**Appendix 5 - Summary of subgroup analyses**

|  |  |  |  |
| --- | --- | --- | --- |
| **Covariate** | **Subgroups** | **BPD** | **Mortality**  |
| **Chi2** | **df**  | **P**  | **Chi2** | **df**  | **P**  |
| Country of publication | North America vs. non-North America | 0.51 | 1 | 0.48 | 1.63 | 1 | 0.20 |
| Publication status | Full-text vs. conference abstract | 3.76 | 1 | 0.05 | 0.09 | 1 | 0.77 |
| Route of administration | Endotracheal using surfactant as vehicle vs. endotracheal without using surfactant as a vehicle vs. inhalation | 5.85 | 2 | 0.05 | 4.82 | 2 | 0.09 |
| Type of corticosteroids | Beclomethasone vs budesonide | 0.70 | 1 | 0.40 | 0.34 | 1 | 0.56 |
| Type of comparator | Surfactants vs. placebo vs. normal saline | 6.02 | 2 | 0.05 | 1.32 | 2 | 0.52 |
| Risk of Bias | Low risk of bias vs unclear risk of bias | 0.05 | 1 | 0.81 | 3.32 | 1 | 0.07 |
| Timing of administration  | Early (<24hrs) vs Late (>24hrs) | 0.60 | 1 | 0.44 | 1.10 | 1 | 0.29 |

Chi2 = Chi-squared; df = degrees of freedom **Appendix 6- Secondary outcomes reported by included trials**

|  |  |  |
| --- | --- | --- |
| Outcome | No. of Participants(# of trials) | Effect estimateMD (95% CI) |
| Pulmonary function | PCO2 (mmHg) | 181(3) | -0.06 (-0.29, 0.18) |
| FiO2 | 195(4) | -0.04 (-0.13, 0.05) |
| Duration of mechanical ventilation (days) |  | 86 (2) | -2.24 (-7.88, 3.41) |

PCO2: Partial pressure of carbon dioxide; FIO2: Fraction of inspired oxygen; CI: Confidence interval; MD: Mean Difference;