#### Welcome

# Searching PubMed for Research

Peggy Edwards, AMLS TTUHSC - Preston Smith Library Lubbock, Texas 79430

# When searching library applications, use



chrome

Chrome is TTUHSC IT's supported browser!

# <u>Link</u>

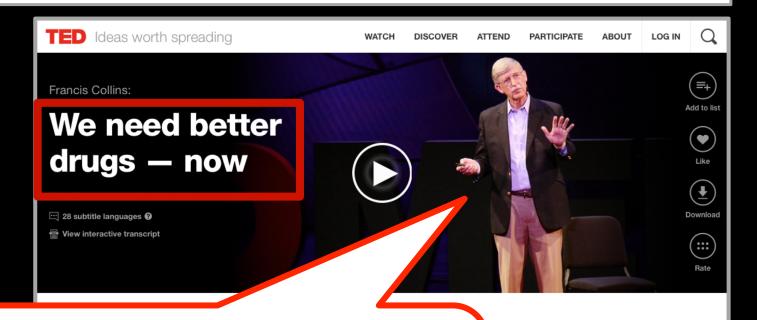
Today's power point **Searching PubMed for Research**:

under Orientations and Presentations

http://www.ttuhsc.edu/libraries/schools/som.aspx

# Research Question Teaching Example

https://www.ted.com/talks/francis\_collins\_we\_need\_better\_drugs\_now



"Today, we know the molecular cause of 4,000 diseases, but treatments are available for only 250 of them."



Francis Collins Geneticist, physician

A key player in the US' new brain-mapping project, Francis Collins is director of the National Institutes of Health. Full bio

# Searching Research Questions

To be complete, need to search:

**PubMed** 

**Embase** 

Cochrane Database of Systematic Reviews

Cochrane Central Register of Controlled Trials

Scopus

Web of Science

# Searching PubMed

## PubMed Database

 Biomedical and life sciences journal literature



International scope



Developed and maintained by the:

National Center for Biotechnology Information at the U.S. National Library of Medicine at the National Institutes of Health



# Accessing PubMed

Freely available over the Internet



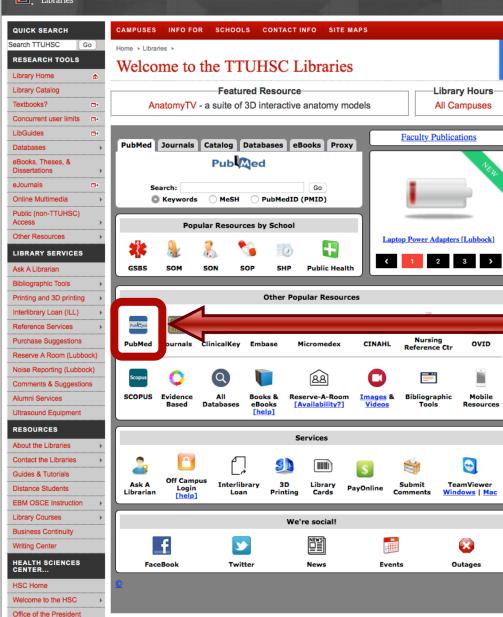
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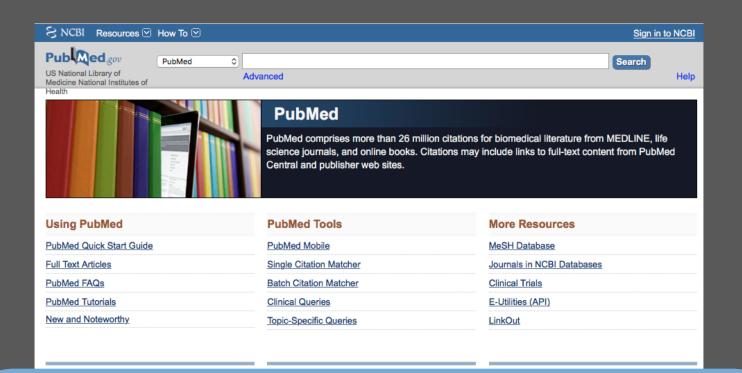




www.ttuhsc.edu/libraries

#### Click PubMed





# PubMed Home Page

# Vocabulary: Using MeSH Database

# MeSH Database

Terms in the database are called Medical Subject Headings or MeSH.

is a "controlled vocabulary list" of more than <u>25,000</u> subject headings.

MeSH Database is updated annually.

#### Frequently Used Mesh Categories - 2011

#### **A** Anatomy

- A1 Body Regions
- A2 Musculoskeletal System
- A3 Digestive System
- A4 Respiratory System
- A5 Urogenital System
- A6 Endocrine System
- A7 Cardiovascular System
- A8 Nervous System
- A9 Sense Organs
- A10 Tissues
- A11 Cells
- A12 Fluids and Secretions
- A13 Animal Structures
- A14 Stomatognathic System
- A15 Hemic and Immune Systems
- A16 Embryonic Structures
- A17 Integumentary System
- A18 Plant Structures
- A19 Fungal Structures
- A20 Bacterial Structures
- **A21 Viral Structures**

#### **B** Organisms

- B1 Eukaryota
- B2 Archaea
- B3 Bacteria
- **B4 Viruses**
- **B5** Organism Forms

#### **C** Diseases

- C1 Bacterial Infections & Mycoses
- C2 Virus Diseases
- C3 Parasitic Diseases
- C4 Neoplasms
- C5 Musculoskeletal Diseases
- C6 Digestive System Diseases
- C7 Stomatognathic Diseases
- C8 Respiratory Tract Diseases
- C9 Otorhinolaryngologic Diseases
- C10 Nervous System Diseases
- C11 Eye Diseases
- C12 Male Urogenital Diseases
- C13 Female Urogenital Diseases & Pregnancy Complications
- C14 Cardiovascular Diseases
- C15 Hemic & Lymphatic Diseases
- C16 Congenital, Hereditary, & Neonatal Diseases & Abnormalities
- C17 Skin & Connective Tissue Diseases
- C18 Nutritional & Metabolic Diseases
- C19 Endocrine System Diseases
- C20 Immune System Diseases
- C21 Disorders of Environmental Origin
- C22 Animal Diseases
- C23 Pathologic Conditions, Signs, and Symptoms
- C24 Occupational Diseases
- C25 Chemically-Induced Disorders
- C26 Wounds and Injuries

#### **D** Chemicals & Drugs

- D1 Inorganic Chemicals
- D2 Organic Chemicals
- D3 Heterocyclic Compounds
- D4 Polycyclic Compounds
- D5 Macromolecular Substances
- D6 Hormones, Hormone Substitutes, & Hormone Antagonists
- D8 Enzymes, & Coenzymes
- D9 Carbohydrates
- D10 Lipids
- D12 Amino Acids, Peptides, & Proteins
- D13 Nucleic Acids, Nucleotides, & Nucleosides
- **D20 Complex Mixtures**
- D23 Biologic Factors
- D25 Biomedical and Dental Materials
- D26 Pharmaceutical Preparations
- D27 Chemical Actions and Uses

#### Other Categories Include:

**Analytical, Diagnostic, & Therapeutic Techniques & Equipment** 

**Psychiatry and Psychology** 

**Physical Phenomena** 

**Natural Sciences** 

**Anthropology, Education, Sociology & Social Phenomena** 

**Technology, Industry, Agriculture** 

**Humanities** 

**Information Science** 

**Persons** 

**Population Characteristics** 

**Publication Components** 

**Geographic Locations** 

#### MeSH Terms Index

Each article in PubMed is assigned 10-15 MeSH and are listed in the MeSH Terms Index.

#### MeSH terms

Breast Neoplasms/diagnosis

Breast Neoplasms/surgery\*

Breast Neoplasms/therapy\*

Chemotherapy, Adjuvant/methods

Decision Making

Female

Humans

Molecular Targeted Therapy/methods

Neoadjuvant Therapy/methods\*

Physician's Role

Physician-Patient Relations

Precision Medicine/methods

Prognosis

Surgeons\*

# Why use MeSH?

When searching from PubMed's home page, the computer searches words in titles & abstracts

When using MeSH Database, PubMed searches the MeSH Terms Index, NOT words in titles and/or abstracts.

Using MeSH brings together similar terms/tags; thus brings similar articles together

Examples: AIDS, blood

Most accurate, effective and efficient way to search!

## Create a Search Strategy Plan

Identify the question and key concepts:

Molecular targeted therapy of breast neoplasms

Write the search program using medical subject headings (MeSH)

# Search Example

Help



PubMed Search

Advanced

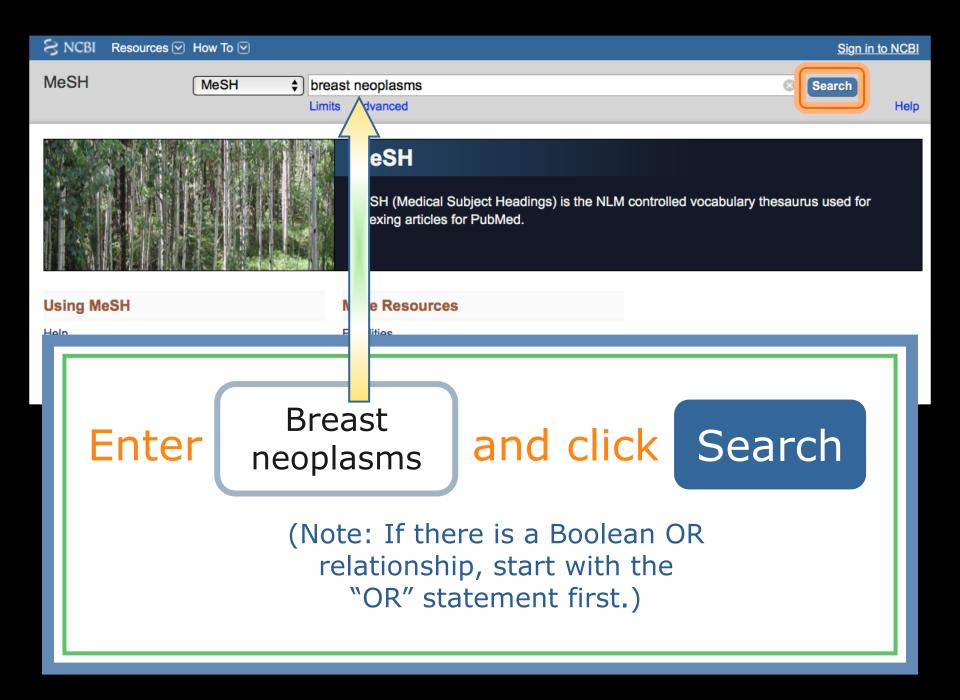


#### **PubMed**

PubMed comprises more than 27 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.



Click MeSH Database



& NCBI

MeSH

#### Terms and Definitions

n in to NCBI

Help

Summary -

#### Search results

Items: 5

#### **Breast Neoplasms**

- Tumors or cancer of the human BREAST.
  - Triple Negative Breast Neoplasms
- Breast neoplasms that do not express ESTROGEN RECEPTORS; PROGESTERONE RECEPTORS; and do not overexpress the NEU RECEPTOR/HER-2 PROTO-ONCOGENE PROTEIN.
- Inflammatory Breast Neoplasms
- Metastatic breast cancer characterized by EDEMA and ERYTHEMA of the affected breast due to LYMPHATIC METASTASIS and eventual obstruction of LYMPHATIC VESSELS by the cancer cells.
  - Breast Neoplasms, Male
- 4. Any neoplasms of the male breast. These occur infrequently in males in developed countries, the incidence being about 1% of that in females.
- Unilateral Breast Neoplasms
- Tumors or cancer found specifically in one human BREAST, but not in both. Year introduced: 2016

PubMed Search Builder

Add to search builder AND \$

Search PubMed

Find related data

Database: Select \$

Find items

Search details

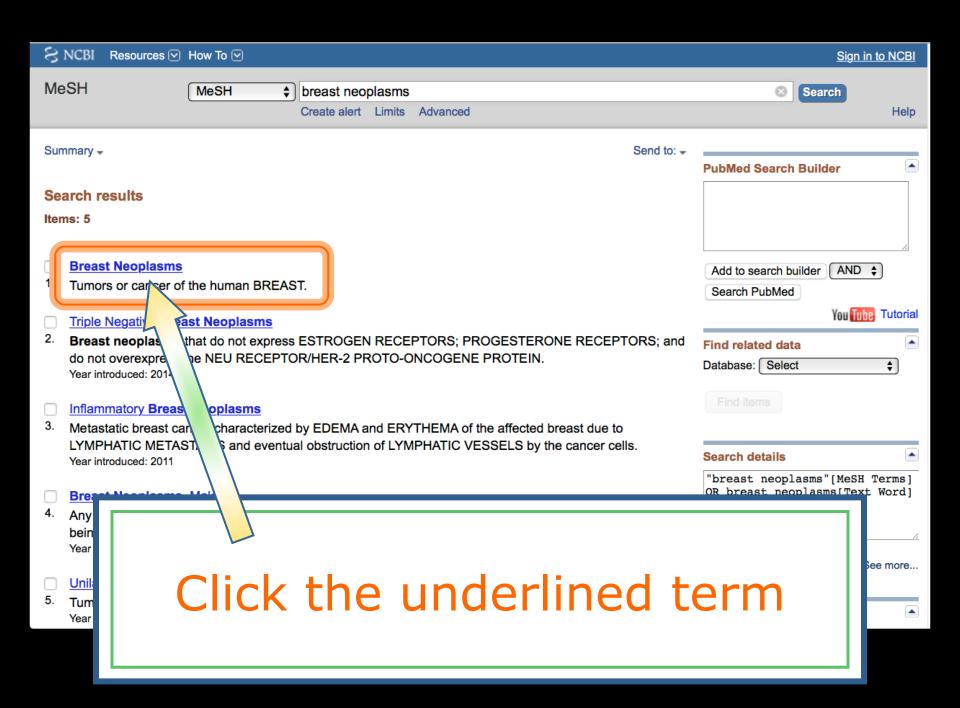
"breast neoplasms"[MeSH Terms]
OR breast neoplasms[Text Word]

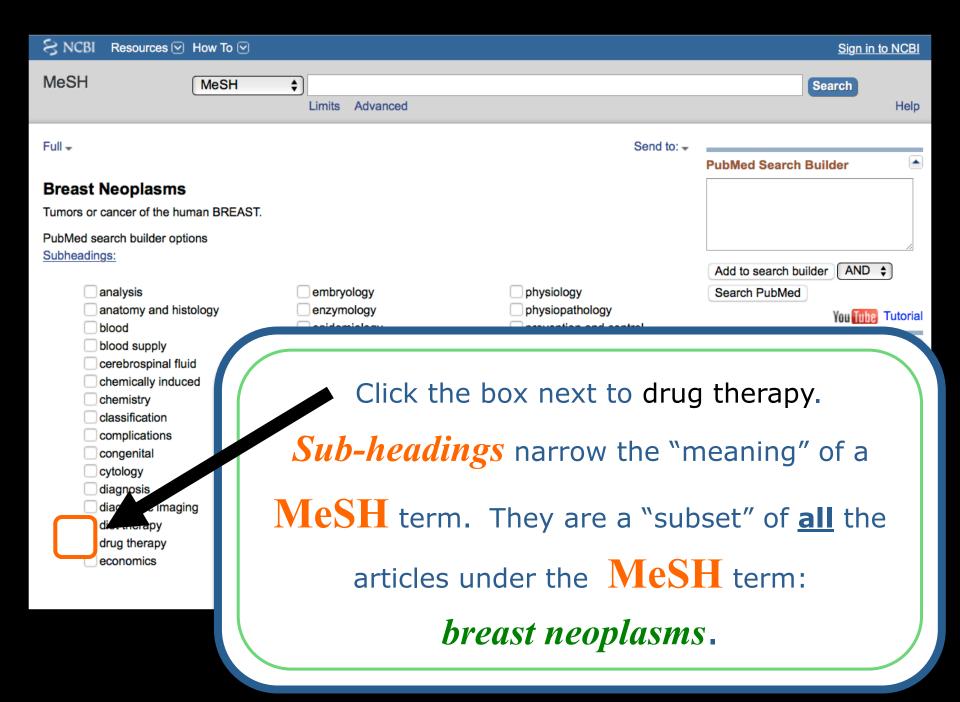
Search

See more...

