Study Selection

Handbook: Chapter 7

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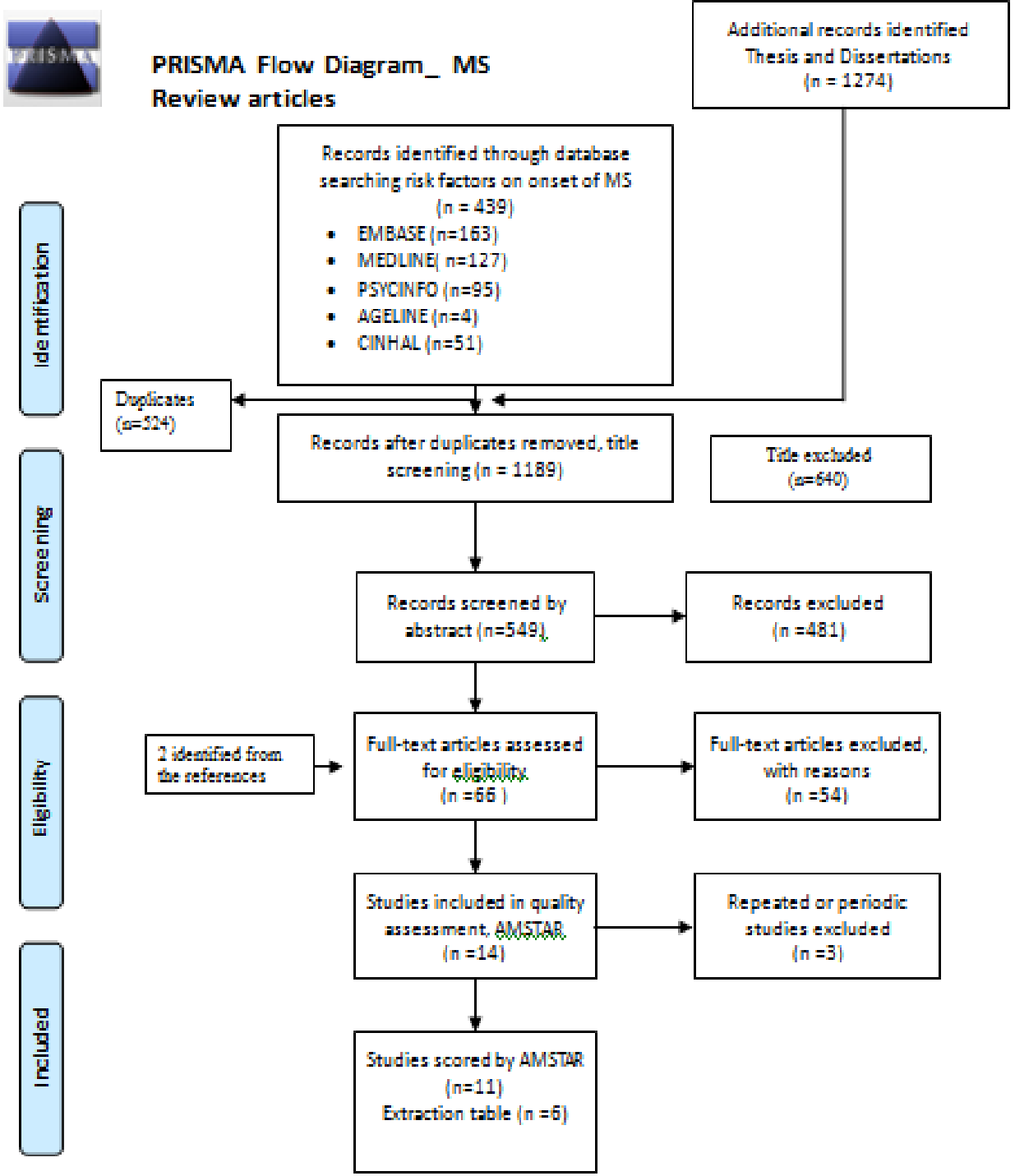
How do we began screening?

- Flow
  1. Title screening (e.g. 1000)
  2. Abstract screening (e.g. 100)
  3. Full article screening (e.g. 20)
- Keeping track (flow chart or PRISMA)
- Software (e.g. DISTILLER)


PRISMA Flow Diagram_ MS
Review articles
Additional records identified
Thesis and Dissertations
(n = 1274)
Records identified through database searching risk factors on onset of MS
(n = 439)
EMBASE (n=163)
MEDLINE(n=127)
PSYCINFO (n=95)
AGELINE (n=4)
CINHAL (n=51)
Identification
Duplicates
(n=524)
Records after duplicates removed, title screening (n = 1189)
Title excluded
(n=640)
Screening
Records screened by abstract (n=549)
Records excluded
(n =481)
2 identified from the references
Full-text articles assessed for eligibility
(n =66)
Full-text articles excluded, with reasons
(n =54)
Eligibility
Studies included in quality assessment, AMSTAR
(n =14)
Repeated or periodic studies excluded
(n =3)
Included
Studies scored by AMSTAR
(n=11)
Extraction table (n =6)

