

EBM

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Motivation: EBM “Successes”

- Theophylline and asthma
 - We were doing the wrong thing
 - Littenberg, 1988
- Beta blockers and MIs
 - We weren't doing the right thing
 - Yusuf, 1987

Uses of “EBM”

- Use of empirically-verified treatments in the care of patients
- Incorporation of research results into the process of care
- Ability to critically appraise research results

What is Evidence-Based Medicine?

- “The integration of individual clinical expertise with the best available clinical evidence from systematic research.”
 - David L Sackett, W Scott Richardson, William Rosenberg, R Brian Haynes *Evidence Based Medicine--How to Practice and Teach EBM*, 1996
 - Various definitions

Individual
Clinical
Expertise

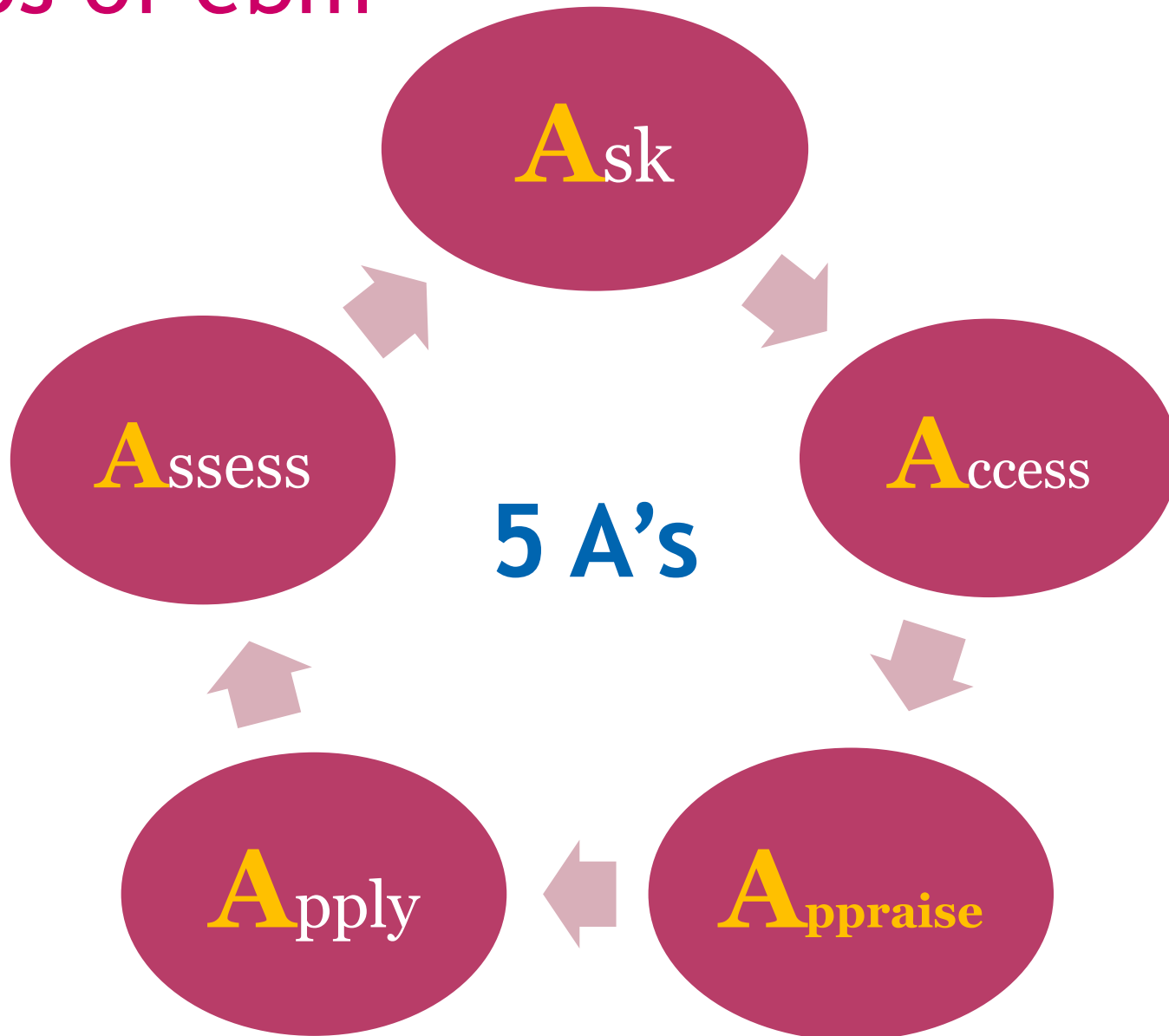


Improved Patient
Outcomes

Patient's
Values and
Expectations

Best Available Clinical Evidence

Steps of ebm

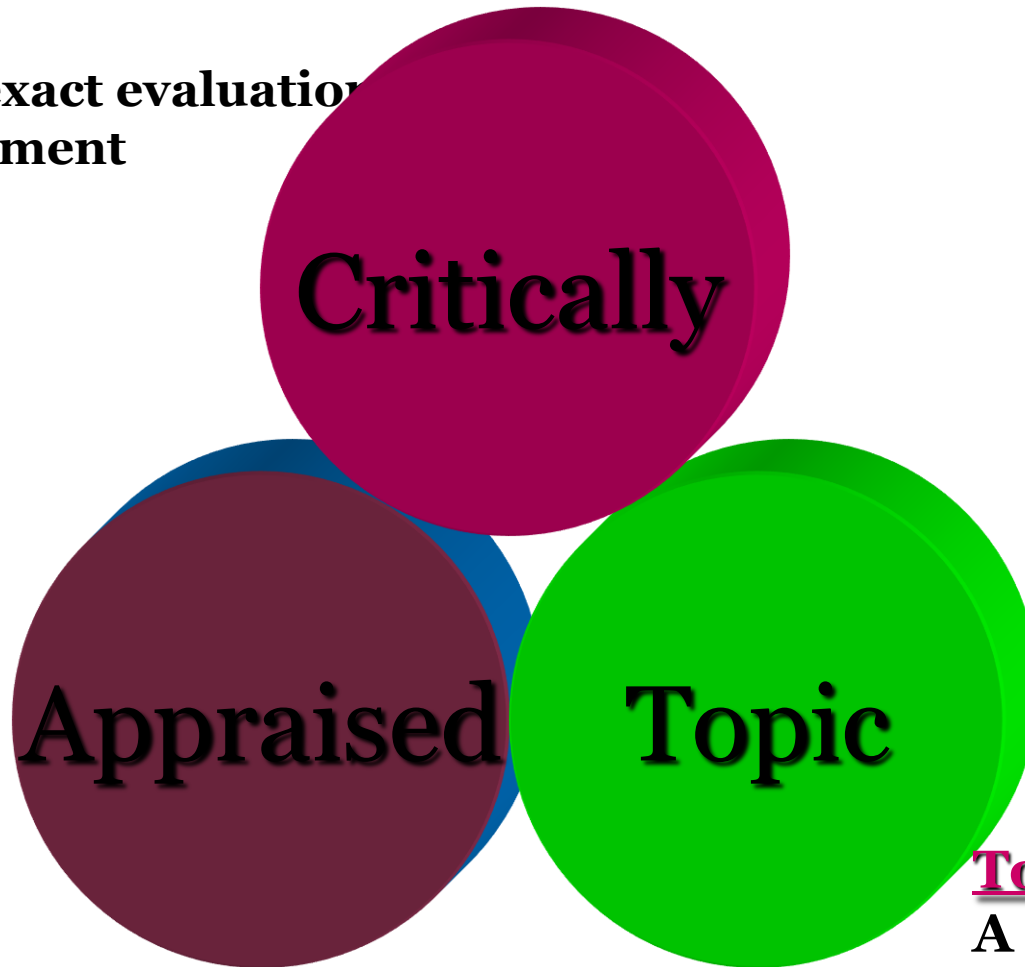


Critical:

careful, exact evaluation
and judgment

Appraise:

To evaluate, &
estimate the
quality, amount
of validity,
results and
applicability



Topic:

A subject of
discussion or
conversation

“Best Available Clinical Evidence”

- **Therapy**
 - Double-blind, placebo-controlled, randomized clinical trial
- **Diagnosis**
 - Independent, blind comparison with a reference standard
- **Prognosis**
 - Representative and well-defined prospective cohort of patients at a similar point in the course of disease
- See [Centre for Health Evidence](#)

Levels of Evidences

- (I-1) a well done systematic review of 2 or more RCTs
- (I-2) a RCT
- (II-1) a cohort study
- (II-2) a case-control study
- (II-3) a dramatic uncontrolled experiment
- (III) respected authorities, expert committees, etc..
- (IV) ...someone once told me....
 - <http://www.phru.org/casp/>
 - See also [AAFP](#)

“Systematic Research”

- “Meta-analysis”
- “Literature synthesis”
 - From Michael Scriven

Questions



Questions: PICO

	1	2	3	4
	Patient or Problem	Intervention (a cause, prognostic factor, treatment, etc)	Comparison Intervention (if necessary)	Outcomes
Tips for Building	Starting with your patient, ask "How would I describe a group of patients similar to mine?" Balance precision with brevity.	Ask "Which main intervention am I considering?" Be specific	Ask "What is the main alternative to compare with the intervention?" Again, be specific	Ask "What can I hope to accomplish?", or "What could this exposure really affect?" Again, be specific
Example	"In patients with heart failure from dilated cardiomyopathy who are in sinus rhythm..."	"...would adding anticoagulation with warfarin to standard heart failure therapy..."	"...when compared with standard therapy alone..."	"...lead to lower mortality or morbidity from thromboembolism. Is this enough to be worth the increased risk of bleeding?"

USEFULNESS OF MEDICAL INFORMATION

DISEASE ORIENTED EVIDENCE THAT MATTERS
(DOES)

PATIENT ORIENTED EVIDENCE THAT MATTERS
(POEMS)

DOEs -----> POEM

Drug A lowers cholesterol	Drug A decreases cardiovascular mortality/morbidity	Decreases overall mortality
PSA screening detects prostate cancer most of the time and at an early stage	PSA screening decreases mortality	PSA screening improves quality of life
Corticosteroid use decreases neutrophil chemotaxis in patients with asthma	Corticosteroid use decreases admissions, length of hospital stay, and symptoms of acute asthma	Corticosteroid use decreases asthma-related mortality
Tight control of type 1 diabetes mellitus can keep fasting blood glucose <140mg/dl	Tight control of type 1 diabetes can decrease microvascular complications	Tight control of type 1 diabetes can decrease mortality and improve quality of life

Problems

- Should a 30-year-old woman with recurrent uncomplicated lower UTIs be advised to drink cranberry juice to prevent reinfection?
- For a 63 year old woman with Type 2 diabetes, is gabapentin superior to amitriptyline as first-line therapy for painful peripheral neuropathy?



Educational Prescription

Patient's Name

Learner:

3-part Clinical Question

Target Disorder:

Intervention (+/- comparison):

Outcome:

Date and place to be filled:

Presentation will cover:

- Relavance
- PICO
- search strategy
- search results
- the validity of this evidence
- the importance of this valid evidence
- can this valid, important evidence be applied to your patient

Task

- Well formulated question?
- Formulate the query
- Report back to us on your success
- The whole group reports back in a week

Search for the Best Evidence

- ~~Review articles~~
- Community/professional standards
- Systematic reviews
- Original results

What are the Sources of Good Evidence?

The Johns Hopkins Medical Institutions
Welch WEB
The William H. Welch Medical Library

→ MyWelch → Home → PubMed → JHULibraries Catalog → RAUL (Rem...)

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Evidence Based Medicine

- [Systematic Reviews, Journal Articles and other Databases](#)
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Ranking * = Good; **Very Good; ***Excellent

Systematic Reviews, Journal Articles and other Databases

- [National Guideline Clearinghouse](#)*** - EBM practice guidelines
- [Cochrane](#)*** - Systematic reviews of literature on specific subjects
- [TRIP-CeRes](#)*** - British meta-search engine; covers 58 resources
- [Clinical Queries - PubMed](#)*** - Evidence Based filters for Medline
- [UpToDate](#)*** - Topic reviews on specific clinical issues
- [MD Consult](#) - Practice guidelines, clinical topics
- [Clinical Evidence Online](#)** - Provides a searchable list of reviewed topics, BMJ
- [Best Evidence](#) - Provides a searchable list of reviewed topics, ACP
- [CAT Bank](#)* - 63 Critically Appraised Topics
- [SUM Search - Univ. of Texas](#) - Meta-search for Merck, NGC, and PubMed
- [Bandolier](#) - Reviewed literature, offers subjects by medical speciality

www.welch.jhu.edu

- [National Guideline Clearinghouse](#)^{***} -
- [Cochrane](#)^{***} - Systematic reviews of literature
- [TRIP - CeRes](#)^{***} - British meta-search engine
- [Clinical Queries - PubMed](#)^{***} - Evidence
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الترحيب

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Saudi Digital Library



Saudi Digital Library is one of the pioneer projects of NCEL aiming at enhancing the education process in the Kingdom of Saudi Arabia.

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The library contains approx. 90,000 titles of digital books and resources from leading publishing houses...all are available for university student and faculty staff.