You Tille Tutorial

**Recent Activity** 

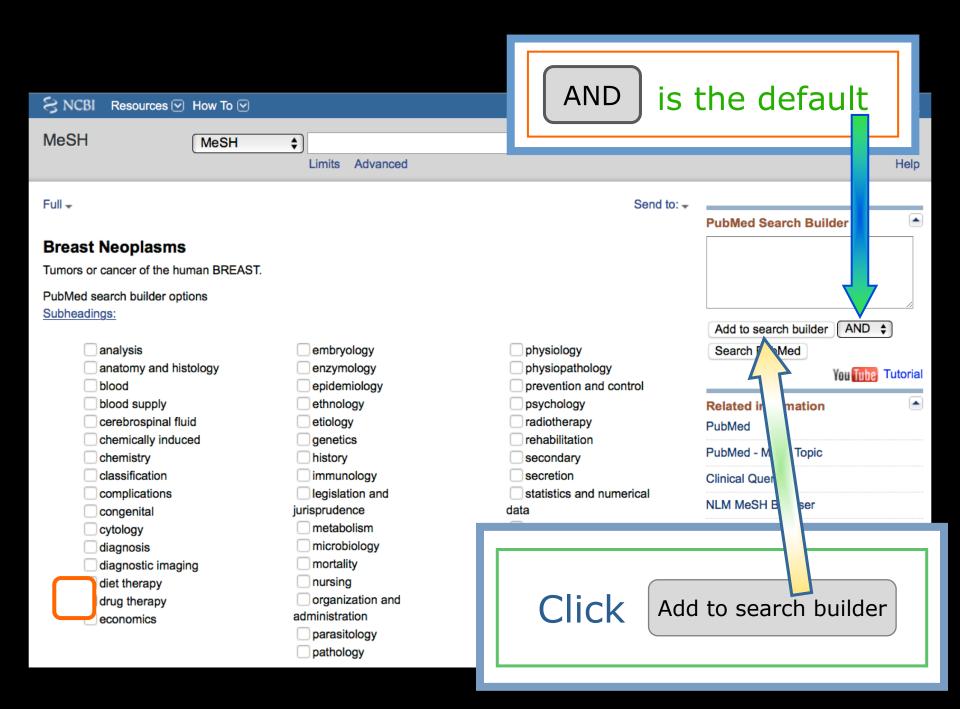


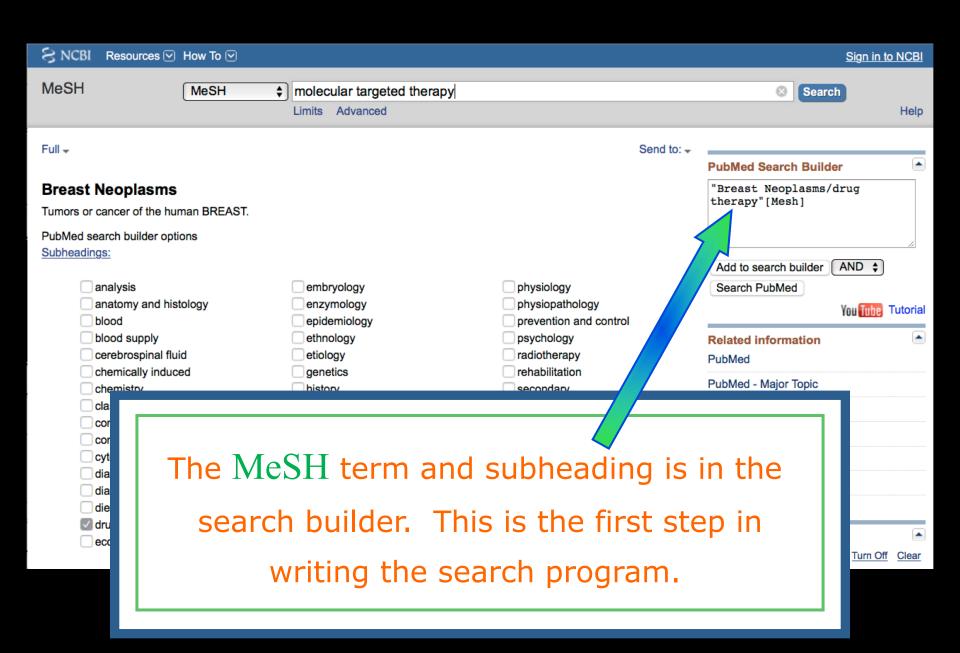


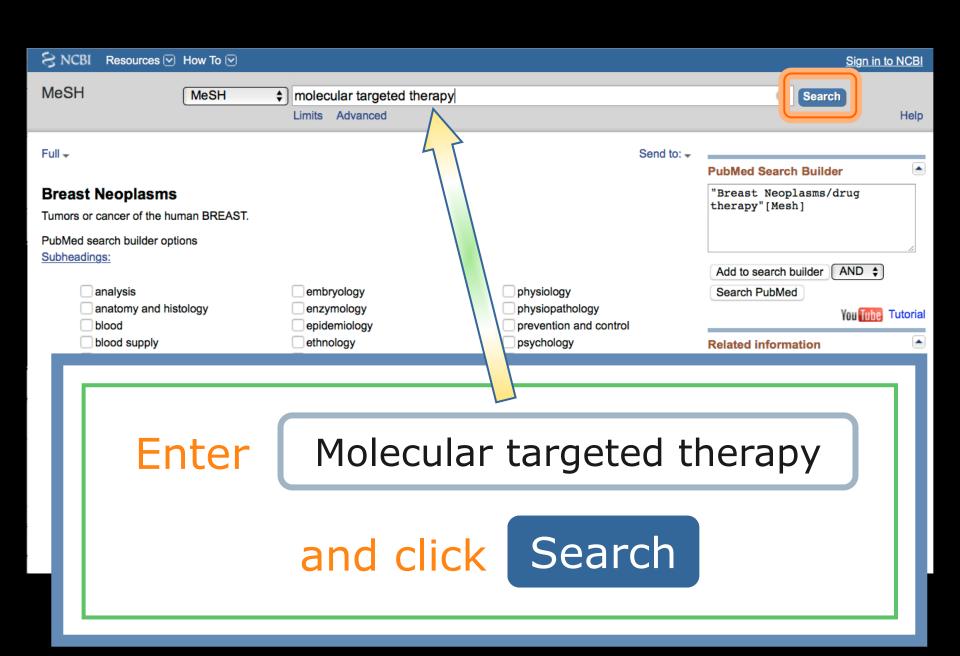
#### **82 SUBHEADINGS:**

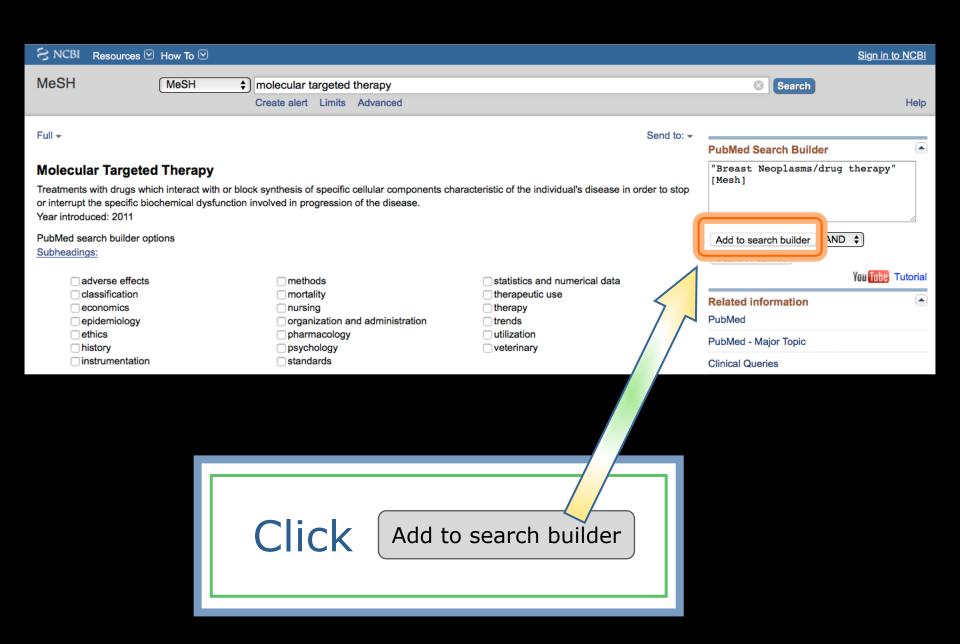
abnormalities administrations & dosage adverse effects agonists analogs & derivatives analysis anatomy & histology antagonists & inhibitors biosynthesis blood blood supply cerebrospinal fluid chemical synthesis chemically induced chemistry classification complications congenital contraindications cytology deficiency diagnosis diet therapy drug effects drug therapy economics education embryology

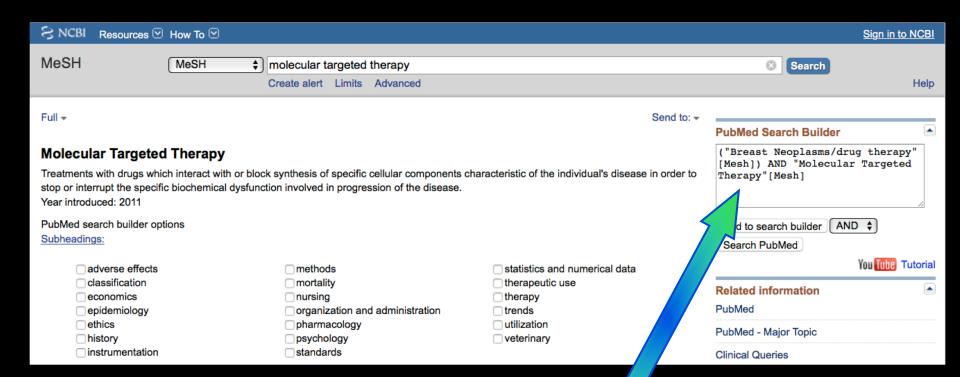
enzymology epidemiology ethics poisoning prevention & control ethnology etiology psychology radiation effects genetics growth & development radiography radionuclide imaging history immunology radiotherapy rehabilitation injuries innervation secondary instrumentation secretion isolation & purification standards statistics & numerical data legislation & jurisprudence supply & distribution manpower metabolism surgery methods therapeutic use microbiology therapy mortality toxicity transmission nursing organization & administration transplantation parasitology trends pathogenicity ultrasonography pathology ultrastructure pharmacokinetics urine utilization pharmacology physiology veterinary physiopathology virology



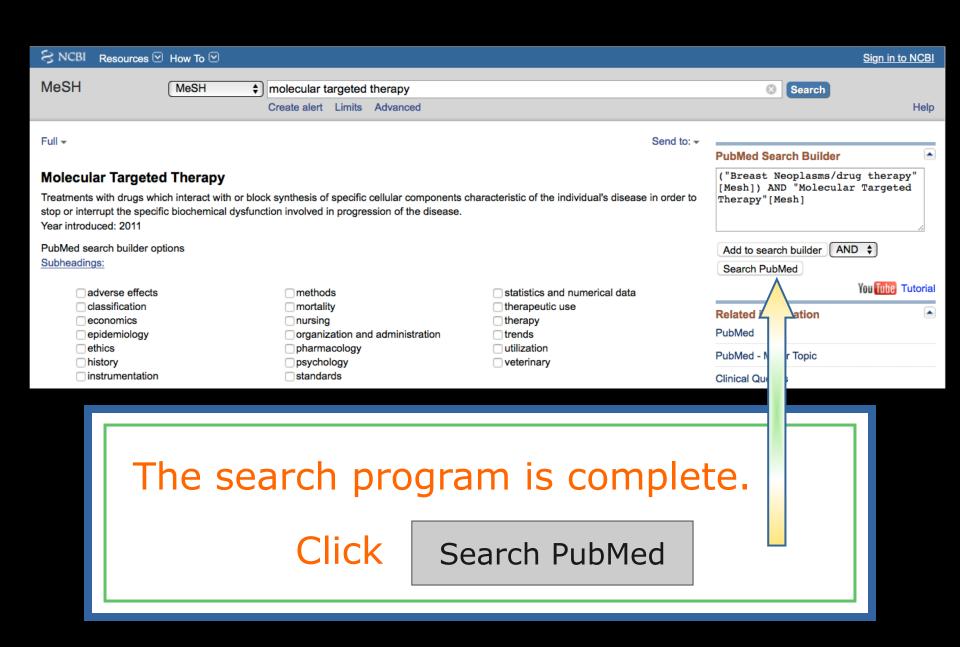








The second MeSH term is in the search program "box"



