

From PubMed to Embase

Tips for Translating Search Queries



Are you wondering why and how to replicate your PubMed searches in Embase? Join us to learn the benefits of using Embase and how to optimize the PubMed to Embase translation process. Leverage the power of Embase's comprehensive literature coverage and detailed indexing using Emtree terms (subject headings).

Lecturer



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Sciences

ELSEVIER

Welcome! We'll **start** at **1:03 p.m. Eastern Time.**



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March 2025

María José (Majo) Dávila-Rodríguez, PhD

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ELSEVIER

- Supports users from academic and government institutions worldwide.
- Demonstrates integration of Elsevier's Researcher Tools and Databases in Chemistry and Life Sciences.
- Enhances learning, teaching, and research activities.

Educational and Research Background: Chemistry.

Agenda



- Get to know Embase
- How to bring PubMed searches to Embase?
- Q&A

Today's Goal: By the end of this session, participants will have the necessary foundations to effectively translate their PubMed searches to Embase and leverage the power of Embase's comprehensive literature coverage and detailed indexing.



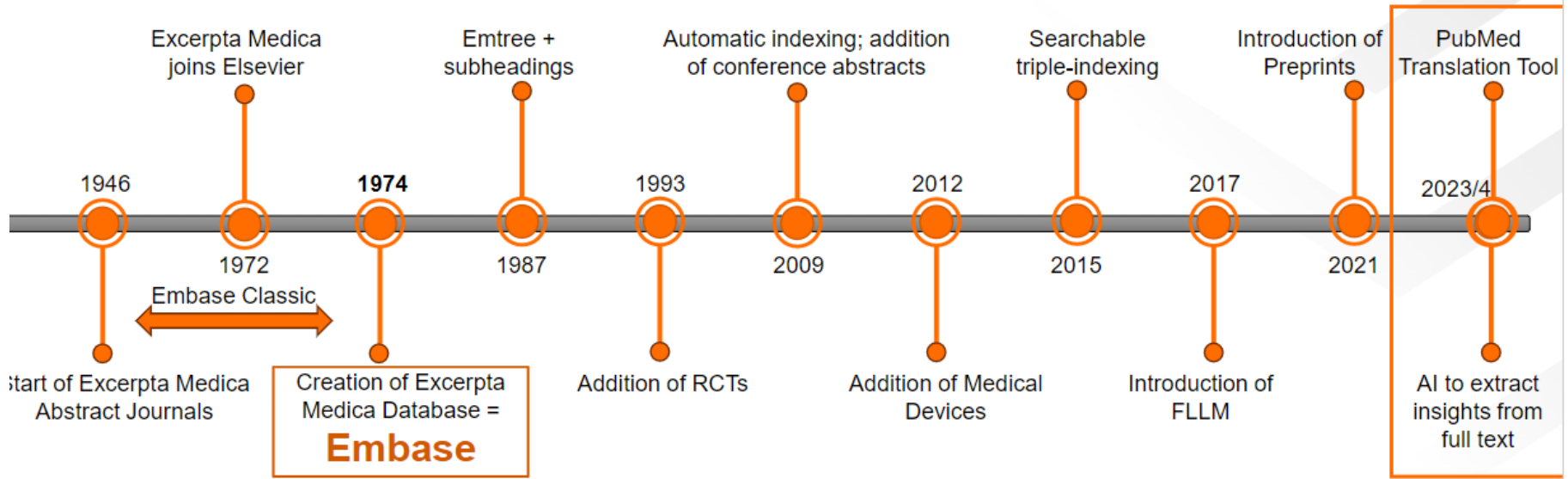
Get to know Embase

Features & Content

+50 Years of Embase success!



We've come a long way from manually indexing abstracts...



How does Embase address your requirements?



Comprehensive

- **45M+** records from journals, conference abstracts and pre-prints
- **3000 journals unique** to Embase
- Strong focus on drugs, disease and medical device



Up-to-date

- Records added daily
- Emtree terms are updated 3 times per year



Dedicated search forms/ features

- **PICO** and **Medical device** Search form for complex searches as SR, CER and PMS
- **Save** and **Export** searches
- **Email alerts** on new articles



Deep Indexing with Emtree

- Full articles* indexed manually
- Triple-linking for discovering deeper and extended relationship with subheadings (qualifiers)



Medical Device focus

- Device concepts
- Device tradenames
- FDA GMDN names and etc



Recommended by authorities


- European Commission
- Cochrane Handbook
- WHO
- NICE and more.

Embase content provides more comprehensive results


Embase contains:

 99.7% of MEDLINE journals


+

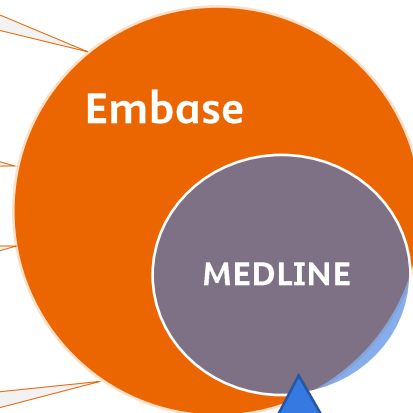
 More than 3,200 journals not found in Medline

