**openMetaAnalysis: Risk of bias**

**Studies of interventions**

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| Study | Summary risk | Selection bias | | Performance bias | Detection bias | Attrition bias | Reporting bias | Other biases |
| Random sequence generation | Allocation concealment |
| Lung Screening Study (LSS)24,48,49 | Unclear risk | Unclear Risk  Not explicitly stated | Low risk  Centralized randomization | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Unclear risk  No endpoint verification was performed | Low risk  Missing data balanced and too small to affect results. | Low risk |  |
| DANTE25,31,50 | High risk | Low risk  Computerized randomization | Low risk  Randomized in blocks of 4, stratified by center according to computer generated list. | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low risk  Missing data balanced and too small to affect results | Low risk | High risk  Single center study.  Significantly higher number of control subjects (166) declined enrollment compared to LDCT group (91).  Investigators excluded 92 (46 each arm) “ineligible” allocated subjects from primary analyses.  Discovered duplicate registrations (20) and test records (2) at final analyses; study numbers not consistent across reports.  All subjects underwent a baseline chest x-ray and sputum cytology.  Trial registered retrospectively 2007, but this is unlikely to affect selection of outcomes. |
| National Lung Screening Trial (NLST)4,51,52 | Low risk | Low risk  Computerized randomization | Low risk  Centralized randomization | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low risk  Missing data balanced and too small to affect results | Low risk |  |
| Nederlands Leuvens Longkanker Screeningsonderzoek (NELSON)53-55 | Low | Low risk  Computerized randomization | Low risk  Centralized randomization | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low Risk:  Missing data balanced and too small to affect results. | Low Risk |  |
| Danish Lung Cancer Screening Trial (DLCST)26,56,57 | Unclear risk | Low risk  Computerized randomization | Unclear risk  Method of allocation concealment not described | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low risk  Missing data balanced and too small to affect results. | Low risk | Unclear risk  Participants who emigrated from Denmark were lost to follow-up.  Single center study. |
| Italian Lung study (ITALUNG)28,58,59 | Unclear risk | Low risk  Computerized randomization | Low risk  Centralized randomization | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low risk  Missing data balanced and too small to affect results. | Low risk | Unclear risk  13% of LDCT subjects dropped out before imaging. |
| Multicentric Italian Lung Detection (MILD)27,60 | High risk | High risk  Method not detailed. Large imbalance of baseline characteristics including current smokers versus former. | Unclear risk  Reported as “central stratified randomization” | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Low risk  Outcome assessment was blinded | Low risk  Missing data balanced and too small to affect results | Low risk | High risk  Did not include control group until after enrolling 653 subjects.  Baseline comparisons not reported for contemporaneously enrolled intervention and control subjects.  Pooled results from annual and biennial subjects without justification.  Initially planned as multicenter trial with planned sample size of 10,000. Ended up as single center study.  Trial not properly registered, but this is unlikely to affect selection of outcomes. |
| German Lung Cancer Screening Intervention Trial (LUSI)29,61,62 | Unclear risk | Low risk  Computerized randomization | Low risk  Centralized randomization | Low risk  No blinding or incomplete blinding, but review authors deem this not to affect results. | Unclear risk  Incident lung cancers were ascertained through annual visits (screening group) and questionnaires (control group). Investigators also used a regional cancer registry that was deemed to be incomplete. Mortality was ascertained through linkages with municipal registries, though some patients denied access. | Low risk  Missing data balanced and too small to affect results. | Low risk | Trial not registered, but this is unlikely to affect selection of outcomes. |
| AME Thoracic Surgery Collaborative Group30 | High risk | High risk  Not explicitly stated; however, substantially more subjects were randomized to LDCT (3550 vs. 3167). | Unclear risk  Not explicitly stated | Low risk  Blinding not described, but review authors deem this not to affect results. | Unclear risk  Outcome assessment not described | Low risk | Low risk | Single center study.  Trial not registered, but this is unlikely to affect selection of outcomes. |