## Boolean Logic - AND

Breast neoplasms/ drug therapy

and

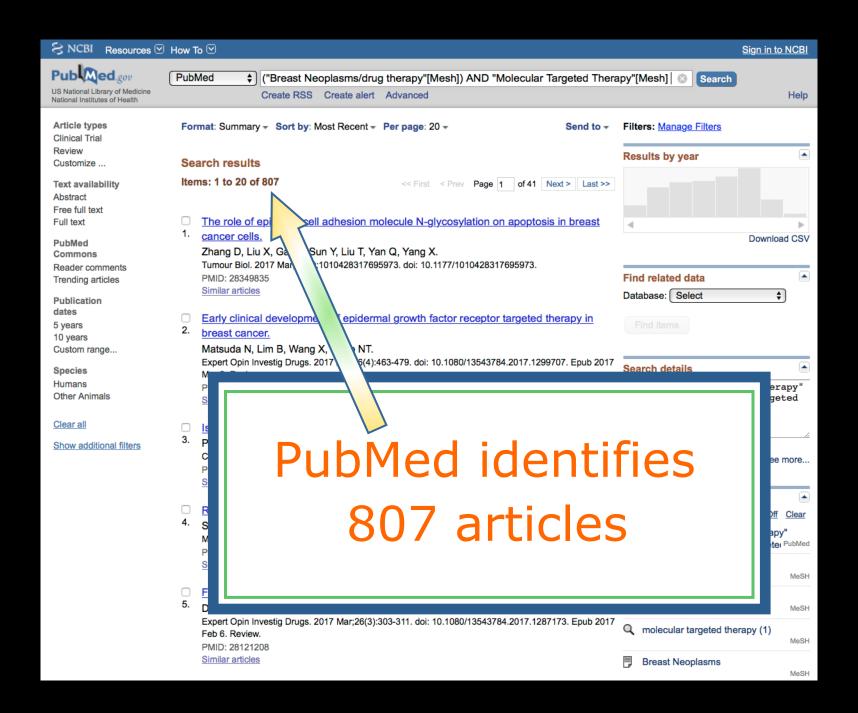
Molecular targeted therapy

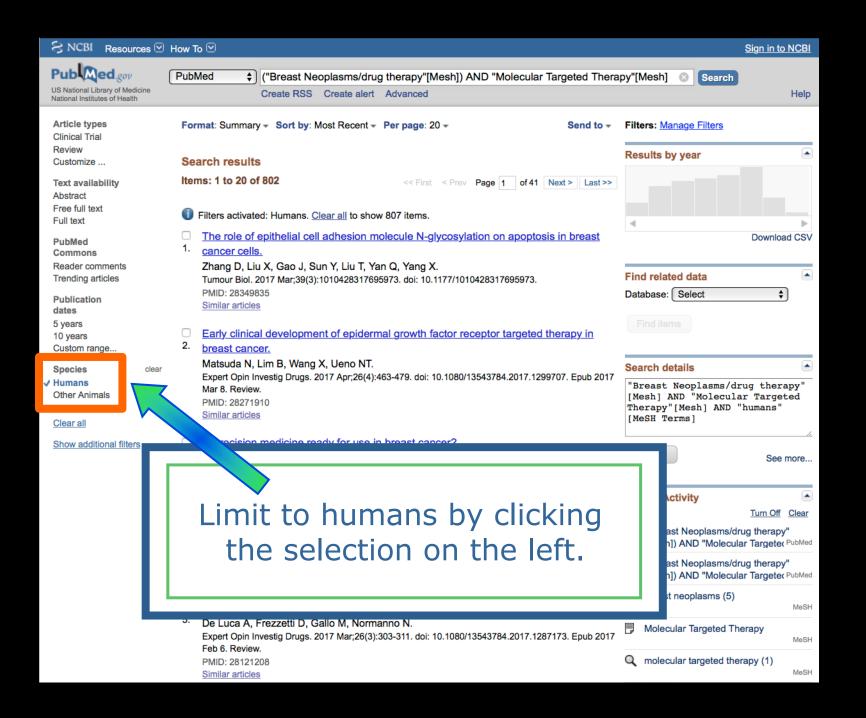
## Boolean Logic - OR

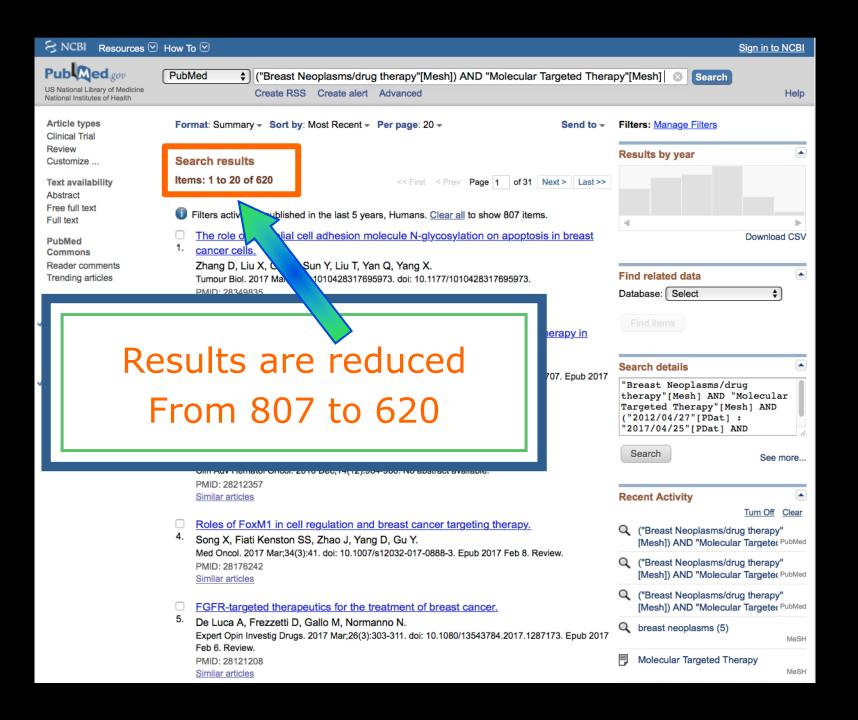
molecular targeted therapy

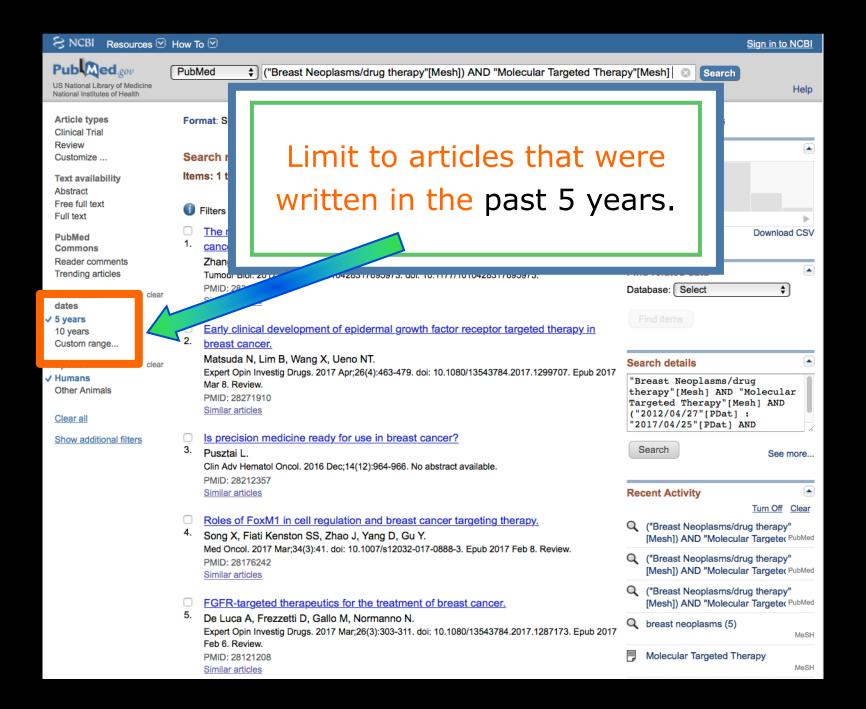
OR chemotherapy

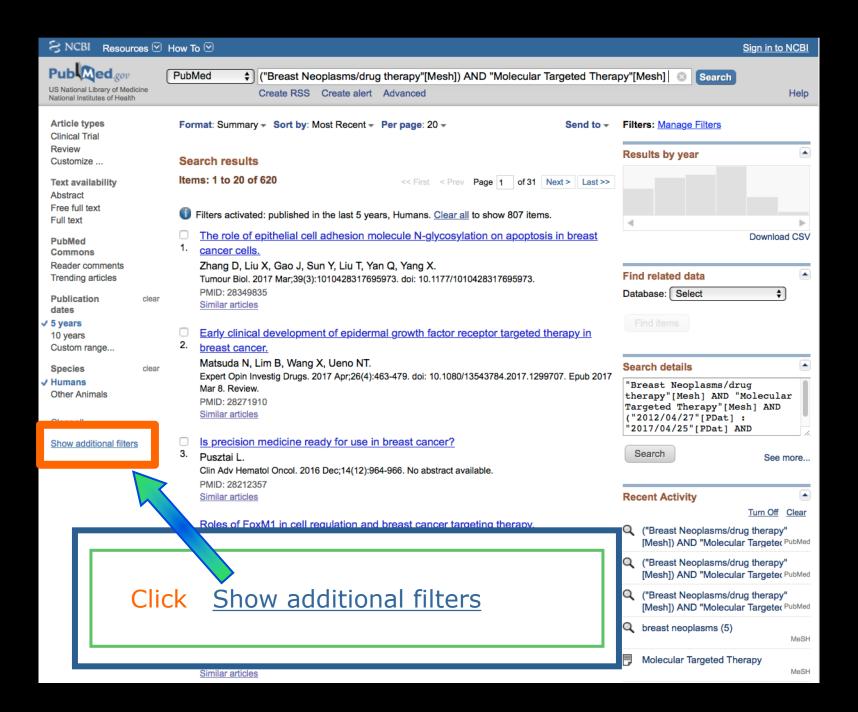
# Search Results

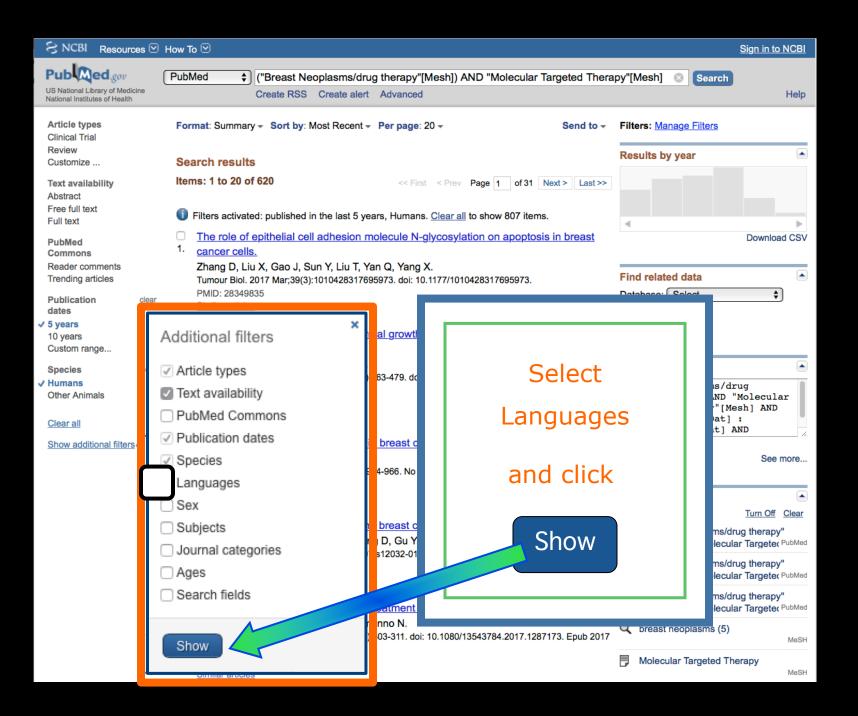


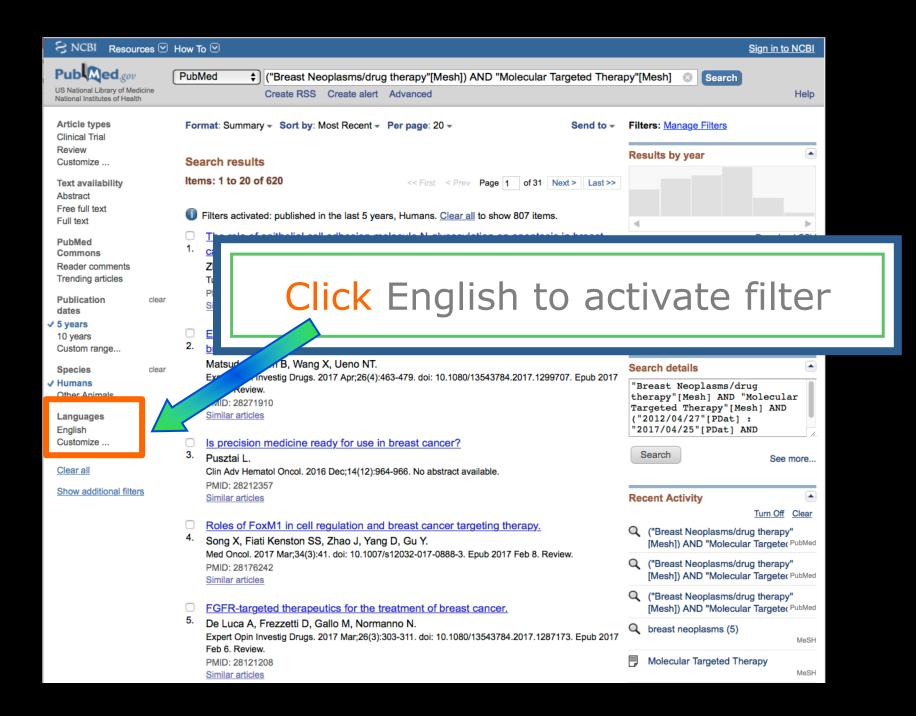


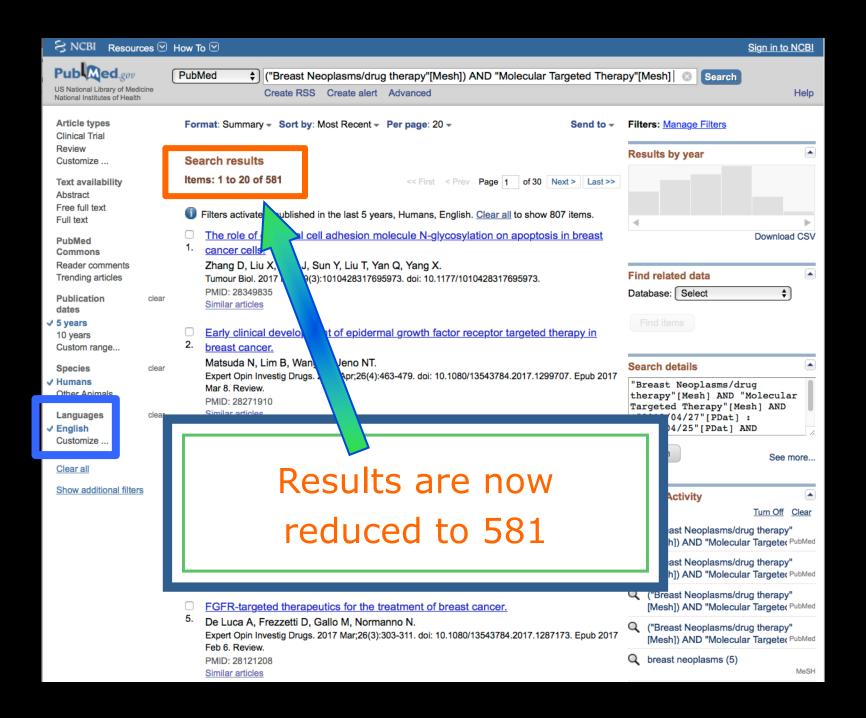




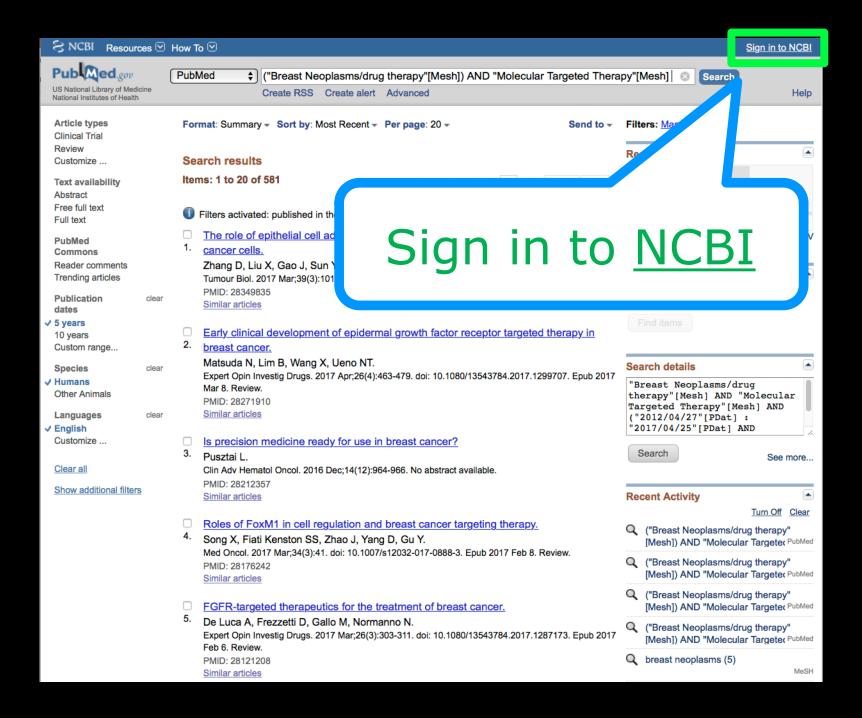


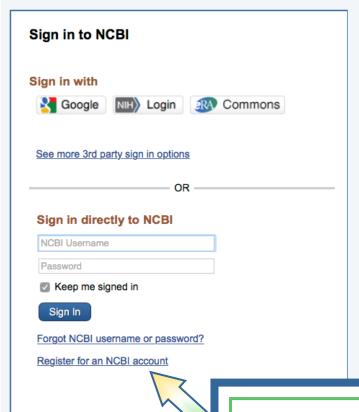






# Creating a My NCBI Account





My NCBI retains user information and database preferences to provide customized services for many NCBI databases.



You Tibe My NCBI Overview

My NCBI features include:

- Save searches & automatic e-mail alerts
- Display format preferences
- Filter options
- My Bibliography & NIH public access policy compliance
- · SciENcy: a researcher biosketch profile service
- · Highlighting search terms
- · Recent activity searches & records for 6 months
- LinkOut, document delivery service & outside tool selections

### NIH funded investigator?

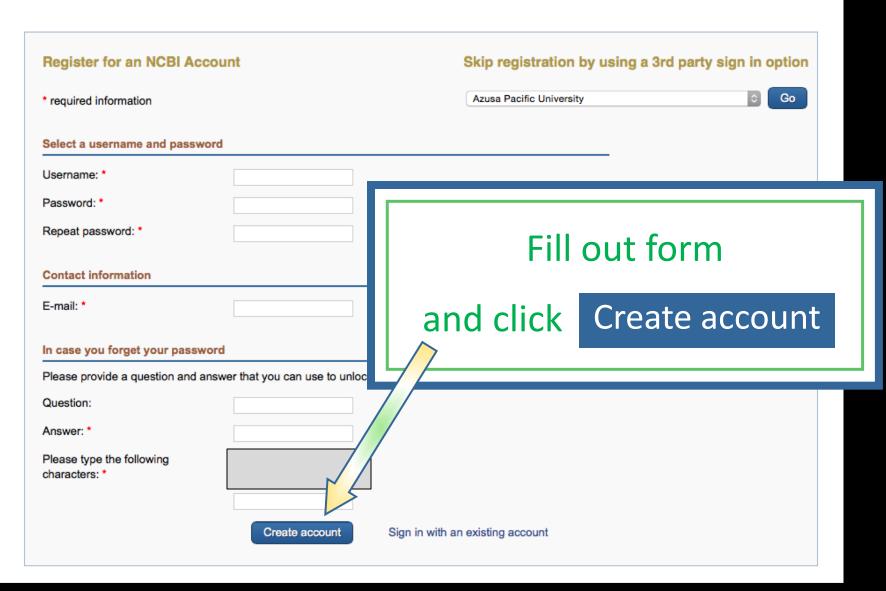
Extramural NIH-funded investigators looking for NIH Public Access Compliance tools can sign in with either "eRA Commons" or "NIH Login". Use your eRA Commons credentials on the subsequent sign in page. Once signed in, navigate to the My Bibliography section.

Documentation for using these features is located in the Managing Compliance to the NIH Public Access Policy section of the NCBI Help Manual.

# Click Register for an NCBI account

### My NCBI » Register

help

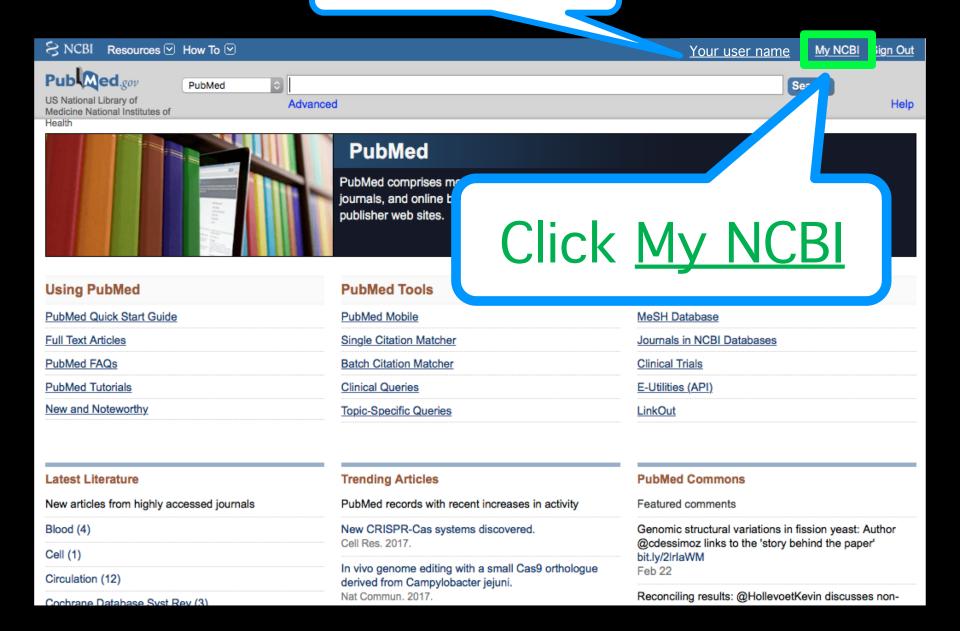


# Verifying your MY NCBI Account

# Open the email you used in the account:

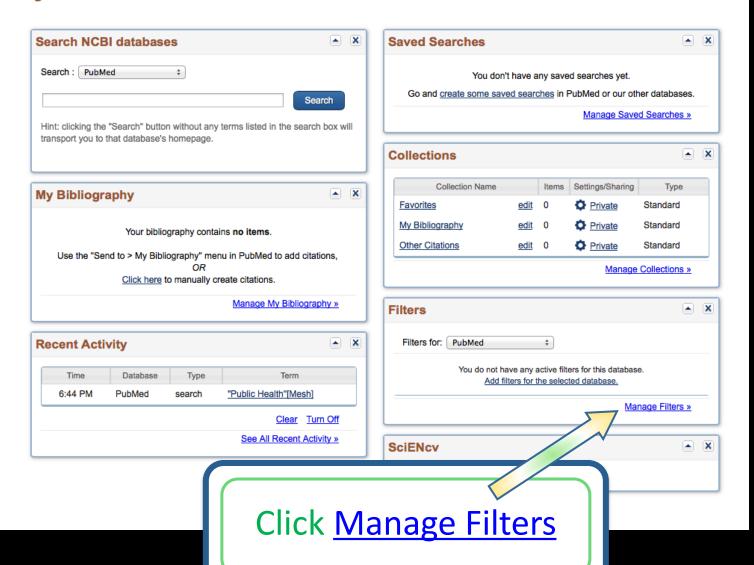
- 1) Locate the link from NCBI
- 2) Click the link
- 3) Tells NCBI you are a real user requesting the account (not computer generated)
- 4) Your user name will now appear on the top right-hand side

## Your username



### My NCBI

Customize this page | NCBI Site Preferences | Video Overview | Help



# Database is PubMed



My NCBI » Filters

You are managing filters for: PubMed

Choose another database: PubMed

Your PubMed filter list

Create custom filter

You do not have any active filters for this database. Create a new custom filter using the button above, or select filters from Browse/Search Panel to the right.

Select **English & Humans** 

Browse	/Conwell		Davids Manad	Ellhows
Browse	/Searcr	ITOF	PHIDMED	PHITER

Select category:

LinkOut Properties Popular

Links

Filters help

Search with terms (optional):

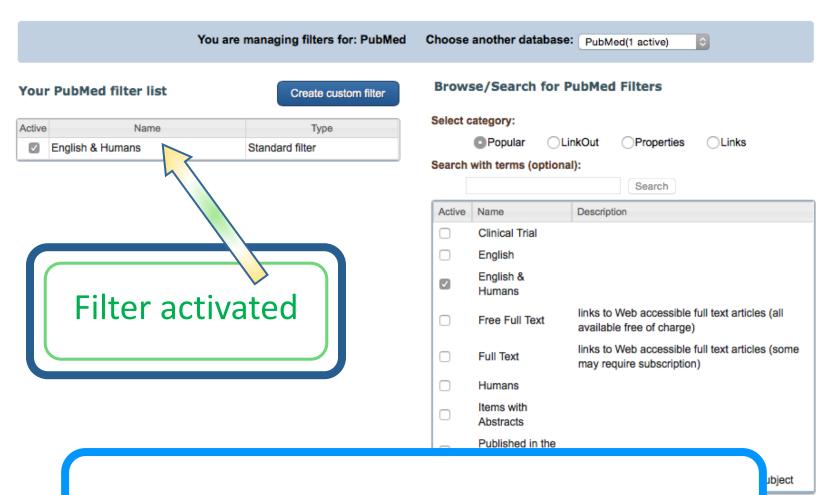
last 5 years

Review

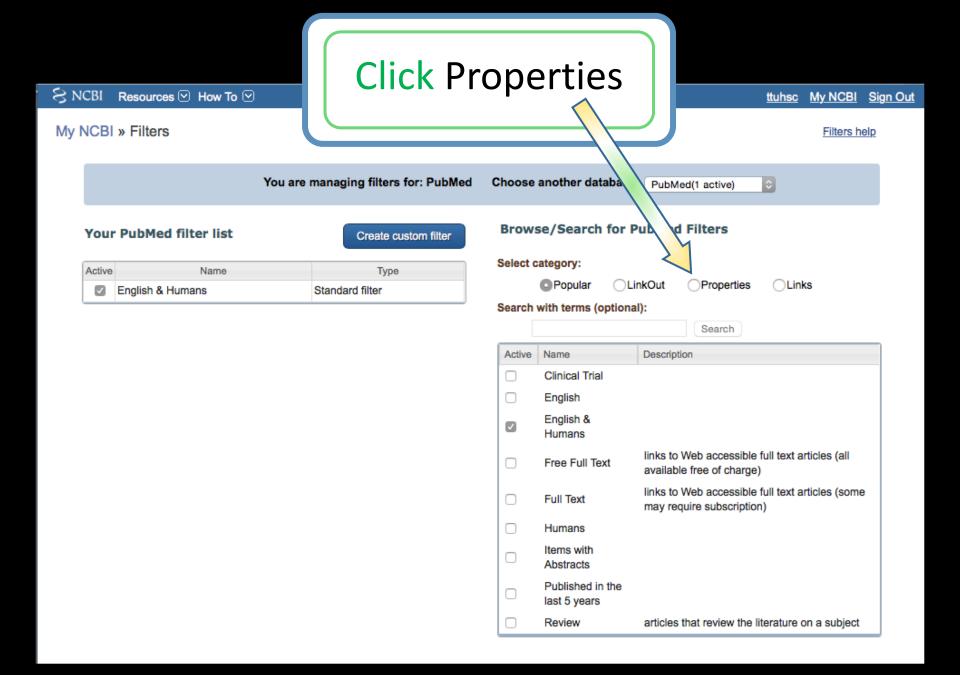
	Search		
Active	Name	Description	
	Clinical Trial		
	English		
	English & Humans		
	Free Full Text	links to Web accessible full text articles (all available free of charge)	
	Full Text	links to Web accessible full text articles (some may require subscription)	
	Humans		
0	Items with Abstracts		
	Published in the		

articles that review the literature on a subject

My NCBI » Filters Filters help

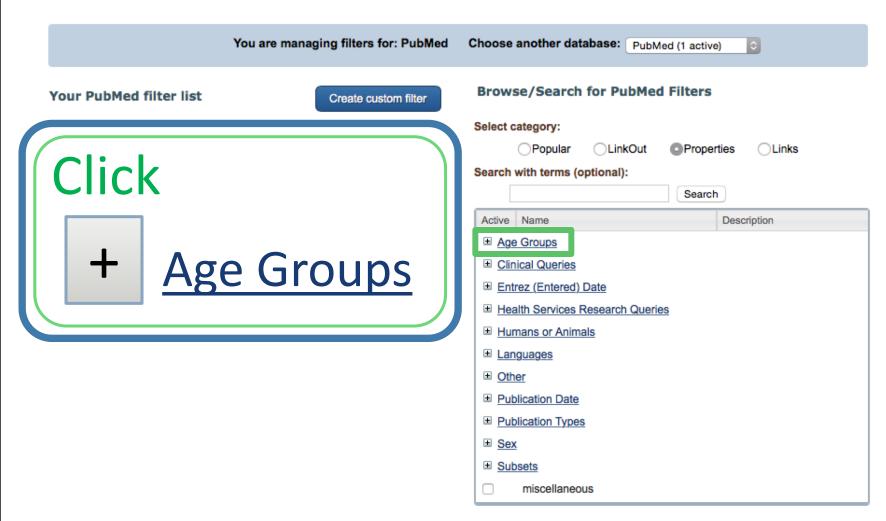


You may set up to 15 filters

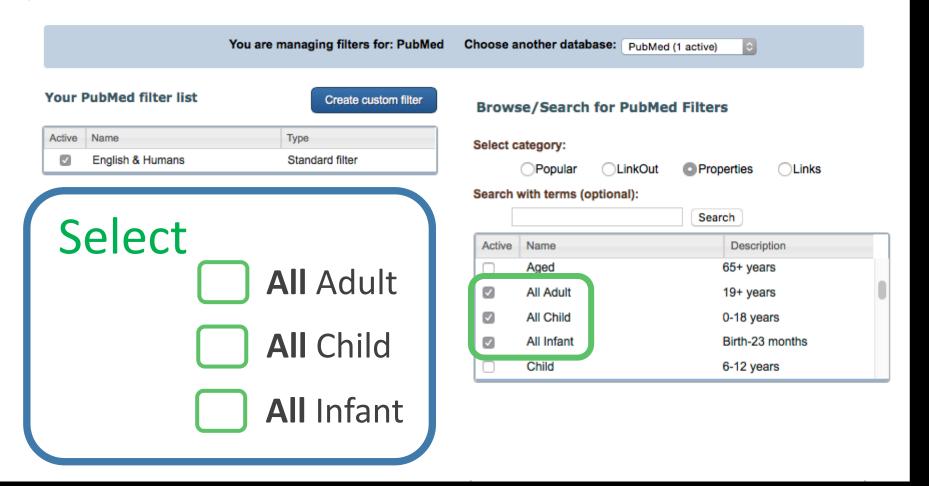


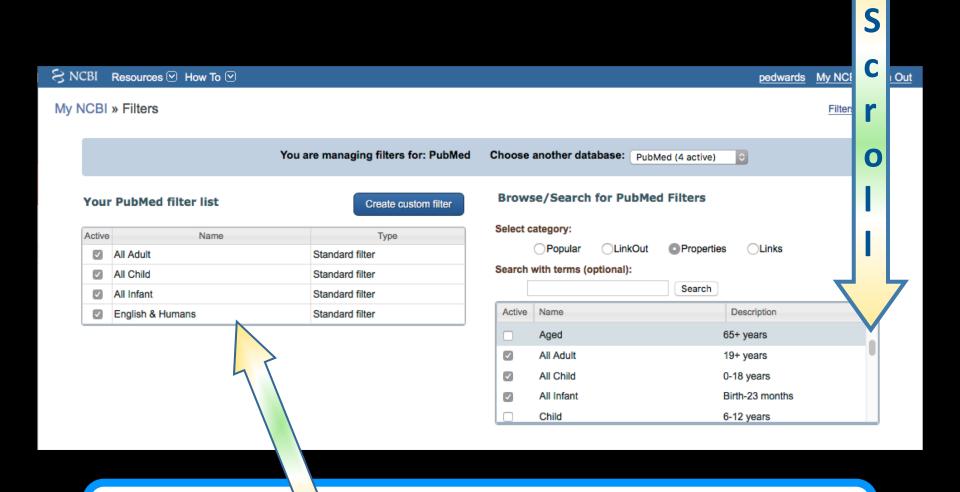
S NCBI Resources ☑ How To ☑

My NCBI » Filters Filters help



My NCBI » Filters

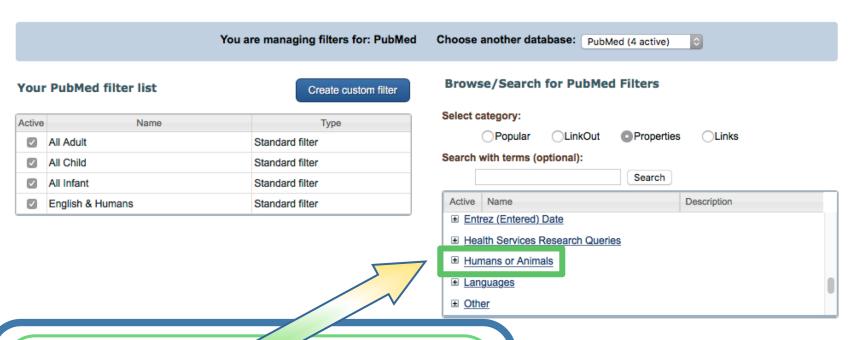




Check to see if all selected filters are activated

pedwards My NCBI Sign Out

My NCBI » Filters





Filters help

All Infant

English & Humans

My NCBI » Filters

### You are managing filters for: PubMed Your PubMed filter list Create custom filter Active Name Type All Adult Standard filter All Child Standard filter

Standard filter

Standard filter

# Select

Other Animals

### **Browse/Search for PubMed Filters**

Choose another database: PubMed (4 active)

Select category:

Active Name

Popular LinkOut Properties Clinks

Search

Description

Search with terms (optional):