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King Khalid University
King Saud University
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- [CAT Bank*](#) - 63 Critically Appraised Topics
- [SUM Search](#) - Univ. of Texas - Meta-search engine
- [Bandolier](#) - Review of clinical evidence

National Guideline Clearinghouse

Website

National Guideline Clearinghouse

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In Memoriam

Tribute to John M. Eisenberg, M.D., 1946-2002

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Wednesday, March 20, 2002

Welcome! You are connected to the **National Guideline Clearinghouse™ (NGC)**, a public resource for evidence-based clinical practice guidelines. NGC is sponsored by the [Agency for Healthcare Research and Quality](#) (formerly the Agency for Health Care Policy and Research) in partnership with the [American Medical Association](#) and the [American Association of Health Plans](#). Click on [About NGC](#) to learn more about us.

www.guideline.gov

(1/37)

☐ [Preventive health care, 2000 update. Use of ambulatory electrocardiography for the detection of paroxysmal atrial fibrillation in patients with stroke.](#) Canadian Task Force on Preventive Health Care. 2000. 7 pages.

(2/37)

☐ [Antithrombotic therapy in atrial fibrillation. In: Sixth ACCP Consensus Conference on Antithrombotic Therapy.](#) American College of Chest Physicians. 2001 Jan. 13 pages.

(3/37)

☐ [AAE clinical practice guidelines for the evaluation and treatment of hyperthyroidism and hypothyroidism.](#) American Association of Clinical Endocrinologists/American College of Endocrinology. 1996. 24 pages.

(4/37)

☐ [Driving and heart disease.](#) European Society of Cardiology. 1998 Aug. 13 pages.

(5/37)

☐ [Atrial fibrillation: drug treatment and DC electroversion.](#) Finnish Medical Society Duodecim. 2001 Apr 30. Various pagings.

(6/37)

☐ [Screening for thyroid disease.](#) American College of Physicians-American Society of Internal Medicine. 1997 Mar 6. 3 pages (guideline); 14 pages (background paper).

Restoration of sinus rhythm

- Measures to convert **atrial fibrillation** to sinus rhythm should be undertaken if sinus rhythm does not restore after decrease of heart rate and correction of possible heart failure **[B]**.
- Direct current electroversion is recommended if the patient:
 - Has used several antiarrhythmic drugs
 - Is hypotensive
 - Is in a critical condition because of the arrhythmia
 - Has chronic **atrial fibrillation**
- Drugs used in this indication include flecainide and propafenone; previously, quinidine 0.2 grams 3 times at 2-hour intervals was often used. Monitoring the patient during conversion of the rhythm, and for at least 3 hours after that, is recommended because of the risk of ventricular tachycardia.

Definitions:

Levels of Evidence

A: Strong research-based evidence. Multiple relevant, high-quality scientific studies with homogenic results.

B: Moderate research-based evidence. At least one relevant, high-quality study or multiple adequate studies.

C: Limited research-based evidence. At least one adequate scientific study.

D: No scientific evidence. Expert panel evaluation of other information.

National Guideline Clearinghouse*** -

- Cochrane*** - Systematic reviews of literature
- TRIP - CeRes*** - British meta-search engine
- Clinical Queries - PubMed*** - Evidence
- UpToDate*** - Topic reviews on specific topics
- MD Consult - Practice guidelines, clinical decision support
- Clinical Evidence Online** - Provides a searchable database of evidence
- Best Evidence - Provides a searchable database of evidence
- CAT Bank* - 63 Critically Appraised Topics
- SUM Search - Univ. of Texas - Meta-search engine
- Bandolier - Reviewed literature, offers a searchable database

Cochrane

Website

The screenshot shows the Cochrane website interface. At the top, there are navigation links: CLEAR, TOPICS, RECORDS, MeSH, HISTORY, and HELP. Below these is a search bar with the text 'atrial fibrillation' and a 'Go' button. A 'Refine your search' dropdown menu is also visible. On the left side, there is a sidebar with links: Home, Support, and Links. Below these are links for 'The Cochrane Library', 'About', 'Log on', 'What's in', 'Abstracts of Cochrane Reviews', 'Subscribe', 'Known problems & change requests', 'Demo & Screensaver', 'Document Delivery', 'Feedback', and 'Cochrane/HLG Prize'. At the bottom of the sidebar is a link for 'La Cochrane Library Plus en español'. The main content area displays a list of search results, each with a checkbox and a description of the database and the number of results found.

View selected	Unselect all	Save selected
<input type="checkbox"/>	The Cochrane Database of Systematic Reviews (2935 out of 2935)	
<input type="checkbox"/>	Database of Abstracts of Reviews of Effects (4006 out of 4006)	
<input type="checkbox"/>	The Cochrane Central Register of Controlled Trials (CENTRAL) (362540 out of 362540)	
<input type="checkbox"/>	The Cochrane Database of Methodology Reviews (16 out of 16)	
<input type="checkbox"/>	The Cochrane Methodology Register (CMR) (4553 out of 4553)	
<input type="checkbox"/>	About the Cochrane Collaboration (84 out of 84)	
<input type="checkbox"/>	Health technology assessment database (HTA) (3138 out of 3138)	
<input type="checkbox"/>	NHS Economic evaluation database (NHS EED) (11485 out of 11485)	

Search phrase:

atrial fibrillation

Go

Refine your search

(atrial next fibrillation) - 1457 hits

View selected • Unselect all • Save selected

Refine your search

[Send a comment about this review](#)

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(atrial next fibrillation) - 1457 hits

View selected • Unselect all • Save selected

☒ The Cochrane Database of Systematic Reviews
(47 out of 2935)

☒ Complete reviews (33 out of 1669)

documents 1 to 20 of 33



- ☒ 1. [Anticoagulants for acute ischaemic stroke](#)
- ☒ 2. Anticoagulants for preventing recurrence following presumed non-cardioembolic ischaemic stroke or transient ischaemic attack.
- ☒ 3. Anticoagulants for preventing stroke in patients with nonrheumatic atrial fibrillation and a history of stroke or transient ischemic attacks.
- ☒ 4. Anticoagulants or antiplatelet therapy

ANTICOAGULANTS FOR ACUTE ISCHAEMIC STROKE

Gubitz G, Counsell C, Sandercock P, Signorini D



Date of most recent substantive amendment: 22 February 1999

This review should be cited as: Gubitz G, Counsell C, Sandercock P, Signorini D. Anticoagulants for acute ischaemic stroke (Cochrane Review). In: *The Cochrane Library*, Issue 2, 2003. Oxford: Update Software.

ABSTRACT

Background

Most ischaemic strokes are caused by blood clots blocking an artery in the brain. Clot prevention with anticoagulant therapy could have a significant impact on patient survival, disability and recurrence of stroke.