+


 Millions of abstracts from 16,000 conferences

+

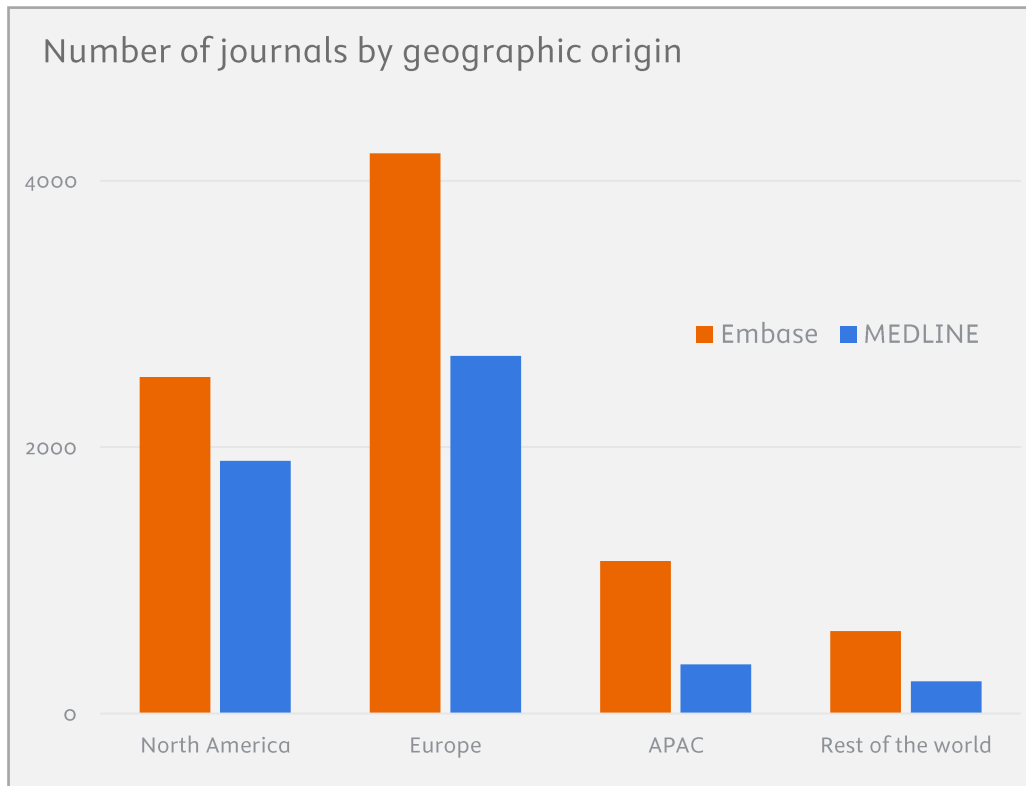
 Article preprints



Primary component of PubMed, containing relevant life sciences, with a concentration on biomedical, references to journal articles.

- 
- With Embase, researchers have access to nearly all MEDLINE journals.
 - Embase provides access to a huge amount of information that is not part of MEDLINE.
 - Literature searches in Embase provide more comprehensive results.

Embase covers more international journals



Monitoring the global research landscape is critical for R&D, regulatory compliance, informed decisions, and public health efforts.

Better accuracy with manual expert indexing from full text with Emtree



Interdisciplinary Neurosurgery: Advanced Techniques and Case Management 24 (2021) 101092

Contents lists available at ScienceDirect

Interdisciplinary Neurosurgery: Advanced Techniques and Case Management

Journal homepage: www.elsevier.com/locate/lnat

Research Article

Efficacy of pretreatment with the free radical scavenger, edaravone, for prevention of cerebral hyperperfusion after carotid artery stenting: A single-center randomized controlled trial

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ARTICLE INFO

Keywords:
Carotid stenosis
Cerebral hyperperfusion syndrome
Free radicals
Single-photon emission computed tomography

ABSTRACT

Objective: Optimal therapy to avoid cerebral hyperperfusion (CHP) after carotid artery stenting (CAS) is yet to be established. The purpose of this study was to determine whether pretreatment with a free radical scavenger, edaravone, could prevent CHP after CAS.

Methods: A prospective, randomized, controlled, single-center trial was conducted between April 2011 and January 2018. Eligible patients were those who underwent CAS. Subjects were randomly assigned to receive (edaravone group) or not receive (control group) administration of edaravone before stent deployment. The primary outcome was occurrence of CHP immediately (within 1 h) after CAS. Cerebral blood flow (CBF) was assessed in the middle cerebral artery (MCA) region and the cerebellar hemisphere using single-photon emission computed tomography (SPECT) before and immediately after CAS. The asymmetry index (AI) (%) was defined as CBF in the affected MCA region divided by CBF in the unaffected MCA region. > 100. CHP was defined as AI > 120% immediately after CAS.

Results: The trial was stopped ahead of schedule due to poor recruitment. Among 52 participants, 51 completed the trial (edaravone group, n = 25; control group, n = 26). CHP occurred in 2/25 patients (8%) in the edaravone group and in 1/26 patients (4%) in the control group, with no significant difference between the groups (P = 0.610).

Conclusion: Pretreatment with edaravone appeared not to be associated with reduction in the occurrence of CHP immediately after CAS.

1. Introduction

Cerebral hyperperfusion (CHP) syndrome (CHS) is a serious complication of carotid endarterectomy (CEA) and carotid artery stenting (CAS), with a reported incidence of 0.21% to 7.96% [1,2]. Once an intracranial hemorrhage occurs, serious morbidity or mortality may follow [3]; thus, prevention of CHS is an important issue in carotid revascularization therapy. The only preventive therapy that has thus far been accepted as effective is strict blood pressure control, but this alone does not completely avoid occurrence of CHS [3–5].


A case cohort study found that pretreatment with a free radical scavenger, edaravone, reduced the occurrence of CHP, as measured by single-photon emission computed tomography (SPECT) after CEA [6]. CHP is a significant predictor of CHS [7,8], and therefore, it is important to control CHP to prevent development of CHS. Free radicals are produced in the central nervous system during reperfusion and are thought

Abbreviations: ACZ, acetazolamide; AI, asymmetry index; CAS, carotid artery stenting; CBF, cerebral blood flow; CEA, carotid endarterectomy; CHP, cerebral hyperperfusion; CHS, cerebral hyperperfusion syndrome; CT, computed tomography; CTR, cerebrovascular reactivity; DWI, diffusion-weighted imaging; ECA, internal carotid artery; EMF, [¹²⁵I]-N-isopropyl- β -iodoamphetamine; MCA, middle cerebral artery; MDA-LDL, malondialdehyde-modified low-density lipoprotein; MRI, magnetic resonance imaging; QSPECT/DTARG, quantitative SPECT/dual-table autoradiography; rCBF, regional CBF; RCT, randomized controlled trial; SD, standard deviation; SEE-JET, Japanese extracranial-intracranial bypass trial; SPECT, single-photon emission computed tomography.

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Available online 7 January 2021
2214-7519/© 2021 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

	Embase	MEDLINE*
Title	Automatic and manual	Automatic
Abstract	Automatic and manual	Automatic
Full text	Manual	Not indexed

 Deep full text indexing with manual expert curation in Embase helps uncover critical content that is missing when indexing is done automatically and from title and abstract only. See [here](#) as a study investigating this in detail.

What is Emtree?