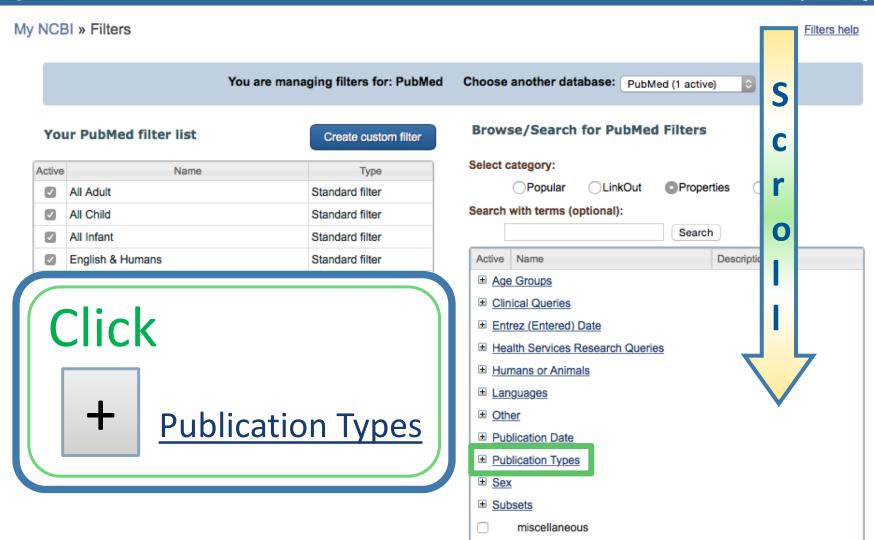
□ Hun	nans or Animals

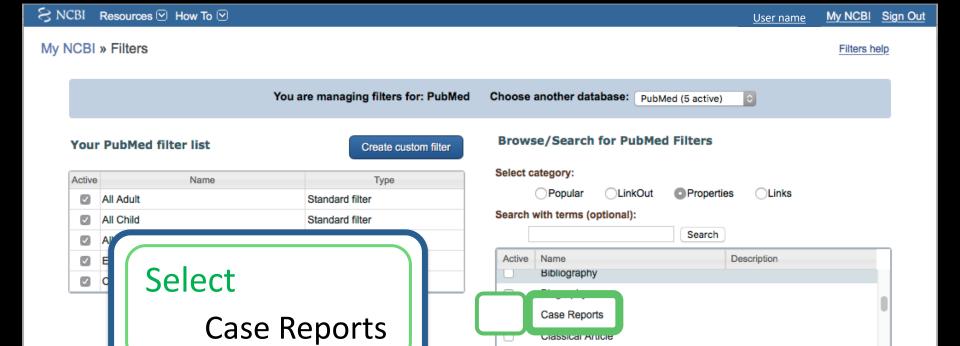
English & Humans

Humans

Other Animals

<u>Languages</u>



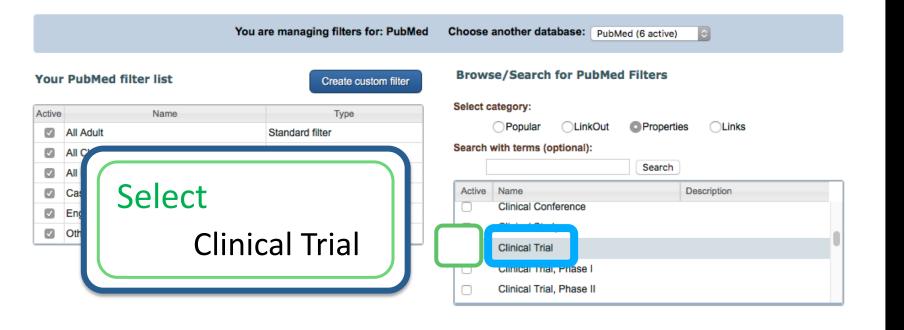


Classical Article

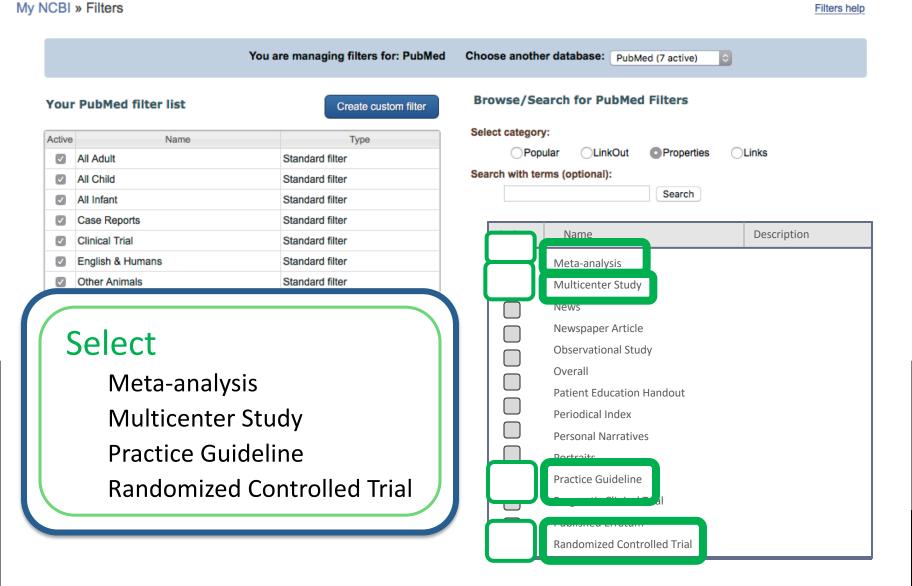
Clinical Conference

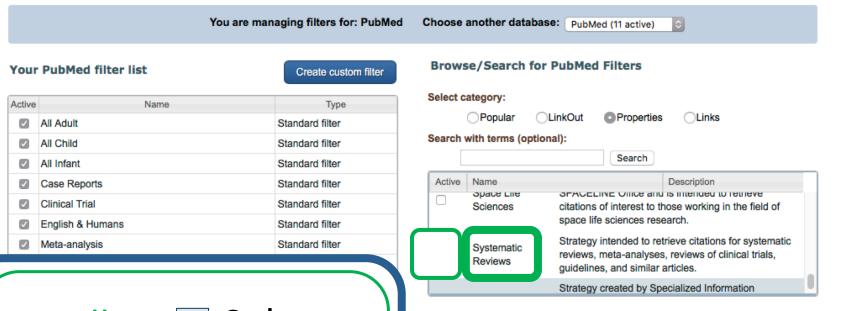
Filters help

My NCBI » Filters



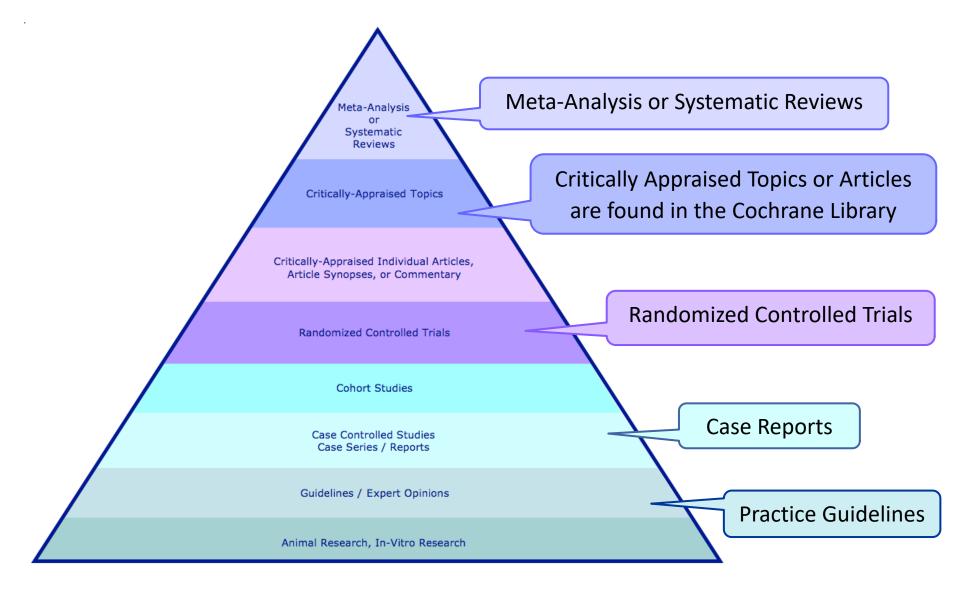
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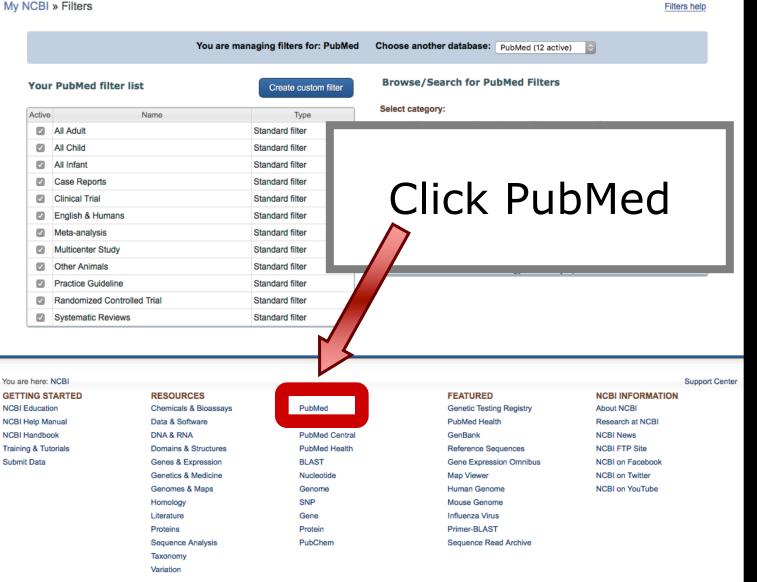




Scroll to - Subsets and select Systematic Reviews

# Hierarchy of Evidence





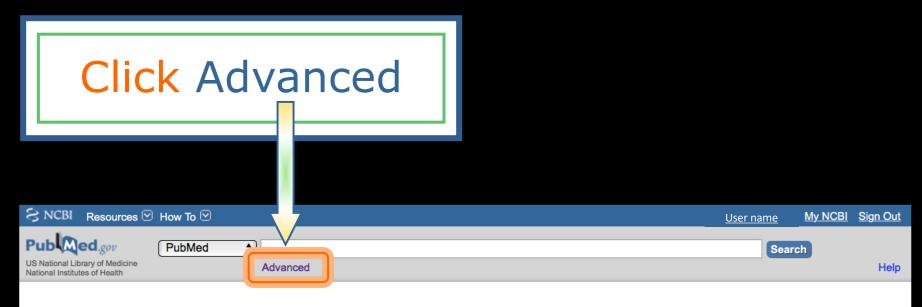
National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA Policies and Guidelines | Contact











Filters activated: published in the last 5 years, Humans, English. Clear all



### **PubMed**

PubMed comprises more than 27 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.

PubMed Tools	More Resources
PubMed Mobile	MeSH Database
Single Citation Matcher	Journals in NCBI Databases
Batch Citation Matcher	Clinical Trials
Clinical Queries	E-Utilities (API)
Topic-Specific Queries	LinkOut
	PubMed Mobile  Single Citation Matcher  Batch Citation Matcher  Clinical Queries

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index list

lear history

Click results link

PubMed Home



1 Filters activated: published in the last 5 years, Humans, English.

Use the builder below to create your search

Edit

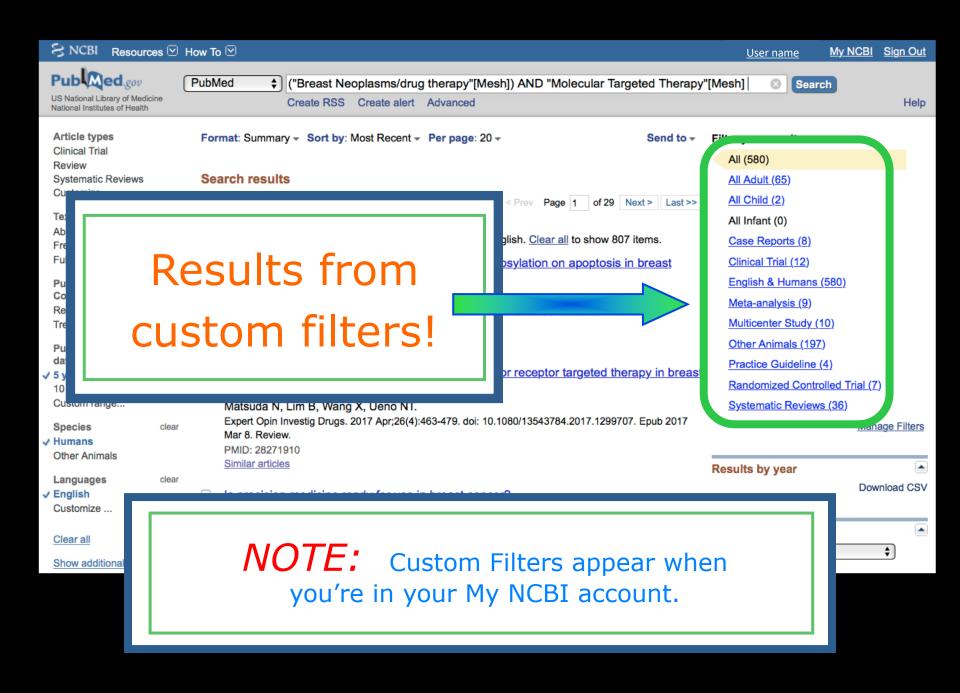
### Builder

History

All Fields **\$**] AND \$ All Fields

Search or Add to history

Search	Add to builder	Query	Items found	Time
<u>#7</u>	<u>Add</u>	Search ("Breast Neoplasms/drug therapy"[Mesh]) AND "Molecular Targeted Therapy" [Mesh] Filters: published in the last 5 years; Humans; English	<u>581</u>	3:46:20
<u>#6</u>	<u>Add</u>	Search ("Breast Neoplasms/drug therapy"[Mesh]) AND "Molecular Targeted Therapy" [Mesh] Filters: published in the last 5 years; Humans	620	23:45:07
<u>#5</u>	Add	Search ("Breast Neoplasms/drug therapy"[Mesh]) AND "Molecular Targeted Therapy" [Mesh] Filters: Humans	802	23:44:41
<u>#4</u>	Add	Search ("Breast Neoplasms/drug therapy"[Mesh]) AND "Molecular Targeted Therapy" [Mesh]	807	23:42:48





### Latest Literature

New articles from highly accessed journals

Blood (4)

Cell (1)

Circulation (12)

Cochrane Database Syst Rev (3)

J Biol Chem (12)

N Engl J Med (20)

Nature (12)

PLoS One (70)

Pediatrics (3)

Proc Natl Acad Sci U S A (58)

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### **Trending Articles**

PubMed records with recent increases in activity

New CRISPR-Cas systems discovered.

Cell Res. 2017.

In vivo genome editing with a small Cas9 orthologue derived from Campylobacter jejuni. Nat Commun. 2017.

Survival of tissue-resident memory T cells requires exogenous lipid uptake and metabolism.

Nature, 2017.

Mining the Human Gut Microbiota for Immunomodulatory Organisms.

Cell. 2017.

Association between light at night, melatonin secretion, sleep deprivation, and the internal clock: Health impacts and mechanisms of circadian disruption.

Life Sci. 2017.

See more

### **PubMed Commons**

Featured comments

Genomic structural variations in fission yeast: Author @cdessimoz links to the 'story behind the paper' bit.ly/2lrlaWM

Feb 22

Reconciling results: @HollevoetKevin discusses non-viral antibody gene transfer study. bit.ly/2kWASwb

Feb 17

Checking syntax: @mlrethlefsen notes "even small details matter greatly for reproducibility in search strategies." bit.ly/2kT8vPr

Feb 16

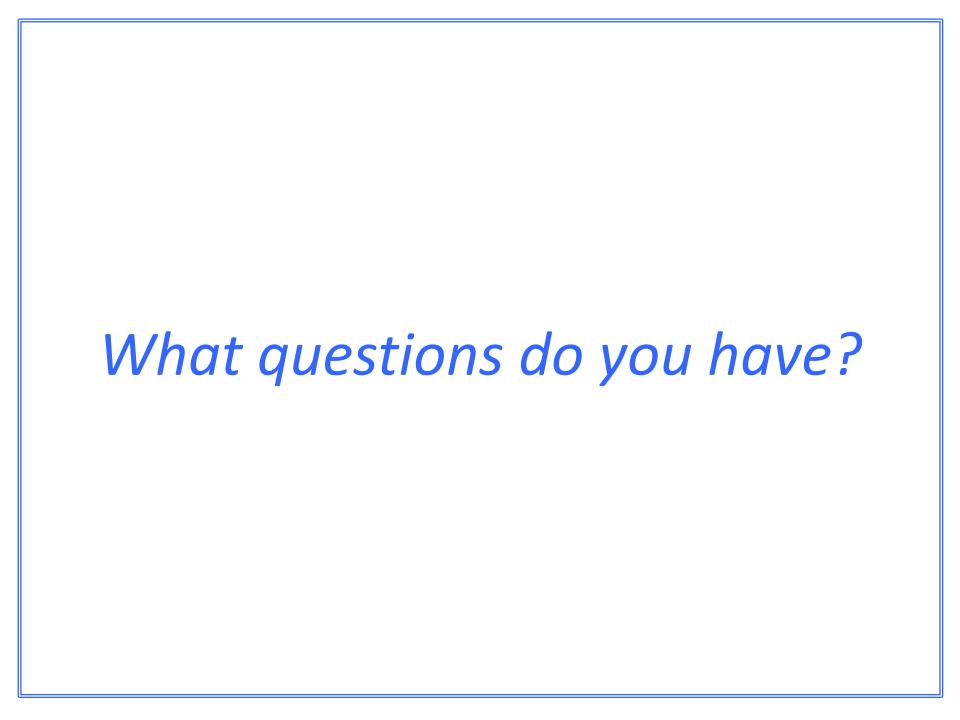
Connecting context: S Ray (@soupvector) links primary report & literature review on mycobacterium causing leprosy. bit.ly/2lpPSRe

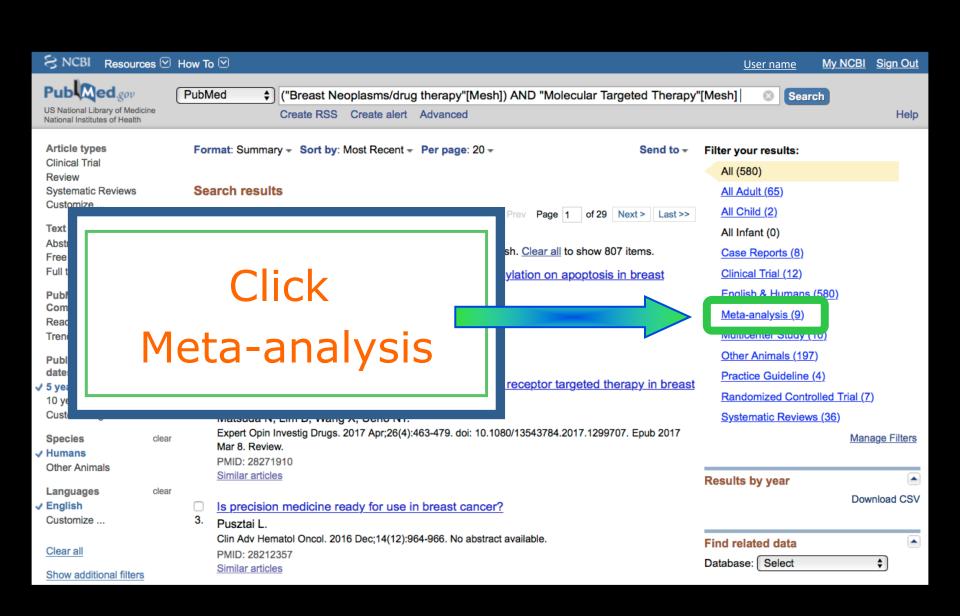
Feb 14

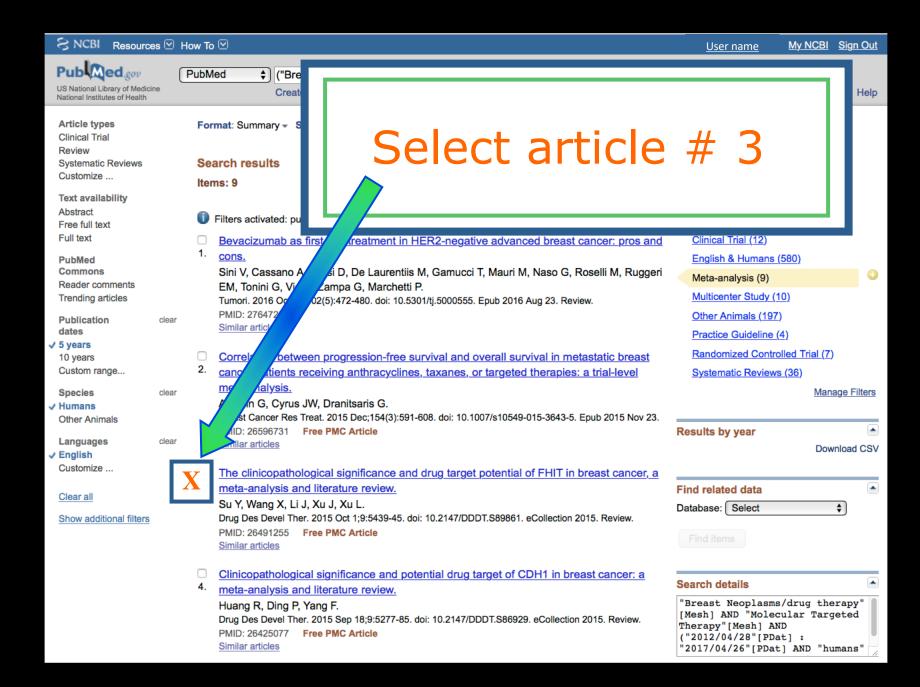
Assessing methods: M Fiander (@MicF\_UofU) critiques systematic review's adherence to reporting standards. bit.ly/2lmYJ66 #medlibs

