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Session 1

What study identification looks like with LSRs

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SRs v LSRs: what's different?

(Traditionally) key questions for any search are:

1. WHAT to search SOURCES
2. HOW to search TERMS and LIMITS

For SR updates, what to search and how to search should be informed by an evaluation of the original searches (yield, suitability of search terms, etc.) to improve specificity

For LSRs, the same approach applies, but with greater frequency

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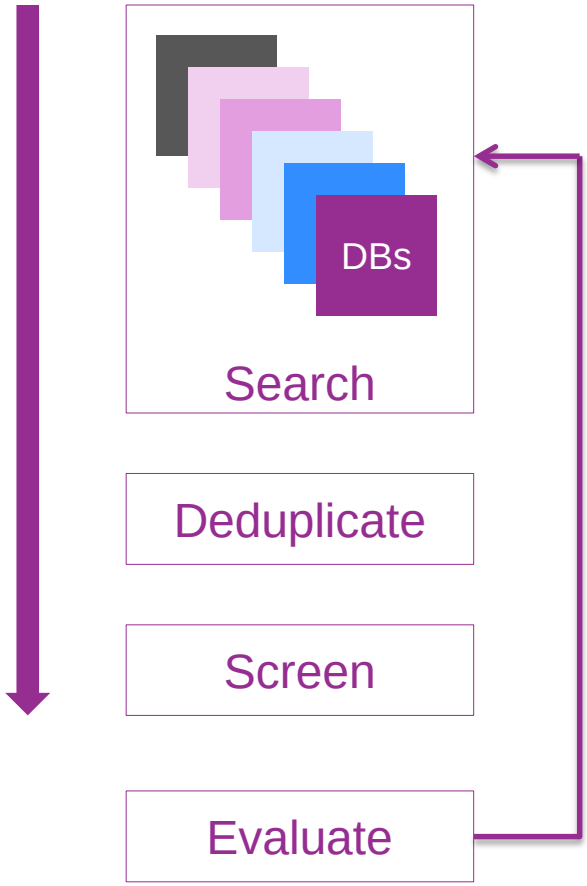
Traditional approach: SR update



EVALUATE
- Database selection
- Search strategies
- Text words
- Language limits

See Garner 2016, App 2

LSRs

Searches re-run at pre-determined frequency

- Databases: usually auto-alerts
- Grey literature
- Trial registers and data sharing repositories
- Citation tracking

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While similar to frequently updated 'conventional' Cochrane Reviews, ***LSRs aim at the outset to achieve a high degree of currency by continuous monitoring of the evidence*** *and require authors to make explicit commitments as to the frequency and methods of updating and the threshold for ceasing frequent updating.*

Cochrane Living Systematic Reviews
Interim guidance for pilots (Draft version 0.2)

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Current approaches

1. Full search
2. Abridged search
3. Adaptive search

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1. Full search re-run

CENTER-TBI LSRs

- *"…the searches will be re-run frequently, any new studies incorporated into the review, and updates will be regularly published."*
- three-monthly searches of all databases

COCHRANE (interim guidance)

- Re-run of full searches monthly to comply with the MECIR standards and Updating Classification System
- An abridged or partial search is considered a scoping search only

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2. Abridged search

- Partial re-run of searches (core vs supplementary sources)
- Assumption that focusing on a few, key databases will identify the vast majority of studies

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3. Adaptive search

- Full searches but constantly tweaking and refining the “what” and “how” to search
- Créquit et al. BMJ Open 2016;6:e011841