Objectives

The objective of this review was to assess the effect of anticoagulant therapy in the early treatment of

Anticoagulants or antiplatelet therapy for non-rheumatic atrial fibrillation and flutter

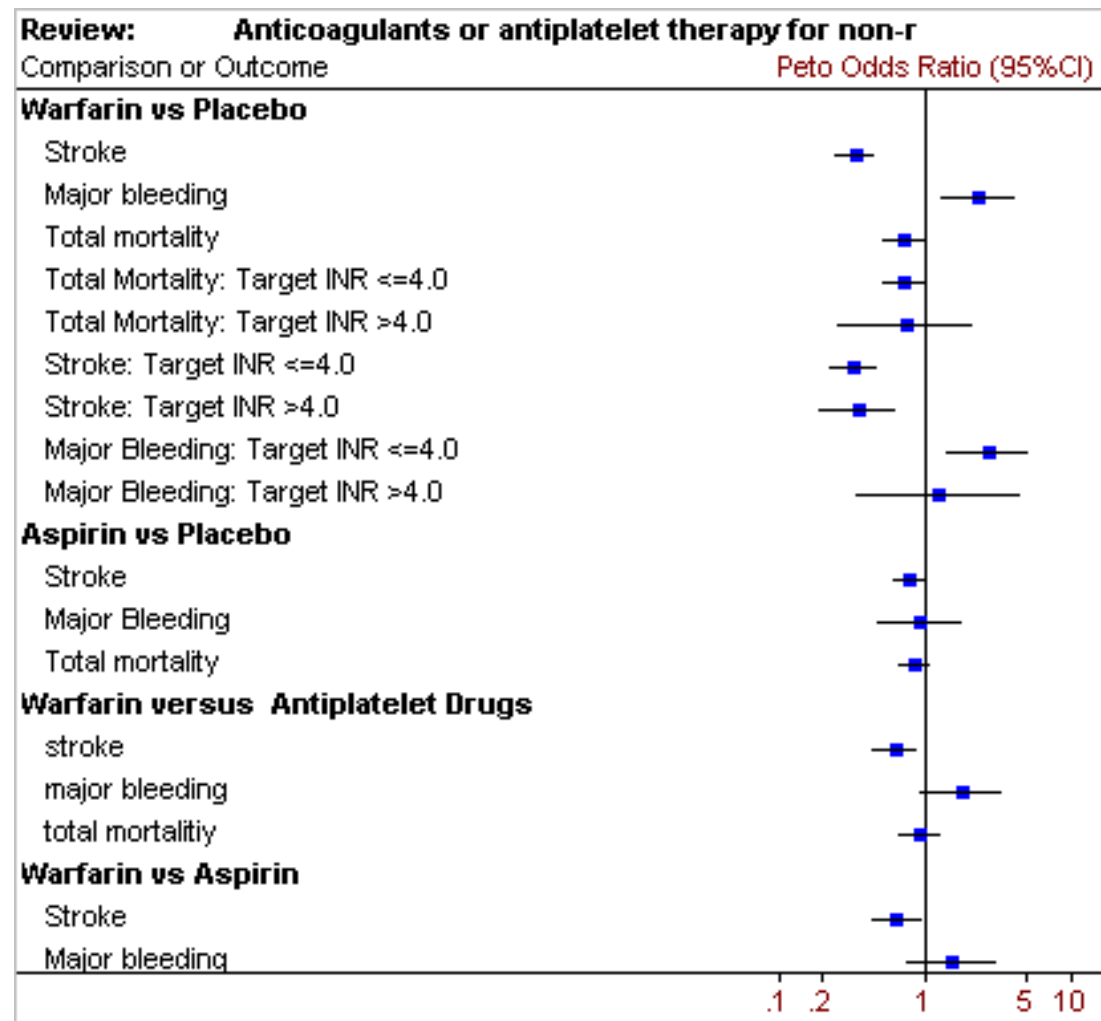
Segal JB, McNamara RL, Miller MR, Powe NR, Goodman SN, Robinson KA, Bass EB

Main results: Fourteen articles were included in this review. Warfarin was more efficacious than placebo for primary stroke prevention {aggregate odds ratio (OR) of stroke=0.30 [95% Confidence Interval (C.I.) 0.19,0.48]}, with moderate evidence of more major bleeding { OR= 1.90 [95% C.I. 0.89,4.04]}. Aspirin was inconclusively more efficacious than placebo for stroke prevention {OR=0.68 [95% C.I. 0.29,1.57]}, with inconclusive evidence regarding more major bleeds {OR=0.81[95% C.I. 0.37,1.78]}. For primary prevention, assuming a baseline risk of 45 strokes per 1000 patient-years, warfarin could prevent 30 strokes at the expense of only 6 additional major bleeds. Aspirin could prevent 17 strokes, without increasing major hemorrhage. In direct comparison, there was moderate evidence for fewer strokes among patients on warfarin than on aspirin {aggregate OR=0.64[95% C.I. 0.43,0.96]}, with only suggestive evidence for more major hemorrhage {OR =1.58 [95% C.I. 0.76,3.27]}. However, in younger patients, with a mean age of 65 years, the absolute reduction in stroke rate with warfarin compared to aspirin was low (5.5 per 1000 person-years) compared to an older group (15 per 1000 person-years). Low-dose warfarin or low-dose warfarin with aspirin was less efficacious for stroke prevention than adjusted-dose warfarin.

Reviewers' conclusions: The evidence strongly supports warfarin in AF for patients at average or greater risk of stroke, although clearly there is a risk of hemorrhage. Although not definitively supported by the evidence, aspirin may prove to be useful for stroke prevention in sub-groups with a low risk of stroke, with less risk of hemorrhage than with warfarin. Further studies are needed of low- molecular weight heparin and aspirin in lower risk patients.