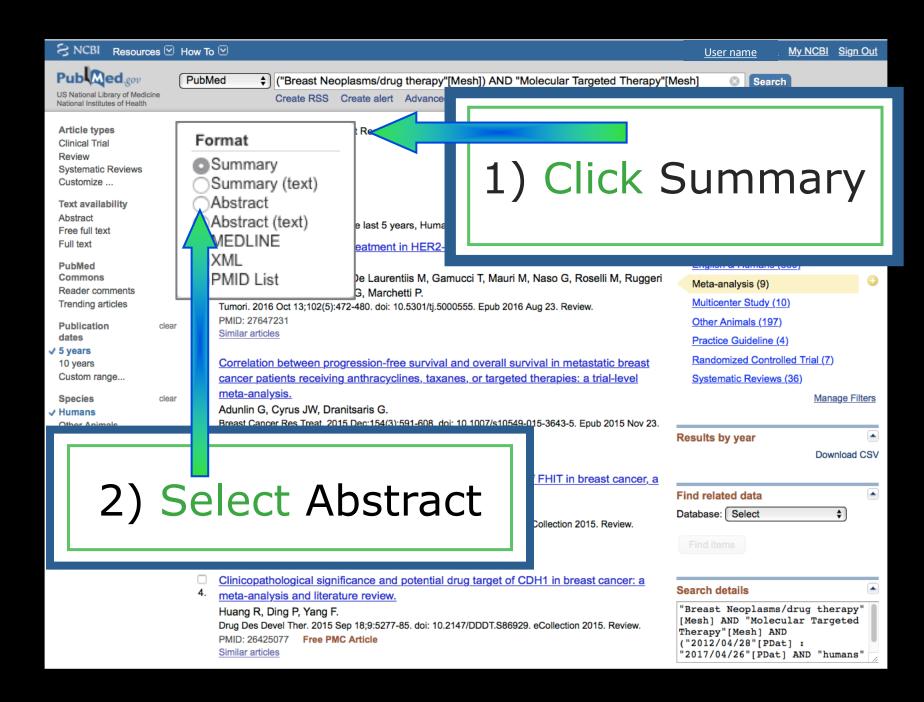
Feb 13

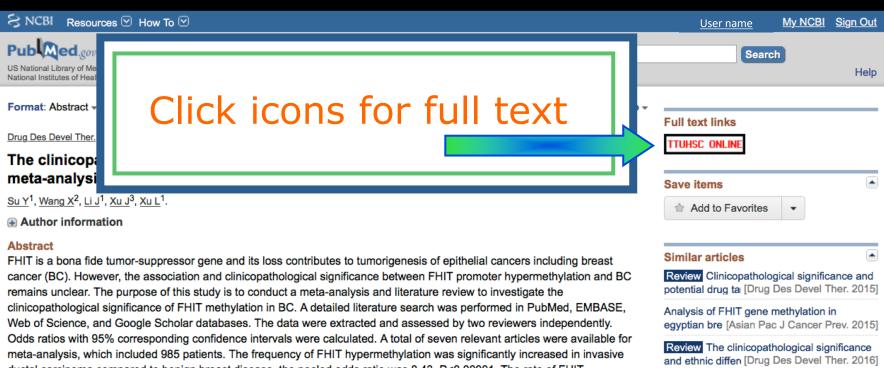
See more











cancer (BC). However, the association and clinicopathological significance between FHIT promoter hypermethylation and BC remains unclear. The purpose of this study is to conduct a meta-analysis and literature review to investigate the clinicopathological significance of FHIT methylation in BC. A detailed literature search was performed in PubMed, EMBASE, Web of Science, and Google Scholar databases. The data were extracted and assessed by two reviewers independently. Odds ratios with 95% corresponding confidence intervals were calculated. A total of seven relevant articles were available for meta-analysis, which included 985 patients. The frequency of FHIT hypermethylation was significantly increased in invasive ductal carcinoma compared to benign breast disease, the pooled odds ratio was 8.43, P<0.00001. The rate of FHIT hypermethylation was not significantly different between stage I/II and stage III/IV, odds ratio was 2.98, P=0.06. In addition, FHIT hypermethylation was not significantly associated with ER and PR status. FHIT hypermethylation was not significantly correlated with premenopausal and postmenopausal patients with invasive ductal carcinoma. In summary, our meta-analysis indicated that the frequency of FHIT hypermethylation was significantly increased in BC compared to benign breast disease. The rate of FHIT hypermethylation in advanced stages of BC was higher than in earlier stages; however, the difference was not statistically significant. Our data suggested that FHIT methylation could be a diagnostic biomarker of BC carcinogenesis. FHIT is a potential drug target for development of demethylation treatment for patients with BC.

KEYWORDS: FHIT; drug target; meta-analysis; methylation; odds ratio; tumor suppressor gene

PMID: 26491255 PMCID: PMC4598219 DOI: 10.2147/DDDT.S89861

Indexed for MEDLINE1 Free PMC Article











Review The clinicopathological significance

Promoter methylation status of the FHIT

of FHIT hypermethylation in n [Sci Rep. 2016]

gene and Fhit expression: [Oncol Rep. 2013]

See reviews...

See all...

Gene

Gene (GeneRIF)

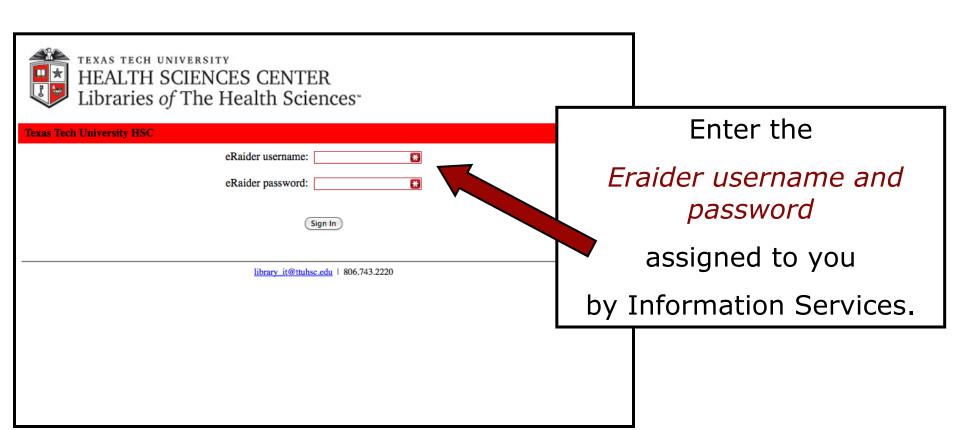
MedGen

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#### Drug Design, Development and Therapy

Dovepress

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ORIGINAL RESEARCH

## The clinicopathological significance and drug target potential of FHIT in breast cancer, a meta-analysis and literature review

Yunshu Su<sup>1</sup> Xiaoli Wang<sup>1,2</sup> Jun Li<sup>1</sup> Junming Xu<sup>3</sup> Lijun Xu<sup>1</sup>

Department of Cardiothoracic Surgery, 'Cancer Biology Research Center, Tongil Hospital, Tongi Medical College, Huazhong University of Science and Technology, Wuhan, Hubel, 'Department of General Surgery, Shanghai First People's Hospital, Shanghai Jiartong University, Shanghai, People's Republic of China Abstract: FHIT is a bona fide tumor-suppressor gene and its loss contributes to tumorigenesis of epithelial cancers including breast cancer (BC). However, the association and clinicopathological significance between FHIT promoter hypermethylation and BC remains unclear. The purpose of this study is to conduct a meta-analysis and literature review to investigate the clinicopathological significance of FHIT methylation in BC. A detailed literature search was performed in PubMed, EMBASE, Web of Science, and Google Scholar databases. The data were extracted and assessed by two reviewers independently. Odds ratios with 95% corresponding confidence intervals were calculated. A total of seven relevant articles were available for meta-analysis, which included 985 patients. The frequency of FHIT hypermethylation was significantly increased in invasive ductal carcinoma compared to benign breast disease, the pooled odds ratio was 8.43, P<0.00001. The rate of FHIT hypermethylation was not significantly different between stage I/II and stage III/IV, odds ratio was 2.98, P=0.06. In addition, FHIT hypermethylation was not significantly associated with ER and PR status. FHIT hypermethylation was not significantly correlated with premenopausal and postmenopausal patients with invasive ductal carcinoma. In summary, our meta-analysis indicated that the frequency of FHIT hypermethylation was significantly increased in BC compared to benign breast disease. The rate of FHIT hypermethylation in advanced stages of BC was higher than in earlier stages; however, the difference was not statistically significant. Our data suggested that FHIT methylation could be a diagnostic biomarker of BC carcinogenesis. FHIT is a potential drug target for development of demethylation treatment for patients with BC.

Keywords: FHIT, methylation, tumor suppressor gene, meta-analysis, odds ratio, drug target

#### Introduction

Breast cancer (BC) is the most frequently diagnosed cancer in women and the major cause of cancer-related female mortality in the USA. A series of epigenetic alterations and genetic abnormalities contribute to this process of BC onset and progression. Epigenetic alterations, which occur in transformed cells, involve changes in DNA methylation, including global hypomethylation, focal hypermethylation, histone modifications, and nucleosomal remodeling. Specifically, abnormal promoter region methylation in tumor suppressor genes results in loss of gene function which contributes to tumorigenesis of epithelial cancers. Therefore, it is critical to identify biomarkers for diagnosis and new molecular targets for development of personalized therapy. Common fragile sites are large chromosomal regions that are hot spots for alterations, especially in cancer cells. The three most frequently expressed common fragile site regions are FRA3B, FRA16D, and FRA6E which contain FHIT, WWOX, and PARKZ.

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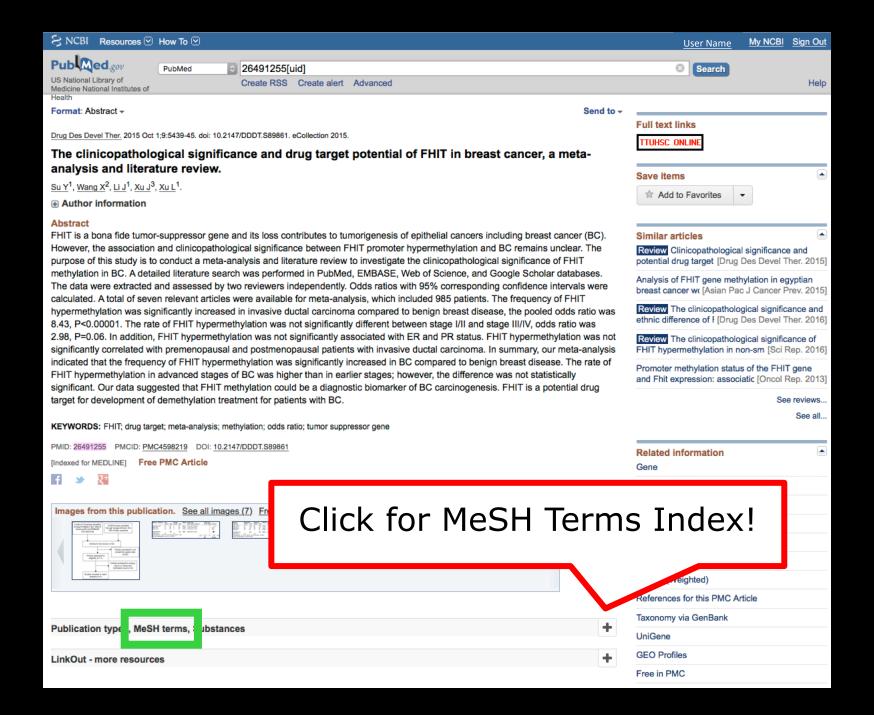
Drug Design, Development and Therapy 2015:9 5439-5445

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Gene Expression Regulation, Neoplastic

## Molecular Targeted Therapy\*

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Neoplasm Proteins/metabolism

Neoplasm Staging

Odds Ratio

Risk Factors

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**Neoplasm Proteins** 

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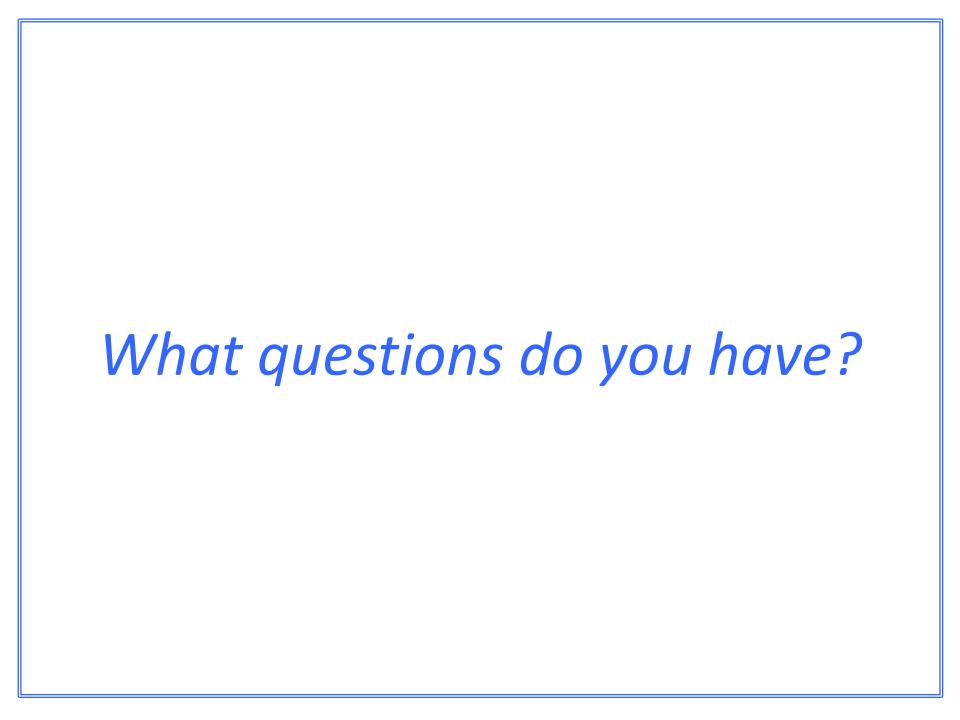
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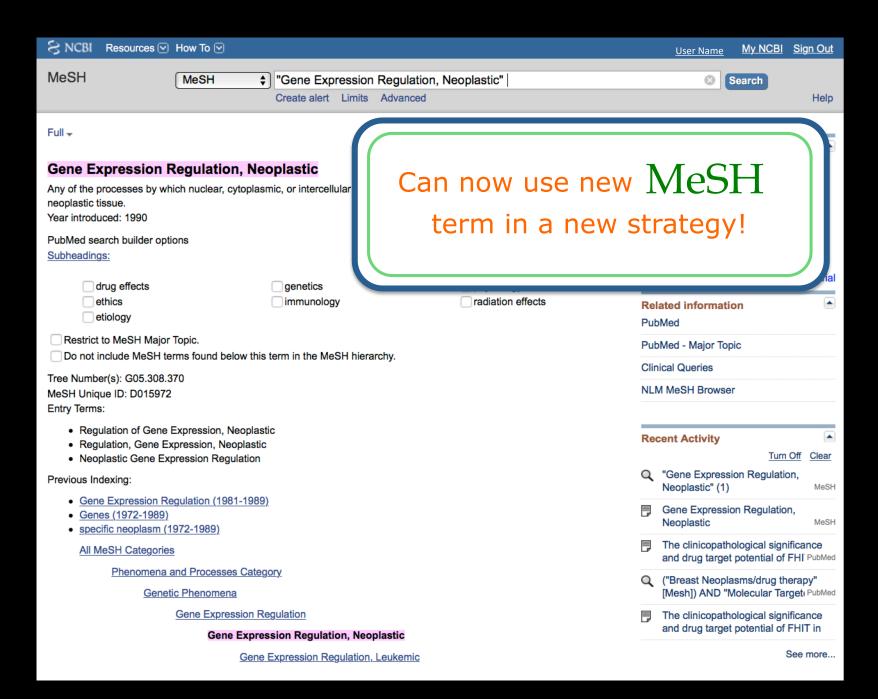
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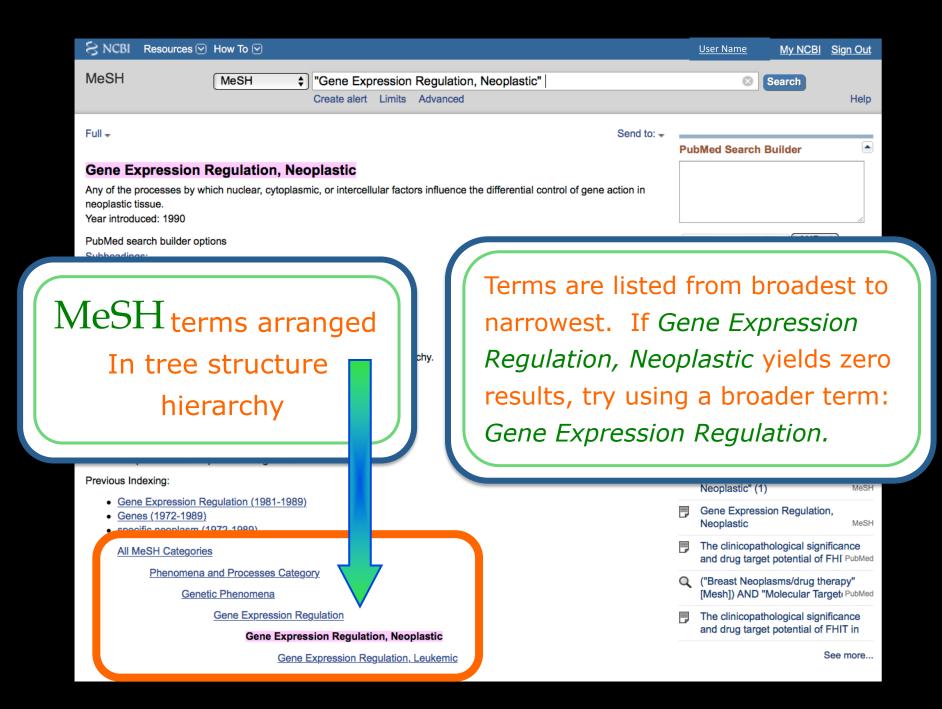
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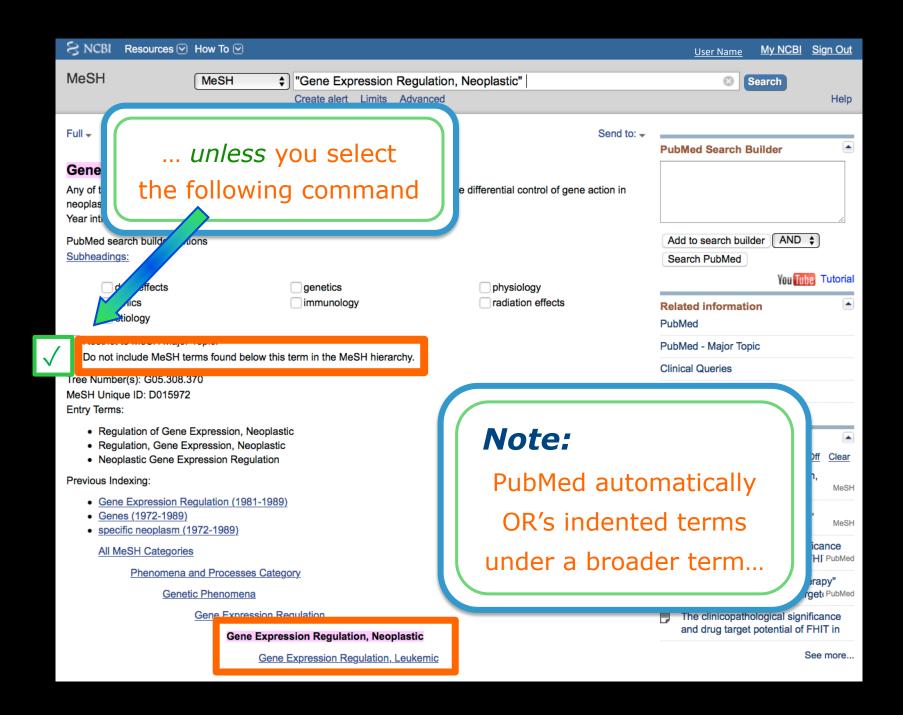
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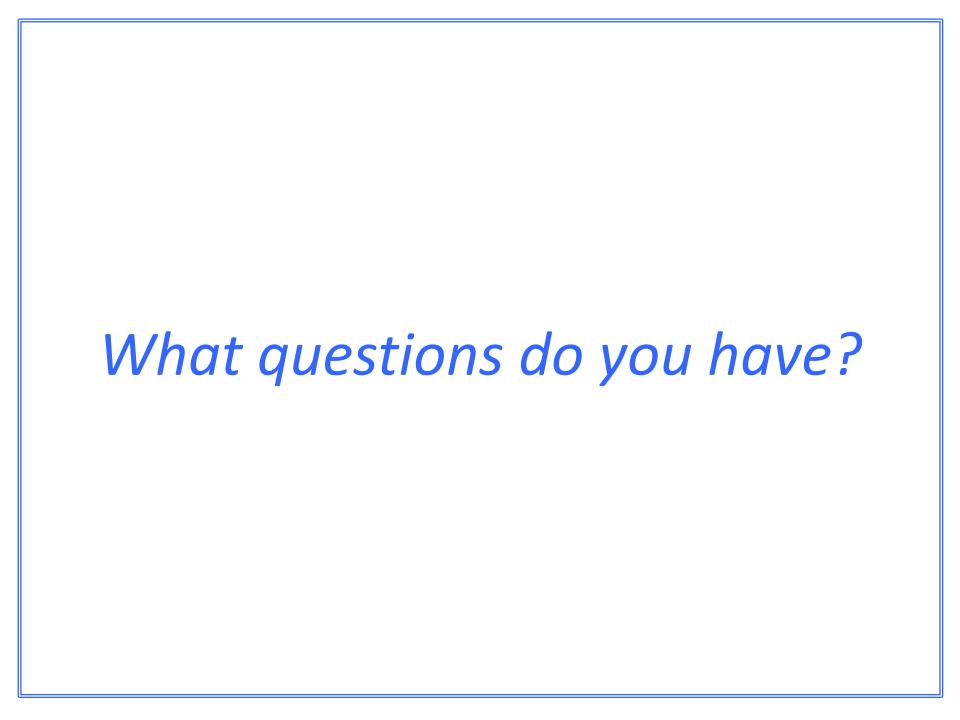
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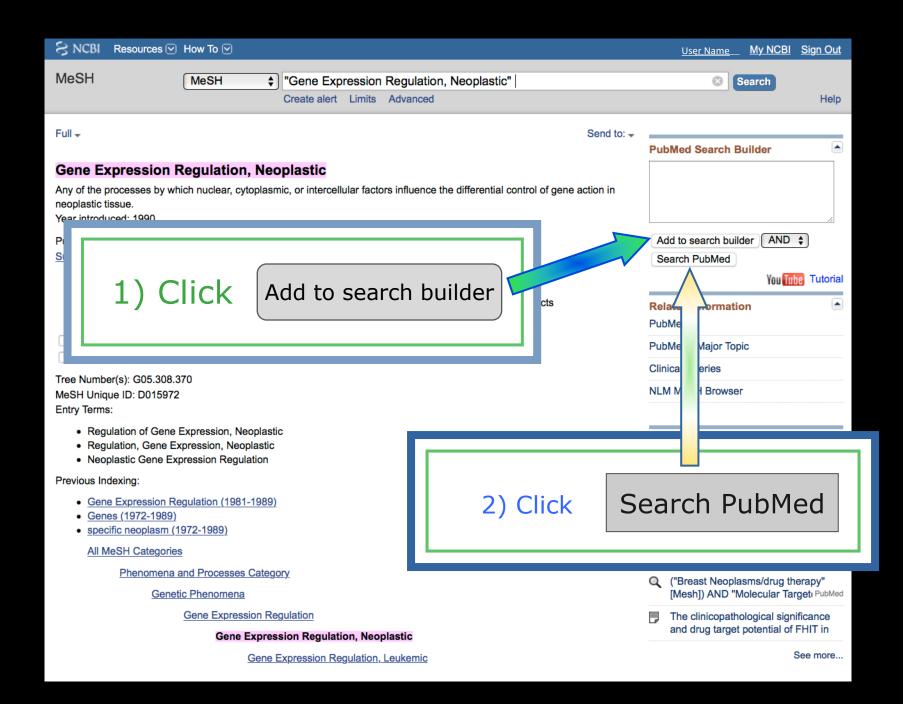
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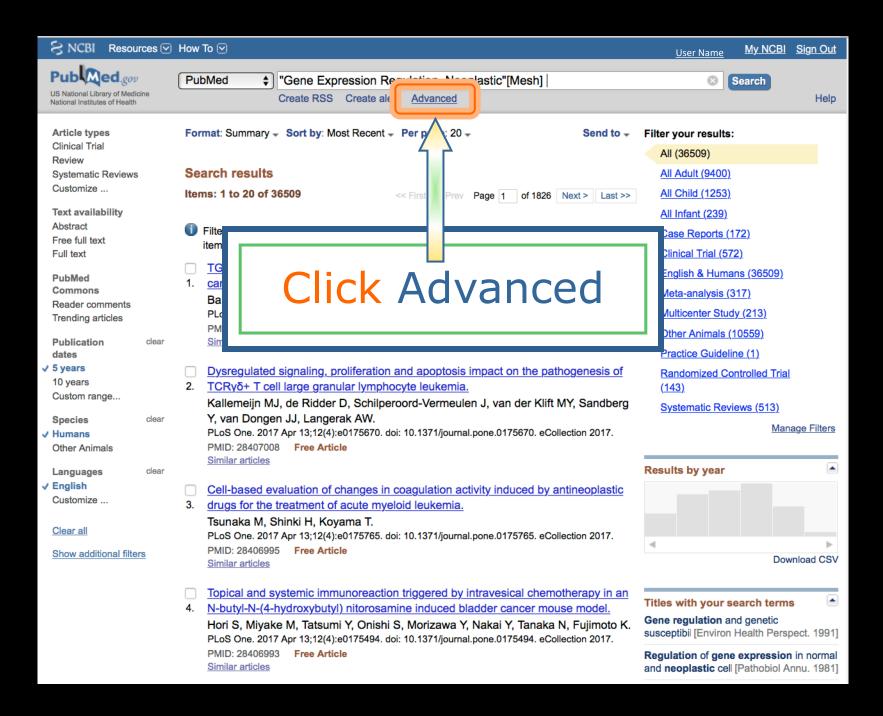


