Embase®

By:

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Session aims

 To understand the concepts of a basic search strategy in Embase

 To describe the EMTREE thesaurus in detail so that you will be able to apply EMTREE to use Embase efficiently

To carry out advanced Embase searches

Biomedical Evidence is Essential

□ To successfully perform critical functions such as pharmacovigilance, generating high-quality systematic reviews in support of evidence-based medicine and drug and medical device efficacy studies, pharmaceutical and life sciences organizations require a wide array of biomedical evidence.

Embase increases the discovery of biomedical evidence to support critical life sciences functions, delivering relevant, up-to-date biomedical information to the global biomedical research community.

Relevant and Accessible Biomedical Information

Over 30 million abstracts and indices from published, peer-reviewed biomedical literature, in-press publications and conferences are available on Embase. Full-text indexing of drug, disease and medical device data, supported by the Embase thesaurus Emtree, facilitates precise searching.

Embase Content

□ Embase provides unparalleled coverage of the biomedical literature, with 30 million+ records from 8,500+ currently published journals. Embase includes six million+ records and 2,900+ journals that are not covered by MEDLINE. Also, Embase Classic provides access to data going back to 1947.

List of Conferences Covered in Embase

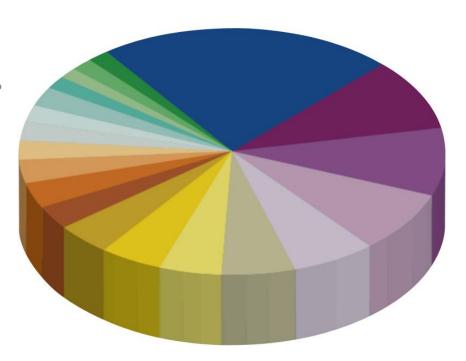
□ Embase includes conference abstracts from important biomedical, drug and medical device conferences dating <u>back to 2009</u>. It currently indexes <u>6,000+ conferences covering over 2 million conference abstracts</u>—advanced information that can't be found searching MEDLINE alone.

As of January 2016, Emtree contains:

- Over 73,000 preferred terms (more than 31,000 for drugs and chemicals)
- Over 310,000 synonyms (more than 190,000 for drugs and chemicals)
- Over 3,000 specific terms for general and medical devices (e.g., endoscopes, catheters, prostheses)
- Several thousand terms for related medical procedures (e.g., endoscopy, catheterization)
- 64 drug subheadings, including 47 routes of administration
- 4 medical device subheadings
- 14 disease subheadings
- 38 check tags for study types, including randomized controlled trial, systematic review, and diagnostic test accuracy study
- Links to over 23,000 CAS registry numbers

Embase Scope & Coverage

- Pharmacology & Taxicology 12%
- General Clinical Medicine 11%
- Genetics, Biochemistry & Molecular Biology 10%
- Neurology & Behavioral Medicine 8%
- Microbiology & Infectious Disease 7%
- Cardiology & Hematology 6%
- Psychiatry & Mental Health 6%
- Oncology 5%
- Healthcare Policy & Management 4%
- Allergy & Immunology 4%
- Pediatrics 4%
- Endocrinology & Metabolism 3%
- Obstetrics & Gynecology 3%
- Biomedical Engineering & Medical Devices 3%
- Anesthesiology & Intensive Care 3%
- Gastroenterology 2%
- Respiratory Medicine 2%
- Nephrology & Urology 2%
- Dermatology 2%



Other topics 28%

Including public health, basic biomedical science and topics included from MEDLINE

EMBASE vs Medline

MEDLINE

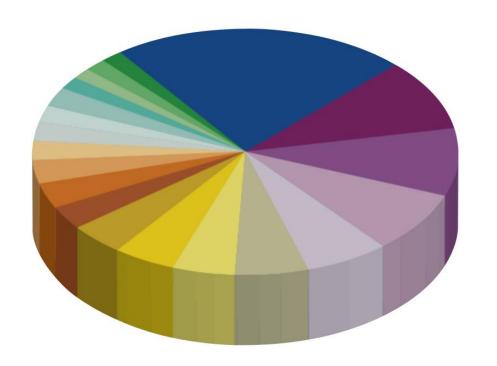
- USA coverage
- 1950 onwards
- Wide medical coverage
- In process
- MeSH indexing

EMBASE

- European coverage
- 1974 onwards
- Drug/pharmacology focus
- Updated faster
- EMTREE indexing

30% overlap between the Medline and Embase

Embase vs MEDLINE – Scope



Similar overall pattern of coverage

... but with two major differences

1. Pharmacology & toxicology

Embase: 11.2% (889 titles)
MEDLINE: 8.3% (465 titles)

