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# Managing and reporting the search process for your systematic review



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Cochrane Hypertension Review Group:  
<http://hypertension.cochrane.org>

International organisation committed to helping people make well-informed decisions about prevention, tx of hypertension by preparing, maintaining, promoting systematic reviews of the effects of healthcare interventions for hypertension.

2011 Cochrane Canada Symposium (Vancouver, BC)  
Symposium: 16-17 Feb / Pre-Symposium 14-15 Feb  
<http://ccc-symposium.org>



# Topics

Organising your results

Reporting the search

Managing references



# Organising search results

- Separate text files for each database of results
- Combined file to remove duplicates





# File organisation

Name	Date Modified	Size	Kind
A098 Declarations of Interest Form Douglas Salzwedel.pdf	2010-10-04 2:59 PM	45 KB	Adobe...ument
Search methodsmcw ds.doc	2009-12-07 12:13 PM	49 KB	Micro...ument
Walking - CCTR - 2010-11-04 (1284).txt	2010-11-05 12:36 PM	3.3 MB	Plain Text
Walking - Embase - 2010-11-04 (1513).txt	2010-11-05 12:31 PM	5.4 MB	Plain Text
Walking - Medline - 2010-11-04 (1330).txt	2010-11-05 12:29 PM	4.2 MB	Plain Text
Walking - PEDro - 2010-11-05 (160).txt	2010-11-05 12:42 PM	319 KB	Plain Text
Walking - PsycINFO - 2010-11-04 (96).txt	2010-11-05 12:33 PM	336 KB	Plain Text
Walking - SPORTDiscus - 2010-11-04 (209).txt	2010-11-05 12:33 PM	741 KB	Plain Text
Walking for bp search summary	2010-11-05 2:11 PM	45 KB	Micro...rkbook
Walking for htn - title registration.doc	2009-11-04 11:17 AM	217 KB	Micro...ument
Walking for htn Protocol 2010.pdf	2010-11-05 9:39 AM	152 KB	Adobe...ument
Walking results 2010-11-04.Data	2010-11-05 12:27 PM	--	Folder
Walking results 2010-11-04.enl	2010-11-05 12:27 PM	Zero KB	DocumentType
Walking results 2010-11-05 (2149).txt	2010-11-05 2:01 PM	7 MB	Plain Text
Walking strategies 2010-11-04	2010-11-05 12:23 PM	66 KB	Micro...ument



# Organising results



Walking for bp search summary.xlsx

Search in Sheet

Home Layout Tables Charts SmartArt Formulas Data Review

Font: Calibri (Body), 12

Alignment: General

Number: General

Format: Conditional Formatting, Styles

Cells: Actions

Themes: Themes

A1 fx Walking for Hypertension search results (Search dates 4 November 2010)

Database	Records retrieved
Medline	1330
Embase	1513
CCTR	1284
SPORTDiscus	209
PEDro*	160
PsycINFO	96
Prelim Total	4592
After de-duping	2149

\*Search date = 5 November 2010

Sheet1

Normal View Ready

Sum = 1:

