



MOUNT CARMEL
Health Sciences Library



MCHSL PubMed Mechanics Workshop

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Outline

PubMed: The U.S. National Library of Medicine's (NLM's) search system for literature in the health fields.

Four main types of results:

- **MEDLINE**, the NLM's core medical database.
- **OLDMEDLINE** which contains citations from 1948 -1965.
- In-process citations not yet indexed.
- Publisher-contributed individual articles.

Purpose

To gain an understanding of the most popular search features of **PubMed** which will improve and enhance searching abilities.

Objective

The objective is to familiarize you with PubMed and to feel comfortable performing searches.

Learning Outcomes

After completing the workshop, you will know how to effectively use PubMed in your searches, including:

- Basic and Advanced Searching
- MeSH
- Filters
- Clinical Queries
- Saving to Clipboard (My NCBI)
- Access Full-Text articles





Accessing PubMed

Click on PubMed from the top bar on the Library's (MCHSL) website (library.mchs.com).

Accessing PubMed through the library will sync MCHSL's journal subscriptions to records in PubMed, making it easier and faster to access full-text articles.

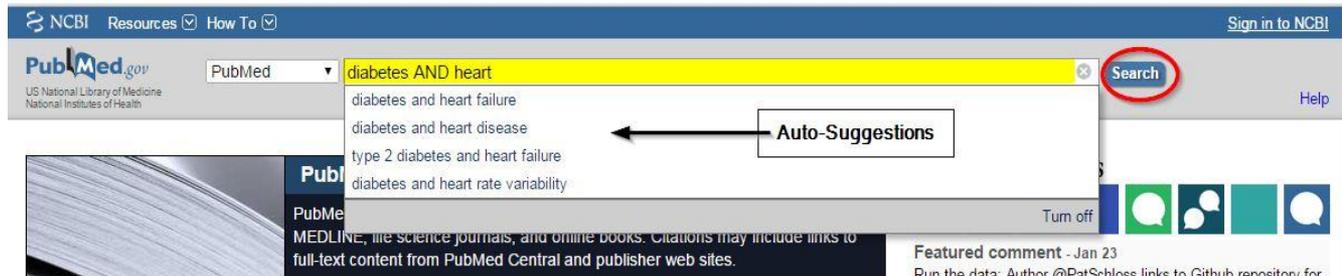
The screenshot shows the PubMed website interface. At the top, there is a navigation bar with 'NCBI Resources' and 'How To' links, and a 'Sign in to NCBI' link. Below this is the 'PubMed.gov' header with the 'US National Library of Medicine' and 'National Institutes of Health' logos. A search box is present with a dropdown menu set to 'PubMed' and a 'Search' button. A large number '1' is placed over the search box. Below the header is a 'PubMed' section with a description: 'PubMed comprises more than 24 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.' To the right is a 'PubMed COMMONS' section with a 'Featured comment' by 'May 6' titled 'Metaphors in medical decision-making: Health Behaviour Research Centre Journal Club on an approach to describing flu.' Below these sections are three columns of links. The first column is titled 'Using PubMed' and contains links for 'PubMed Quick Start Guide', 'Full Text Articles', 'PubMed FAQs', 'PubMed Tutorials', and 'New and Noteworthy'. A large number '2' is placed over this column. The second column is titled 'PubMed Tools' and contains links for 'PubMed Mobile', 'Single Citation Matcher', 'Batch Citation Matcher', 'Clinical Queries', and 'Topic-Specific Queries'. A large number '3' is placed over this column. The third column is titled 'More Resources' and contains links for 'MeSH Database', 'Journals in NCBI Databases', 'Clinical Trials', 'E-Utilities (API)', and 'LinkOut'. A large number '4' is placed over this column.

1. **Search Box.** Enter terms here.
2. **Using PubMed:** Lists of tutorials and starter guides.
3. **PubMed Tools:** Searching tools. Use Single Citation Matcher to find articles from citations and use [Clinical Queries](#) to search only clinical resources (meta-analyses, systematic reviews, randomized controlled trials, etc).
4. **More Resources:** Additional resources. Use the MeSH Database to search using Medical Subject Headings.



Search Box

The search box is at the top of the homepage and each additional search page. Type keywords or concepts in the search box; auto-suggestions will appear to show what others have searched.