Emtree is a controlled vocabulary for Biomedicine and related Life Sciences



Natural Language

- Easy to search with precision and high recall
- **81,000+ preferred terms** and **355,000+ synonyms** that map to the preferred term
- **Include all MeSH terms from MEDLINE**



A polyhierarchical thesaurus

- A term can appear in multiple levels → easier to find relevant concepts
- Unambiguous explosion searches (/exp)



Coverage

- 5000+ device concept terms, 13000 device tradenames, 25500 alternative concepts, 5500 GMDN names
- 204,000+ Chemical names, trade names, laboratory/research codes, generic drugs and chemicals (FDA, EMEA and WHO)



Up-to-date

- Latest drugs, medical devices, procedures and diseases are indexed and added three times per year (with back-posting of older records).
- Includes all drug generic names by FDA and EMA, tradenames of devices approved by FDA (2015-2021), all International Non-Proprietary Names (INNs) by WHO

Full-text indexing with Emtree



From this...

Drug administration in critically ill patients with acute renal failure.

Kroh U.F.¹

Author information ▶

New Horizons (Baltimore, Md.), 01 Nov 1995, 3(4):748-759
PMID: 8574606

[Review](#)

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Abstract

Patients with acute renal failure are commonly treated by continuous renal replacement therapies. To understand drug disposition in multiple organ failure patients, the pharmacokinetics of 18 drugs were evaluated in 243 patients. Continuous hemofiltration served as a model for constant elimination rates. In addition, the elimination of drugs was investigated during extracorporeal lung support. The dosage of 11 of 15 drugs had to be reduced as a result of these kinetic studies. Wide variability in volumes of distribution, clearances, and the extrarenal fractions of elimination were detected. There was a close correlation of the latter with Acute Physiology and Chronic Health Evaluation II scores of illness severity. A new algorithm was developed for primary estimates of drug dosage during hemofiltration and other organ support systems. Two in vitro studies confirmed the clinical results on drug sieving and provided important information on adsorption to membranes. A clinical validation study of the algorithm improved drug dosage. A simplified therapeutic drug monitoring approach is given.

No specific drug is mentioned in the title or abstract.

to this!

5 Drug administration in critically ill patients with acute renal failure
Kroh U.F.
New Horizons: Science and Practice of Acute Medicine 1995 3:4 (748-759) Cited by: 43

Embase MEDLINE [Abstract](#) [Index Terms](#) [Similar records](#) ▶

Drug Terms
acetylsalicylic acid, aciclovir, ajmaline, amantadine, amikacin, aminoglycoside antibiotic agent, amiodarone, amoxicillin, amphotericin B, ampicillin, bupivacaine, capecitabine, cefazolin, cefotaxime, ceftriaxone, cefuroxime, cimetidine, ciprofloxacin, dexamethasone, diazepam, digoxin, dobutamine, doxycycline, etomidate, fosfomycin, gentamicin, haloperidol, ibuprofen, midazolam, unindexed

Disease Terms
acute kidney failure, critical illness, multiple organ dysfunction syndrome

Other Terms
adsorption, algorithm, drug clearance, drug disposition, drug elimination, drug monitoring, hemofiltration, human, major clinical study, priority journal, review, substitution therapy

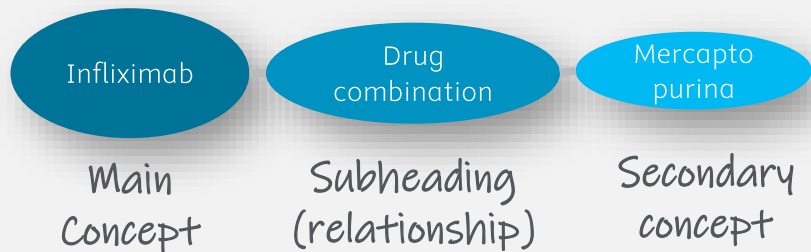
amikacin (major focus)
Other Subheadings
drug dose, pharmacokinetics

Thanks to the full-text indexing process, relevant terms are assigned under the categories *Drug*, *Disease*, *Device* and *Other*, along with subheadings. This process not only improves the discoverability of the record but also enables its rapid and

Emtree: Triple-linking

Triple linking

Manually extracted semantic relationships

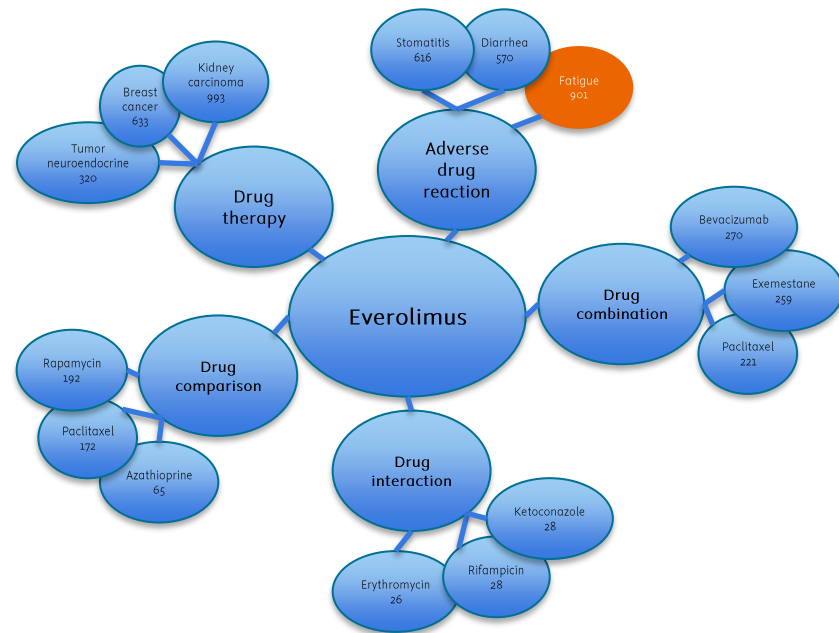


Subheadings (Qualifiers):

- Drugs;
 - Administration Routes;
- Diseases;
- Medical devices.

*Emtree includes all terms from MeSH, the MEDLINE thesaurus.