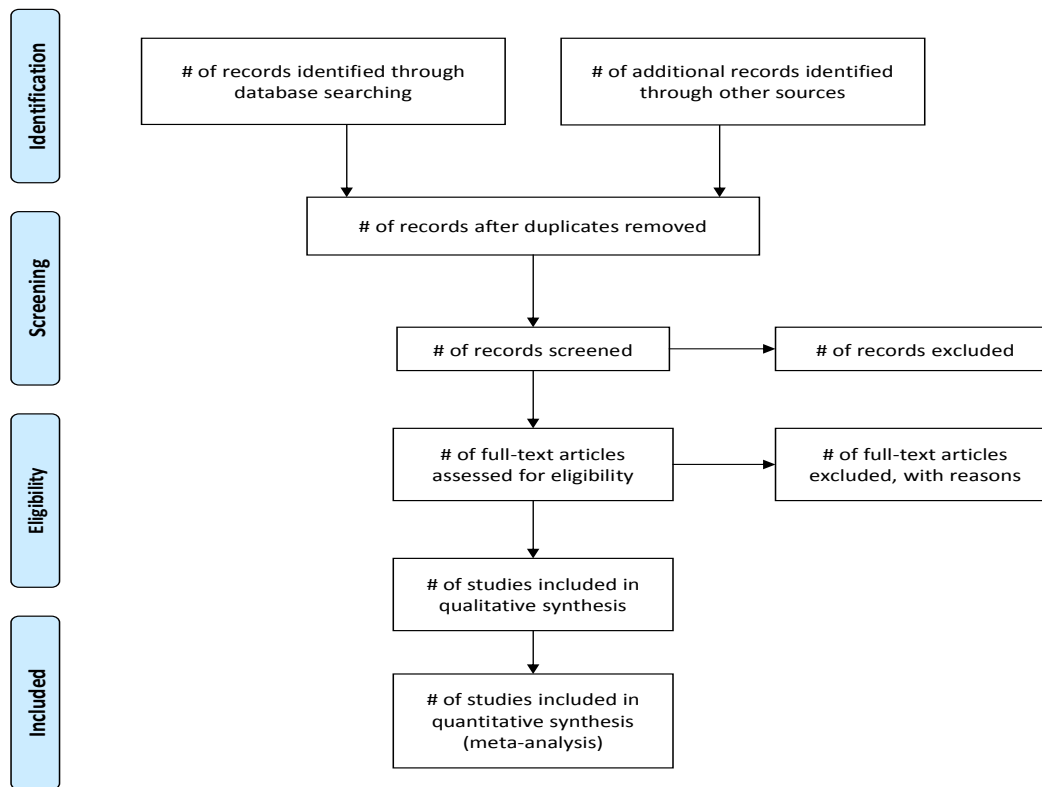


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## PRISMA 2009 Flow Diagram



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](http://www.prisma-statement.org).



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# Organising results – Plan ahead

## CRD guidance:

- Set clear rules about who can add, edit records in the database of references retrieved
- Use clear terminology to record decisions when screening
- Usually preferable to have one person manage the database of references

[www.york.ac.uk/inst/crd/guidance.htm](http://www.york.ac.uk/inst/crd/guidance.htm)





# Reporting the search

- Need to ensure strategies provide enough detail to be reproducible, transparent
- List all sources searched
- Search strategy used for at least one database
- Time periods of the searches



# Reporting example - Databases

Search methods for identification of studies

The Database of Abstracts of Reviews of Effectiveness (DARE) and the Cochrane Database of Systematic Reviews will be searched for related reviews.

The following electronic databases will be searched for primary studies:

- a) Cochrane Central Register of Controlled Trials (CENTRAL)
- b) Medline (1950-), Embase (1980-), Allied and Complementary Medicine Database (1985-), and the Cochrane Hypertension Group specialised register (1950-)



# Reporting example – Description

## Search methods for identification of studies

Electronic databases will be searched using a strategy combining the Cochrane Highly Sensitive Search Strategy for identifying randomized trials in Medline: sensitivity-maximizing version (2008 revision) with selected MeSH terms and free text terms relating to roselle and hypertension. No language restrictions will be used. The Medline search strategy (see Appendix 1) will be translated into the other databases using the appropriate controlled vocabulary as applicable.



# Reporting example – Other steps

Search methods for identification of studies

Other sources:

- a) Hand searching of high-yield journals
- b) Reference lists of all papers and relevant reviews identified
- c) Authors of relevant papers will be contacted regarding further published or unpublished work
- d) Authors of trials reporting incomplete information will be contacted to provide missing information

e) ISI Web of Science will be searched for papers which cite studies included in the review



# Exporting search strategies

## Demo



# Publish your strategies!

## Include:

- The name of the database searched
- The name of the host/system/vendor/interface used
- The date when the search was run
- The years covered by the search

## Example:

Ovid Medline searched 1950-June 2010



# Well-documented searches...

- Contribute to transparent, reproducible reviews
- Updating the review is faster, easier
- Avoid needless duplication of results



# Managing References - Steps

1. Export each set of references into a separate EndNote library for the database searched
2. Combine records from all databases searched (Medline, Embase...) into one Endnote database
3. Remove duplicates (iterative process)





# EndNote demo



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# De-duplication - Endnote

## Exact Match:

- author, title, year, journal, pages...