2. General clinical medicine

Embase: 10.5% (835 titles)
MEDLINE: 8.9% (495 titles)

Pharmacovigilance

- A key component of diverse and increasingly complex pharmacovigilance regulatory requirements is systematic screening of biomedical literature for adverse drug reactions (ADRs).
- □ Capturing all potential and unanticipated health risks for a drug from the international biomedical literature also allows pharmaceutical manufacturers to proactively develop more effective drug safety strategies. Embase helps track all published/peer-reviewed biomedical information on your products and makes it easy to quickly review reported safety risks, side effects and adverse drug events information all in a single platform.

- Embase provides the information pharmaceutical companies need for effective pharmacovigilance
 - Comprehensive and up-to-date drug safety information, with over 30 million records from more than 8,500 journals and 5,500 conferences
 - The Embase thesaurus, Emtree, is one of the most comprehensive thesauri available for life science information, with a unique focus on drug terminology
 - Direct linking of drugs, diseases and devices to associated events mentioned in the article, enabling more precise retrieval of adverse event information

Systematic Reviews (EBM).

- Finding all relevant information from the biomedical literature is key to creating high-quality systematic reviews that accelerate evidence-based clinical decisions and improve patient outcomes.
- Unique coverage of the most important types of evidence and search tools specifically designed to pinpoint relevant biomedical literature ensures that Embase enables Biomedical Researchers to generate the most impactful Systematic Reviews in support of Evidence-Based Medicine (EBM).

Embase provides the information researchers need to generate high-quality Systematic Reviews

- Dedicated search form for building searches using the PICO (Patient, Intervention, Comparison/control, Outcome) framework
- More than 30 million records from over 8,500 journals and 'grey literature' from over 1.9 million conference abstracts
- Coverage of the most important types of evidence, including randomized controlled trials, controlled clinical trials, Cochrane reviews and meta-analyses

- Deep indexing using the Emtree life science thesaurus, which includes over 70,000 preferred terms and 290,000 synonyms, as well as trial and study types, reviews and meta-analysis
- Unique non-English content, along with detailed indexing of study types, trial phases, patient populations etc.
- The Cochrane Collaboration recommends searching in Embase

Medical Devices

Information found in the biomedical literature strengthens every stage of the medical device life cycle, from concept and design through clinical trials to release and reimbursement. Regulatory authorities require medical device companies to the biomedical literature during the approval process and for post-market surveillance. Embase includes unique medical device information and indexing, making it an indispensable resource.

PICO

- The PICO process is a technique used in evidence based practice to frame and answer a clinical or health care related question. The PICO framework is also used to develop literature search strategies. The PICO acronym stands for
- P patient, problem or population
- □ I intervention
- C comparison, control or comparator
- O outcomes

How do I build searches using the PICO framework?

Identify how each part of the clinical question to be answered applies to each element of the PICO framework and then identify the best terms to use to retrieve all relevant data:

P - Patient or Problem or Population

The aspects of this concept may include the disease or condition, stage, severity, demographic characteristics and other clinically relevant factors.

I - Intervention

The aspects of this concept may include type of intervention, drug dose and duration, timing and route of administration.

C - Comparison or Control

The aspects of this concept may include absence of risk or treatment, placebo or alternative therapy.

O - Outcome

The aspects of this concept may include risk, mortality, morbidity, quality of life and utilities. Sometimes this component is not searchable and/or it is advisable to ignore it in the search process.

Example

□ A 28-year-old male presents with recurrent furunculosis (skin boils) for past 8 months; these episodes have been treated with drainage and several courses of antibiotics but keep recurring. He asks if recurrences can be prevented. To convert this to an answerable question, use the PICO method as follows:

Question: In patients with recurrent furunculosis, do prophylactic antibiotics, compared to no treatment, reduce the recurrence rate?