Triple linking allows more focused searches. Ex.:



Search strategy:'everolimus'/'adverse drug reaction'/'fatigue'

Emtree: Triple-linking

Also, triple linking reveals relationships between concepts to find relevant content with minimal effort:

Drug subheadings:

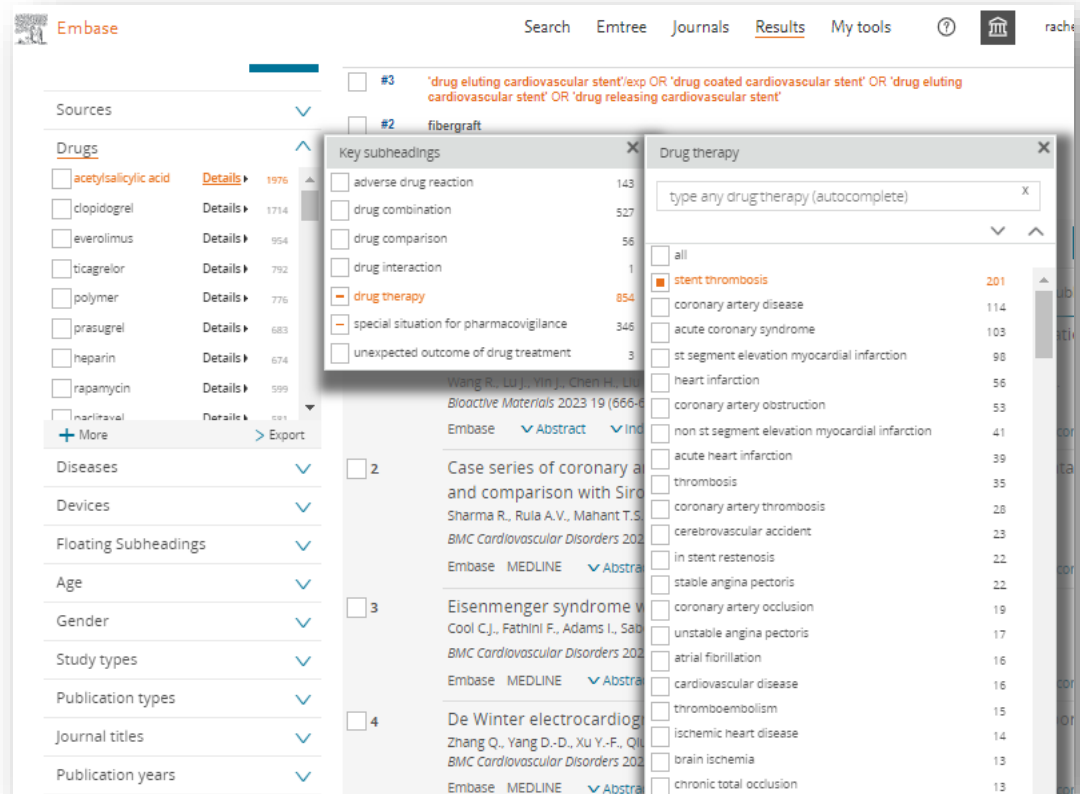
- Adverse drug reaction
- Drug combination
- Drug comparison
- Drug interaction
- Drug therapy
- And etc...

Disease subheadings:

- Drug therapy
- Side effects
- Epidemiology
- And etc...

Device subheadings:

- Adverse device effect
- Device comparison
- Device economics
- And etc...



The screenshot shows the Embase search results page. The search query is: `'drug eluting cardiovascular stent'exp OR 'drug coated cardiovascular stent' OR 'drug eluting cardiovascular stent' OR 'drug releasing cardiovascular stent'`. The results are filtered by 'Drugs' and 'Diseases'. Two pop-up windows are open:

- Key subheadings:** A list of subheadings with counts:

<input type="checkbox"/> adverse drug reaction	143
<input type="checkbox"/> drug combination	527
<input type="checkbox"/> drug comparison	56
<input type="checkbox"/> drug interaction	1
<input checked="" type="checkbox"/> drug therapy	854
<input type="checkbox"/> special situation for pharmacovigilance	346
<input type="checkbox"/> unexpected outcome of drug treatment	3
- Drug therapy:** A list of drug therapy subheadings with counts:

<input checked="" type="checkbox"/> stent thrombosis	201
<input type="checkbox"/> coronary artery disease	114
<input type="checkbox"/> acute coronary syndrome	103
<input type="checkbox"/> st segment elevation myocardial infarction	98
<input type="checkbox"/> heart infarction	56
<input type="checkbox"/> coronary artery obstruction	53
<input type="checkbox"/> non st segment elevation myocardial infarction	41
<input type="checkbox"/> acute heart infarction	39
<input type="checkbox"/> thrombosis	35
<input type="checkbox"/> coronary artery thrombosis	28
<input type="checkbox"/> cerebrovascular accident	23
<input type="checkbox"/> in stent restenosis	22
<input type="checkbox"/> stable angina pectoris	22
<input type="checkbox"/> coronary artery occlusion	19
<input type="checkbox"/> unstable angina pectoris	17
<input type="checkbox"/> atrial fibrillation	16
<input type="checkbox"/> cardiovascular disease	16
<input type="checkbox"/> thromboembolism	15
<input type="checkbox"/> ischemic heart disease	14
<input type="checkbox"/> brain ischemia	13
<input type="checkbox"/> chronic total occlusion	13

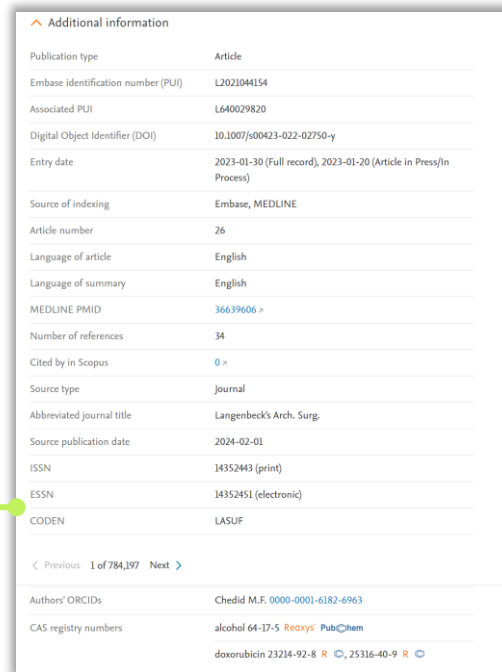
What information can you retrieve from Embase?

