Systematic Review Search Protocol

Title_____

Research Team members and contact information

_____	**Phone:**	_____	**E-mail**	_____
_____	**Phone:**	_____	**E-mail**	_____
_____	**Phone:**	_____	**E-mail**	_____
_____	**Phone:**	_____	**E-mail**	_____

Do you require a Librarian to co-author on the systematic review?

___Yes (Librarian will work with the team to develop the search strategy, search databases, export results, write search part of the methods section, document search appendix for article, and review the final draft of the article)

___No (Librarian will instruct you in how to search databases and export results)

Introduction (*Describe the background to your study)*

Objectives

The objective of this review is to conduct an up-to-date systematic review of

Methods

Criteria for considering studies for this review

Types of studies

To be included, studies will be…..

Types of participants *(Population)*

Studies including…..

Types of interventions

Types of outcome measures

Primary outcomes

The primary outcome will be ….

Secondary outcomes

1.
2.
3.

Search methods for identification of studies

Electronic searches

We will identify studies via systematic searches of bibliographic databases including *(list databases)*

We will search electronic data bases using the following terms *(List likely keywords)*

We will/will not limit by date *(list date range)*_____
We will/will not limit by language
We will/will not include unpublished materials

Appendix 5- Search Strategy – Grey Literature

Grey literature search will be conducted as follows:

We will include

___Yes ___No - Clinical trial registries (Cochrane Central Register of controlled trials, controlled-trials.com and ClinicalTrials.gov) to identify recent and ongoing studies.

___Yes ___No - Web of Science/Scopus searches of the sentinel paper[5] from each of the reviews will be completed at the end of the searches to identify any additional potentially relevant studies.

___Yes ___No - Google Scholar web search.

___Yes ___No - Dissertations and Theses

___Yes ___No - Hand searches of the most recent subject _____conference abstracts associated with Canadian and research meetings to identify recently completed but not yet published studies. Please list relevant meetings:

___Yes ___No - bibliographies from included studies, known reviews and text for additional citations.

Does not have to be completed for Search Session

Data collection and analysis

Selection of studies

How will you define inclusion/exclusion criteria?

Who/how many people will select from the complete title list?

Who/how many people will make the secondary selection?

How will you resolve disagreements?

Data extraction and management

How will you do your data extraction and management

Assessment of risk of bias in included studies

Quality Assessment (Risk of Bias):

How will you assess risk of bias?

Interpretation of the Results:

References (List relevant papers that you have already found)

