| **PICO #3. Noninvasive positive pressure ventilation compared to endotracheal intubation and positive pressure ventilation for adults age >65 years old with rib fractures and acute hypoxic respiratory failure refractory to nasal cannula and face mask**  **Bibliography:** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 endotracheal intubation and positive pressure ventilation** | **With noninvasive positive pressure ventilation** | **Risk with endotracheal intubation and positive pressure ventilation** | **Risk difference with noninvasive positive pressure ventilation** |
| **Pneumonia** | | | | | | | | | | | |
| 112 (2 RCTs) | not serious | not serious | seriousa | not serious | strong association | ⨁⨁⨁⨁ High | 26/54 (48.1%) | 7/58 (12.1%) | **OR 0.15** (0.06 to 0.39) | 481 per 1,000 | **359 fewer per 1,000** (from 429 fewer to 216 fewer) |
| **Mortality** | | | | | | | | | | | |
| 112 (2 RCTs) | not serious | not serious | seriousa | not serious | strong association | ⨁⨁⨁⨁ High | 9/54 (16.7%) | 2/58 (3.4%) | **OR 0.19** (0.04 to 0.86) | 167 per 1,000 | **130 fewer per 1,000** (from 159 fewer to 20 fewer) |

**CI:** confidence interval; **OR:** odds ratio

#### Explanations

a. Variations in age and injury severity