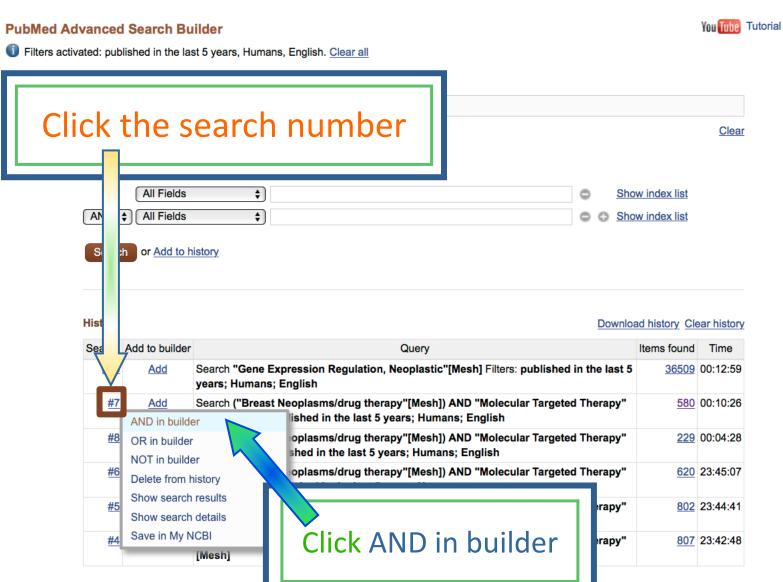














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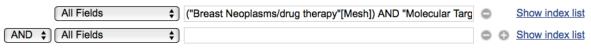
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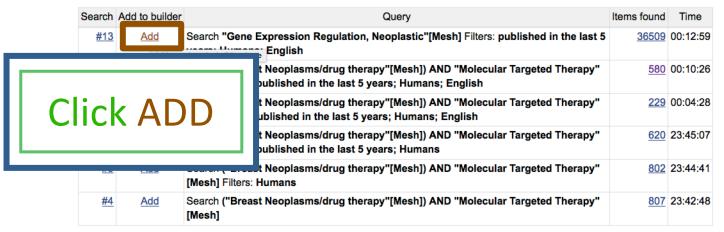
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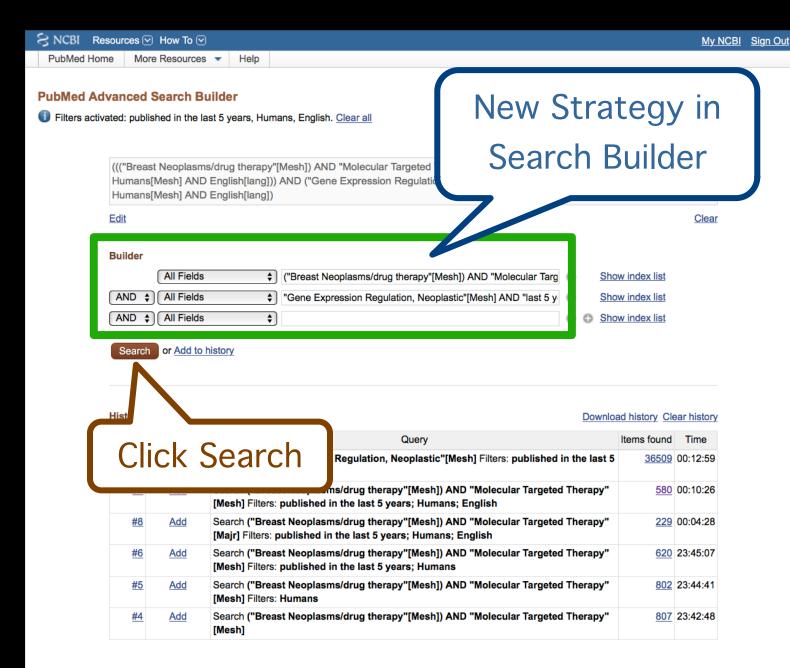
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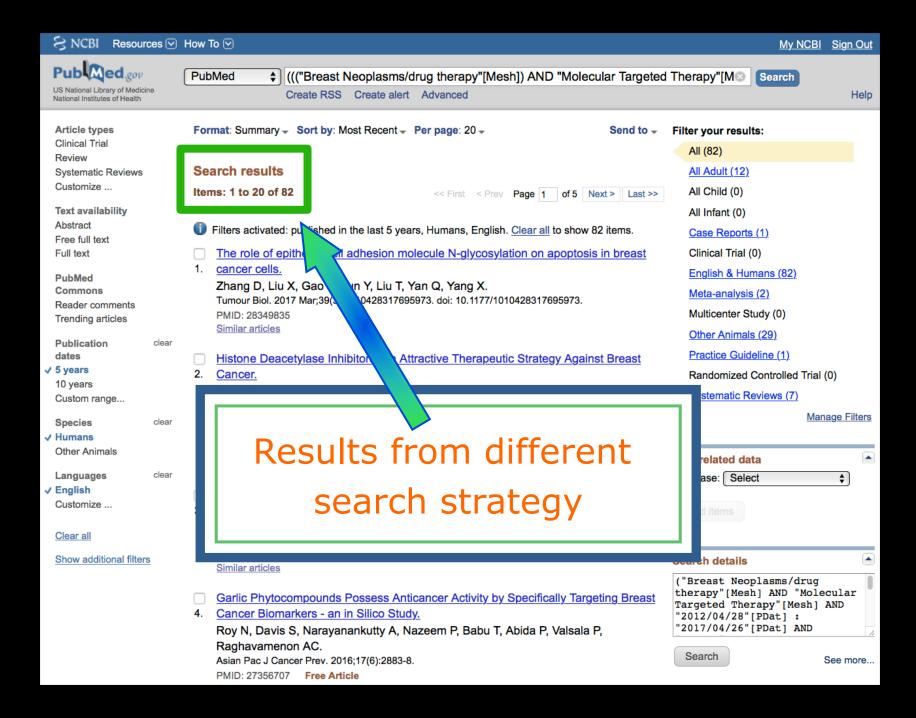


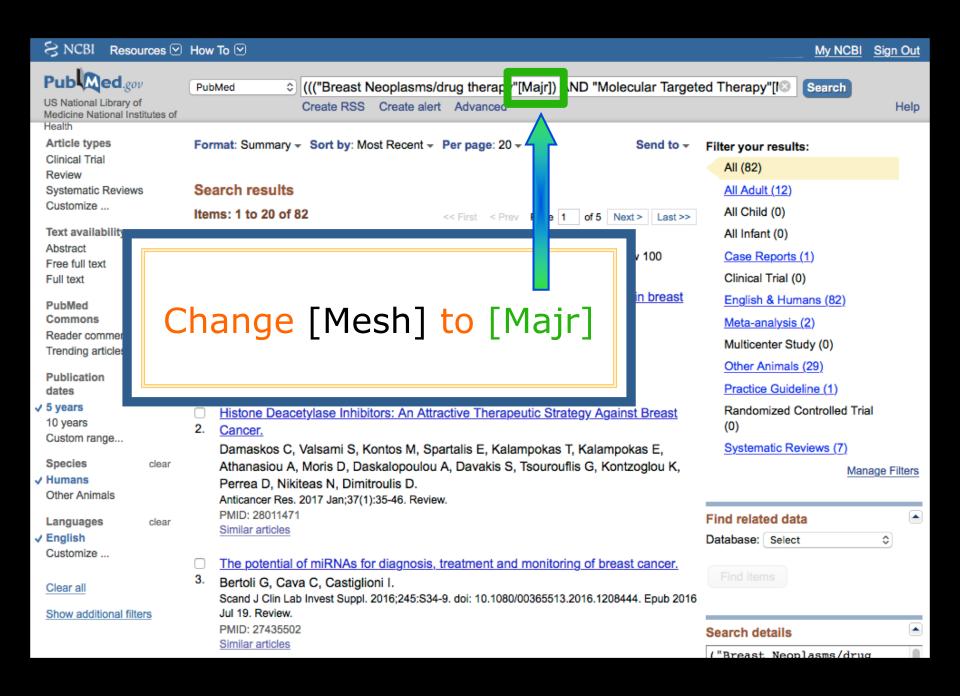
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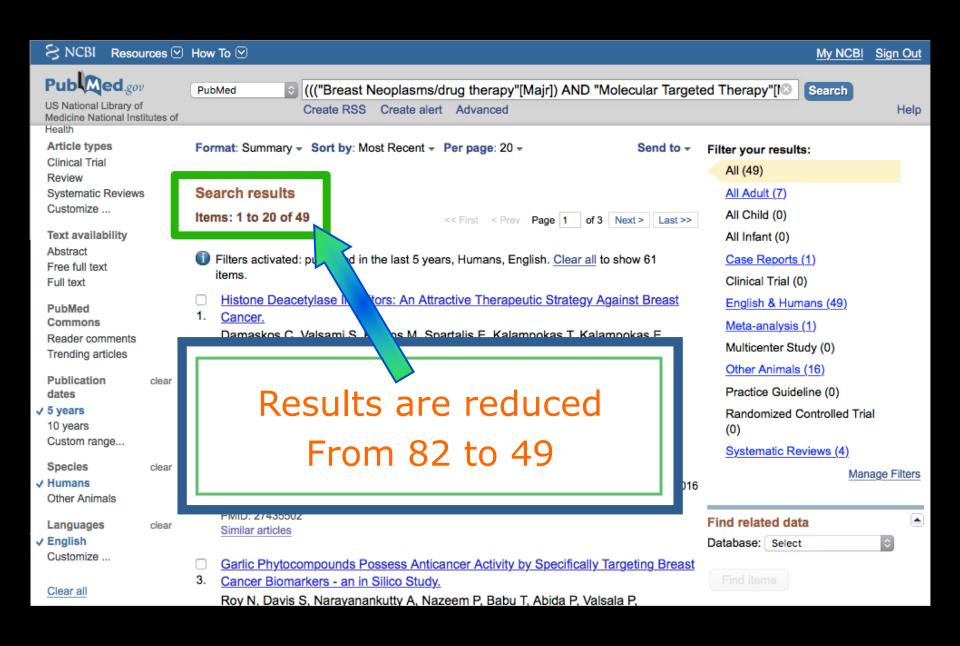
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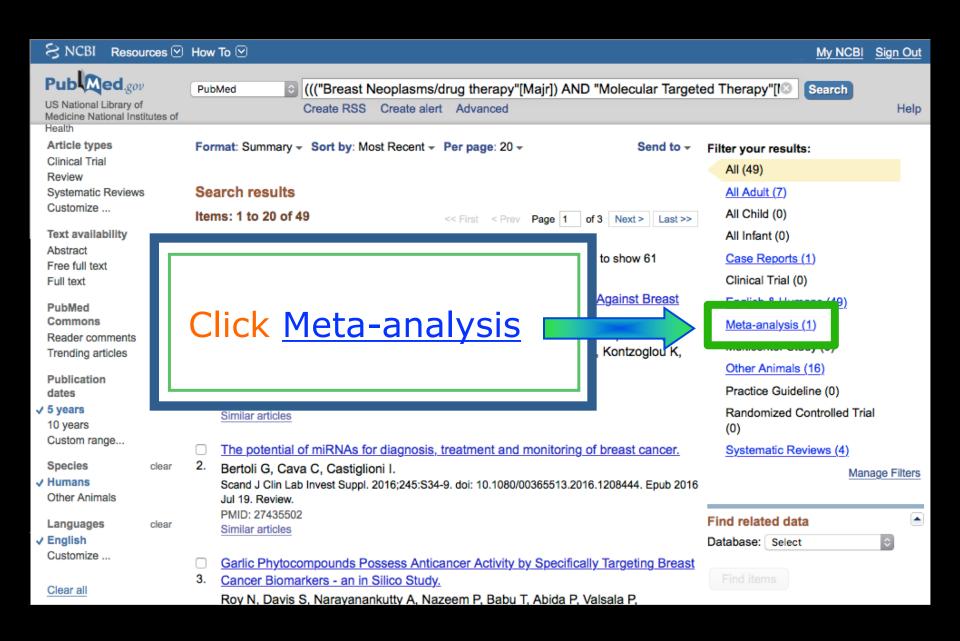