If searching more than one topic, use Boolean operators **AND**, **OR**, or **NOT**. Boolean operators must be capitalized.

- **AND:** Combines two concepts; this refines searches and lowers the number of results (ex. diabetes AND heart disease).
- **OR:** Searches for results with either search concepts. This will expand the search and increase the results. (ex. diabetes OR heart disease).
- **NOT:** Excludes specific terms. This will limit the search and decrease the results. (ex. diabetes NOT heart disease). **Use with caution: many comprehensive studies (such as systematic reviews or meta-analyses) will discuss several concepts and using **NOT** will exclude these high-level results.**



MeSH

PubMed is indexed using MeSH (Medical Subject Headings). This means that records in PubMed have terms connected to them based on the type and content of the article. Searching with MeSH enables extreme precision when searching in PubMed.

- To search using MeSH terms, go to the [PubMed homepage](#) and click on "[MeSH database](#)" in column 3.
- Type a concept and see if any MeSH terms relate. If no results appear, make the concept less specific and try again.
- Click on a term to see the MeSH record. The record includes the definition, subheadings, entry terms (words that will trigger a search using the MeSH heading), and the hierarchical tree. If the term is relevant, click "Add to search builder" and click "Search PubMed" to see the results.

Display Settings: Full

Stroke

A group of pathological conditions characterized by sudden, non-convulsive loss of neurological function due to BRAIN ISCHEMIA or INTRACRANIAL HEMORRHAGES. Stroke is classified by the type of tissue NECROSIS, such as the anatomic location, vasculature involved, etiology, age of the affected individual, and hemorrhagic vs. non-hemorrhagic nature. (From Adams et al., Principles of Neurology, 6th ed, pp777-810)

Year introduced: 2008 (2000)

PubMed search builder options

[Subheadings:](#)

Send to: Full

PubMed Search Builder

"Stroke"[Mesh]

Add to search builder AND

Search PubMed

YouTube Tutorial



Display Settings

The Display Settings customize how the results are displayed and sorted.

- The default **Format** setting is Summary but can be switched to Abstract.
- The default **Results per page** is 20 but can be switched from 5 to 200.
- The default **Sort by** setting is Recently Added but can be switched to Pub Date or Relevance.

The screenshot shows a PubMed search interface. At the top, the search term is "heart disease AND pregnancy". Below the search bar, there are options for "Summary", "20 per page", and "Sort by Most Recent". A dropdown menu is open, showing the "Format" settings with the following options: Summary (selected), Summary (text), Abstract, Abstract (text), MEDLINE, XML, and PMID List. The search results are displayed in a list format, with the first result being "Pregnancy and pulmonary arterial hypertension: A clinical conundrum" by Sahni S, Palkar AV, Rochelson BL, Kępa W, Talwar A. The second result is "Epidemiology and outcomes of peripartum cardiomyopathy in the United States: findings from the Nationwide Inpatient Sample" by Krishnamoorthy P, Garg J, Palaniswamy C, Pandey A, Ahmad H, Frishman WH, Lanier G. The third result is "Antibodies against AT1-receptor in transplantation (diagnostics, treatment, clinical relevance)" by Barz D, Friedrich S, Schuller A, Rummler S. The fourth result is "Continuous Glucose Monitoring in Type 1 Diabetes Pregnancy Shows that Fetal Heart Rate Correlates with Maternal Glycemia" by Cypryk K, Bartyzel L, Zurawska-Klis M, Mlynarski W, Szadkowska A, Wilczynski J, Nowakowska D, Wozniak LA, Fendler W. The fifth result is "Contraception and cardiovascular disease" by Roos-Hesselink JW, Cornette J, Sliwa K, Pieper PG, Veldtman GR, Johnson MR.



Filters

An unfiltered search can result in a large list of results. Use the filters located in the left-hand column to refine the results.

Filters activated indicates the filters that are applied.

1. "Customize ..."
 - Add filters.
2. "Show additional filters"
 - Add filter options.
3. Checkmark
 - Apply filters to search.
4. "Clear"
 - Remove filters in set category.
5. "Clear all"
 - Remove all filters.