Well-Built Clinical Question

Write your question as a question: _____

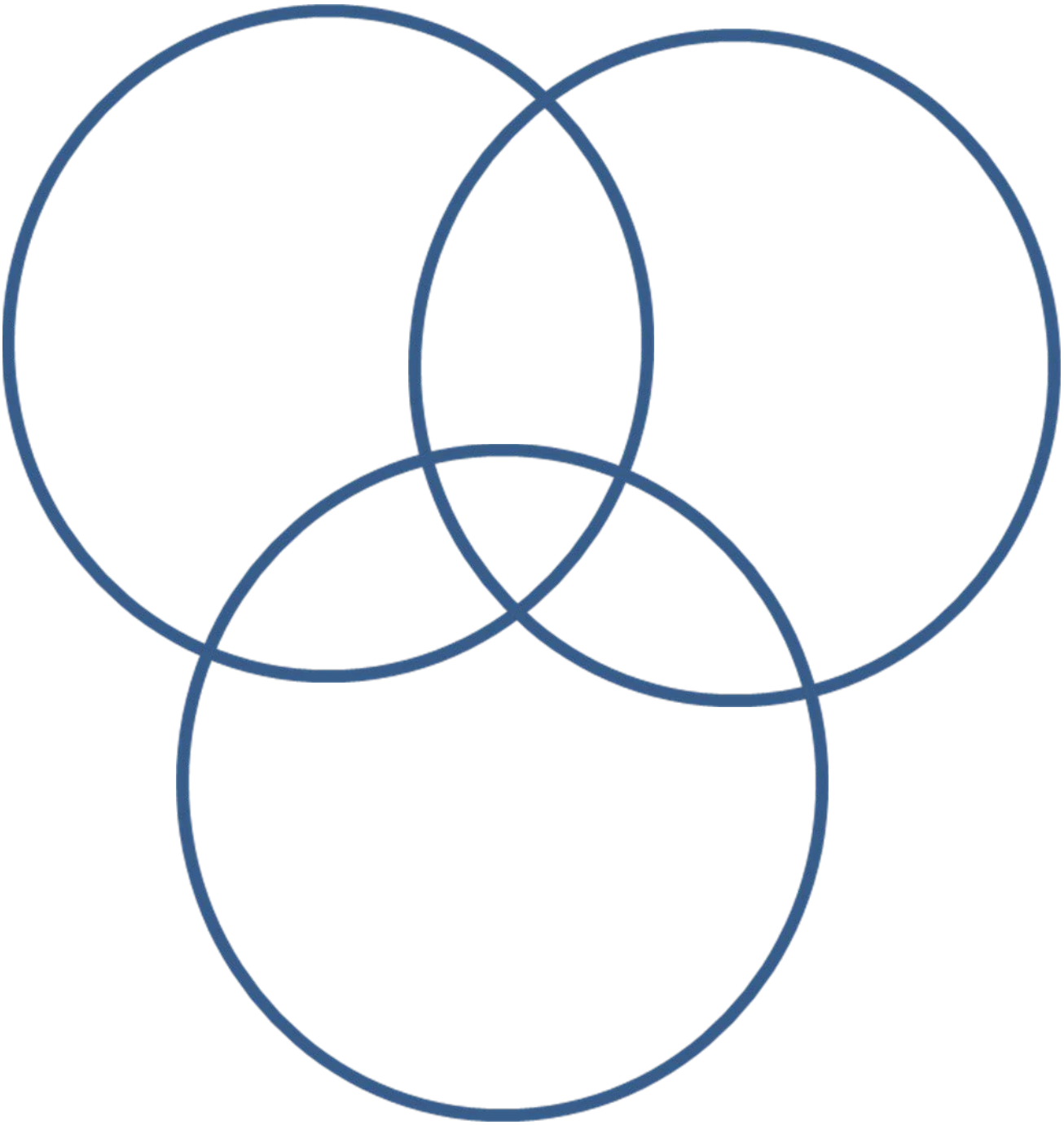
_____

_____

PICOS	*Ask yourself:*	*Example:*
Population (patient)	How would I describe a group of patients similar to mine? (condition, age, gender, etc.)	
Intervention (drug, procedure, etc.)	Which main /new intervention am I considering?	
Comparison	What is the alternative to compare with the intervention? (placebo, standard of care, etc.)	
Outcome	What can I hope to accomplish, measure, improve, or affect?	
Study design	What study design would provide the best level of evidence for this question?	

Buckinngham, Jeanette, Bruce Fisher and Duncan Sanuders. *Evidence Based Mini-Manual*. University of Alberta, 2007
http://www.library.ualberta.ca/uploads/HealthSciences/200717155.pdf

Combining Concepts



Search Strategy Development Form

Research Question: _____

_____

_____

Concept 1	Concept 2	Concept 3

Building A Better Search Strategy

Things to think about:

- Subject headings/controlled vocabulary
- Alternate spellings - analyze/analyse, fetus/foetus
- Alternate endings - learner/learns/learning/etc
- Synonyms – doctor/physician/clinician
- Trade names/generics –
    - iClicker/audience response system
- Antonyms – success/failure, increase/decrease
- Homonyms -same word - different meanings –
    - patient educators (patients who educate doctors)
    - patient educators (people who educate patients)
- Acronyms – task-based learning or TBL

Contact:

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J.W. Scott Library
780-492-7915
sandy.campbell@ualberta.ca

PRESS Checklist

1. Translation: Is the search question translated well into search concepts?
□ Adequate
□ Needs revision Provide an explanation or example

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2. Operators: Are there any mistakes in the use of Boolean or proximity operators?
□ Adequate
□ Needs revision Provide an explanation or example

---

3. Subject headings: Are any important subject headings missing or have any irrelevant ones been included?
□ Adequate
Needs revision Provide an explanation or example

---

4. Natural language: Are any natural language terms or spelling variants missing, or have any irrelevant ones been included? Is truncation used optimally?
□ Adequate
□ Needs revision Provide an explanation or example

---

5. Spelling & syntax: Does the search strategy have any spelling mistakes, system syntax errors, or wrong line numbers?
□ Adequate
□ Needs revision Provide an explanation or example

---

6. Limits: Do any of the limits used seem unwarranted or are any potentially helpful limits missing?
□ Adequate
□ Needs revision Provide an explanation or example