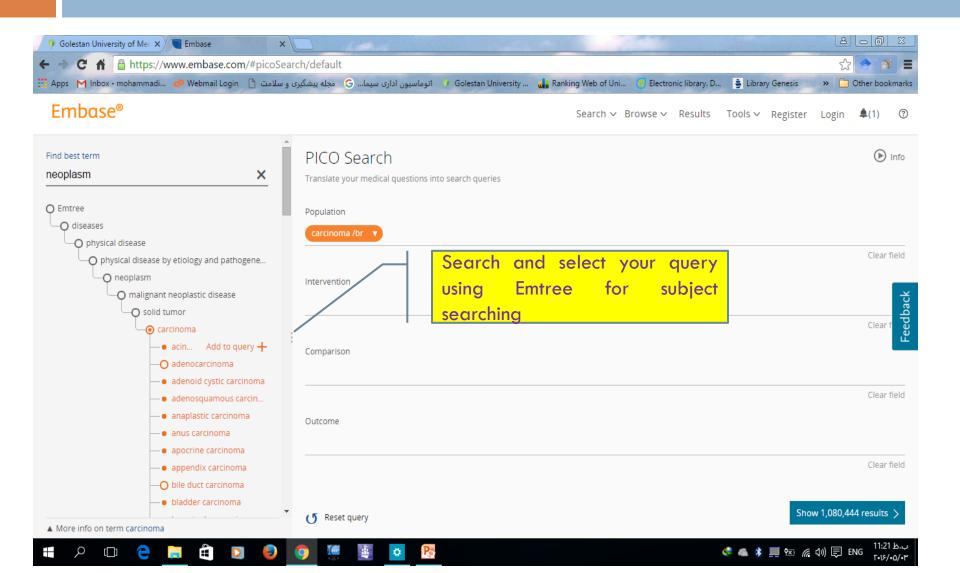
- \square P = patients with recurrent furunculosis
- \Box I = prophylactic antibiotics
- C = no treatment
- O = reduction in recurrence rate of furunculosis

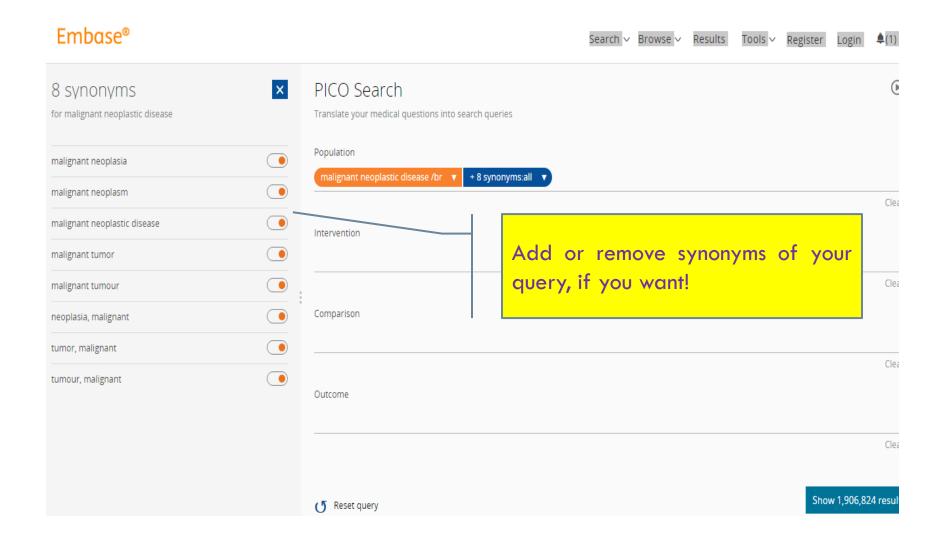
Searching in Embase in 7 way:

- PICO
- Quick
- Advances
- Drug
- Disease
- Device
- Article

PICO

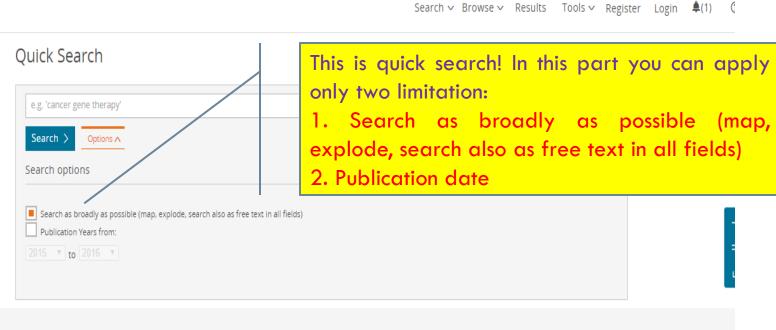
in PICO, you must entre the complete the sections of your question in adequate part of PICO form. For better results, use Emtree in this platform. Additionally, you can add or remove any synonyms of your query.