The screenshot shows the PubMed search interface. At the top, the search query is "heart disease AND pregnancy". Below the search bar, there are several filter categories on the left side, each with a checkmark indicating it is active:

- Article types:** Clinical Trial, Comparative Study, Guideline, Meta-Analysis, Practice Guideline, Randomized Controlled Trial, Review, Systematic Reviews, Customize ...
- Text availability:** Abstract, Free full text, Full text
- Publication dates:** 5 years, 10 years, Custom range...
- Species:** Humans, Other Animals
- Languages:** English, Customize ...
- Ages:** Child: birth-18 years, Infant: birth-23 months, Adult: 19+ years, Adult: 19-44 years, Aged: 65+ years, Customize ...

On the right side, the search results are displayed. The first result is titled "Estimation of changes in maternal mortality in a rural district of northern Tanzania during years." and is marked with a blue 'i' icon. Above the results, it says "Results: 1 to 20 of 57". A blue arrow points from the text "Filters activated" to the 'i' icon. Below the results, there are several other titles, each with a checkbox and a link to "Related citations".

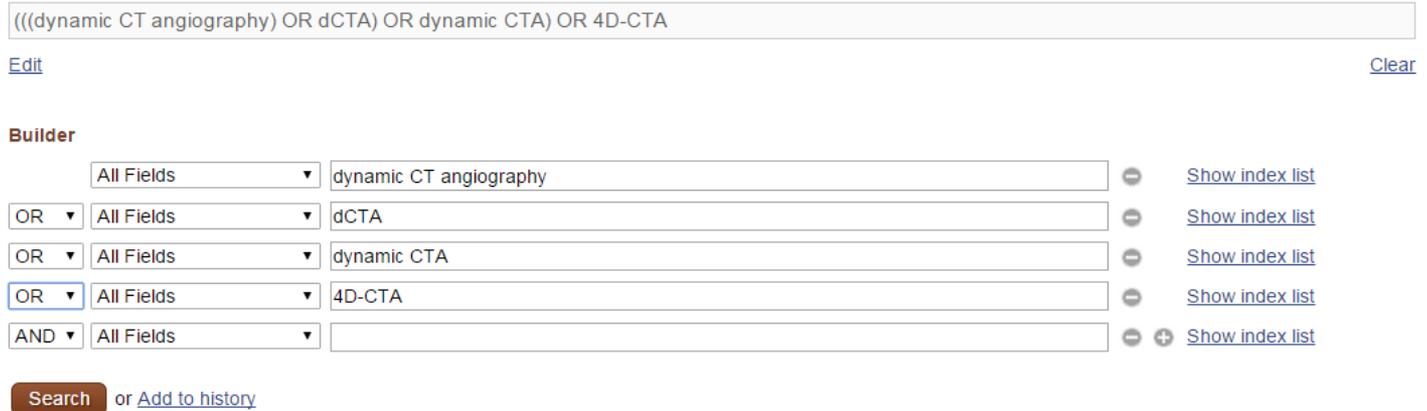


Advanced Search

Another way to search is to use the Advanced Search Builder, found under the main search box on any page.



The Advanced Search Builder makes it easier to build complex searches or to search in specific fields such as Author, Title, Subject, etc.



Search History

- To combine the two previous searches topics, we can click "Add" under the column "Add to builder."

History [Download history](#) [Clear history](#)

Search	Add to builder	Query	Items found	Time
#2	Add	Search ischemic stroke	62283	10:45:56
#1	Add	Search (((dynamic CT angiography) OR dCTA) OR dynamic CTA) OR 4D-CTA	1655	10:45:10

- Clicking "Add" will automatically add the terms to the search builder.

(ischemic stroke) AND (((dynamic CT angiography) OR dCTA) OR dynamic CTA) OR 4D-CTA

[Edit](#)

[Clear](#)

Builder

All Fields [Show index list](#)

AND All Fields [Show index list](#)

AND All Fields [Show index list](#)

[Search](#) or [Add to history](#)

- Clicking "Add to history" will show you the number of results for that search. To see the results, either click on the number under "Items found" or click "Search" above.