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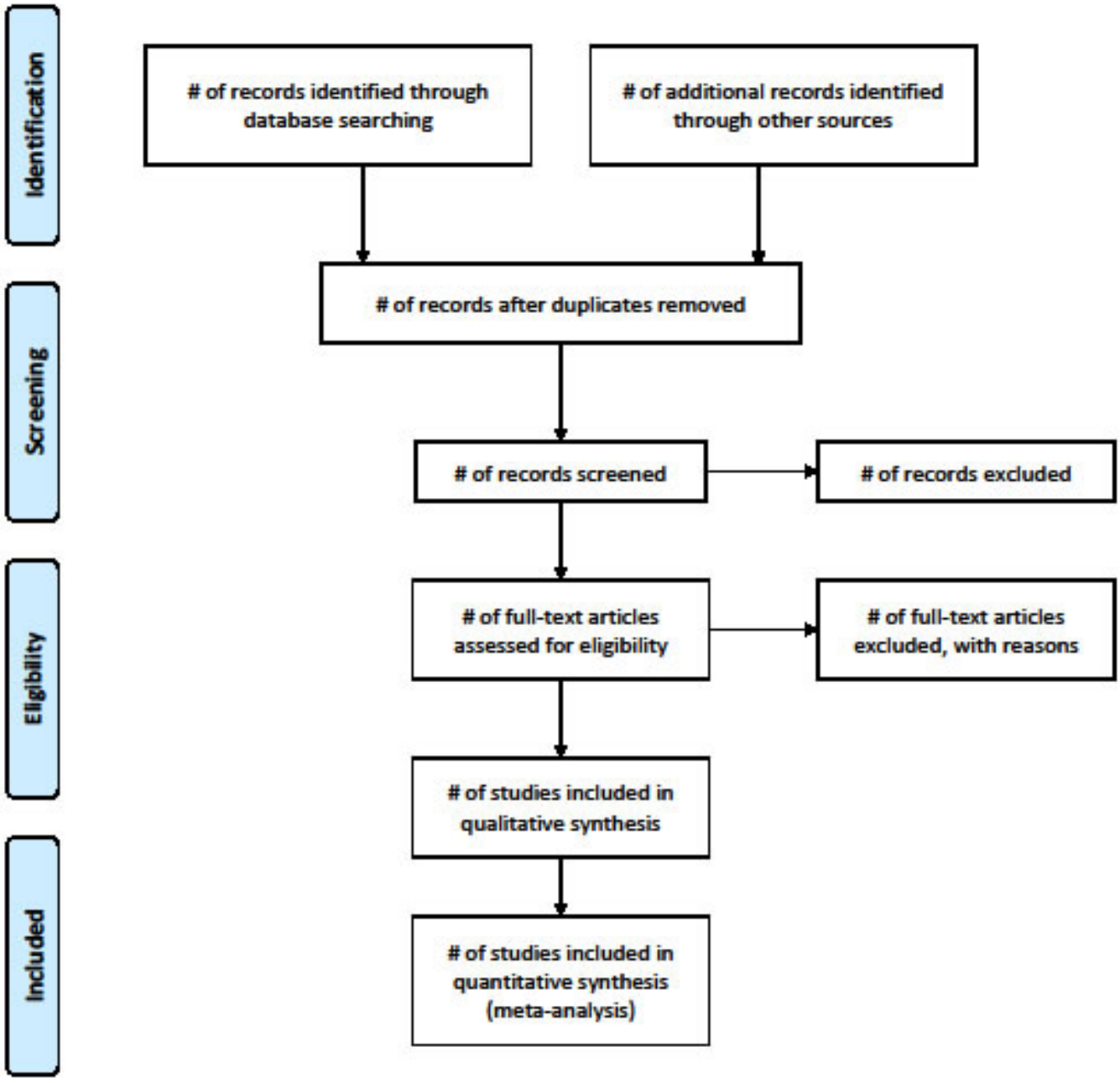
7. Adapted for db: Has the search strategy been adapted for each database to be searched?
□ Adequate
□ Needs revision Provide an explanation or example

Canadian Agency for Drugs and Technologies in Health. PRESS: Peer Review of Electronic Search Strategies. Appendix G: PRESS Checklist., p. A57-A58. http://www.cadth.ca/media/pdf/477_PRESS-Peer-Review-Electronic-Search-Strategies_tr_Appendices.pdf, accessed Feb 27, 2012.

PRISMA 2009 Flow Diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement.* PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit www.prisma-statement.org.

