13/51 (25.5%)  | 6/47 (12.8%)  | **OR 0.37**(0.12 to 1.15) | 255 per 1,000 | **143 fewer per 1,000**(from 215 fewer to 27 more) |
| **Mortality** |
| 66(2 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯Very low | 2/34 (5.9%)  | 2/32 (6.3%)  | **OR 1.11**(0.15 to 8.09) | 59 per 1,000 | **6 more per 1,000**(from 50 fewer to 277 more) |
| **Hospital Length of Stay (days)** |
| 261(3 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯Very low | 171 | 90 | - | The mean hospital Length of Stay (days) was **0** | MD **9.12 lower**(30.14 lower to 11.9 higher) |
| **Ventilator Days** |
| 94(3 RCTs) | seriousa | seriousb | seriousc | not serious | none | ⨁◯◯◯Very low | 47 | 47 | - | The mean ventilator Days was **0** | MD **6.97 lower**(16.59 lower to 2.65 higher) |

**CI:** confidence interval; **MD:** mean difference; **OR:** odds ratio

#### Explanations

a. Poor standardization of the non-epidural pain regimen

b. High levels of heterogeneity between studies

c. Age is significantly younger than the population in the PICO question