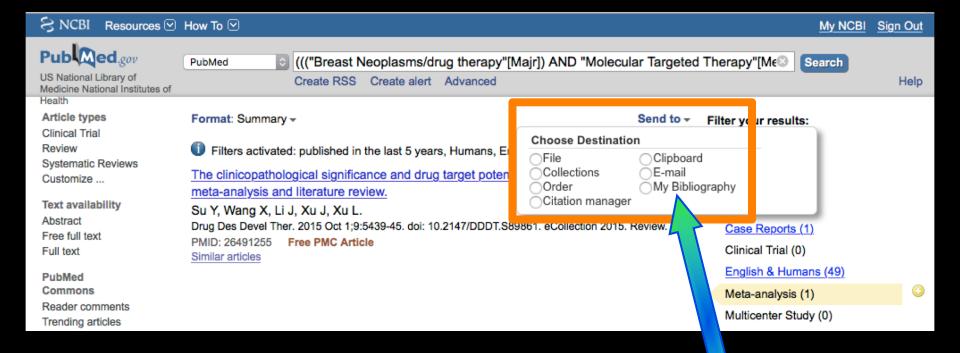










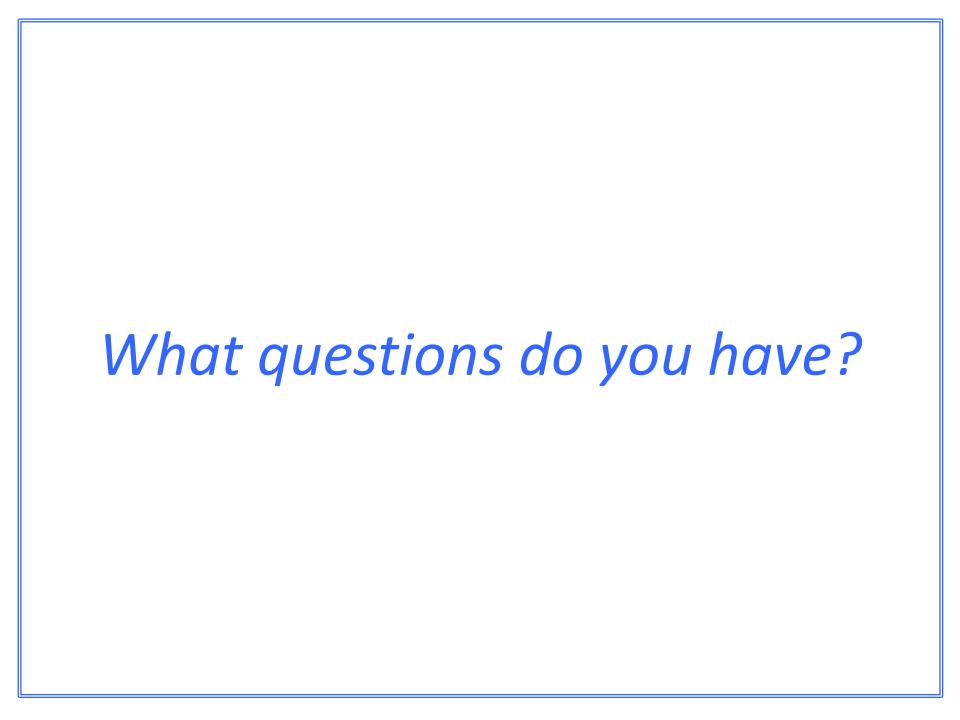


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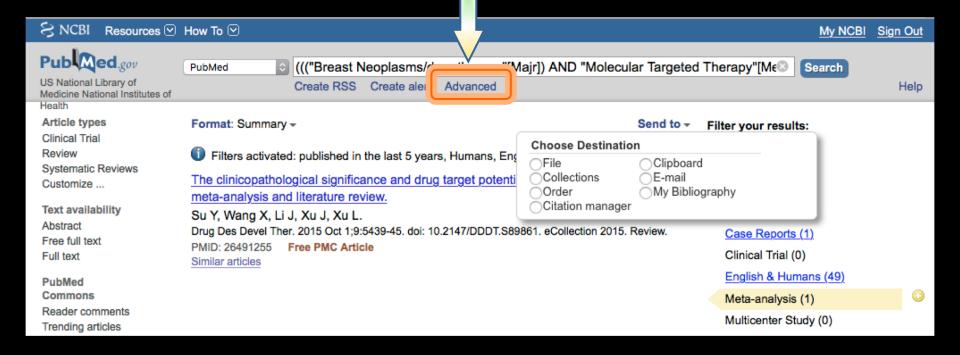
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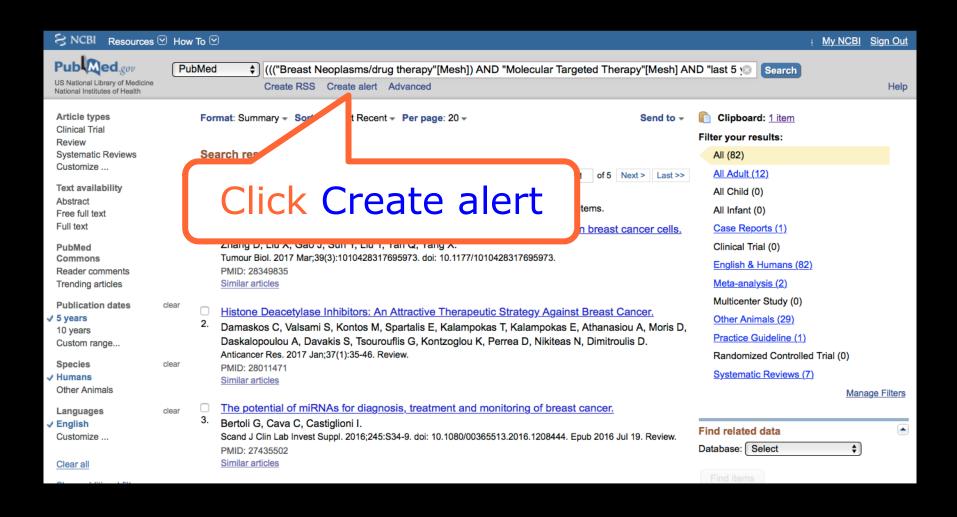
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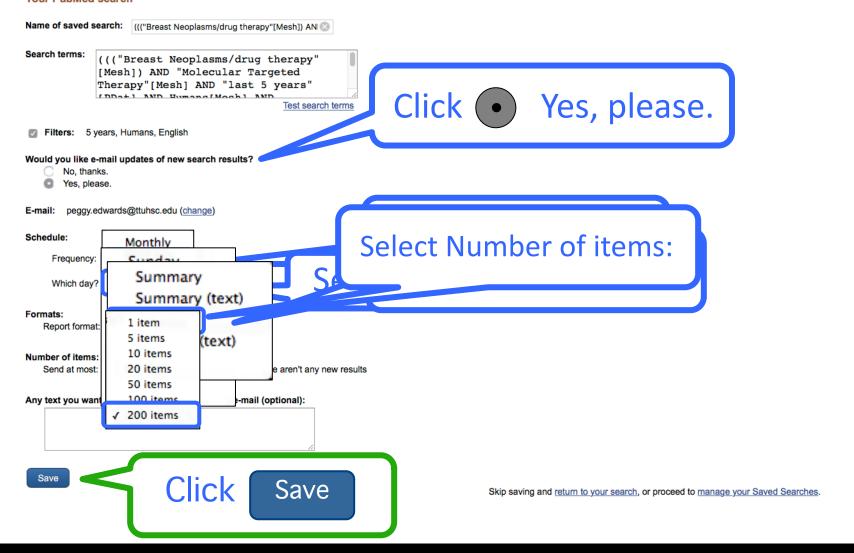
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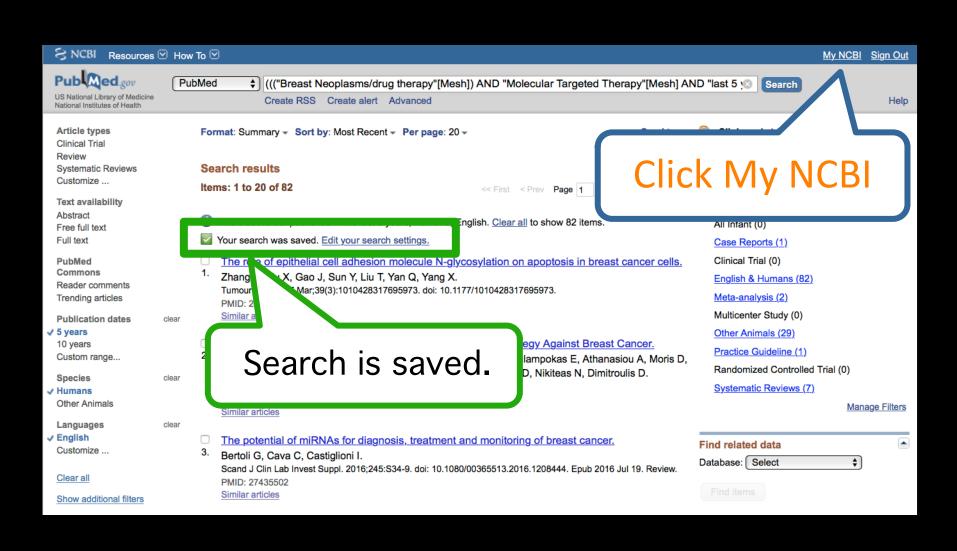
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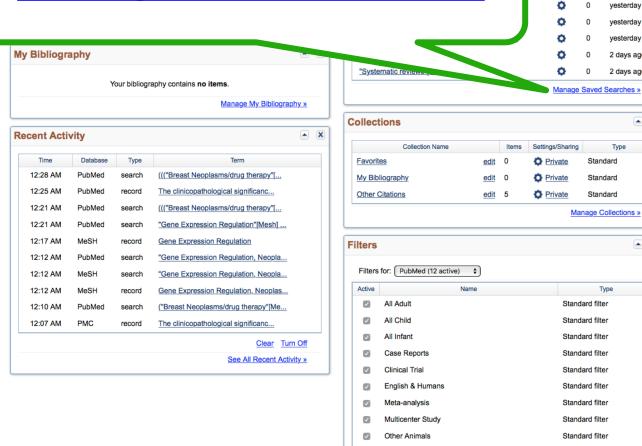
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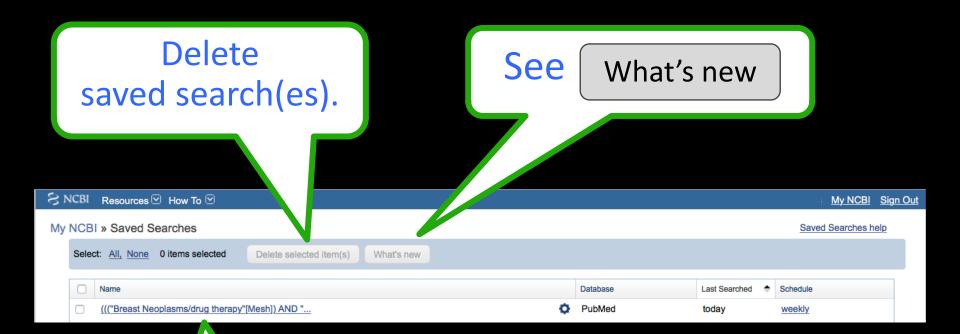
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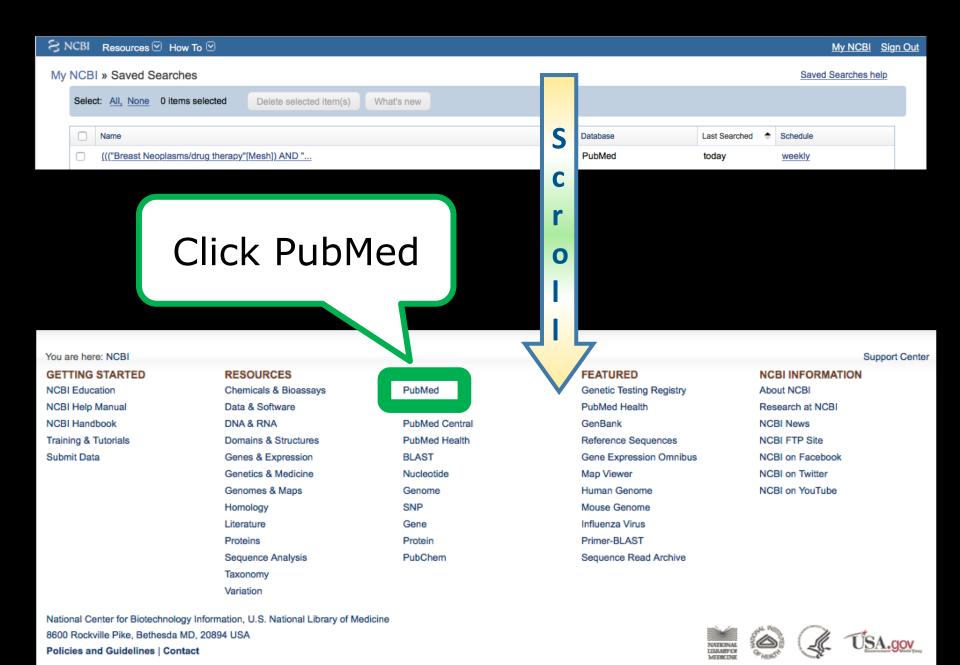
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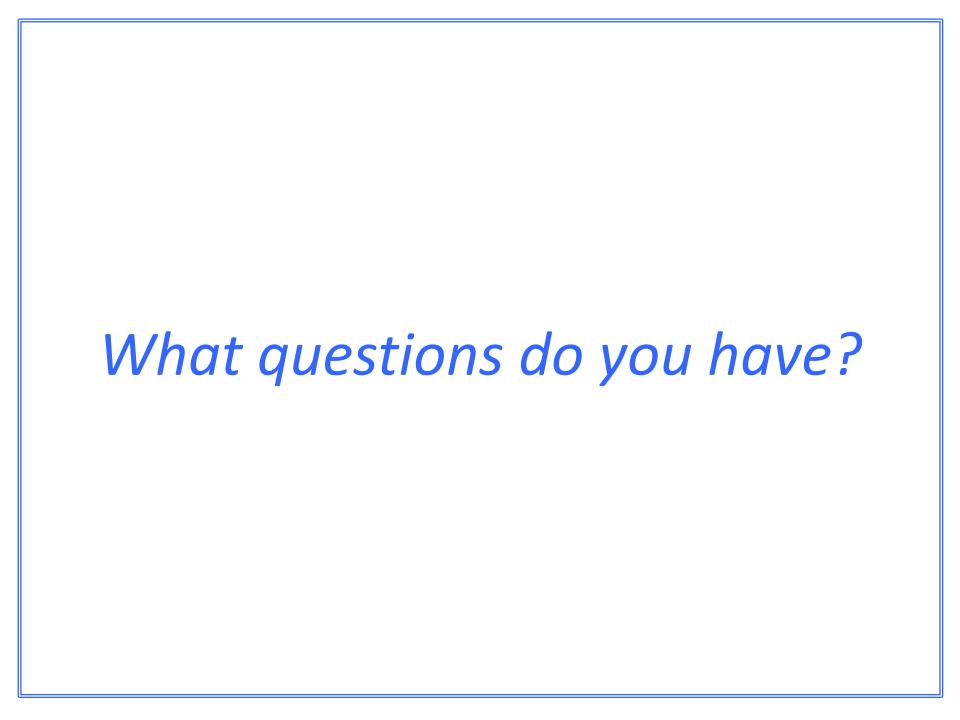
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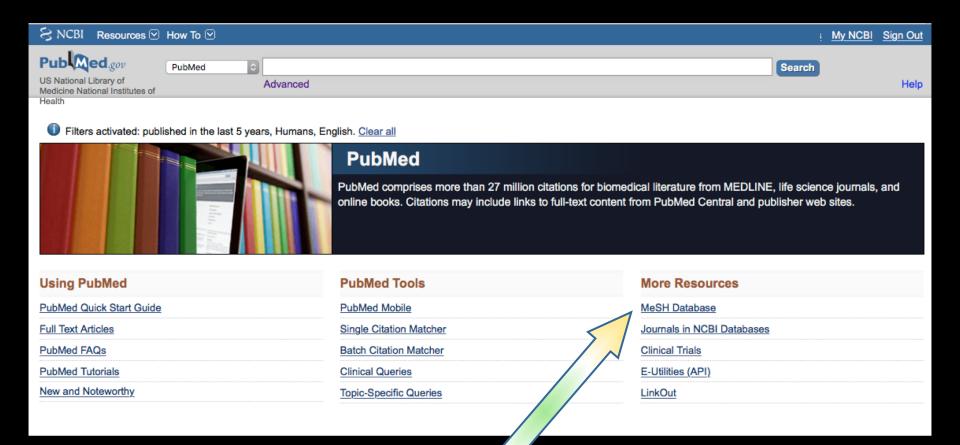
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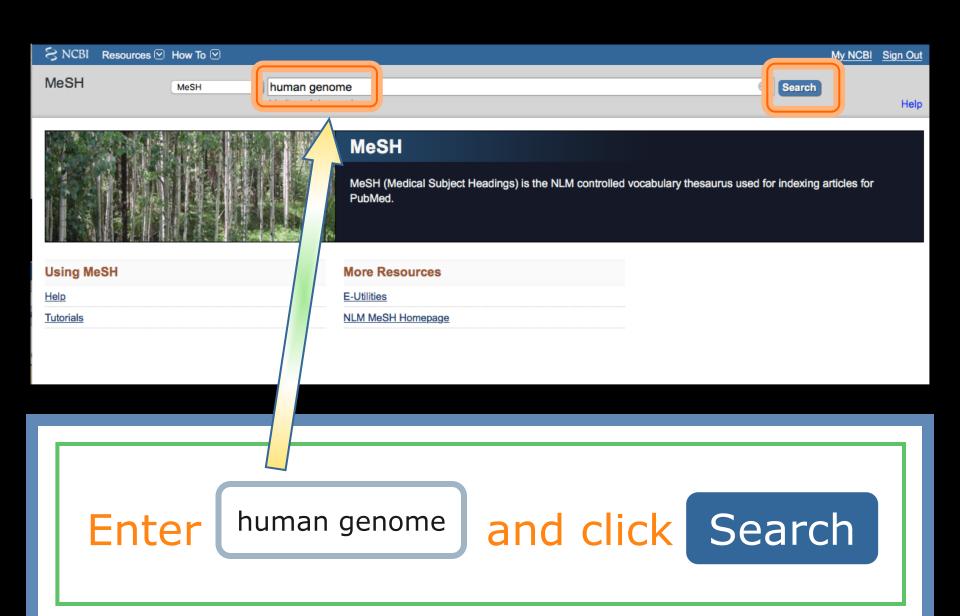


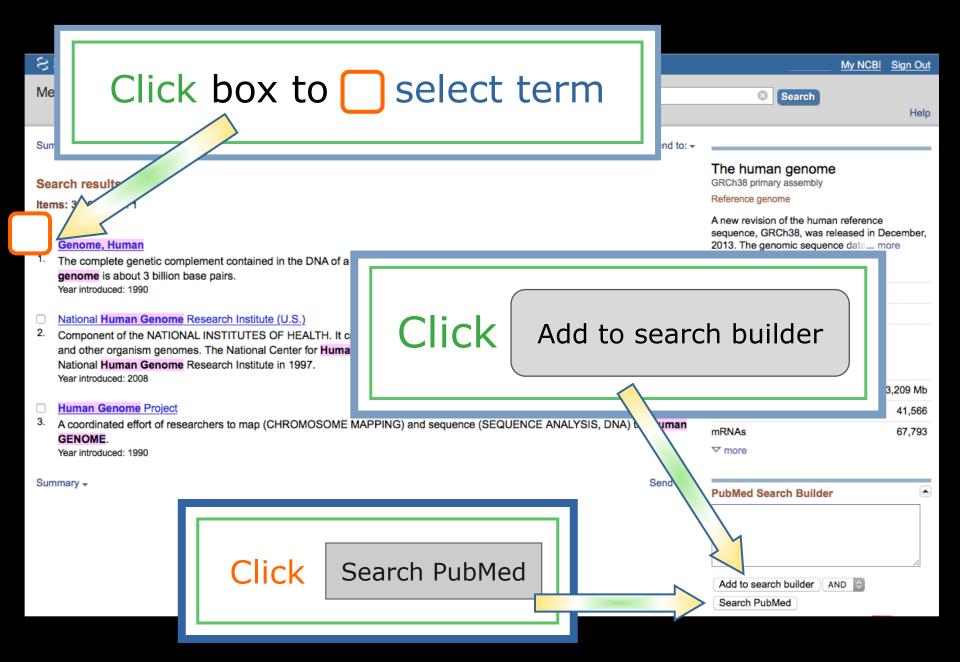
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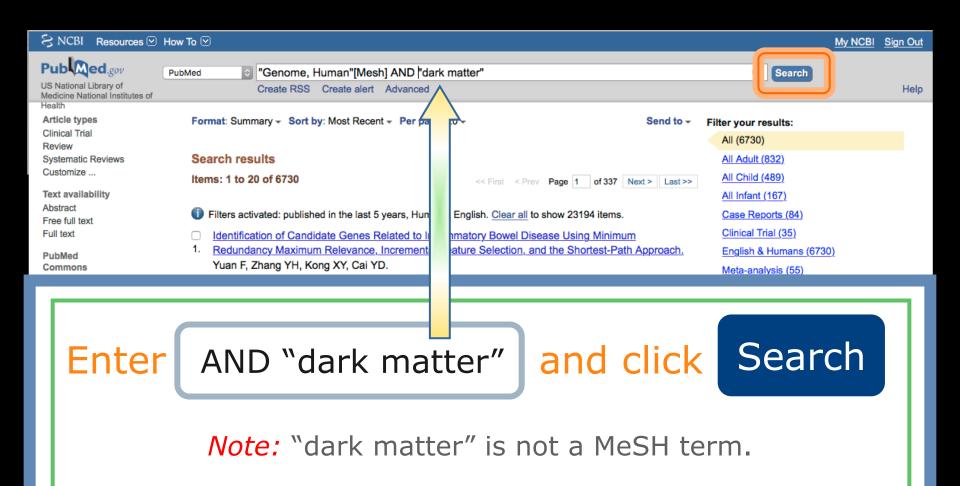


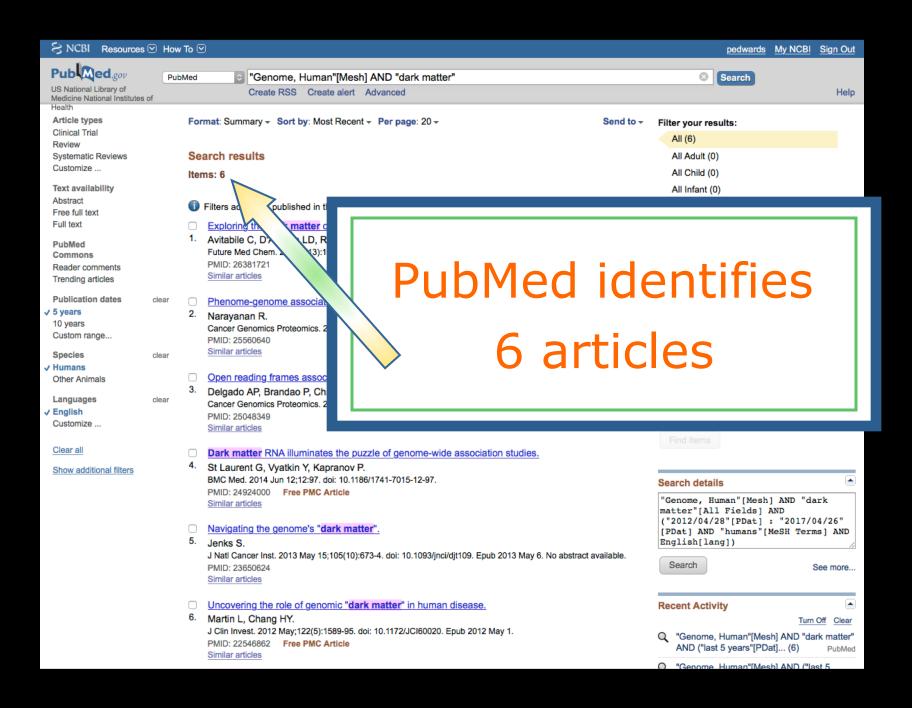
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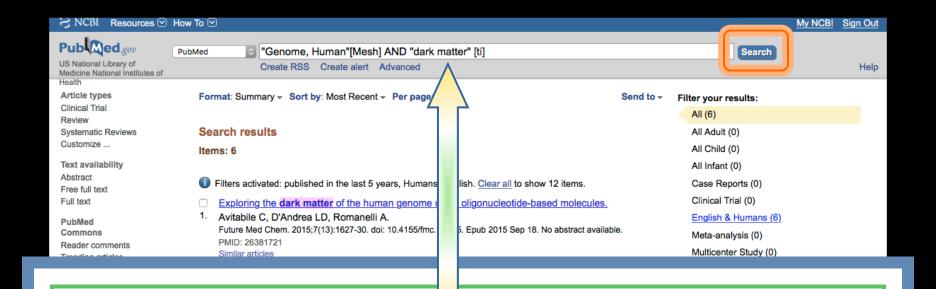