Quick Search

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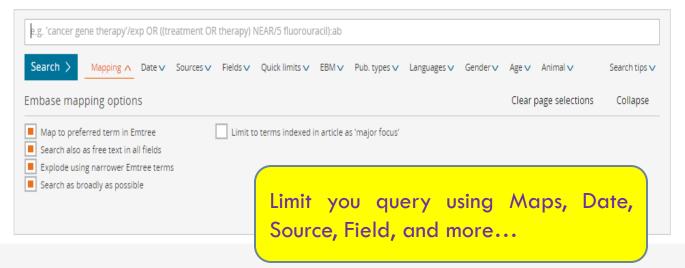
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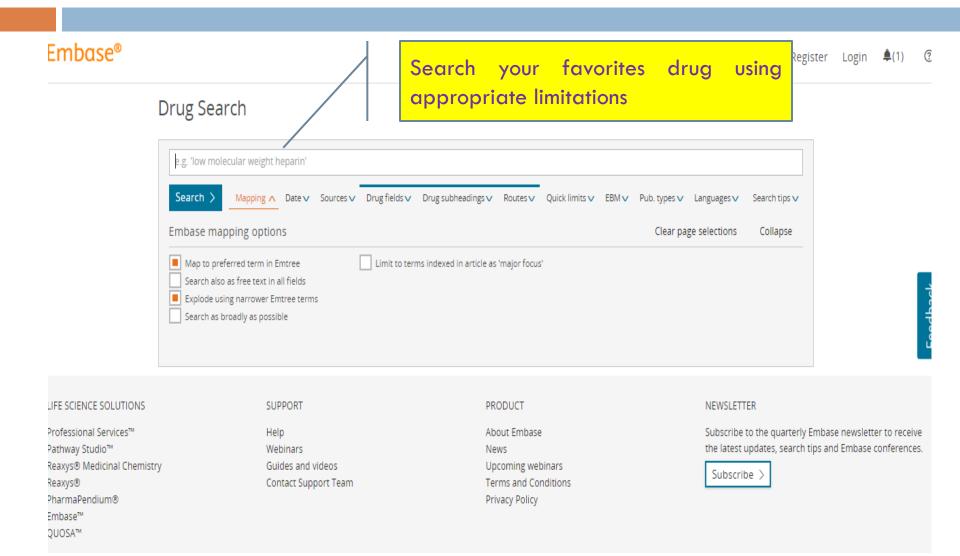
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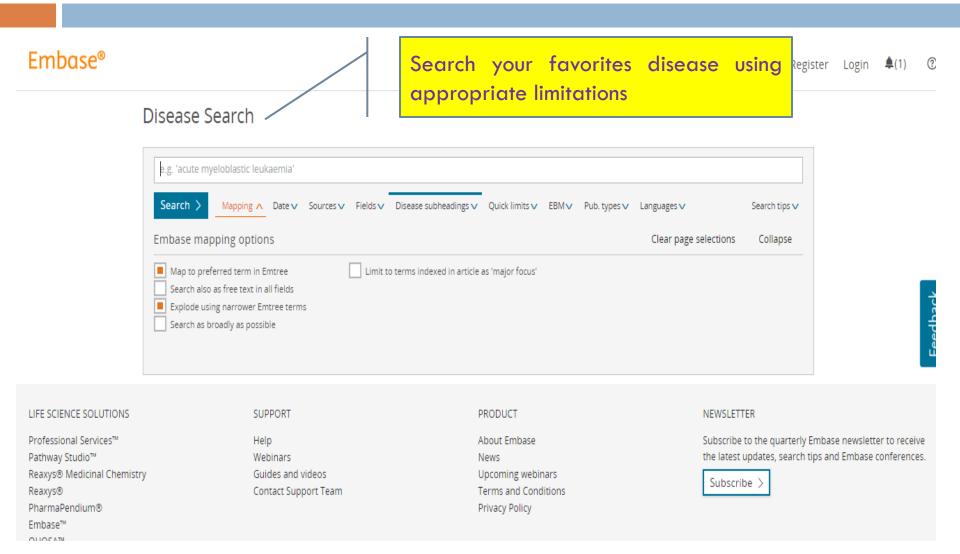
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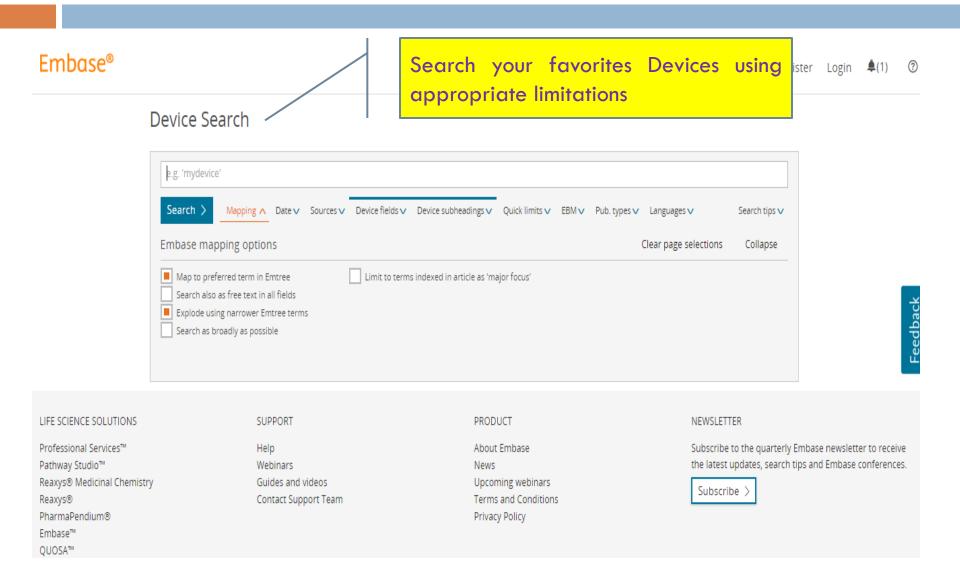
Drug search