## Iterative process

- Capture all duplicates
- Avoid accidental deletions



# RefWorks

Katherine Miller, Reference Librarian



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# Importing Records Identified through Database Searching



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# Google Scholar

Google scholar   [Advanced Scholar Search](#)

**Scholar**     [Create email alert](#) Results **1 - 10** of about **1**

[Primary-care-based randomised \*\*placebo\*\*-controlled trial of \*\*antibiotic treatment\*\* in \*\*acute\*\* maxillary \*\*sinusitis\*\*](#) [UBC eLink](#)

FL Van Buchem, JA Knottnerus... - *The Lancet*, 1997 - Elsevier  
... score, the results of the t test were confirmed with the stratified Wilcoxon rank sum test: a weighted summary p value was calculated for the **comparison** of the differences between baseline score and follow-up scores of the **antibiotic** and **placebo** groups, stratified by ...  
[Cited by 171](#) - [Related articles](#) - [AONE Full Text @ TAL](#) - [Get at CISTI](#) - [All 6 versions](#) - [Import into RefWorks](#)

[Randomised, double blind, \*\*placebo\*\* controlled trial of penicillin V and amoxicillin in \*\*treatment\*\* of \*\*acute\*\* sinus infections in adults](#) [\[HTML\] from bmj.com](#)  
[UBC eLink](#)

M Lindbaek, P Hjortdahl... - *British Medical Journal*, 1996 - [bmj.com](#)  
... Abstract Objective: To compare the effectiveness of penicillin V and amoxicillin with **placebo** in **treatment** of ... nine days for amoxicillin, 11 days for penicillin V, and 17 days for **placebo**. More than half of the patients receiving **antibiotic treatment** reported side effects but few gave ...  
[Cited by 126](#) - [Related articles](#) - [AONE Full Text @ TAL](#) - [Get at CISTI](#) - [All 8 versions](#) - [Import into RefWorks](#)



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# Medline (OVID)

Results Tools Options

All  Print Email Export Add to My Projects Keep Selected

Search Information

Clear Selected View: Title Citation Abstract 25 Per Page GO Next

**You searched:**  
7 and 28  
- Search terms used:  
allocation  
anti-bacterial agents  
antibiotic\$  
blind  
blind\$  
clin\$  
clinical  
clinical trial  
controlled  
controlled clinical trial  
doubl\$  
double  
double blind method  
mask\$  
method  
placebo\$  
placebos  
random

1.  [An evaluation of diagnosis and treatment of acute sinusitis at three health care centers]. [Icelandic]  
Oskarsson JP, Halldorsson S.  
*Laeknabladid*. 96(9):531-5, 2010 Sep.  
[English Abstract. Evaluation Studies. Journal Article. Multicenter Study]  
UI: 20820069  
**Authors Full Name**  
Oskarsson, Jon Palmi. Halldorsson, Sigurdur.  
[View Abstract](#)

2.  Similar effect of therapeutic ultrasound and antibiotics for acute bacterial rhinosinusitis: a randomised trial.  
Høstøien E, Lund AB, Vasseljen O.  
*Journal of Physiotherapy*. 56(1):29-32, 2010.  
[Journal Article. Randomized Controlled Trial. Research Support, Non-U.S. Gov't]  
UI: 20500134

[Abstract Reference](#)  
[Complete Reference](#)  
[Find Similar](#)  
[Find Citing Articles](#)

[+ My Projects](#) [+ Annotate](#)



# CINAHL

New Search | Publications | CINAHL Headings | Cited References | More ▾

Sign In | **Folder** | Preferences | Help



Searching: **CINAHL with Full Text** | Choose Databases »

Suggest Subject Terms

sinusitis in Select a Field (optional) **Search** **Clear** ?