Fields:

- Title
- Authors
- Type of record (article, conference, preprint)
- Abstract
- **Indexed terms** – descriptors – classified as Drugs, Diseases, Devices and Others
 - Subheadings (qualifiers)
- Authors' keywords,
- Additional information

Links to:

- The full text.
- Other Information Resources (e.g.: [Reaxys](#)).



A screenshot of the 'Additional information' section in Embase. It displays a table of metadata for a specific article. A green line from the 'Additional information' bullet point in the list above points to this table.

Additional information	
Publication type	Article
Embase identification number (PUI)	L202104154
Associated PUI	L640029820
Digital Object Identifier (DOI)	10.1007/s00423-022-02750-y
Entry date	2023-01-30 (Full record), 2023-01-20 (Article in Press/In Process)
Source of indexing	Embase, MEDLINE
Article number	26
Language of article	English
Language of summary	English
MEDLINE PMID	36639606
Number of references	34
Cited by in Scopus	0
Source type	Journal
Abbreviated journal title	Langenbeck's Arch. Surg.
Source publication date	2024-02-01
ISSN	14352443 (print)
ESSN	14352451 (electronic)
CODEN	LASUF
Previous 1 of 784,197 Next	
Authors' ORCIDs	Chedid M.F. 0000-0001-6182-6963
CAS registry numbers	alcohol 64-17-5 Reaxys PubChem doxorubicin 23214-92-8 R 25316-40-9 R Q

*Fast and accurate
assessment of the
relevance of the results!*

Review the presented slides and consult examples and tips in our Support Material.



 ELSEVIER

Embase

The world's largest database of biomedical evidence from published, peer-reviewed literature, in-press publications and conference abstracts.

Last updated: March 17, 2025
Check if you're working with the most up-to-date version [here](#).

Support material



How to bring PubMed searches to Embase?

Examples of some Database Syntax differences

Action	PubMed	Embase
Mapping of Index terms	[Majr:NoExp]/[MeSH Major Topic:noexp], [mh:noexp]/[Mesh:NoExp]/[MeSH Terms:noexp], [majr]/[MeSH Major Topic] or [mh]/[MeSH Terms]	/mj, /de, /exp/mj, /exp or /br, /syn
Mapping of Index terms with Higher specificity	MeSH Qualifiers (also know as MeSH Subhedings)	Emtree Subheadings
Search for a term in a specific field	Field Tags e.g.: Tittle [ti], Title/Abstract [tiab], Other Term [ot], etc.	Field codes e.g.: Tittle :ti, Abstract :ab, Author Keywords, :kw or combinations :ti,ab,kw, etc.
Proximity searching	"search terms"[field:~N] (any order within a specified N distance)	NEAR/n (any order within a specified n distance) or NEXT/n (given order within a specified n distance)
Truncation/Wildcards Options	* (replaces one or more letters)	* (replaces one or more letters), ? (single-letter truncation) and \$ (replaces one or no letters)

Case Study 1: FAERS Literature Search



Pusheen needs to perform a search in [PubMed](#) and then bring that search to [Embase](#), focusing on publications between the years 2014 and 2023. The objective is to identify mentions of the 'FAERS public dashboard' from a specific list of key concepts provided.

List of key concepts provided:

- FDA Adverse Event Reporting System Public Panel
- FAERS
- FAERS Public Dashboard
- FDA Database
- Food and Drug Administration Database
- U.S. Food and Drug Administration Adverse Event Database
- U.S. Adverse Events Database
- AERS
- Adverse Event Reporting System

PubMed input:



FDA adverse event reporting system public dashboard OR FAERS OR FAERS public dashboard OR FDA database OR Food and Drug Administration database OR US Food and Drug Administration adverse events database OR US adverse events database OR AERS OR Adverse event reporting system

PubMed Search*



PubMed®

FDA adverse event reporting system public dashboard OR FAERS OR FAERS ; X Search

Advanced Create alert Create RSS User Guide

Save Email Send to Sort by: Best match Display options

To access the query run by PubMed, click "Advanced". Next, in the "History and Search Details" section, expand the Query details.

MY NCBI FILTERS

23,777 results

Page 1 of 2,378

RESULTS BY YEAR

2014-2023

Emerging Causes of Disease
Associated Reactions
Yu RJ, Krantz MS, et al.
J Allergy Clin Immunol
2018;141:28.
PMID: 32992044
OBJECTIVE: We sought to identify
anaphylaxis following

History and Search Details

Search	Actions	Details	Query	Results	Time
#7	...	▼	Search: FDA adverse event reporting system public dashboard OR FAERS OR FAERS public dashboard OR FDA database OR Food and Drug Administration database OR US Food and Drug Administration adverse events database OR US adverse events database OR AERS OR Adverse event reporting system Filters: from 2014 - 2023 (((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR	23,777	10:58:27

*Query executed on Jan. 30, 2024 – 10:58 a.m.

Detailed query executed by PubMed:

Input:

FDA adverse event reporting system public dashboard OR FAERS OR FAERS public dashboard OR FDA database OR Food and Drug Administration database OR US Food and Drug Administration adverse events database OR US adverse events database OR AERS OR Adverse event reporting system



```
((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields]) AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields]) AND ("public"[All Fields] OR "public s"[All Fields] OR "publically"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields]) OR "FAERS"[All Fields] OR ("FAERS"[All Fields] AND ("public"[All Fields] OR "public s"[All Fields] OR "publically"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields])) OR (("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("database"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields])) OR (("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food and drug administration"[All Fields]) AND ("database"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields])) OR ("US"[All Fields] AND ("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food and drug administration"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields])) OR ("US"[All Fields] AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields])) OR ("US"[All Fields] AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields]) AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields])))) AND (2014:2023[pdat])
```

PubMed Search

Detailed query executed by PubMed:

```
((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food AND drug administration"[All Fields] OR "fda"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields] AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields]) AND ("public"[All Fields] OR "public s"[All Fields] OR "publicly"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields]) OR "FAERS"[All Fields] OR ("FAERS"[All Fields] AND ("public"[All Fields] OR "public s"[All Fields] OR "publicly"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields]) OR ((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food AND drug administration"[All Fields] OR "fda"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ((("united states food AND drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food AND drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food AND drug administration"[All Fields] AND ("database"[All Fields] OR "database s"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ("US"[All Fields] AND ("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food AND drug administration"[All Fields] OR "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food AND drug administration"[All Fields] AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ("US"[All Fields] AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR "AERS"[All Fields] OR ((("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields] AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields])) AND (2014:2023[pdat]))
```

