

**Sensitivity analyses for the effect of a restrictive vs. routine chest x-ray strategy on patient outcomes, assuming different values of ICC for the cluster randomized trial\***

| Outcomes with ICC = 0                   | Results                                                                            |
|-----------------------------------------|------------------------------------------------------------------------------------|
| <i>Trials only</i>                      |                                                                                    |
| ICU mortality                           | RR 1.04, 95% CI 0.86 to 1.24, p=0.70; $I^2 = 0\%$ ; 2 trials, N=1014               |
| ICU length of stay                      | WMD -0.84 days, 95% CI -2.18 to 0.51 days, p=0.22; $I^2 = 0\%$ ; 3 trials, N=1108  |
| Duration of mechanical ventilation      | WMD -0.25 days, 95% CI -1.39 to 0.89 days, p=0.67; $I^2 = 16\%$ ; 2 trials, N=943  |
| <i>Trials and observational studies</i> |                                                                                    |
| ICU mortality                           | RR 0.97, 95% CI 0.82 to 1.14, p=0.67; $I^2 = 5\%$ ; 3 studies, N=2390              |
| ICU length of stay                      | WMD 0.00 days, 95% CI -0.27 to 0.27 days, p=0.99; $I^2 = 48\%$ ; 7 studies, N=8675 |
| Duration of mechanical ventilation      | WMD 0.24 days, 95% CI -0.09 to 0.57 days; p=0.16; $I^2 = 20\%$ ; 5 studies, N=7134 |

| Outcomes with ICC = 0.05                | Results                                                                            |
|-----------------------------------------|------------------------------------------------------------------------------------|
| <i>Trials only</i>                      |                                                                                    |
| ICU mortality                           | RR 1.04, 95% CI 0.80 to 1.37, p=0.76; $I^2 = 0\%$ ; 2 trials, N=453                |
| ICU length of stay                      | WMD -0.93 days, 95% CI -2.86 to 1.00 days, p=0.35; $I^2 = 0\%$ ; 3 trials, N=547   |
| Duration of mechanical ventilation      | WMD -0.51 days, 95% CI -1.91 to 0.90 days, p=0.48; $I^2 = 0\%$ ; 2 trials, N=382   |
| <i>Trials and observational studies</i> |                                                                                    |
| ICU mortality                           | RR 0.93, 95% CI 0.76 to 1.13, p=0.46; $I^2 = 0\%$ ; 3 studies, N=1829              |
| ICU length of stay                      | WMD 0.02 days, 95% CI -0.23 to 0.28 days, p=0.86; $I^2 = 44\%$ ; 7 studies, N=8114 |
| Duration of mechanical ventilation      | WMD 0.24 days, 95% CI -0.10 to 0.59 days, p=0.17; $I^2 = 18\%$ ; 5 studies, N=6573 |

\* Hejblum G, Chalumeau-Lemoine L, Ioos V, Boelle PY, Salomon L, Simon T, Vibert JF, Guidet B: **Comparison of routine and on-demand prescription of chest radiographs in mechanically ventilated adults: a multicentre, cluster-randomised, two-period crossover study.** Lancet 2009, **374**(9702):1687-1693.

This trial does not contribute data to meta-analyses of hospital mortality or hospital length of stay, which are therefore not included in the table.

Abbreviations: CI, confidence interval; ICC, intraclass correlation; ICU, intensive care unit; RR, risk ratio; WMD, weighted mean difference