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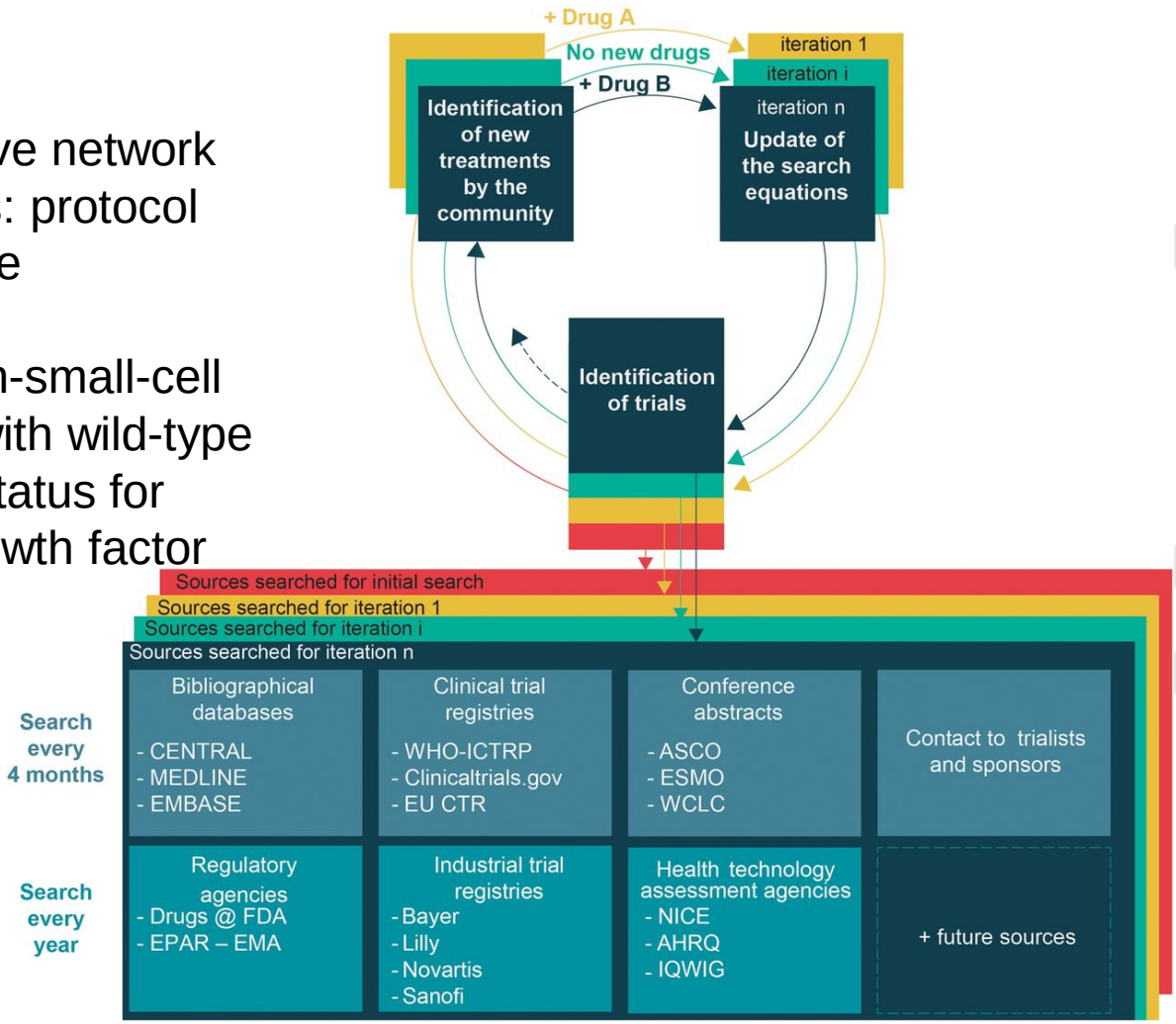
Adaptive search strategy.

Live cumulative network meta-analysis: protocol for second-line treatments in advanced non-small-cell lung cancer with wild-type or unknown status for epidermal growth factor receptor



Perrine Créquit et al. BMJ Open 2016;6:e011841

BMJ Open

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LSR protocols

- Include additional information relating to search methods and frequency of search
- Potentially greater emphasis on registers, repositories and new data sources
- Specify process for ongoing refinement of search method
- To be determined… how do we integrate new tools and services (machine, crowd, pipeline)

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New tools and enablers

- Minimise effort and speed up process
- Developments in machine learning and automation, plus citizen science initiatives, can massively reduce the burden of effort
  - RCT classifier
  - Topic classifiers
  - Cochrane Crowd
  - Use of ‘known assessments’
- Needs to be broader discussion about the routine integration of these approaches
  - Acceptable performance thresholds
  - Wording