**Supplementary Table 1.** Patient characteristics of included studies.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **No of studies** | **Events/participants** | | **Events** | | **Heterogeneity between trials** | | **P-value for**  **differences**  **across groups** |
| **Vitamin D supplementation** | **Non-vitamin D supplementation** | **OR** | **95%CI** | **P-value** | **I2 statistic** |
| Sex, male | 8 | 448/786 (57.0%) | 887/1,536 (57.7%) | 0.89 | 0.71, 1.12 | 0.32 | 14 % | 0.32 |
| Comorbidities  Diabetes  Hypertension  Cerebrovascular disease  Cardiovascular disease  Asthma/COPD  Chronic kidney disease  Cancer | 7  7  2  3  6  4  4 | 153/770 (19.9%)  173/339 (51.0%)  5/96 (5.2%)  20/156 (12.8%)  84/720 (11.7%)  32/696 (4.6%)  44/583 (7.5%) | 230/1,504 (15.3%)  606/1,145 (52.9%)  34/484 (7.0%)  43/343 (12.5%)  172/1,478 (11.6%)  72/995 (7.2%)  85/1,332 (6.4%) | 0.83  0.85  0.81  0.96  0.69  0.63  1.08 | 0.49, 1.41  0.49, 1.46  0.32, 2.05  0.45, 2.02  0.51, 0.94  0.16, 2.51  0.61, 1.90 | 0.05  0.003  0.48  0.30  0.48  0.13  0.26 | 51 %  70 %  0 %  17 %  0 %  51 %  25 % | 0.49  0.55  0.66  0.91  0.02  0.51  0.79 |

*Legend: CI, confidence interval; COPD, Chronic obstructive pulmonary disease; NA, not applicable; OR, Odds ratio*