AND ▾ antibiotics in Select a Field (optional) ▾

AND ▾ in Select a Field (optional) ▾ Add Row

Basic Search | Advanced Search | Visual Search | Search History

Page: Previous | 1 | 2 | 3 | 4 | 5 | Next


Relevance Sort ▾ | Page Options ▾ | Alert /

407 Results for...

Refine your results

- Linked Full Text
- Abstract Available
- Scholarly (Peer Reviewed) Journals

1988 Publication Date 2010


51. Antibiotics for acute maxillary sinusitis. 

Bailey J; Change J; American Family Physician, 2009 May 1; 79 (9): 757-8 (journal article - case stu  
0002-838X PMID: 20141093 CINAHL AN: 2010559093

Subjects: Enzyme Inhibitors; Antibiotics; Sinusitis; Adult: 19-44 years; Female

Database: CINAHL with Full Text

**Add to folder** Relevancy: ██████████

 PDF Full Text



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# PubMed (2 step method)

NCBI Resources How To

PubMed.gov  
U.S. National Library of Medicine  
National Institutes of Health

Search: PubMed  
sinusitis antibiotics

RSS Save search Limits Advanced search Help

Search Clear

Display Settings: Summary, 20 per page, Sorted by Recently Added

Send to: Filter your results

Results: 1 to 20 of 3414 Selected: 3

- [Antibiotic use for acute upper respiratory tract infections in a veteran population](#)  
 1. Franck AJ, Smith RE.  
 J Am Pharm Assoc (2003). 2010 Nov-Dec;50(6):726-9.  
 PMID: 21071318 [PubMed - in process]  
[Related citations](#)
- [\[Clinicopathologic study of malignant tumors in head and neck region completed in 1997\]](#)  
 2. Li LL, Liu HG, Piao YS, He CY, Zhou Q, Zhang Y.  
 Zhonghua Bing Li Xue Za Zhi. 2010 Aug;39(8):508-512. Chinese.  
 PMID: 21055027 [PubMed - as supplied by publisher]  
[Related citations](#)
- [Everolimus for subependymal giant-cell astrocytomas in tuberous sclerosis.](#)  
 3. Krueger DA, Care MM, Holland K, Agricola K, Tudor C, Mangeshkar P, Wilson KA, Byars A, Sahnoud T, [Antibiotics : Comparison treatment of](#)

**Choose Destination**

File  Clipboard  
 Collections  E-mail  
 Order  My Bibliography

Download 3 items.