Disease search



Device search



Article search

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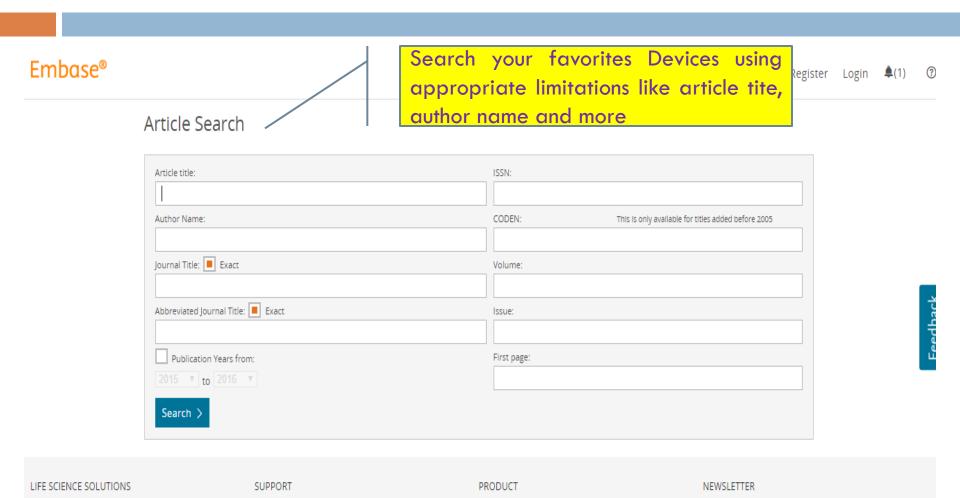
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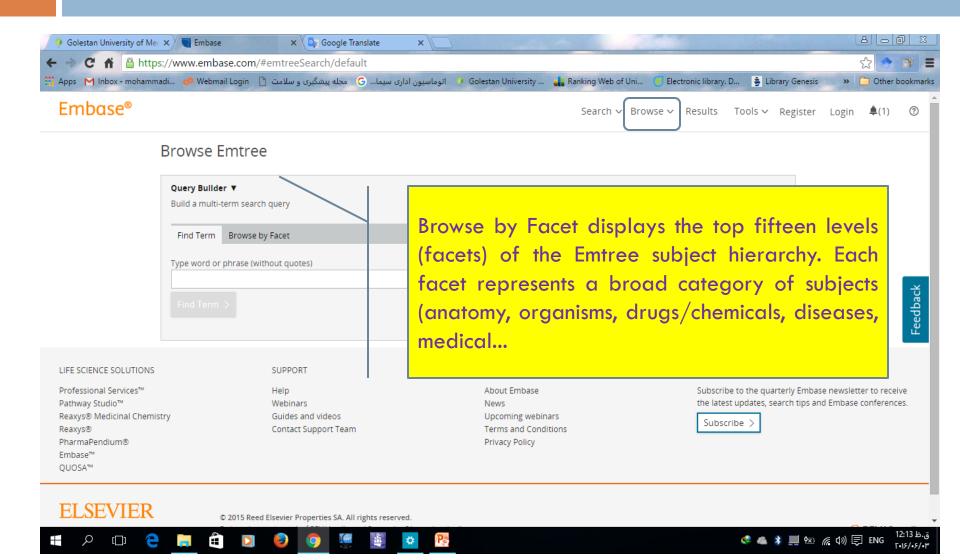
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