The 4,242-character Query run by PubMed includes only 5 MeSH descriptors (4 of which may not be relevant) along with search terms as Free Text ([All Fields]), allowing for the widest possible mapping. The MeSH descriptors are:

- "united states food and drug administration"[MeSH Terms]
- "research report"[MeSH Terms]
- "publications"[MeSH Terms]
- "publishing"[MeSH Terms]
- "publications"[MeSH Terms]

This PubMed search strategy could be refined within the "PubMed Advanced Search Builder"

Detailed query executed by PubMed:

```
((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields]) AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields]) AND ("public"[All Fields] OR "public s"[All Fields] OR "publically"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields])) OR "FAERS"[All Fields] OR ("FAERS"[All Fields] AND ("public"[All Fields] OR "public s"[All Fields] OR "publically"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields])) OR (("united states food and drug administration"[MeSH Terms] OR "united states food and drug administration"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("database"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR (("united states food and drug administration"[MeSH Terms] OR "united states food and drug administration"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food and drug administration"[All Fields]) AND ("database"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ("US"[All Fields] AND ("united states food and drug administration"[MeSH Terms] OR "united states food and drug administration"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food and drug administration"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ("US"[All Fields] AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR "AERS"[All Fields] OR ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields]) AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields])) AND (2014:2023[pdati])
```

The detailed query executed by PubMed is the one that should be taken to Embase

Search in Embase – 1st Option: Query translator



Embase

Search Emtree Journals Results My tools 10 Maria Jose Davila-Rodriguez

Query translator

Quick PICO PV Wizard Medical device Advanced Drug Disease Device Citation information Query translator Beta

Translate PubMed syntax to Embase Beta

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

Translate Reset form

2. Review Embase translation

Show results Take to Advanced search Copy query

PubMed translation is currently at Beta stage, there might be some mistakes or errors. Help us improve by [sharing your feedback](#) >

Welcome to the translation tool!

Get started with example queries:
[Covid-19](#) > [Meta-Analysis](#) >

Type or paste a PubMed query and then review the Embase translation. Different highlighting will be applied depending on the mapping between MeSH to Emtree and based on the impact on the query. Those are:

'cervical vertebra/exp	means that Embase found exact match in Emtree and field code.
'cervical vertebra/exp	means that there is no exact match in Emtree and it used preferred term.
'cervical vertebra/exp	means that there is no translation for the term or field code.

[Embase - How to use the new PubMed to Embase translation tool \(youtube.com\)](#)

[New Feature: PubMed to Embase Translation Tool - Beta version - Embase Support Center \(elsevier.com\)](#)

Search in Embase – 1st Option: Query translator

Detailed query executed by PubMed:

```
((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("reportable"[All Fields] OR "reporting"[All Fields] OR "reportings"[All Fields] OR "research report"[MeSH Terms] OR ("research"[All Fields] AND "report"[All Fields]) OR "research report"[All Fields] OR "report"[All Fields] OR "reported"[All Fields] OR "reports"[All Fields]) AND ("system"[All Fields] OR "system s"[All Fields] OR "systems"[All Fields]) AND ("public"[All Fields] OR "public s"[All Fields] OR "publicly"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields]) OR "FAERS"[All Fields] OR "FAERS"[All Fields] AND ("public"[All Fields] OR "public s"[All Fields] OR "publicly"[All Fields] OR "publication s"[All Fields] OR "publications"[MeSH Terms] OR "publications"[All Fields] OR "publicity"[All Fields] OR "publicize"[All Fields] OR "publicized"[All Fields] OR "publicizing"[All Fields] OR "publics"[All Fields] OR "publishing"[MeSH Terms] OR "publishing"[All Fields] OR "publication"[All Fields]) AND ("dashboard"[All Fields] OR "dashboards"[All Fields]) OR ((("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR "fda"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields] OR "databased"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR (((("united states food and drug administration"/exp OR ("united" AND "states" AND "food" AND "drug" AND "administration") OR "united states food" AND "drug administration" OR "fda") AND ("database" OR "database s" OR "databases" OR "databasing")) OR (((("united states food" AND "drug administration"/exp OR ("united" AND "states" AND "food" AND "drug" AND "administration") OR "united states food" AND "drug administration" OR ("food" AND "drug" AND "administration") OR "food") AND "drug administration" AND ("database" OR "database s" OR "databases" OR "databasing" OR "databases" OR "databasing")) OR ("us" AND ("united states food and drug administration"[MeSH Terms] OR ("united"[All Fields] AND "states"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "united states food and drug administration"[All Fields] OR ("food"[All Fields] AND "drug"[All Fields] AND "administration"[All Fields]) OR "food and drug administration"[All Fields]) AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event"[All Fields] OR "event s"[All Fields] OR "events"[All Fields]) AND ("database"[All Fields] OR "database s"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields] OR "databases"[All Fields] OR "databasing"[All Fields]) OR ("us" AND ("adverse"[All Fields] OR "adversely"[All Fields] OR "adverses"[All Fields]) AND ("event" OR "event s" OR "events") AND ("database" OR "database s" OR "databases" OR "databasing" OR "databases" OR "databasing")) OR "aers" OR ((("adverse" OR "adversely" OR "adverses") AND ("event" OR "event s" OR "events") AND ("reportable" OR "reporting" OR "reportings" OR "research"/exp OR ("research" AND "report") OR "research report" OR "report" OR "reported" OR "reports") AND ("system" OR "system s" OR "systems")) AND [2014 to 2023]/pd
```