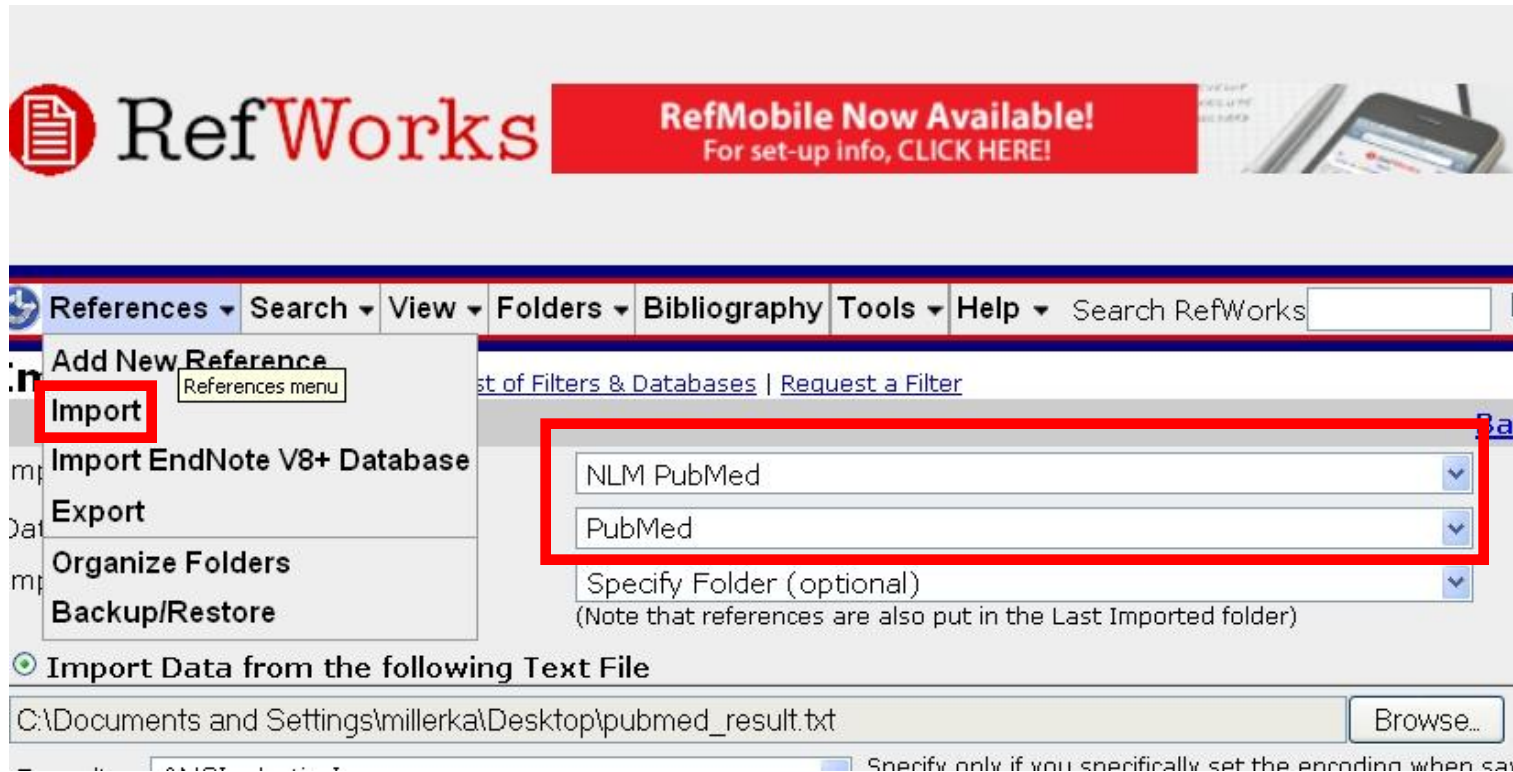
Format

Sort by





# PubMed (2 step method)



RefWorks **RefMobile Now Available!**  
For set-up info, [CLICK HERE!](#)

References Search View Folders Bibliography Tools Help Search RefWorks

**Import** (References menu)

List of Filters & Databases | [Request a Filter](#)

NLM PubMed  
PubMed  
Specify Folder (optional)  
(Note that references are also put in the Last Imported folder)

Import Data from the following Text File

C:\Documents and Settings\millerka\Desktop\pubmed\_result.txt

Specify only if you specifically set the encoding when saving

# Managing Citations



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# Manage Citations with Folders



The screenshot shows a citation management interface. At the top, there is a navigation bar with tabs for 'References', 'Search', 'View', 'Folders', and 'Bibliography'. The 'Folders' tab is active, and a dropdown menu is open, showing options: 'Create New Folder', 'View', 'Organize Folders', and 'Share Folders'. Below the navigation bar, the section is titled 'Last Imported Folder'. There are two radio buttons for 'References to Use': 'Selected' (which is selected) and 'p'. Below these are several buttons: 'Add to My List', 'Put in Folder...', 'Remove from Folder', 'Global Edit', 'Delete', and 'Print'. A list of references is shown below, with the first entry selected: 'Ref ID: 652 Journal Article Refere'. Below the reference list, there are links for 'PubMed Links', 'View in PubMed', 'Related Documents', and 'More'. The title of the selected reference is 'Antibiotics for acute maxillary sinusitis'.