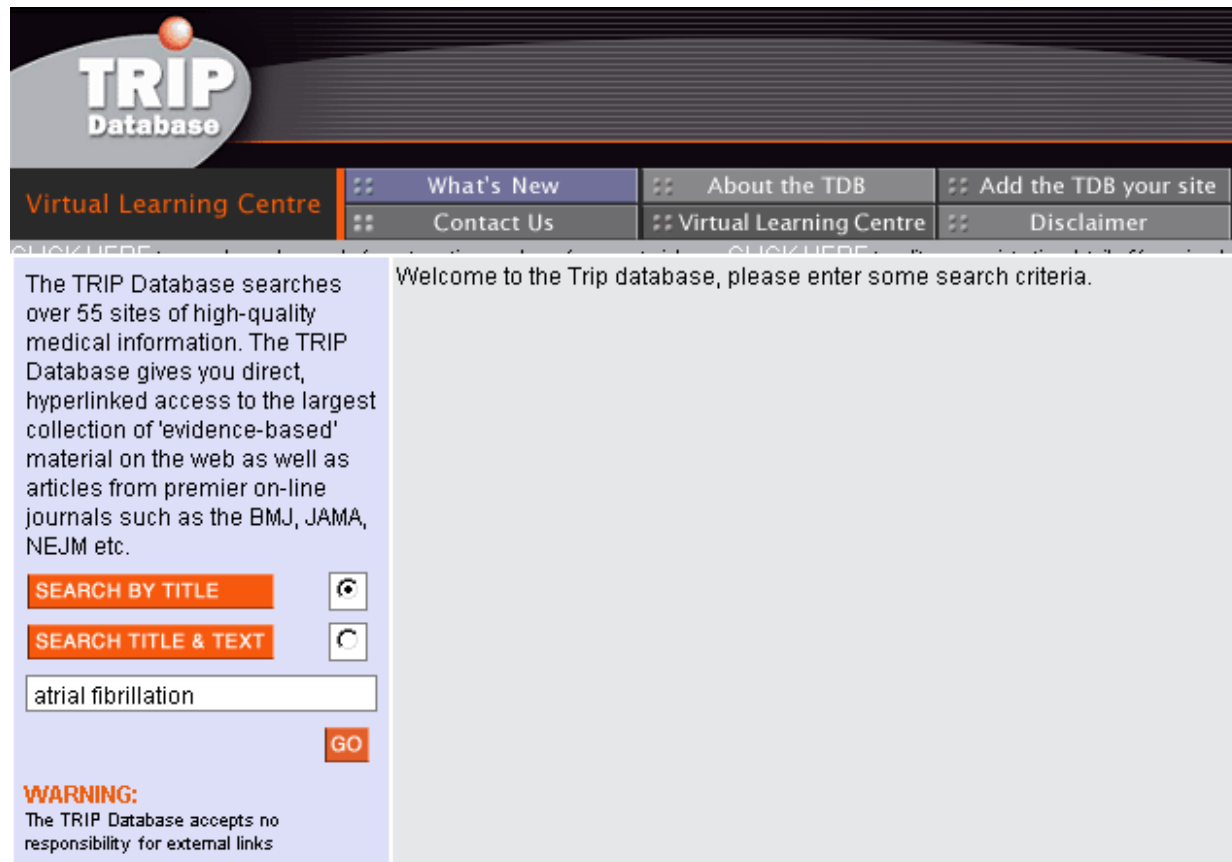
Tables & Graphs

- [MetaView graphs](#)



TRIP Database

[Website](http://www.tripdatabase.com)



The screenshot shows the TRIP Database website. At the top is the TRIP Database logo. Below it is a navigation bar with links: Virtual Learning Centre, What's New, About the TDB, Add the TDB your site, Contact Us, Virtual Learning Centre, and Disclaimer. The main content area is divided into two columns. The left column contains a description of the TRIP Database, search options (SEARCH BY TITLE and SEARCH TITLE & TEXT), a search bar with the text 'atrial fibrillation', and a GO button. The right column contains a welcome message and a large empty space for search results.

TRIP Database

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The TRIP Database searches over 55 sites of high-quality medical information. The TRIP Database gives you direct, hyperlinked access to the largest collection of 'evidence-based' material on the web as well as articles from premier on-line journals such as the BMJ, JAMA, NEJM etc.

SEARCH BY TITLE ☐

SEARCH TITLE & TEXT ☐

atrial fibrillation

GO

WARNING:
The TRIP Database accepts no responsibility for external links

Welcome to the Trip database, please enter some search criteria.

(75 resources...)

www.tripdatabase.com

Search RESULTS: You searched on **atrial fibrillation** Total records matched > 79 of 24709

Evidence-Based (Direct links)	Records Matched: 43
Query-answering services	Records Matched: 0
Peer-reviewed journal	Records Matched: 29
Guidelines	Records Matched: 3
eTextbooks	Records Matched: 4
Experimental links to Clinical Queries on PubMed.	

REPEAT SEARCH FOR: **atrial fibrillation** using title and text **GO**

Search within these results **GO**

☒ Search by: TITLE ONLY ☐ Search by: TITLE & TEXT

New Search **GO**

☒ Search by: TITLE ONLY ☐ Search by: TITLE & TEXT

Evidence-Based (Direct links) The links under this section come from 'Evidence based sources', i.e. they have been pre-critically appraised using a pre-defined method. Most sites have been recommended from the 'Netting the Evidence' site. (<http://www.shef.ac.uk/~scharr/ir/netting.html>)

Initial energy for elective external cardioversion of persistent atrial fibrillation ACP Journal Club	2001
Comparing digoxin with amiodarone and sotalol for converting new onset atrial fibrillation POBMs	2001
Prevalence of atrial fibrillation (AF) Bandolier	2001
Amiodarone as a first-choice drug for restoring sinus rhythm in patients with atrial fibrillation . A randomized,	2001

Query-answering services The sources used in this section specifically respond to clinical queries received from practitioners/purchasers. The query-answering process is not uniform and the quality may vary. You are strongly advised to familiarise yourself with the strengths and weaknesses of each sources approach.

Peer-reviewed journal The links in this section are from peer-reviewed journals. As such they have not undergone a systematic critical appraisal.

Warfarin Therapy for an Octogenarian Who Has atrial fibrillation Annals of Internal Medicine	2001
Incident Thromboembolism in the Aorta and the Renal, Mesenteric, Pelvic, and Extremity Arteries After Discharge From the Hospital With a Diagnosis of atrial fibrillation Archives of Internal Medicine	2001
Systematic review of long term anticoagulation or antiplatelet treatment in patients with non-rheumatic atrial	2001

Guidelines The links in this section are taken from sites whose main remit is the production of guidelines. NOTE: Other guidelines may appear in other sections.

Preventive health care, 2000 update. Use of ambulatory electrocardiography for the detection of paroxysmal atrial fibrillation in patients with stroke. National Guideline Clearinghouse	2001
--	------

atrial fibrillation PRODIGY	2001
---------------------------------------	------

atrial fibrillation: current knowledge and recommendations for management European Society for Cardiology	1998
---	------

eTextbooks The links in this section originate predominantly from eTextbooks and similar sources - as with other textbooks they may not be regularly updated.

atrial fibrillation eMedicine.com	2000
---	------

Sustained atrial fibrillation Mack Manual (13th Edition)	1999
--	------

Experimental links to Clinical Queries on Pubmed. These will return a number of hits - some of which will be inappropriate. To refine your search further find at least one article that matches your query and use the related article function to improve your search.

Therapy emphasis

Diagnosis emphasis

Etiology emphasis

Prognosis emphasis

- [National Guideline Clearinghouse***](#) -
- [Cochrane***](#) - Systematic reviews of literature
- [TRIP - CeRes***](#) - British meta-search engine
- [Clinical Queries - PubMed***](#) - Evidence-based medicine
- [UpToDate***](#) - Topic reviews on specific clinical topics
- [MD Consult](#) - Practice guidelines, clinical decision support
- [Clinical Evidence Online**](#) - Provides a searchable database of clinical evidence
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- [SUM Search - Univ. of Texas](#) - Meta-search engine
- [Bandolier](#) - Reviewed literature, offers summaries

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135 titles matching: **Atrial fibrillation**

Most Relevant Topics (30 titles)

- [Causes of atrial fibrillation](#)
- [Overview of the presentation and management of atrial fibrillation](#)
- [Paroxysmal atrial fibrillation](#)
- [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials](#)
- [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations](#)
- [Anticoagulation during restoration of sinus rhythm in atrial fibrillation](#)
- [Anticoagulation to prevent embolization in chronic atrial fibrillation: Clinical trials](#)
- [Anticoagulation to prevent embolization in chronic atrial fibrillation: Recommendations](#)
- [Arrhythmias after cardiac surgery: Atrial fibrillation and atrial flutter](#)

