Review title and timescale

1. Review title
   Give the working title of the review. This must be in English. Ideally it should state succinctly the interventions or exposures being reviewed and the associated health or social problem being addressed in the review.
   **The accuracy of PCR, IHC, FISH for ALK positive in patients with non-small cell lung cancer: a meta-analysis**

2. Original language title
   For reviews in languages other than English, this field should be used to enter the title in the language of the review. This will be displayed together with the English language title.

3. Anticipated or actual start date
   Give the date when the systematic review commenced, or is expected to commence.
   **01/04/2015**

4. Anticipated completion date
   Give the date by which the review is expected to be completed.
   **30/04/2016**

5. Stage of review at time of this submission
   Indicate the stage of progress of the review by ticking the relevant boxes. Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. This field should be updated when any amendments are made to a published record.
   - The review has not yet started
   - **Started**
   - **Completed**

   Review stage
   - Preliminary searches
   - Yes
   - Yes
   - Piloting of the study selection process
   - Yes
   - Yes
   - Formal screening of search results against eligibility criteria
   - Yes
   - Yes
   - Data extraction
   - Yes
   - Yes
   - Risk of bias (quality) assessment
   - Yes
   - Yes
   - Data analysis
   - Yes
   - Yes

   Provide any other relevant information about the stage of the review here.
   - **Funded proposal**

Review team details

6. Named contact
   The named contact acts as the guarantor for the accuracy of the information presented in the register record.
   **Dr Zhou**

7. Named contact email
   Enter the electronic mail address of the named contact.
   **jianguo.zhou@yahoo.com**

8. Named contact address
   Enter the full postal address for the named contact.
   **No.149 Dalian Road, Zunyi City, Guizhou Province, Peoples Republic of China.**

9. Named contact phone number
   Enter the telephone number for the named contact, including international dialing code.
   **+86-18311543939**

10. Organisational affiliation of the review
    Full title of the organisational affiliations for this review, and website address if available. This field may be completed as ‘None’ if the review is not affiliated to any organisation.
Review team members and their organisational affiliations

Give the title, first name and last name of all members of the team working directly on the review. Give the organisational affiliations of each member of the review team.

<table>
<thead>
<tr>
<th>Title</th>
<th>First name</th>
<th>Last name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Dr</td>
<td>Jian-Guo</td>
<td>ZHOU</td>
<td></td>
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<tr>
<td>Dr</td>
<td>Xia</td>
<td>ZHANG</td>
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<tr>
<td>Professor</td>
<td>Hu</td>
<td>MA</td>
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<tr>
<td>Professor</td>
<td>Zhi-Xia</td>
<td>JIANG</td>
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Funding sources/sponsors

Give details of the individuals, organizations, groups or other legal entities who take responsibility for initiating, managing, sponsoring and/or financing the review. Any unique identification numbers assigned to the review by the individuals or bodies listed should be included.

This work was supported by NSFC (Natural Science Foundation of China) (81360351), Start-Up Fund for Doctor of Zunyi Medical University and the Department of Science and Technology of Guizhou Province (Grant No. Qian Ke He SY [2013] 3003) and Centre for Reviews and Dissemination PROSPERO (Registration No.CRD42014010347).

Conflicts of interest

List any conditions that could lead to actual or perceived undue influence on judgements concerning the main topic investigated in the review.

Are there any actual or potential conflicts of interest?

None known

Collaborators

Give the name, affiliation and role of any individuals or organisations who are working on the review but who are not listed as review team members.

<table>
<thead>
<tr>
<th>Title</th>
<th>First name</th>
<th>Last name</th>
<th>Organisation details</th>
</tr>
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Review methods

Review question(s)

State the question(s) to be addressed / review objectives. Please complete a separate box for each question.

The accuracy of PCR, IHC, FISH for ALK positive in patients with non-small cell lung cancer: a meta-analysis

Searches

Give details of the sources to be searched, and any restrictions (e.g. language or publication period). The full search strategy is not required, but may be supplied as a link or attachment.

The following electronic databases will be searched. EMBASE PubMed Cochrane Central Register of Controlled Trials (CENTRAL) web of science

URL to search strategy

If you have one, give the link to your search strategy here. Alternatively you can e-mail this to PROSPERO and we will store and link to it.