# Manage Citations with Folders



**RefWorks** RefWorks is now on Facebook & Twitter  
[CLICK HERE!](#)

References Search View **Folders** Bibliography Tools Help

**All References** Switch to:

References to Use:  Selected  Unselected

Ref ID: 730 Journal Article Reference  
 Title: Moxifloxacin: new indication. Inadequacy of  
 Authors:  
 Source: [Prescrire Int.](#), 2009, 18, 103, 206, France

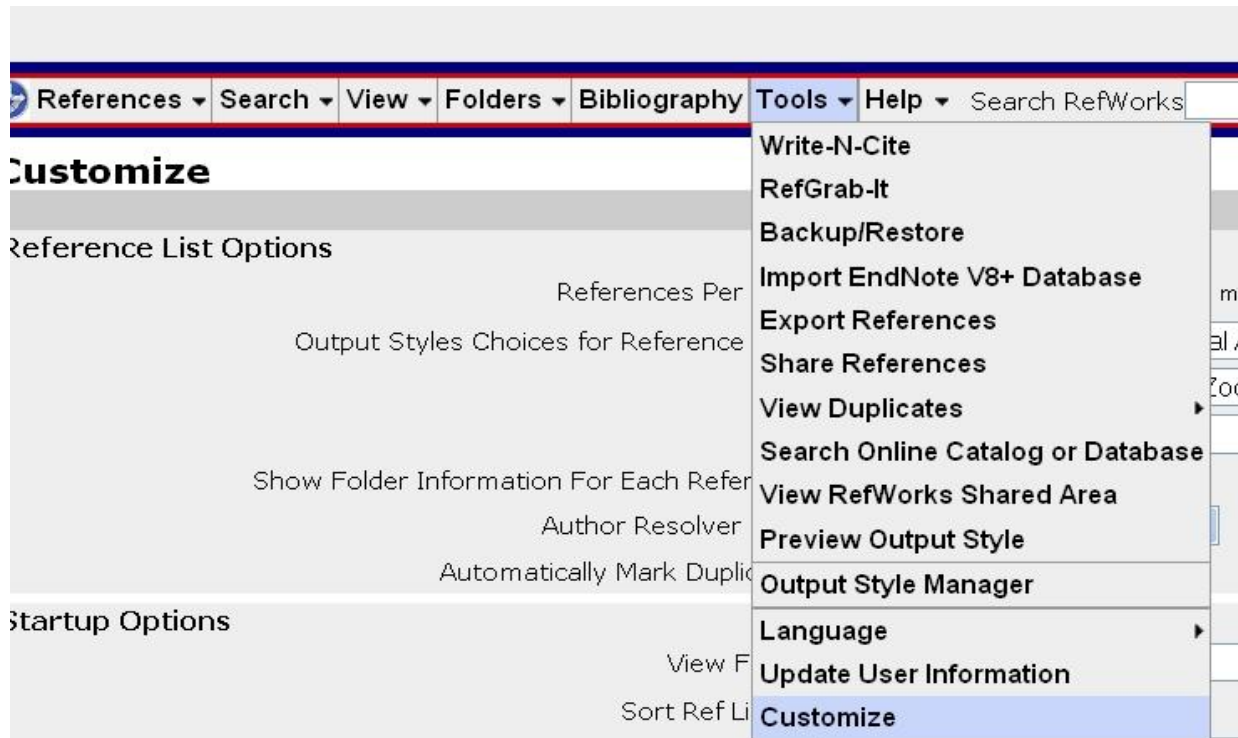
Ref ID: 757 Journal Article Reference  
 Title: Managing acute sinusitis  
 Authors:  
 Source: [Drug Ther. Bull.](#), 2009, 47, 3, 26-30, England

Folder menu options:  
 Create New Folder  
 View  
 Organize Folders  
 Share Folders

Folder contents:  
 Last Imported  
 References Not in a Folder  
 Deleted References  
 CINAHL Nov 17  
 Cochrane Nov 17  
 EMBASE Nov 17  
 Google Scholar Nov 17  
 Medline (Ovid) Nov 17  
 PubMed Nov 17