Automatic translation of Embase:

```
((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food') AND 'drug administration' OR 'fda') AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('reportable' OR 'reporting' OR 'reportings' OR 'research'/exp OR ('research' AND 'report') OR 'research report' OR 'report' OR 'reported' OR 'reports') AND ('system' OR 'system s' OR 'systems') AND ('public' OR 'public s' OR 'publicly' OR 'publication s' OR 'publication'/exp OR 'publications' OR 'publicity' OR 'publicize' OR 'publicized' OR 'publicizing' OR 'publics' OR 'publishing'/exp OR 'publishing' OR 'publication') AND ('dashboard' OR 'dashboards') OR 'faers' OR ('faers' AND ('public' OR 'public s' OR 'publicly' OR 'publication s' OR 'publication'/exp OR 'publications' OR 'publicity' OR 'publicize' OR 'publicized' OR 'publicizing' OR 'publics' OR 'publishing'/exp OR 'publishing' OR 'publication') AND ('dashboard' OR 'dashboards')) OR (((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food' AND 'drug administration' OR 'fda') AND ('database' OR 'database s' OR 'databases' OR 'databasing')) OR (((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food' AND 'drug administration' OR ('food' AND 'drug' AND 'administration') OR 'food') AND 'drug administration' AND ('database' OR 'database s' OR 'databases' OR 'databasing' OR 'databases' OR 'databasing')) OR ('us' AND (('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food' AND 'drug administration' OR ('food' AND 'drug' AND 'administration') OR 'food') AND 'drug administration' AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('database' OR 'database s' OR 'databases' OR 'databasing' OR 'databases' OR 'databasing')) OR ('us' AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('database' OR 'database s' OR 'databases' OR 'databasing' OR 'databases' OR 'databasing')) OR 'aers' OR (('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('reportable' OR 'reporting' OR 'reportings' OR 'research'/exp OR ('research' AND 'report') OR 'research report' OR 'report' OR 'reported' OR 'reports') AND ('system' OR 'system s' OR 'systems')) AND [2014 to 2023]/pd
```

Terms without exact match in Emtree and it used preferred term.

Search in Embase – 2nd Option: Identify the preferred Emtree terms and develop the Query



- List of key concepts provided:
- FDA adverse event reporting system public dashboard
- FAERS
- FAERS public dashboard
- FDA database
- Food and Drug Administration database
- US Food and Drug Administration adverse events database
- US adverse events database
- AERS
- Adverse event reporting system

The screenshot shows the Emtree interface. On the left, there is a navigation menu with 'Browse Emtree' and a search bar containing 'Food and Drug Administration'. Below the search bar, there are radio buttons for 'Emtree', 'health care concepts', 'health care organization', and 'Food and Drug Administration' (which is selected). The main content area shows 'Term information' for 'Food and Drug Administration'. It includes a 'Query builder' tab, a search button showing 'Show 105,867 results', and a 'Take to Advanced search' button. Below this, there are 'Synonyms (5)' listed: FDA, United States Food and Drug Administration, US FDA, US Food and Drug Administration, and Food and Drug Administration. A note at the bottom states 'This term was added to Emtree in 1974'.

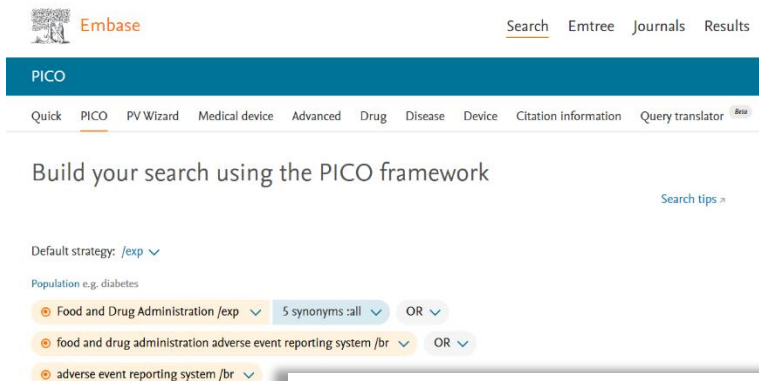
Preferred and Relevant Terms identified in Emtree:

- Food and Drug Administration (*Emtree synonyms*: FDA, United States Food and Drug Administration, US FDA, US Food and Drug Administration, Food and Drug Administration)
- Food and drug administration adverse event reporting system (*Candidate term*)
- Adverse event reporting system (*Candidate term*)

[What are Candidate Terms? - Embase Support Center \(elsevier.com\)](https://www.elsevier.com/support-center)

Search in Embase – 2nd Option: Identify the preferred Emtree terms and develop the Query

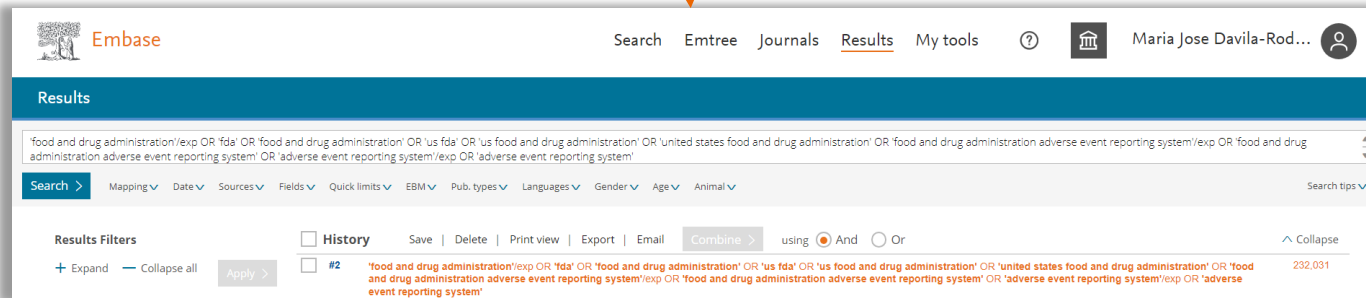
PRO TIP: With the **PICO form**, **synonyms** can be added in a **faster, more controlled**, and easier way to generate comprehensive queries. For **candidate terms**, work with the **/br mapping**.



The screenshot shows the Embase search interface. At the top, there are navigation links for Search, Emtree, Journals, and Results. Below this is a search bar containing the text 'PICO'. Underneath the search bar, there are several tabs: Quick, PICO, PV Wizard, Medical device, Advanced, Drug, Disease, Device, Citation information, and Query translator. A section titled 'Build your search using the PICO framework' is visible. Below this, there is a 'Default strategy: /exp' dropdown and a 'Population e.g. diabetes' field. Three search options are listed with dropdown menus: 'Food and Drug Administration /exp', 'food and drug administration adverse event reporting system /br', and 'adverse event reporting system /br'. An arrow points from the 'Search tips' link to the search bar in the screenshot below.

