**Supplemental MaterialsDatabase Search Terms**

Supplemental Table 1. Database search terms

|  |  |  |
| --- | --- | --- |
| **Database** | **Study Type** | **Search Terms** |
| PubMed | Animal Toxicology | (asbestos[ti] OR chrysotile) AND (inhalation OR inhaled OR oral) AND (animals OR mice OR rats) NOT humans Filters: From 2006/01/01 to 2017/12/31 [36 results] |
| Epidemiology | (cancer OR cancerous OR carcinogenicity) AND (esophageal OR oesophageal OR esophagus OR oesophagus) AND (asbestos[tiab] OR chrysotile) AND (epidemiology OR epidemiological OR epidemiologic OR occupational OR worker OR workers OR cohort OR 'case-control-study' OR 'case control studies' OR 'cohort studies' OR 'case-report' OR controls OR 'retrospective studies') Filters: From 2006/01/01 to 2017/12/31 [22 results] |
| Mechanism of Action | (asbestos OR chrysotile) AND (mechanism OR mechanisms OR 'mode of action' OR mechanistic) AND (esophageal OR oesophageal OR esophagus OR oesophagus) [4 results] |
| Scopus | Animal Toxicology | (TITLE-ABS-KEYa (asbestos OR chrysotile) AND TITLE-ABS-KEY (inhalation OR inhaled OR oral) AND TITLE-ABS-KEY (exposure OR exposed)) AND PUBYEAR > 2005 AND (EXCLUDE (EXACTKEYWORD , 'Human')) AND (LIMIT-TO (EXACTKEYWORD , 'Animals') OR LIMIT-TO (EXACTKEYWORD , 'Nonhuman')) AND (LIMIT-TO (SUBJAREA , 'MEDI') OR LIMIT-TO (SUBJAREA , 'PHAR') OR LIMIT-TO (SUBJAREA, 'BIOC')) [66 results] |
| Epidemiology | (TITLE-ABS-KEY (cancer OR cancerous OR carcinogenicity) AND TITLE-ABS-KEY (esophageal OR oesophageal OR esophagus OR oesophagus ) AND TITLE-ABS-KEY (asbestos OR chrysotile)) AND (epidemiology OR epidemiological OR epidemiologic OR occupational OR worker OR workers OR cohort OR 'case-control-study' OR 'case-control-studies' OR 'cohort studies' OR 'case-report' OR controls OR 'retrospective studies') AND PUBYEAR > 2005 [29 results] |
| Mechanism of Action | TITLE-ABS-KEY (mechanism OR mechanisms OR 'mode of action' OR mechanistic) AND TITLE-ABS-KEY (asbestos OR chrysotile) AND TITLE-ABS-KEY (esophageal OR oesophageal OR esophagus OR oesophagus) [9 results] |

Note:

(a) “TITLE-ABS-KEY” is the default search field for Scopus, as it is not a full text database.

**Animal Study Quality Assessment Tables**

Supplemental Table 2. Reporting quality

| **Criterion** | **Hesterberg *et al*. (1993)** | **Hesterberg *et al*. (1994)** | **McConnell *et al*. (1994)** | **McConnell *et al*. (1995)** | **McConnell *et al*. (1999)** | **NTP (1983) – Amosite Hamsters** | **NTP (1985) – Chrysotile Rats** | **NTP (1988) – Crocidolite Rats** | **NTP (1990) – Amosite Rats** | **NTP (1990) – Chrysotile Hamsters** | **NTP (1990) – Tremolite Rats** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test and compound controls** | | | | | | | | | | | |
| The chemical name, ID or CAS-number of the test compound was given. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The purity of the test compound was stated or is traceable according to information given regarding manufacturer and lot/batch number. In case of mixtures, the composition of different constituents was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The vehicle was described. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| It was stated that a negative control group was included. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Animal model and housing conditions** | | | | | | | | | | | |
| The animal model (species, strain, age or life stage and sex) was described. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The method for individual identification of animals was described. | Not fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled |
| The housing temperature was stated. | Fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The relative humidity was stated. | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The light-dark cycle was described. | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The number of animals per sex in each cage was stated. | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The cage materials were described. | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Any materials used for physical enrichment were described. | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined | Not determined |
| Water bottle materials were described. | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The bedding material used was described. | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The type and source of feed were reported. | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The source of drinking water was reported. | Partially fulfilled | Not fulfilled | Partially fulfilled | Partially fulfilled | Partially fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Dosing and administration of the test compound** | | | | | | | | | | | |
| The administered dose levels or concentrations were stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The method for allocating animals to different treatments was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The total number of animals per dose group was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The route of administration was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The sex and age (or life stage) of the animals at start of dosing was stated or is obvious from the information given, e.g. “pregnant rats were used” is enough information that animals are female and sexually mature/adult. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The frequency and duration of dosing/administration of the test compound was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Data collection and analysis** | | | | | | | | | | | |
| The test and/or analytical methods used were sufficiently described to allow for evaluation of the reliability of results. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The method for allocating animals to different tests and measurements (e.g., tissue collection or evaluation of functional or behavioral endpoints) was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The sex, age and number of animals per dose group subjected to separate tests and measurements was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The statistical methods and software used were described. | Not fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The statistical unit, e.g., the individual or the litter, was stated. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| All results for the investigated endpoints were reported. The most critical results were presented in tables and figures, including description of variation and statistically significant results. | Partially fulfilled | Partially fulfilled | Partially fulfilled | Partially fulfilled | Partially fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Funding and competing interests** | | | | | | | | | | | |
| The funding sources for the study were stated. | Not fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Any competing interests were disclosed or it was explicitly stated that the authors did not have any competing interests. | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled |