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations

▶ [GENERAL PRINCIPLES](#)

▶ [RECOMMENDATIONS](#)

- ▶ [Lone atrial fibrillation](#)
- ▶ [AF associated with structural heart disease](#)
- ▶ [Drug-refractory AF](#)

▶ [REFERENCES](#)

GRAPHICS

- ▶ [ACC/AHA/ESC drugs maintain NSR](#)
- ▶ [ACC/AHA pharm Rx paroxysmal AF](#)
- ▶ [ACC/AHA drugs perm persist AF](#)
- ▶ [ACC/AHA drugs maintain NSR AF](#)
- ▶ [Drug doses maintain NSR](#)
- ▶ [Types of proarrhythmia AADs](#)
- ▶ [Quinidine in AF](#)
- ▶ [ACC/AHA oral drug HR control AF](#)
- ▶ [Proarrhythmia in CAST](#)

RELATED TOPICS

- ▶ [Restoration of sinus rhythm in atrial fibrillation: Recommendations](#)
- ▶ [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion](#)

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations

[Morton F Arnsdorf, MD](#)

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.1 is current through December 2001; this topic was last changed on November 9, 2001. The next version of UpToDate (10.2) will be released in June 2002.

GENERAL PRINCIPLES — DC shock and antiarrhythmic drugs are usually effective in converting atrial fibrillation (AF) to a sinus mechanism, thereby improving symptoms, lessening the liability for the development of a tachycardia-induced cardiomyopathy involving the ventricles and atria, and minimizing the long-term risk of peripheral and cerebral emboli. ([See "Restoration of sinus rhythm in atrial fibrillation: Recommendations"](#)).

However, maintenance of normal sinus rhythm (NSR) is often problematic. Only 20 to 30 percent of patients who are successfully cardioverted will maintain NSR for more than one year without chronic antiarrhythmic therapy [[1-7](#)]. The risk of recurrence is highest in the patient who has hypertension, an enlarged LA, AF for more than one year, or heart failure [[8](#)]. On the other hand, patients who are most likely to maintain NSR usually have one or more of the following characteristics:

- LA size less than 4.5 or 5 cm

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials

▶ CLASS IA ANTIARRHYTHMIC DRUGS

• Efficacy and proarrhythmia

▶ CLASS IC ANTIARRHYTHMIC DRUGS

▶ CLASS III ANTIARRHYTHMIC AGENTS

• Sotalol

• Amiodarone

• Dofetilide

• Azimilide

• Ibutilide

▶ BETA BLOCKERS

▶ MAGNESIUM

▶ COMBINATION ANTIARRHYTHMIC DRUG THERAPY

▶ HYBRID THERAPY IN PATIENTS WHO DEVELOP ATRIAL FLUTTER

▶ REFERENCES

GRAPHICS

▶ Quinidine in AF

▶ Proarrhythmia in CAST

▶ AF sotalol versus amiodarone

▶ Post CABG AF with amiodarone

▶ Embolic risk with AF

▶ Warfarin in AF

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials

[Morton F Arnsdorf, MD, MACC](#)

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.1 is current through December 2001; this topic was last changed on December 5, 2001. The next version of UpToDate (10.2) will be released in June 2002.

DC shock and antiarrhythmic drugs are usually effective in converting atrial fibrillation (AF) to a sinus mechanism, thereby improving symptoms, lessening the liability for the development of a tachycardia-induced cardiomyopathy involving the ventricles and atria, and minimizing the long-term risk of peripheral and cerebral emboli. ([See "Restoration of sinus rhythm in atrial fibrillation: Recommendations"](#)).

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Getting to PubMed



PubMed Response

for

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Display

Show: Page 1 of 795

☐ 1: [Kalaria RN.](#)

Small vessel disease and Alzheimer's dementia: pathological consideration
Cerebrovasc Dis. 2002;13 Suppl 2:48-52.
PMID: 11901243 [PubMed - in process]

☐ 2: [Bertomeu Martinez V, Morillas Blasco PJ, Gonzalez Juanatey JR, Alegria Ezquerro
Gonzalez Maqueda I, Frutos Garcia A, Valero Parra R, Rodriguez Ortega JA.](#)

[Antithrombotic treatment in hypertensive patients with chronic atrial fibrillation]
Med Clin (Barc). 2002 Mar 16;118(9):327-31. Spanish.
PMID: 11900700 [PubMed - in process]

☐ 3: [Chinushi Y, Chinushi M, Toida T, Aizawa Y.](#)

Class I antiarrhythmic drug and coronary vasospasm-induced T wave alteration
tachyarrhythmia in a patient with Brugada syndrome and vasospastic angina
J Cardiovasc Electrophysiol. 2002 Feb;13(2):101-4.

- [National Guideline Clearinghouse***](#) -
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- [TRIP - CeRes***](#) - British meta-search engine
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The New PubMed!

This new version of PubMed has a single search interface with pull-down menus that display search field limits, indexes, your search history, and a clipboard for gathering selected articles. See [help](#) and [FAQ](#) for more information.

PubMed, Clinical Query, cont'd

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Clinical Queries using Research Methodology Filters

This specialized search is intended for clinicians and has built-in search "filters" based largely upon [Haynes RB et al.](#) Four study categories--therapy, diagnosis, etiology, prognosis--are provided, and you may indicate whether you wish your search to be more sensitive (i.e., include most relevant articles but probably including some less relevant ones) or more specific (i.e. including mostly relevant articles but probably omit a few). See [this table](#) for details regarding filtering.

Indicate the category and emphasis below:

Category: ☒ therapy ☐ diagnosis ☐ etiology ☐ prognosis

Emphasis: ☒ sensitivity ☐ specificity

Enter subject search (do not repeat any of the words above):

Question (points to the Category section)

Context (points to the Emphasis section)

Subject matter (points to the search input field)

Controlled Vocabulary for Subject Matter

[All MeSH Categories](#)

[Diseases Category](#)

[Cardiovascular Diseases](#)

[Heart Diseases](#)

[Arrhythmia](#)

Atrial Fibrillation

[All MeSH Categories](#)

[Diseases Category](#)

[Pathological Conditions, Signs and Symptoms](#)


[Pathologic Processes](#)

[Arrhythmia](#)


Atrial Fibrillation

☐ blood ☐ chemically induced ☐ classification ☐ complications ☐ congenital ☐ diagnosis ☐ drug therapy ☐ economics
☐ embryology ☐ enzymology ☐ epidemiology ☐ ethnology ☐ etiology ☐ genetics ☐ history ☐ immunology ☐ metabolism
☐ mortality ☐ nursing ☐ pathology ☐ physiopathology ☐ prevention and control ☐ psychology ☐ radiography ☐ radionuclide
imaging ☐ radiotherapy ☐ rehabilitation ☐ surgery ☐ therapy ☐ ultrasonography ☐ urine ☐ veterinary