# Customization of Fields



The screenshot shows the RefWorks software interface. The top menu bar includes 'References', 'Search', 'View', 'Folders', 'Bibliography', 'Tools', and 'Help'. The 'Tools' menu is open, displaying a list of options: 'Write-N-Cite', 'RefGrab-It', 'Backup/Restore', 'Import EndNote V8+ Database', 'Export References', 'Share References', 'View Duplicates', 'Search Online Catalog or Database', 'View RefWorks Shared Area', 'Preview Output Style', 'Output Style Manager', 'Language', 'Update User Information', and 'Customize'. The 'Customize' option is highlighted in blue. The background shows a 'Reference List Options' section with various settings like 'References Per Page' and 'Output Styles Choices for Reference'.



# Customization of Fields

## Import Options

Default Source Type for Imported References

Show Option for Global Edit of Electronic Source Related Fields After Import  Yes  No

## RefWorks Links

Show PubMed  Yes  No

## Reference Edit Options

Enable Term Assistant  Yes  No

Default Output Language

## User Field Options

User 1 Field Name

User 2 Field Name



# Global Edit

## Last Imported Folder Switch to:

References to Use:  Selected  Page  All in List

Ref ID: 652 Journal Article

 [PubMed Links](#) [View in PubMed](#) [Related Documents](#)

**Title:** [Antibiotics for acute maxillary sinusitis](#)

**Author:** [Akerman, Selenite A](#); [Denzinger, O V](#)



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# Global Edit

References ▾ Search ▾ View ▾ Folders ▾ Bibliography Tools ▾ Help ▾

## Global Edit

**Add** Move Delete Replace

References to Edit  Selected (0)  Page (10)  All in List (10)

Field to Add Data  Specific Field Search Strategy ▾  
 Electronic Source Related Fields

Search Strategy **B** *I* U x<sup>2</sup> x<sub>2</sub>

- 1 exp SINUSITIS/
- 2 sinusitis.mp.
- 3 or/1-2
- 4 exp Anti-Bacterial Agents/
- 5 antibiotic.mp.

If Field Already Contains Data  Append to Existing Data  
 Overwrite Existing Data  
 Leave Existing Data Alone

**Add** Cancel





# Data Deduplication



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# Deduplication

- *Exact Match*: author, title and year of publication fields
- *Close Match*: loose comparison of same 3 fields
- **Recommendation: 2 accounts:**
  1. Complete data & 2. Deduped data

# Exporting Options



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# Backup & Restore

References ▾ Search ▾ View ▾ Folders ▾ Bibliography Tools ▾ Help ▾

## Backup/Restore

Backup  Restore

Include References  
 Include Attachments  
 Include RSS Feeds

**Perform Backup**

## Backup/Restore

Backup  Restore

Include References  
 Include Attachments  
 Include RSS Feeds  
 Include Output Styles

Restore Source

**Perform Restore**



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# Export



RefWorks

RefWorks is now on Facebook & Twitter!  
[CLICK HERE!](#)



Welcome, Katherine Miller  
R  
University of British Col

[References](#) ▾ [Search](#) ▾ [View](#) ▾ [Folders](#) ▾ [Bibliography](#) [Tools](#) ▾ [Help](#) ▾

Search RefWorks   A

## Export

[Back](#)

References to Include

All References (314)  My List (0)  References from Folder

Export Format

[Explanation of Export Formats](#)

- Bibliographic Software (EndNote,Reference Manager,ProCite)
- BibTeX - RefWorks ID
- Citation List
- RefWorks Tagged Format
- RefWorks XML Format
- Tab Delimited
- XML [\(deprecated\)](#)

[Export to Text File](#)