Supplemental Table 3. Methodological quality

| **Criterion** | **Hesterberg *et al*. (1993)** | **Hesterberg *et al*. (1994)** | **McConnell *et al*. (1994)** | **McConnell *et al*. (1995)** | **McConnell *et al*. (1999)** | **NTP (1983) – Amosite Hamsters** | **NTP (1985) – Chrysotile Rats** | **NTP (1988) – Crocidolite Rats** | **NTP (1990) – Amosite Rats** | **NTP (1990) – Chrysotile Hamsters** | **NTP (1990) – Tremolite Rats** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test compound and controls** | | | | | | | | | | | |
| The test compound or mixture was unlikely to contain any impurities that may significantly have affected its toxicity. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| An appropriate vehicle was used that is not expected to interfere with the absorption, distribution, metabolism, excretion or toxicity of the test compound. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| A concurrent negative control group was included. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Animal model and housing conditions** | | | | | | | | | | | |
| A reliable and sensitive animal model was used for investigating the test compound and selected endpoints. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Animals were individually identified. | Partially fulfilled | Partially fulfilled | Fulfilled | Partially fulfilled | Fulfilled | Partially fulfilled | Not determined | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Housing conditions (temperature, relative humidity, light-dark cycle) were appropriate for the study type and animal model. | Fulfilled | Not fulfilled | Partially fulfilled | Partially fulfilled | Partially fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The number of animals per sex in each cage were appropriate for the study type and animal model. | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Not determined | Fulfilled | Fulfilled | Not determined |
| The test system was unlikely to contain contaminants that could affect study results, such as organic pollutants, pesticide residues, heavy metals, and mycotoxins, as well as phytoestrogens. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Dosing and administration of the test compound** | | | | | | | | | | | |
| The allocation of animals to different treatments was randomized. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The route of administration was appropriate and not likely to interfere with the study results. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The timing and duration of administration were appropriate for investigating the included endpoints. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The frequency of administration was appropriate for investigating the included endpoints. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Data collection and analysis** | | | | | | | | | | | |
| The allocation of animals to different tests and measurements was randomized. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Reliable and sensitive test methods were used for investigating the selected endpoints. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| Measurements were collected at suitable time points in order to generate sensitive, valid and reliable data. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| A sufficient number of animals per dose group were subjected to separate tests/data collection/measurements to generate reliable and valid results. | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| The statistical methods have been clearly described and do not seem inappropriate, unusual or unfamiliar. | Not fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled |
| **Other** | | | | | | | | | | | |
| Are there any other aspects of study design, performance or reporting that influence reliability? (Comment in free text.) |  |  |  |  |  |  |  |  |  |  |  |

Supplemental Table 4. Relevance

| **Criterion** | **Hesterberg *et al*. (1993)** | **Hesterberg *et al*. (1994)** | **McConnell *et al*. (1994)** | **McConnell *et al*. (1995)** | **McConnell *et al*. (1999)** | **NTP (1983) – Amosite Hamsters** | **NTP (1985) – Chrysotile Rats** | **NTP (1988) – Crocidolite Rats** | **NTP (1990) – Amosite Rats** | **NTP (1990) – Chrysotile Hamsters** | **NTP (1990) – Tremolite Rats** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| The identity of the tested substance. | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant |
| The animal model used. | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant |
| The endpoint studied. | Not determined | Not determined | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant |
| The route of administration. | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant |
| The dose levels and resulting tissue levels. | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Directly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant | Indirectly relevant |

**Epidemiological Study Quality Assessment Table**

Supplemental Table 5. Epidemiological study quality assessment

| **Citation** | **Tier 1** | | **Tier 2** | | | | | | **Study Quality** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Adjusted for Smoking** | **Adjusted for Drinking** | **Cohort Study Design** | **Selection Bias Minimized** | **Expert Judgment of Exposure** | **≥ 5 Years Latency Period** | **Cumulative Exposure** | **Statistical Model / Interpretation** |
| Gustavsson et al. (1998) | Fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Fulfilled | Not fulfilled | High |
| Parent et al. (2000) | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | High |
| Santibañez et al. (2008) | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | Low |
| Szeszenia-Dabrowska et al. (2002) | Not fulfilled | Not fulfilled | Not fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Offermans et al. (2014) | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Fulfilled | Fulfilled | High |
| Acheson et al. (1984) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Low |
| Clin et al. (2017) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Moderate |
| Du et al. (2012) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Not fulfilled | Moderate |
| Jansson et al. (2005) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Not fulfilled | Low |
| Lin et al. (2014) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Fulfilled | Moderate |
| Meurman et al. (1994) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Moderate |
| Reid et al. (2004) | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Fulfilled | Not fulfilled | Fulfilled | Fulfilled | Moderate |
| Armstrong et al. (1988) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Berry et al. (2000) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Boulanger et al. (2015) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Clin et al. (2009) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Clin et al. (2017) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Du et al. (2012) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Enterline et al. (1987) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Finkelstein and Verma (2004) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Frost et al. (2008) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Gardner et al. (1986) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Harding et al. (2009) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Hein et al. (2007) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Hodgson and Jones (1986) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Hughes et al. (1987) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| McDonald et al. (1993) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Musk et al. (2008) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Peto et al. (1985) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Pira et al. (2007) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Selikoff et al. (1979) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Selikoff and Seidman (1991) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Silver et al. (2004) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Tomioka et al. (2011) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Wang et al. (2013) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |
| Wu et al. (2015) | Not fulfilled | Not fulfilled | Fulfilled | Not assessed | Not assessed | Not assessed | Not assessed | Not assessed | Low |