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- Key concepts!
- Auther

Stopwords

Stopwords	
A	a, about, again, all, almost, also, although, always, among, an, and, another, any, are, as, at
B	be, because, been, before, being, between, both, but, by
C	can, could
D	did, do, does, done, due, during
E	each, either, enough, especially, etc
F	for, found, from, further
H	had, has, have, having, here, how, however
I	i, if, in, into, is, it, its, itself
J	just
K	kg, km
M	made, mainly, make, may, mg, might, ml, mm, most, mostly, must
N	nearly, neither, no, nor
O	obtained, of, often, on, our, overall
P	perhaps, pmid
Q	quite
R	rather, really, regarding
S	seem, seen, several, should, show, showed, shown, shows, significantly, since, so, some, such
T	than, that, the, their, theirs, them, then, there, therefore, these, they, this, those, through, thus, to
U	upon, use, used, using
V	various, very
W	was, we, were, what, when, which, while, with, within, without, would

MeSH(The Medical Subject Headings)

Examples of MeSH Headings:

- **Body Weight**
- **Dental Cavity Preparation**
- **Radioactive Waste**
- **Kidney**
- **Self Medication**
- **Brain Edema**

Face

Cheek
Chin
Eye
Eyebrows
Eyelids
Eyelashes
Forehead
Mouth
Lip
Nose
Parotid Region

<http://www.youtube.com/watch?v=uyF8uQY9wys>

Exercise

- Use the MeSH Database to build a strategy that will find citations to references discussing the economics of community-acquired pneumonia.

Exercise

- Use the NLM Catalog Journal search page to see if PubMed includes the journal, *Molecular Microbiology*. If so, retrieve all PubMed citations from this journal.

Exercise

- Use the Clinical Queries to find systematic reviews for accidents caused by sleep deprivation.

Search

- What role does pain have in sleep disorders?

Search

- To search for citations to articles written by Bonnie W. Ramsey about gene therapy for cystic fibrosis

Search

- To search for citations to articles about drosophila in the journal Molecular Biology of the Cell

Exercise

- Find citations to articles about the ethics of liver transplantation. Check Details to see how the terms are mapped. Filter to review articles. Select a few items and add them to the Clipboard. Go to the Clipboard and view the selected items in Abstract format to see the assigned MeSH terms.

Exercise

- Use the MeSH Database to build a strategy that will find citations to articles about schizophrenia resulting from prenatal exposure to influenza. Schizophrenia and influenza should be the major topics of the articles.

361,987
عدد مرات مشاهدة الفيديو

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4,782

اشترك



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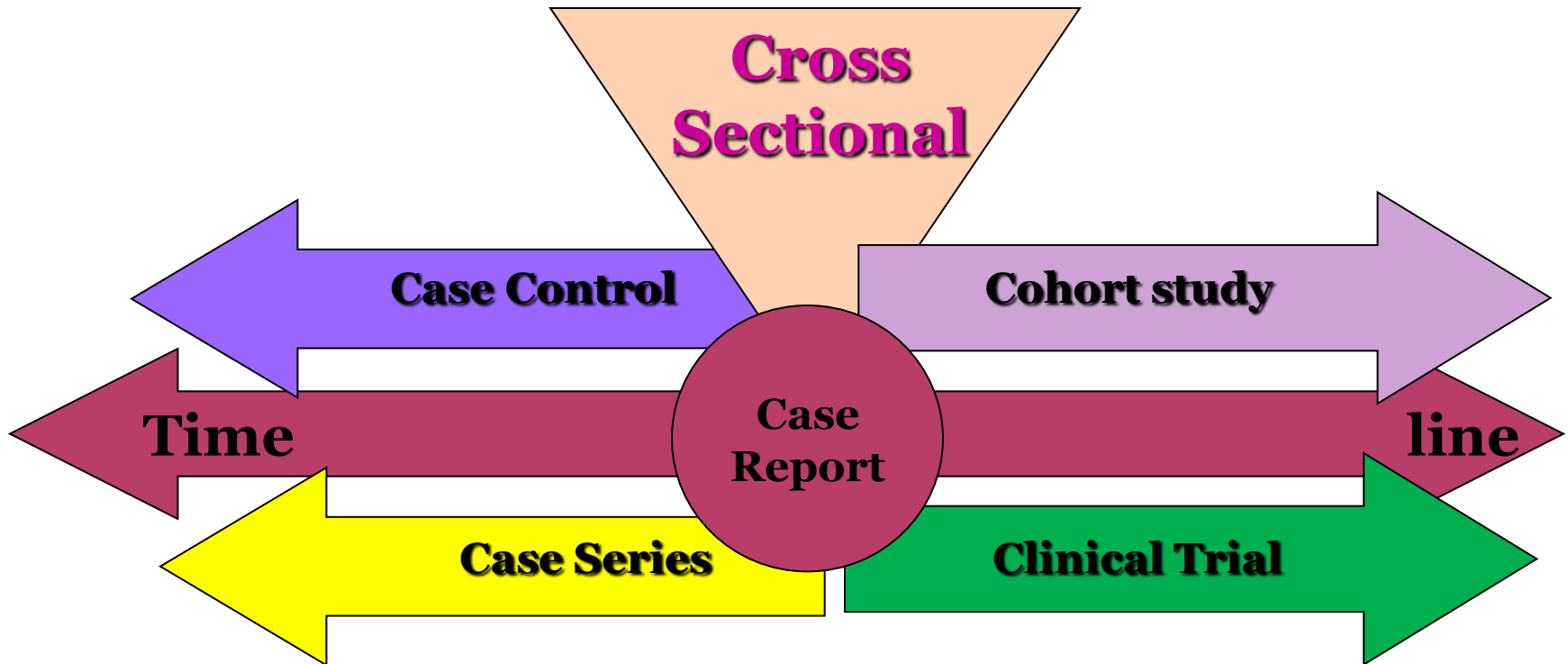
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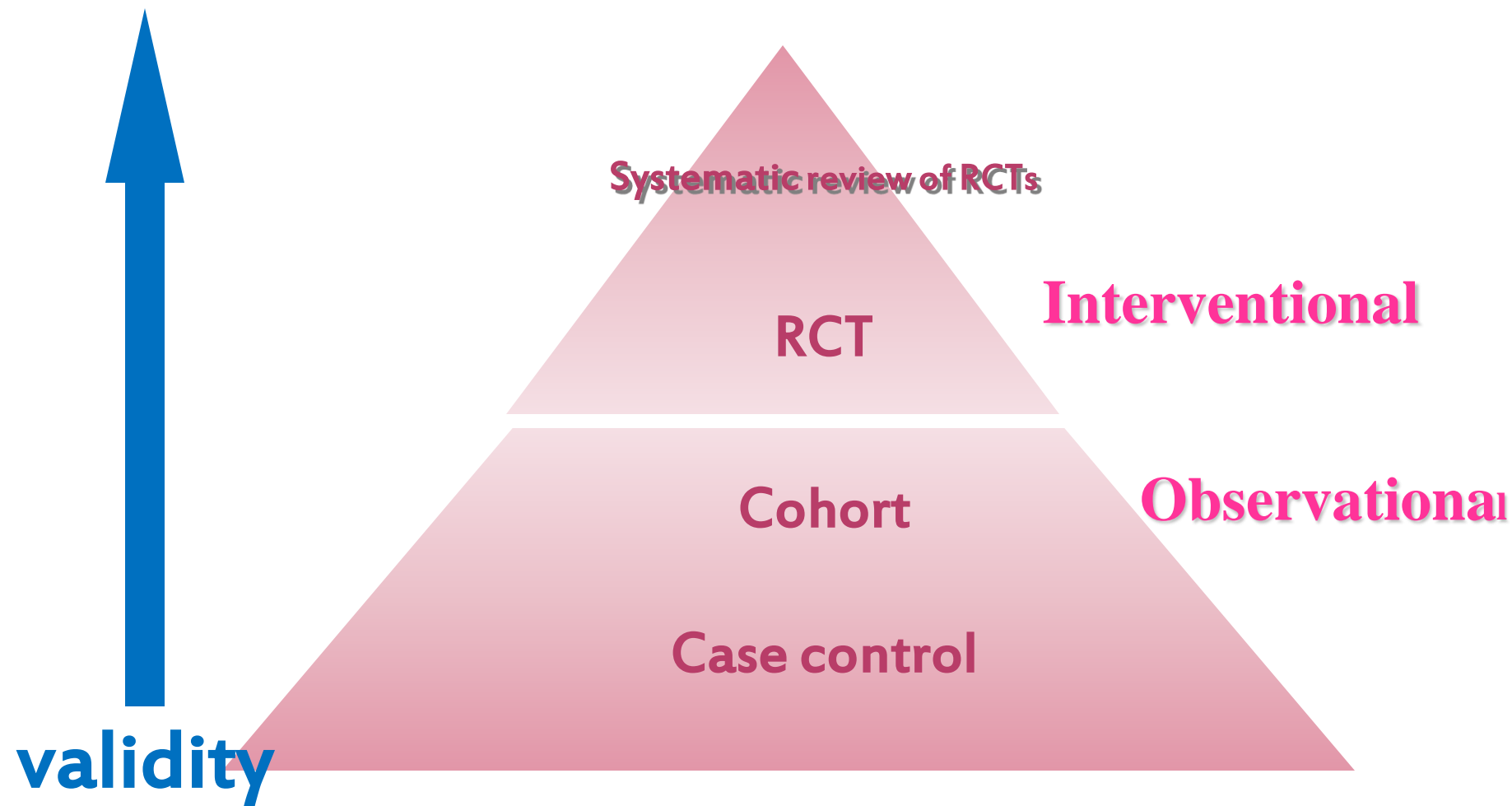
Types of Studies