I give permission for this file to be made publicly available

Yes

Condition or domain being studied

Give a short description of the disease, condition or healthcare domain being studied. This could include health and wellbeing outcomes.

Lung cancer is the leading cause of cancer-related deaths worldwide. Non-small-cell lung cancer (NSCLC) comprises more than 80% of all lung tumors. Approximately two thirds of NSCLCs are diagnosed at advanced stages.
19 Participants/population
Give summary criteria for the participants or populations being studied by the review. The preferred format includes details of both inclusion and exclusion criteria.
ALK positive in patient with non-small cell lung cancer.

20 Intervention(s), exposure(s)
Give full and clear descriptions of the nature of the interventions or the exposures to be reviewed
Intervention(s): PCR, IHC

21 Comparator(s)/control
Where relevant, give details of the alternatives against which the main subject/topic of the review will be compared (e.g. another intervention or a non-exposed control group).
FISH

22 Types of study to be included
Give details of the study designs to be included in the review. If there are no restrictions on the types of study design eligible for inclusion, this should be stated.
cohort studies

23 Context
Give summary details of the setting and other relevant characteristics which help define the inclusion or exclusion criteria.

24 Primary outcome(s)
Give the most important outcomes.
Diagnostic accuracy

Give information on timing and effect measures, as appropriate.

25 Secondary outcomes
List any additional outcomes that will be addressed. If there are no secondary outcomes enter None.
ROC, HROC

Give information on timing and effect measures, as appropriate.

26 Data extraction (selection and coding)
Give the procedure for selecting studies for the review and extracting data, including the number of researchers involved and how discrepancies will be resolved. List the data to be extracted.

27 Risk of bias (quality) assessment
State whether and how risk of bias will be assessed, how the quality of individual studies will be assessed, and whether and how this will influence the planned synthesis.
The quality of the study will be evaluated according to the Cochrane risk of bias for cohort studies; the Grading of Recommendations Assessment, Development and Evaluation (GRADE) System will be used to rate the level of evidence.

28 Strategy for data synthesis
Give the planned general approach to be used, for example whether the data to be used will be aggregate or at the level of individual participants, and whether a quantitative or narrative (descriptive) synthesis is planned. Where appropriate a brief outline of analytic approach should be given.
STATA 12.0 and R will be used for statistical analysis.

29 Analysis of subgroups or subsets
Give any planned exploration of subgroups or subsets within the review. ‘None planned’ is a valid response if no subgroup analyses are planned.
Subgroups by gender, year, country, etc.

Review general information

30 Type and method of review
Select the type of review and the review method from the drop down list.

**Diagnostic, Systematic review**

31 **Language**
Select the language(s) in which the review is being written and will be made available, from the drop down list. Use the control key to select more than one language.

**English**

Will a summary/abstract be made available in English?

**Yes**

32 **Country**
Select the country in which the review is being carried out from the drop down list. For multi-national collaborations select all the countries involved. Use the control key to select more than one country.

**China**

33 **Other registration details**
Give the name of any organisation where the systematic review title or protocol is registered together with any unique identification number assigned. If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here.

34 **Reference and/or URL for published protocol**
Give the citation for the published protocol, if there is one.


Give the link to the published protocol, if there is one. This may be to an external site or to a protocol deposited with CRD in pdf format.

I give permission for this file to be made publicly available

**Yes**

35 **Dissemination plans**
Give brief details of plans for communicating essential messages from the review to the appropriate audiences.

Do you intend to publish the review on completion?

**Yes**

36 **Keywords**
Give words or phrases that best describe the review. (One word per box, create a new box for each term)

37 **Details of any existing review of the same topic by the same authors**
Give details of earlier versions of the systematic review if an update of an existing review is being registered, including full bibliographic reference if possible.

38 **Current review status**
Review status should be updated when the review is completed and when it is published.

**Completed and published**

39 **Any additional information**
Provide any further information the review team consider relevant to the registration of the review.

40 **Details of final report/publication(s)**
This field should be left empty until details of the completed review are available.

Give the full citation for the final report or publication of the systematic review.

Give the URL where available.

http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path%5b%5d=1180