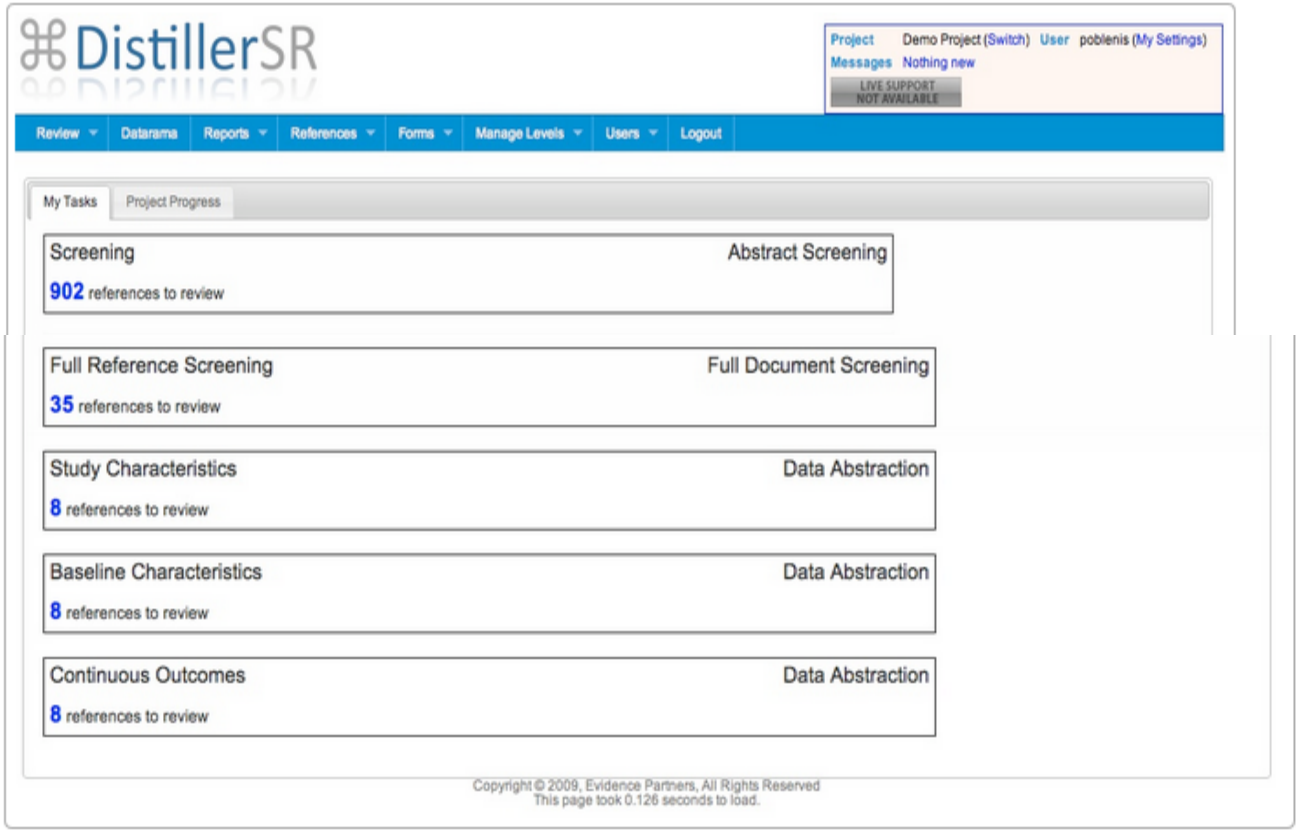
DistillerSR

Online user manual

Getting Started

Welcome to DistillerSR!

Here are the basic things you'll need to know to use the tool effectively and to begin participating as a reviewer on your project.



Search for:

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Overview

- Want to make decisions about which studies to include based on design, not results
  - Risk: don't want to exclude a study just because you don't like the results
- Studies, and not reports, are the unit of interest
- *A priori* need explicit criteria: follow from PICOS, although reporting of outcomes rarely used in the selection process

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Overview *(continued)*

- *A priori* decision rules for whole process:
  - More than one author to screen titles and abstracts?
  - Full-text: two reviewers, independent
  - Who? Content and non-content expert?
  - Blind to information about article? (eg, journal, authors, results) → uncertain benefit
  - How resolve disagreements? Discussion with 3rd person arbitration when differ in interpretation
  - Yes-No-Maybe system, Comments/notes.
  - Detail in protocol

Selection process – detail in Protocol

Typical process:

1. Merge search results using reference management software, remove duplicate records
2. Examine **titles and abstract** to remove obvious irrelevant reports (be over inclusive, though)
   - Initial screen – one or more people?
   - Q: possibly relevant or not relevant?
   - Might be able to apply some criteria, likely not all
3. Retrieve full text reports

Selection process – detail in Protocol

Typical process (*continued*):

4. Link together multiple reports of the same study – detect duplicate publication, can introduce bias if a study included more than once in meta-analysis
5. Examine **full-text reports** for eligibility
   - Detailed screen – 2 people, independent
   - Q: does the paper meet the inclusion criteria?
   - Looking at the details
6. Correspond with study authors to clarify
7. Final decision on study inclusion.

Keep in mind…

- Articles published in other languages
- Separate step from collecting data
- Pilot test eligibility criteria
- Avoid using kappa statistic to report extent of agreement – unlikely to convey real impact of disagreements on a review
- Different categories in RevMan: included, excluded, awaiting assessment, ongoing studies

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Sample eligibility checklist

ELIGIBILITY CHECKLIST

Reviewer ☐

Review ID: _____ Ref ID: _____ Date: _____ Arbitrator ☐ Initials: ____

Please fill in the form by ticking boxes [✓] adding comments in the spaces provided where necessary.

PATIENT DETAILS

Do women in the study have metastatic breast cancer?	YES ☐	NO ☐	UNSURE ☐
Do any women in the study have locally advanced breast cancer?	YES ☐	NO ☐	UNSURE ☐
If yes, is the proportion of women with locally advanced breast cancer < 20%?	YES ☐	NO ☐	UNSURE ☐
When did randomisation start?			UNSURE ☐
Are women randomized to receive chemotherapy as 1st line treatment for advanced breast cancer?	YES ☐	NO ☐	UNSURE ☐
If no, what line treatment is the chemotherapy?			