Standard Search Commands to Beilefeld Academic Search Engine (BASE) Search Commands

http://www.base-search.net/about/en/

Standard Search	Standard Example	BASE Search Form	BASE example
AND	medical and education	words adjacent	medical education
OR	student or learner	words in brackets	(student learner)
NOT	education not trades	leading minus sign (-)	education -trades
Adjacency search	varies (adj2, near2 w/2)	N/A	N/A
Truncation (*)	scholar*	same	scholar* (auto search for word forms is turned off)
Quotation marks for phrases	"teaching scholar"	same	"teaching scholar" (truncation not permitted)
Nested logic	medical and (education or teaching or curriculum)	nested implied logic	medical (education teaching curriculum)
Set manipulation	S1 and S2 and S3	N/A	N/A

Advantages of BASE:

1. Sources are known. 2. Indexes institutional repositories not indexed elsewhere – including U of A's ERA. 3. Searches are replicable 4. Searches can be limited to just reports. 5. Results can be exported to Refworks (one at a time). 6. Searches can be stored and rerun. 7. Records are linked to Google Scholar to find other versions of the article. (BASE does index documents not in Google Scholar).

SMC/May 9, 2013

Searching Syntax Guide for Common Database Platforms

	OvidSP Medline, Embase, EBM Reviews	**PubMed**	**Cochrane Library**	**EBSCO** CINAHL, MEDLINE, SportDiscus	**Proquest** Dissertations & Theses, Physical Education Index	**Web of Science** Science Citation Index, Conference Proceedings	**Scopus**	**Google Scholar**
Boolean (and, or, not)	Yes	Yes	Yes	Yes	Yes	Yes	Yes[(1)]	Limited, in Advanced Search
Natural Language Searching	In Basic Search	Yes	Yes	Yes	Yes	Limited	Limited	Yes
Relevancy Ranking	In Basic Search	Yes	Yes, by default	Yes, by default	Yes, by default	Yes	Yes	Yes, by default
Subject Headings	Mapped	Mapped or in MeSH database	Under "Medical Terms"	Mapped in some databases[(2)]	Click on "Thesaurus"	N/A	N/A	N/A
Combine search sets e.g.*#1 and (#2 or #3)*	On main search page	Click on "Advanced Search"	Click on "Search Manager"	Click on "Search History"	Click on "Recent Searches"	Click on "Search History"	Under "Search History" on main page	N/A
Truncation e.g. *random**	* or $	*	*	*	*	*	*	N/A
Wildcard e.g. *randomi?ed*	?	N/A	?	#	*	$	?	N/A
Exact phrase searching e.g. *"randomized controlled trial"*	Automatically searches by phrase	See Note 6 below	Quotes required	Quotes Required	Quotes Required	Quotes Required	Quotes Required	Quotes required
Truncate in phrase e.g. "random* controlled trial*"	N/A	No	Yes	Yes	Yes	Yes	Yes	N/A

Adjacency Searching	**OvidSP**	**PubMed**	**Cochrane Library**	**EBSCO**	**Proquest**	**Web of Science**	**Scopus**	**Google Scholar**
Within *N* words *randomized* within *N* words before or after *trial*	(randomized adj3 trial)[3]	N/A	randomized NEAR/3 trial	randomized N3 trial	randomized NEAR/3 trial	randomized NEAR/3 trial	(randomized W/3 trial)[3]	N/A
Within *N* words in exact order *randomized* is within N words before *trial*	N/A	N/A	randomized NEXT/3 trial	randomized W3 trial	(randomized PRE/3 trial)[3]	N/A	(randomized PRE/3 trial)[3]	N/A
Field Tag Searching[(4)]	**OvidSP**	**PubMed**	***Cochrane Library***	***EBSCO***	***Proquest***	***Web of Science***	***Scopus***	**Google Scholar**
In Title	migraine.ti.	migraine[ti]	migraine:ti	TI migraine	ti(migraine)	TI=migraine	TITLE(migraine)	In Advanced Search
In Abstract	migraine.ab.	migraine[ab]	migraine:ab	AB migraine	ab(migraine)	N/A	ABS(migraine)	N/A
In Title and Abstract	migraine.ti,ab.	migraine[tiab]	migraine:ti,ab	TI migraine or AB migraine	ti(migraine) or ab(migraine)	N/A	TITLE(migraine) or ABS(migraine)	N/A
As Keyword	migraine.mp.	No field tag needed	migraine:ti,ab,kw	No field tag needed	all(migraine)	TS=migraine	TITLE-ABS-KEY(migraine)	Full-text search
By Subject Heading	exp migraine/	migraine[Mesh]	Use “Medical Terms”	SU migraine[(5)]	su(migraine)	N/A	N/A	N/A

Footnotes:

1) Scopus uses “AND NOT” instead of NOT
2) EBSCO databases without mapping will have a searchable list of subject headings under “Indexes” or “Thesaurus
3) Enclose statement in parentheses
4) Field searching in most databases can be easily done by selecting the appropriate field from a drop-down menu. Instructions in italics are for advanced searching.
5) Subject field tag varies by database
6) See https://goo.gl/z5cA8D for an explanation of phrase searching