History [Download history](#) [Clear history](#)

Search	Add to builder	Query	Items found	Time
#3	Add	Search (ischemic stroke) AND (((dynamic CT angiography) OR dCTA) OR dynamic CTA) OR 4D-CTA)	59	10:48:15
#2	Add	Search ischemic stroke	62283	10:45:56
#1	Add	Search (((dynamic CT angiography) OR dCTA) OR dynamic CTA) OR 4D-CTA	1655	10:45:10

Clinical Queries

To search only for Clinical resources, click on “[Clinical Queries](#)” from the PubMed Homepage (Column 2) or from the [Library Databases page](#).

Type the topic in box and click “Search.”

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use [PubMed](#)

heart disease AND breast cancer

Clinical Study Categories

Category:
 Scope:

Results: 5 of 2659

Women's Health Initiative estrogen plus progestin clinical trial: a study that does not allow establishing relevant clinical risks.
 Aedo S, Cavada G, Blümel JE, Chedraui P, Fica J, Barriga P, Brantes S, Iribarra C, Vallejo M, Campodónico I.
 Menopause. 2015 May 11. Epub 2015 May 11.

The Postmenopausal Woman
 Al-Safi Z, McAvery B, Santoro N.
 Endotext. 2000-.
 2013 Jul 1

Menopausal Symptoms: Comparative Effectiveness of Therapies
 Grant MD, Marbella A, Wang AT, Pines E, Hoag J, Bonnell C, Ziegler KM, Aronson N.
 2015 Mar.

Infertility etiologies are genetically and clinically linked with other diseases in single meta-diseases.
 Tarín JJ, García-Pérez MA, Hamatani T, Cano A.
 Reprod Biol Endocrinol. 2015 Apr 15; 13(1):31. Epub 2015 Apr 15.

A rare truncating BRCA2 variant and genetic susceptibility to upper aerodigestive tract cancer.
 Delahaye-Sourdeix M, Anantharaman D, Timofeeva MN, Gaborieau V, Chabrier A, Vallée MP, Lagiou P, Holcátová I, Richiardi L, Kjaerheim K, et al.
 J Natl Cancer Inst. 2015 May; 107(5). Epub 2015 Apr 2.

[See all \(2659\)](#)

Systematic Reviews

Results: 5 of 180

Menopausal Symptoms: Comparative Effectiveness of Therapies
 Grant MD, Marbella A, Wang AT, Pines E, Hoag J, Bonnell C, Ziegler KM, Aronson N.
 2015 Mar.

The global impact of non-communicable diseases on macro-economic productivity: a systematic review.
 Chaker L, Falla A, van der Lee SJ, Muka T, Imo D, Jaspers L, Colpani V, Mendis S, Chowdhury R, Bramer WM, et al.
 Eur J Epidemiol. 2015 Apr 3. Epub 2015 Apr 3.

Evidence base of clinical studies on Tai Chi: a bibliometric analysis.
 Yang GY, Wang LQ, Ren J, Zhang Y, Li ML, Zhu YT, Luo J, Cheng YJ, Li WY, Wayne PM, et al.
 PLoS One. 2015; 10(3):e0120655. Epub 2015 Mar 16.

Omega-3 polyunsaturated fatty acids and non-communicable diseases: meta-analysis based systematic review.
 Li D.
 Asia Pac J Clin Nutr. 2015; 24(1):10-5.

The utility of cardiac stress testing for detection of cardiovascular disease in breast cancer survivors: a systematic review.
 Kirkham AA, Virani SA, Campbell KL.
 Int J Womens Health. 2015; 7:127-40. Epub 2015 Jan 23.

[See all \(180\)](#)

The 1st column is Clinical Studies, such as RCT, cohort studies, research support, and more.