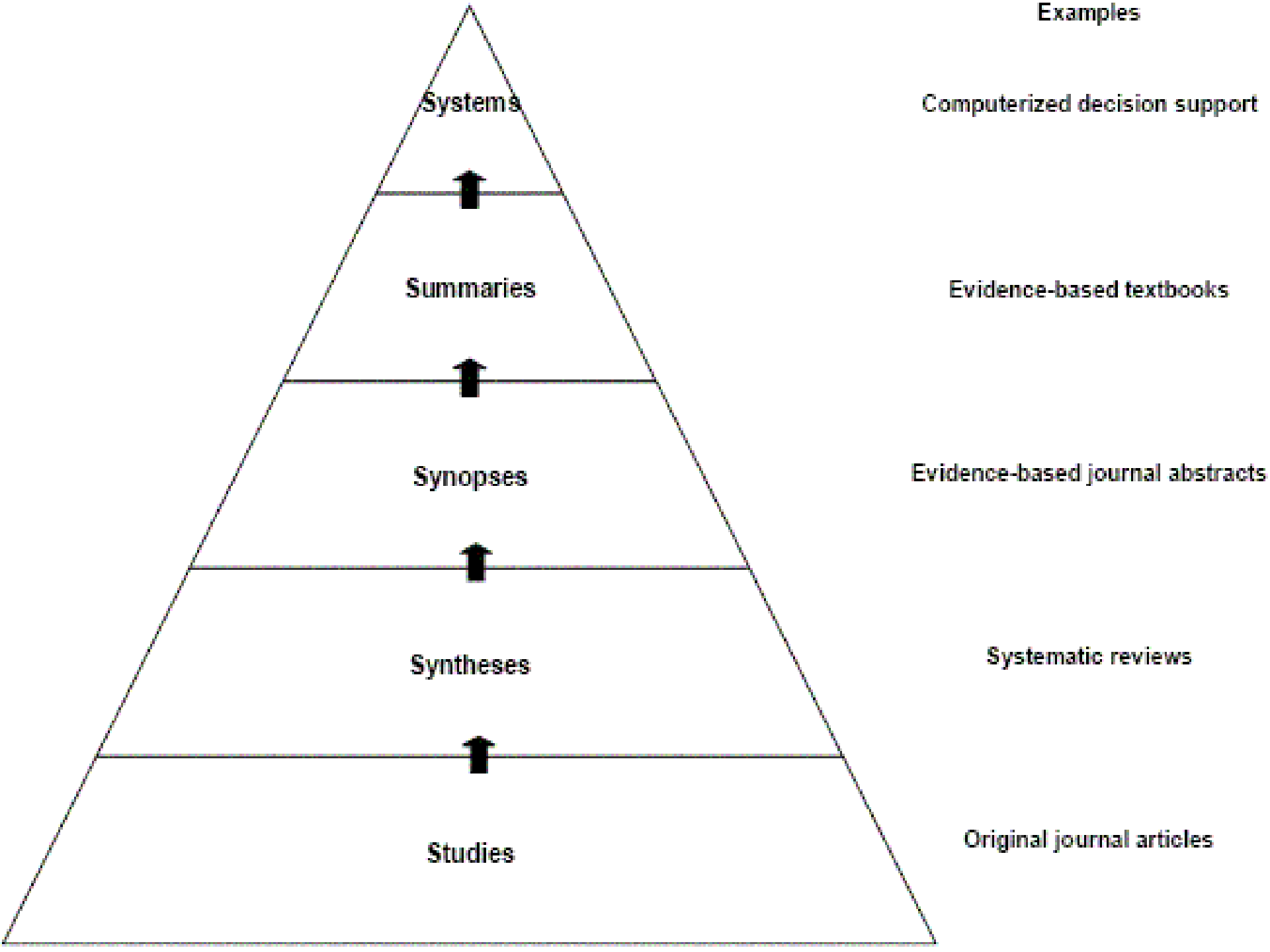


Types of Epidemiological Studies

- Observational
 - Case Reports, Case series
 - Cross - Sectional
 - Case- Control
 - Cohort
- Interventional
 - Clinical Trials

Hierarchy of major study designs







Thank You!