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# Bibliography



The screenshot shows the RefWorks Bibliography tool interface. At the top, there is a navigation bar with the RefWorks logo, a banner for Facebook and Twitter, and a welcome message for Katherine Miller. Below this is a menu bar with options like References, Search, View, Folders, Bibliography, Tools, and Help. The main content area is titled 'Bibliography' and includes a 'Back to Reference' link. The 'Output Style' dropdown menu is set to 'Vancouver'. There are buttons for 'Edit...', 'New', and 'Preview Styles'. Below this, there are two radio button options: 'Format Paper and Bibliography' and 'Format a Bibliography from a List of References'. The second option is selected. Under 'Format a Bibliography from a List of References', there is a 'File Type to Create' dropdown set to 'HTML' and a 'References to Include' section with three radio buttons: 'All References (314)', 'My List (0)', and 'References from Folder'. The 'References from Folder' option is selected, and the folder 'Medline (Ovid) Nov 17' is chosen from a dropdown menu. A 'Create Bibliography' button is located at the bottom of the form.

## Document Formats Supported



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# Bibliography

- (1) Moxifloxacin: new indication. Inadequate restriction of indications in ENT and respiratory infections. *Prescrire Int.* 2009 Oct;18(103):206.
- (2) Managing acute sinusitis. *Drug Ther.Bull.* 2009 Mar;47(3):26-30.
- (3) Adejumo A, Ogunlesi O, Siddiqui A, Sivapalan V, Alao O. Pott puffy tumor complicating frontal sinusitis. *Am.J.Med.Sci.* 2010 Jul;340(1):79.
- (4) Akhaddar A, Elasri F, Elouennass M, Mahi M, Elomari N, Elmostarchid B, et al. Orbital abscess associated with sinusitis from odontogenic origin. *Intern.Med.* 2010;49(5):523-524.
- (5) Anon JB. Upper respiratory infections. *Am.J.Med.* 2010 Apr;123(4 Suppl):S16-25.
- (6) Bachert C, Claeys SE, Tomassen P, van Zele T, Zhang N. Rhinosinusitis and asthma: a link for asthma severity. *Curr.Allergy Asthma Rep.* 2010 May;10(3):194-201.
- (7) Bailey J, Change J. Antibiotics for acute maxillary sinusitis. *Am.Fam.Physician* 2009 May 1;79(9):757-758.
- (8) Basheikh A, Superstein R. A child with bilateral orbital cellulitis one day after strabismus surgery. *J.Aapos.* 2009 Oct;13(5):488-490.
- (9) Bashkaran K, Shatriah I, Zunaina E, Bakiah S, Sakinah Z. Pansinusitis causing bilateral optic neuritis in a 9-year-old child. *Orbit* 2009;28(6):377-379.
- (10) Becker SS, Russell PT, Duncavage JA, Creech CB. Current issues in the management of sinonasal methicillin-resistant *Staphylococcus aureus*. *Curr.Opin.Otolaryngol.Head Neck Surg.* 2009 Feb;17(1):2-5.
- (11) Berlucchi M, Maroldi R, Aga A, Grazzani L, Padoan R. Ethmoid mucocele: a new feature of primary ciliary dyskinesia. *Pediatr.Pulmonol.* 2010 Feb;45(2):197-201.
- (12) Bleier BS, Kofonow JM, Hashmi N, Chennupati SK, Cohen NA. Antibiotic eluting chitosan glycerophosphate implant in the setting of acute bacterial sinusitis: a rabbit model. *Am.J.Rhinol.Allergy* 2010 Mar;24(2):129-132.
- (13) Brener ZZ, Bilik I, Khorets B, Winchester JF, Bergman M. Rhabdomyolysis following clarithromycin monotherapy. *Am.J.Med.Sci.* 2009 Jul;338(1):78.
- (14) Brook I. Treatment modalities for bacterial rhinosinusitis. *Expert Opin.Pharmacother.* 2010 Apr;11(5):755-769.
- (15) Brook I. Microbiology and antimicrobial treatment of orbital and intracranial complications of sinusitis in children and their management. *Int.J.Pediatr.Otorhinolaryngol.* 2009 Sep;73(9):1183-1186.



# Questions?



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