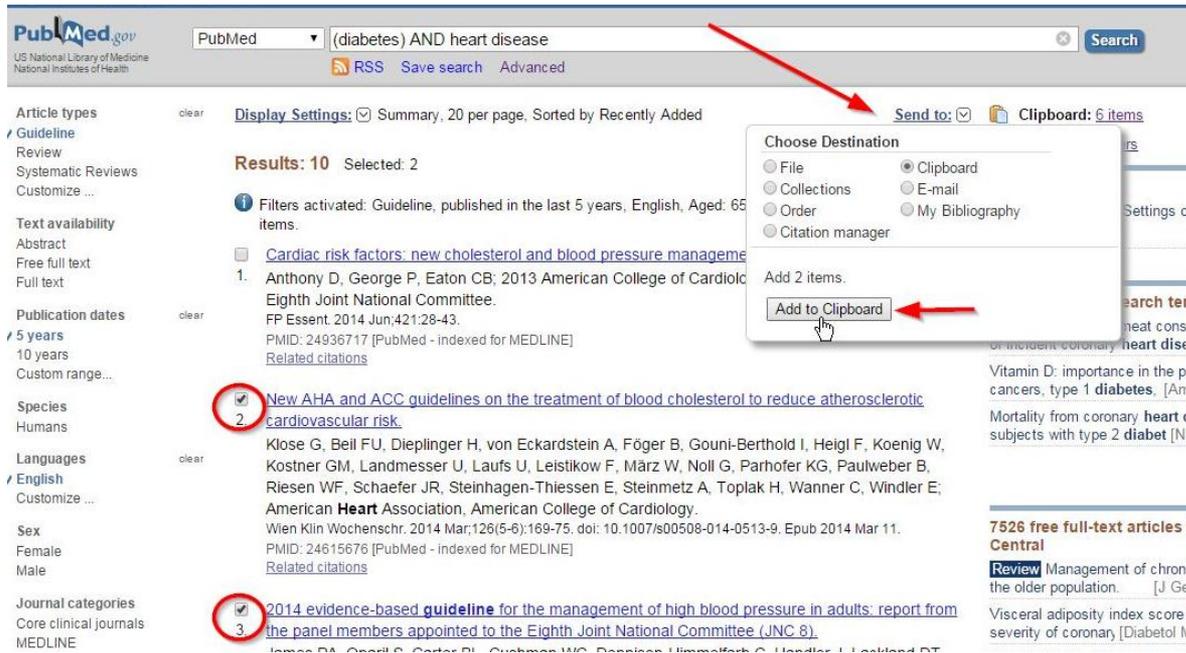
To see all clinical studies, click “See all.”

The 2nd column shows only Systematic Reviews. To see all results, click “See all.”

Clicking “See all” for either category will open up the results in the regular PubMed results screen, at which point filters can be applied for a more precise search.

Saving to Clipboard

Results can be temporarily saved in the Clipboard. To add results to the Clipboard, click on the box next to the result, click on the arrow next to "Send to:" and select "Add to Clipboard."



PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed (diabetes) AND heart disease Search

Article types
Guideline
Review
Systematic Reviews
Customize ...

Text availability
Abstract
Free full text
Full text

Publication dates
5 years
10 years
Custom range...

Species
Humans

Languages
English
Customize ...

Sex
Female
Male

Journal categories
Core clinical journals
MEDLINE

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

Results: 10 Selected: 2

Filters activated: Guideline, published in the last 5 years, English, Aged: 65 items.

Cardiac risk factors: new cholesterol and blood pressure management

- Anthony D, George P, Eaton CB; 2013 American College of Cardiology Eighth Joint National Committee. FP Essent. 2014 Jun;421:28-43. PMID: 24936717 [PubMed - indexed for MEDLINE] [Related citations](#)
- [New AHA and ACC guidelines on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk.](#)
Klose G, Beil FU, Dieplinger H, von Eckardstein A, Föger B, Gouni-Berthold I, Heigl F, Koenig W, Kostner GM, Landmesser U, Laufs U, Leistikow F, März W, Noll G, Parhofer KG, Paulweber B, Riesen WF, Schaefer JR, Steinhagen-Thiessen E, Steinmetz A, Toplak H, Wanner C, Windler E; American Heart Association, American College of Cardiology. Wien Klin Wochenschr. 2014 Mar;126(5-6):169-75. doi: 10.1007/s00508-014-0513-9. Epub 2014 Mar 11. PMID: 24615676 [PubMed - indexed for MEDLINE] [Related citations](#)
- [2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee \(JNC 8\).](#)
James PA, Oparil S, Carter BL, Cushman WC, Dennison-Himmelfarb C, Handler J, Lackland DT

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My NCBI Account

To save in a Collection, a MyNCBI account is necessary. In the top-right corner of every page is a link to "Sign in to NCBI." Accounts are free and allow you to permanently save and build upon existing collections. This is useful for long-term projects.



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*To set up preferences or customized filters within your NCBI account, set up an appointment with a librarian.