Useful Tips for Searching in Common Database Platforms

	OvidSP MEDLINE, EMBASE, EBM Reviews	**PubMed**	**Cochrane Library**	**EBSCO** CINAHL, MEDLINE, SportDiscus
Save Searches (Rerun)	Click on "Save Search History" (Need Ovid account)	Click on "Save Search" (Need NCBI account)	Click on "Save" (Need Wiley account)	Go to "Search History" -> Click on "Save Searches/Alerts" (Need EBSCOhost account)
Save a copy of search	Email to yourself	Copy/paste	Print search strategy (in *Search Manager* tab)	Go to "Search History" -> Then take a Printscreen of the page with *Snipping Tool* or *Snagit*
How to export to RefWorks (link below)	Click here for instructions	Click here for instructions	"Export Selected" -> .txt file -> *Import into RefWorks*	Click here for instructions
Export limitations for large volumes (link below)	1000 - Click here for instructions	Unlimited - Click here for instructions	Unlimited	Unlimited - Click here for instructions
Search multiple databases on the platform at once	Click on "Change" to select other databases	NA	NA	Click on "Choose Databases" to select other databases
Remove Duplicates from multi-database searches	Yes, type in "Remove duplicates from X", where X is the line of the search from which you want to remove duplicates. (Can only de-dupe under 6000 results)	NA	No	No
How are spaces searched	Phrase search	Boolean AND	Boolean AND	Boolean AND
*** Stop Words** e.g. "point of care", "watch and wait", "root canal"	and, or, not, use	not, or	and, near, next, or, not	NA

*** Stop Words** are words that occur too frequently to be useful in searching text. Databases will ignore these words in the search.

To search for stop words, put them in quotation marks as a phrase search (i.e. "root canal" in OvidSP). See links below for full list.

OvidSP http://resourcecenter.ovid.com/site/products/fieldguide/umda/Stopwords.jsp
PubMed http://www.ncbi.nlm.nih.gov/books/NBK3827/table/pubmedhelp.T43/
EBSCO http://support.ebsco.com/knowledge_base/detail.php?id=980

Export to RefWorks http://refworks.scholarsportal.info/refworks2/help/Exporting_from_Data_Services_and_Importing_into_RefWorks.htm
Export large volumes http://goo.gl/NY5RpZ

Need Help? Contact us! Ph: 780-492-7947; Email: jwsinfo@ualberta.ca

Useful Tips for Searching in Common Database Platforms

	ProQuest Dissertations & Theses Global, Physical Education Index	**Web of Science** Science Citation Index, Conference proceedings	**Scopus**	**Google Scholar**
Save Searches (Rerun)	Click on "Save Search" (Need ProQuest account)	(Need Web of Science account)	Click on "Save" (Need Elsevier account)	Save in "Web & App Activity" (Need Google account)
Save a copy of search	Copy/paste	Copy/paste	Copy/paste	Copy/paste
How to export to RefWorks (link below)	Click here for instructions	Click here for instructions	Click here for instructions	Go to "Settings" -> "Refworks" -> *Import into RefWorks*
Export limitations for large volumes (link below)	200 - Click here for instructions	500[ß]	2000 - Click here for instructions	1 for RefWorks
Search multiple databases on the platform at once	Click on "Searching: 1 database" to select other databases	All databases selected by default	NA	NA
Remove Duplicates from multi-database searches	Removed automatically	No	NA	NA
How are spaces searched	Boolean AND	Boolean AND	Boolean AND	Boolean AND
*** Stop Words** e.g. "point of care", "watch and wait", "root canal"	NA	and, or, not	and, or	??

[ß]Can request Web of Science data by completing their online form when exporting more than 500 records.

*** Stop Words** are words that occur too frequently to be useful in searching text. Databases will ignore these words in the search.

To search for stop words, put them in quotation marks as a phrase search (i.e. "root canal" in OvidSP). See links below for full list.

Web of Science http://images.webofknowledge.com/WOK46/help/WOS/ht_stopwd.html
Scopus http://help.scopus.com/Content/h_stopwords.htm

Export to RefWorks http://refworks.scholarsportal.info/refworks2/help/Exporting_from_Data_Services_and_Importing_into_RefWorks.htm
Export large volumes http://goo.gl/NY5RpZ

Last Updated: April 20, 2015

John W. Scott Health Sciences Library, University of Alberta

Need Help? Contact us! Ph: 780-492-7947; Email: jwsinfo@ualberta.ca