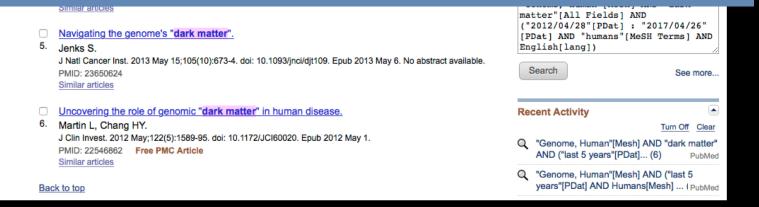


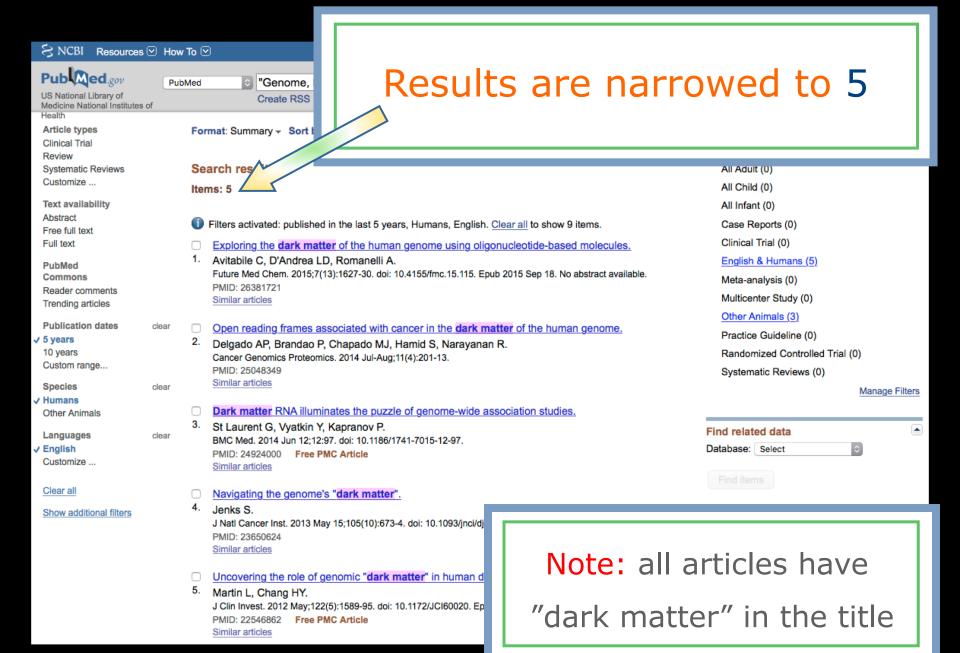




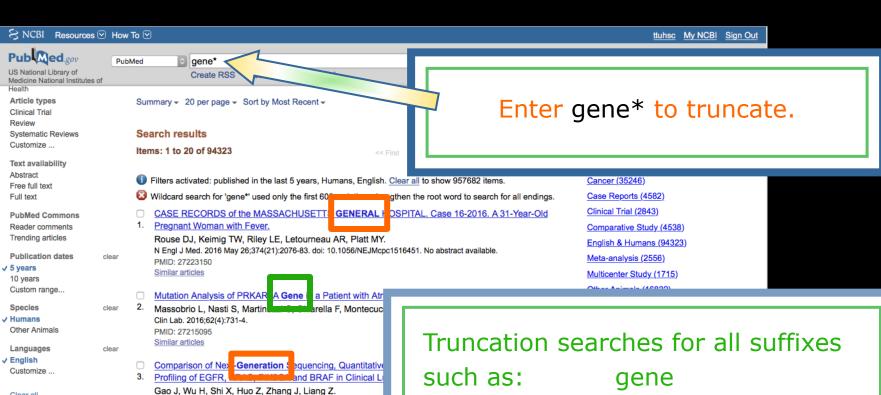


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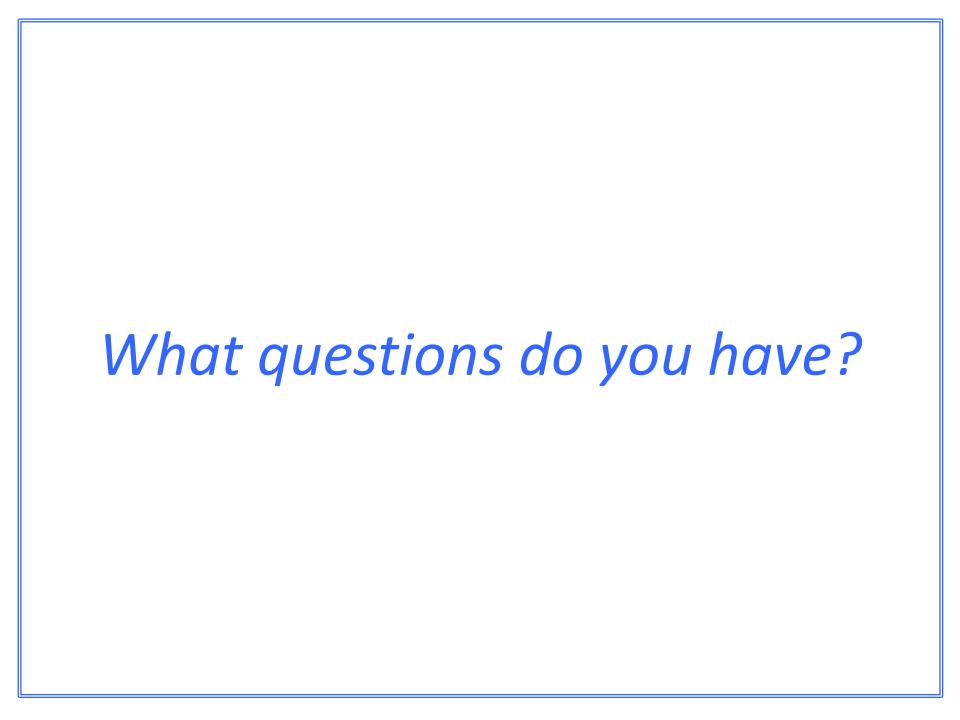
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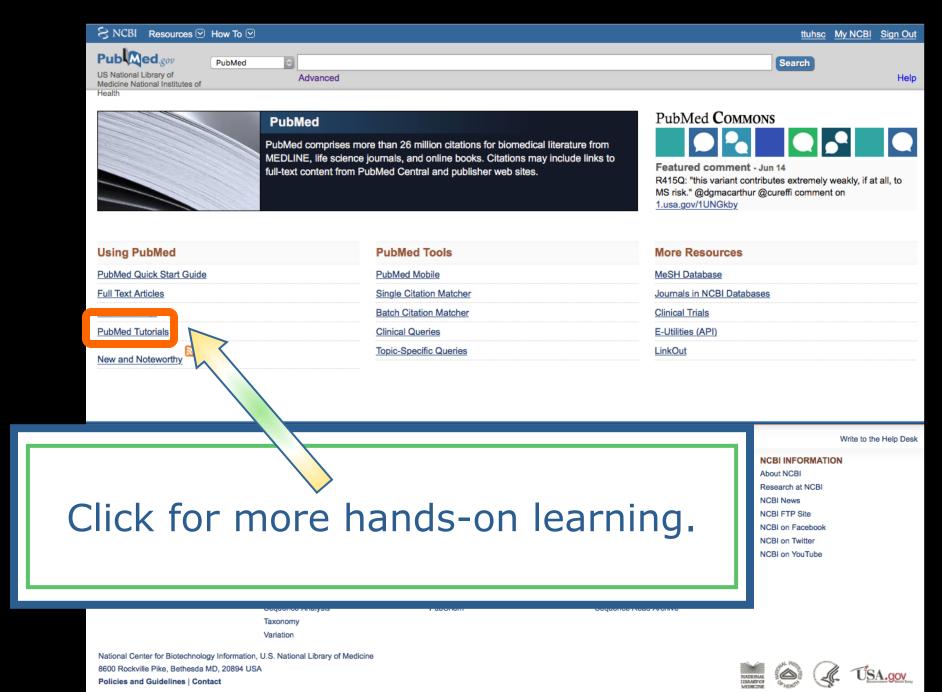
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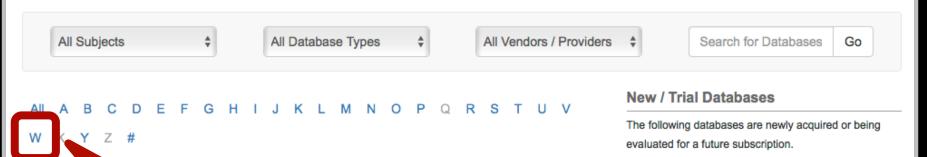
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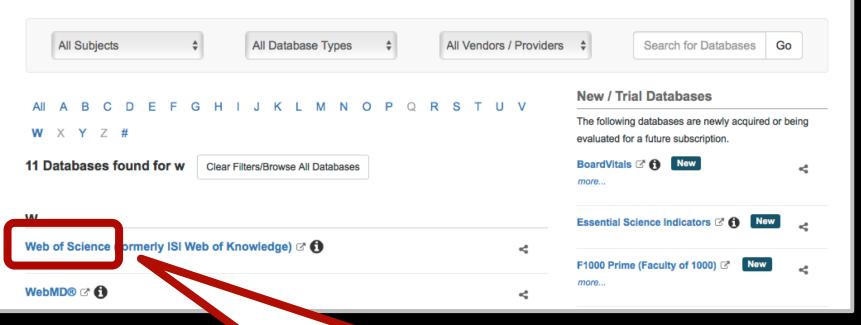
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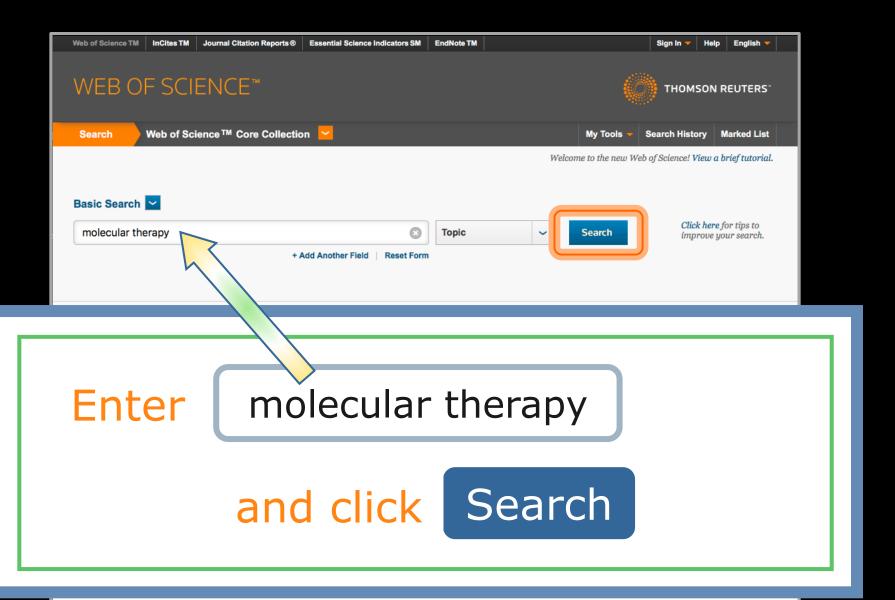
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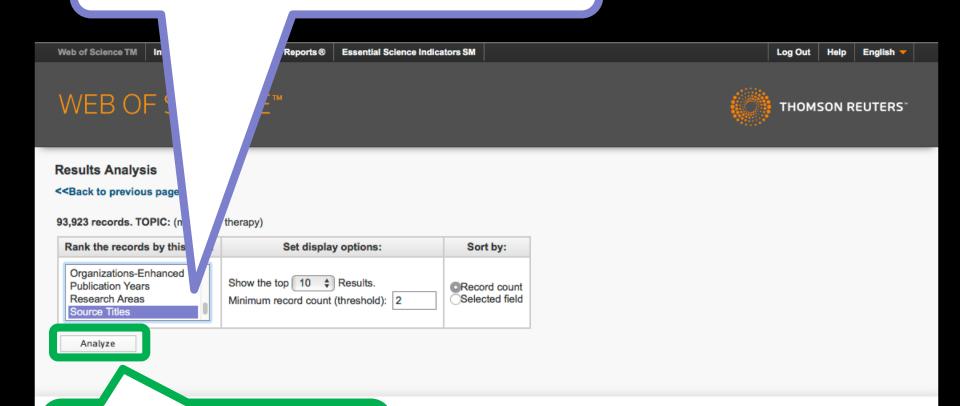
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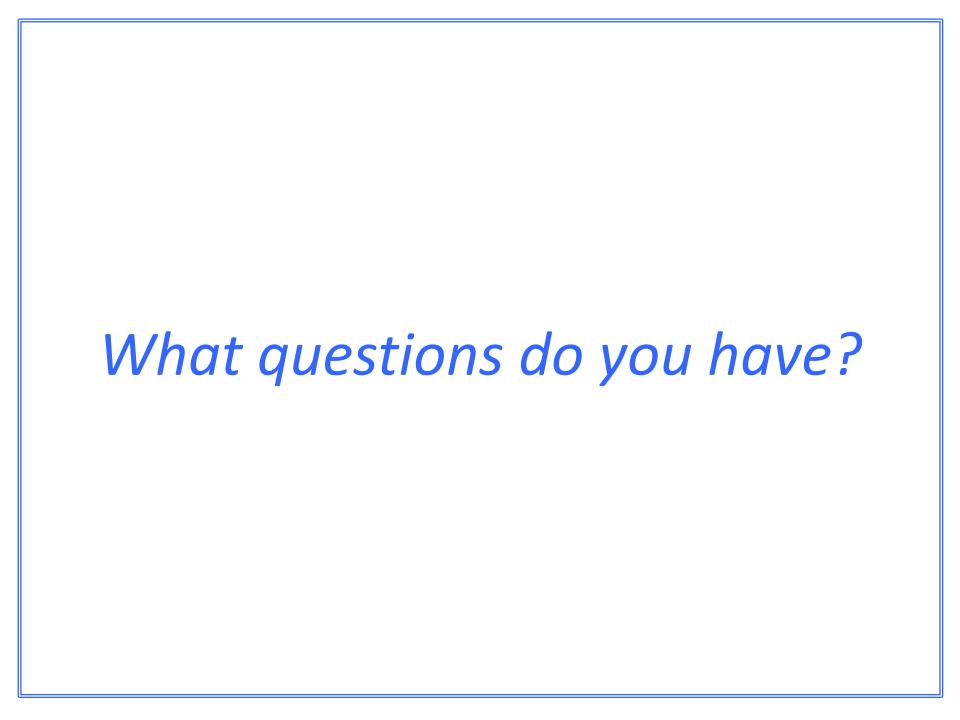
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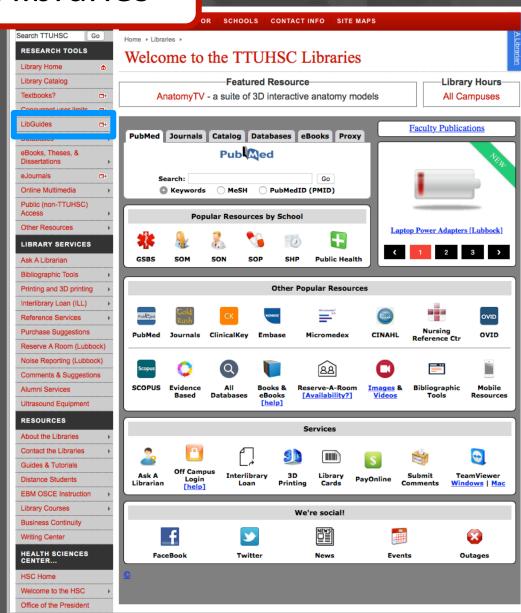
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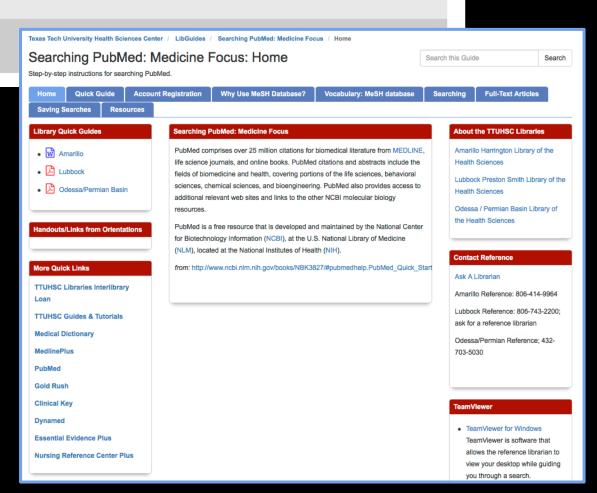
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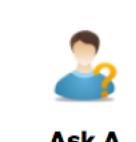


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Ask A Librarian

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# Critical Assessment of the Biomedical Literature

# What is Critical Appraisal?

"The process of assessing and interpreting evidence by systematically considering its validity, results, and relevance."

> The Cochrane Collaboration Glossary http://www.cochrane.org/glossary/



# **Evidence Based Medicine**

# **Toolkit**

Home

About EBM

Domains

Practice Guidelines

Systematic Review >

Economic Analysis >

Glossaries

JAMA User's Guide

Links



http://www.ebm.med.ualberta.ca/

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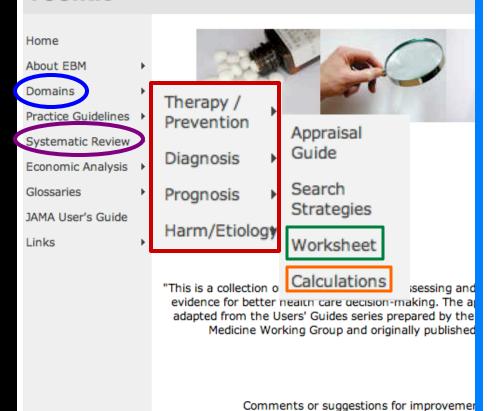
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# **Evidence Based Medicine**

# **Toolkit**



Mouse over



Domains,

Study Category,

and select Worksheet.

Look at Calculations.

Then look at Systematic Review.

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# Critical Appraisal Worksheet

Therapy - Last updated - February 2003 1

# Worksheet for Using an Article About Therapy or Prevention

University of Alberta EBM Toolkit

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### AR

E THE RESULTS OF THE STUDY VALID?										
1.	. Was the assignment of patients to treatment randomized?									
	[]	Yes []	No	[] Can't Tell						
2.	. Were all patients who entered the trial properly accounted for and attributed at its conclusion?									
		[] Yes	[] No	[] Can't Tell						
	• was follow-up	complete?								
	<ul> <li>were patients analyzed in the groups to which they were randomized (intention to treat analysis)?</li> </ul>									
3.	Were patients, their clinicians, and study personnel 'blind' to treatment?									
		[]Yes	[] No	[] Can't Tell						
4.	. Were the groups similar at the start of the trial?									
		[] Yes	[]N	Io [] Can't Tell						

· Baseline prognostic factors (demographics, co-morditity, disease severity, other known confounders) balanced?

**JAMA** evidence Using Evidence to Improve Care

Home Users' Guides to the Medical Literature

The Rational Clinical Examination

Care at the Close of Life

Education Guides

Calculators

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# New | March 2017



### AUDIO

FREE Gordon Guyatt, MD, introduces the 3rd edition of the Users' Guides to the Medical Literature. (9:01)

00:00:00 | NaN:NaN

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### **AUDIO**

FREE John R. Crochet, MD, discusses the clinical examination for ectopic pregnancy. (8:07)

00:00:00 | NaN:NaN

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Acute Coronary Syndrome (0.55 MB PPT)



**New Chapter** 

**Head Trauma** 

Now Available: Complete text of the Third Edition of the Users' Guides to the Medical Literature



# Users' Guides to the Medical Literature

A Manual for Evidence-Based Clinical Practice

**FEATURED** 

Measuring Agreement Beyond Chance

## JAMA evidence THE RATIONAL CLINICAL EXAMINATION



### The Rational Clinical Examination

Evidence-Based Clinical Diagnosis

**FEATURED** 

Infection of a Common Wound

# JAMA evidence CARE AT THE CLOSE OF LIFE



## Care at the Close of Life

Evidence and Experience

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Latino Patients and Their Families

# Glossary

Added July 2016