Full-Text Access

PubMed itself does not provide access to full-text articles, except in the case of Open Access and vendor-supplied articles; however, accessing PubMed through the [library website](#) will sync up the library's journal subscriptions to the results in PubMed. This will provide access to the full-text. In the case the library does not have access to a particular article, you can request the article through the library's InterLibrary Loan (ILL) services.

After accessing PubMed through the library website and finding an article, open up the article record. In the upper, right-hand corner should be a burgundy icon "MCHSL Access." Click on that to see full-text options.

PubMed.gov
Advanced Search

Abstract

Menopausal, 2015 May 11. [Epub ahead of print]

Women's Health Initiative estrogen plus progestin clinical trial: a study that does not allow establishing relevant clinical risks.

Aedo S¹, Cavata S, Blumel JE, Chedrau P, Fica J, Baroja P, Brantes S, Inbarra C, Vallejo M, Campodónico J

Author information

OBJECTIVE: This study aims to determine time differences (differences in restricted mean survival times [RMSTs]) in the onset of invasive breast cancer, coronary heart disease, stroke, pulmonary embolism, colorectal cancer, and hip fracture between the placebo group and the conjugated equine estrogens 0.625 mg plus medroxyprogesterone acetate 2.5 mg group of the Women's Health Initiative (WHI) trial based on survival curves of the original report and to provide adequate interpretation of the clinical effects of a given intervention.

METHODS: Distribution of survival function was obtained from cumulative hazard plots of the WHI report; Monte Carlo simulation was performed to obtain censored observations for each outcome, in which assumptions of the Cox model were evaluated once corresponding hazard ratios had been estimated. Using estimation methods such as numerical integration, pseudovales, and flexible parametric modeling, we determined differences in RMSTs for each outcome.

RESULTS: Obtained cumulative hazard plots, hazard ratios, and outcome rates from the simulated model did not show differences in relation to the original WHI report. The differences in RMST between placebo and conjugated equine estrogens 0.625 mg plus medroxyprogesterone acetate 2.5 mg (in flexible parametric modeling) were 1.17 days (95% CI, -2.25 to 4.59) for invasive breast cancer; 7.50 days (95% CI, 2.90 to 12.11) for coronary heart disease; 2.75 days (95% CI, -0.84 to 6.34) for stroke; 4.23 days (95% CI, 1.82 to 6.64) for pulmonary embolism; -2.73 days (95% CI, -5.32 to -0.13) for colorectal cancer; and -2.77 days (95% CI, -5.44 to -0.1) for hip fracture.

CONCLUSIONS: The differences in RMST for the outcomes of the WHI study are too small to establish clinical risks related to hormone therapy use.

PMID: 25988833 [PubMed - as supplied by publisher]

LinkOut - more resources

PubMed Commons

0 comments

Full text links

Wolters Kluwer MCHSL Access

Save items

Add to Favorites

Related citations in PubMed

Menopausal hormone therapy and health outcomes during the intervention a [JAMA. 2013] risks and benefits of estrogen plus progestin in healthy postmenopausal women. p [JAMA. 2002] Health risks and benefits 3 years after stopping randomized treatment with estrogen [JAMA. 2005] Recent epidemiological evidence relevant to the clinical manage [Climacteric. 2007] Review: The Women's Health Initiative trial and related studies [J Steroid Biochem Mol Biol. 2014]

See reviews. See all.

Related information

MedGen

Recent Activity

Turn Off Clear

Women's Health Initiative estrogen plus progestin clinical trial: a study that d... PubMed

See more.



Full-Text Access Pt 2

Sometimes the icon will link directly to the full-text, and other times, it will link to the most recent issue of the journal. Search for the full-text using the article citation.

Other times, it will give a screen with the article information and resources for the citation. The top options will be electronic access and the last option will link to the library's print resources. Click on each link until it gives full-text access to the article.

If none of the links work, fill out a Request an Article form and the library will request it for you.



Title: Women's Health Initiative estrogen plus progestin clinical trial: a study that does not allow establishing relevant clinical risks.
Source: Aedo, *Menopause* (2015-05-11) ISSN: 1072-3714

[Revise Request](#)

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Print access

Each journal publisher links their articles differently so if you have any difficulties accessing the full-text articles, don't hesitate to ask library staff for help.



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