Emtree-terms based Query:

'food and drug administration'/exp OR 'fda' OR 'food and drug administration' OR 'us fda' OR 'us food and drug administration' OR 'united states food and drug administration' OR 'food and drug administration adverse event reporting system'/exp OR 'food and drug administration adverse event reporting system' OR 'adverse event reporting system'/exp OR 'adverse event reporting system'



The screenshot shows the Embase search results page. At the top, there are navigation links for Search, Emtree, Journals, Results, and My tools. The user's name, Maria Jose Davila-Rod..., is displayed. Below the navigation bar, the search results are displayed. The query is shown as: 'food and drug administration'/exp OR 'fda' OR 'food and drug administration' OR 'us fda' OR 'us food and drug administration' OR 'united states food and drug administration' OR 'food and drug administration adverse event reporting system'/exp OR 'food and drug administration adverse event reporting system' OR 'adverse event reporting system'/exp OR 'adverse event reporting system'. Below the query, there are several filters: Mapping, Date, Sources, Fields, Quick limits, EBM, Pub. types, Languages, Gender, Age, and Animal. The 'Results Filters' section is expanded, showing a list of filters. The first filter is '#2' with a checkbox, and the text: 'food and drug administration'/exp OR 'fda' OR 'food and drug administration' OR 'us fda' OR 'us food and drug administration' OR 'united states food and drug administration' OR 'food and drug administration adverse event reporting system' OR 'adverse event reporting system' OR 'adverse event reporting system'/exp OR 'adverse event reporting system'. The number of results for this filter is 232,031.

Search in Embase – 2nd Option: Identify the preferred Emtree terms and develop the Query



List of key concepts provided:

- FDA adverse event reporting system ~~public dashboard~~
- FAERS
- FAERS public dashboard
- FDA database
- Food and Drug Administration database
- US Food and Drug Administration adverse events database
- US adverse events database
- AERS
- Adverse event reporting system

From the list of key concepts provided, a secondary search strategy can be developed to complement the Query based on the Emtree descriptors:

'adverse event* reporting system*':ab,kw,ti OR 'faers':ab,kw,ti OR 'database*':ab,kw,ti OR 'adverse event* database*':ab,kw,ti OR 'aers':ab,kw,ti

(This secondary search is just an example; it can be improved, or another strategy can be used!)

[Can I use Boolean operators, wildcards and proximity operators in Embase? - Embase Support Center \(elsevier.com\)](#)

[What field codes can I use in Embase? - Embase Support Center \(elsevier.com\)](#)

Search in Embase – 2nd Option: Identify the preferred Emtree terms and develop the Query



The results obtained from query #5 should be more relevant and accurate than those obtained by machine translation (query #1)



Search Emtree Journals Results My tools ? Maria Jose Davila-Rod...

Results

#2 AND #3 AND [2014-2023]/py

Search > Mapping ▾ Date ▾ Sources ▾ Fields ▾ Quick limits ▾ EBM ▾ Pub. types ▾ Languages ▾ Gender ▾ Age ▾ Animal ▾ Search tips ▾

Results Filters

+ Expand - Collapse all

- Sources ▾
- Drugs ▾
- Diseases ▾
- Devices ▾
- Floating Subheadings ▾
- Age ▾
- Gender ▾
- Study types ▾
- Publication types ▾

History Save | Delete | Print view | Export | Email using And Or

<input type="checkbox"/>	#5	#2 AND #3 AND [2014-2023]/py	11,761
<input type="checkbox"/>	#4	#2 AND #3	15,967
<input type="checkbox"/>	#3	'adverse event' reporting system*:ab,kw,ti OR 'faers':ab,kw,ti OR 'database':ab,kw,ti OR 'adverse event' database*:ab,kw,ti OR 'aers':ab,kw,ti	1,022,110
<input type="checkbox"/>	#2	'food and drug administration'/exp OR 'fda' OR 'food and drug administration' OR 'us fda' OR 'us food and drug administration' OR 'united states food and drug administration' OR 'food and drug administration adverse event reporting system'/exp OR 'food and drug administration adverse event reporting system' OR 'adverse event reporting system'/exp OR 'adverse event reporting system'	232,031
<input type="checkbox"/>	#1	((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food') AND 'drug administration' OR 'fda') AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('reportable' OR 'reporting' OR 'reportings' OR 'research'/exp OR ('research' AND 'report') OR 'research report' OR 'report' OR 'reported' OR 'reports') AND ('system' OR 'system s' OR 'systems') AND ('public' OR 'public s' OR 'publicly' OR 'publication s' OR 'publication'/exp OR 'publications' OR 'publicity' OR 'publicize' OR 'publicized' OR 'publicizing' OR 'publics' OR 'publishing'/exp OR 'publishing' OR 'publication') AND ('dashboard' OR 'dashboards') OR 'faers' OR ('faers' AND ('public' OR 'public s' OR 'publicly' OR 'publication s' OR 'publication'/exp OR 'publications' OR 'publicity' OR 'publicize' OR 'publicized' OR 'publicizing' OR 'publics' OR 'publishing'/exp OR 'publishing' OR 'publication') AND ('dashboard' OR 'dashboards')) OR (((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food') AND 'drug administration' OR 'fda') AND ('database' OR 'database s' OR 'databases' OR 'databasing')) OR (((('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food') AND 'drug administration' OR 'food' AND 'drug' AND 'administration') OR 'united states food') AND ('database' OR 'database s' OR 'databases' OR 'databasing')) OR ('us' AND (('united states food' AND 'drug administration'/exp OR ('united' AND 'states' AND 'food' AND 'drug' AND 'administration') OR 'united states food') AND 'drug administration' OR ('food' AND 'drug' AND 'administration') OR 'food') AND 'drug administration' AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('database' OR 'database s' OR 'databases' OR 'databasing')) OR ('us' AND ('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('database' OR 'database s' OR 'databases' OR 'databasing')) OR 'aers' OR (('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('reportable' OR 'reporting' OR 'reportings' OR 'databases' OR 'databasing')) OR 'aers' OR (('adverse' OR 'adversely' OR 'adverses') AND ('event' OR 'event s' OR 'events') AND ('reportable' OR 'reporting' OR 'reportings' OR 'databases' OR 'databasing')) AND [2014 to 2023]/pd	56,795

Case Study 2:

The authors of the Review “[Personal protective equipment for preventing asbestos exposure in workers](#)” reported the search strategies used on PubMed, Embase (OVID), and Scopus. You were asked to translate the PubMed search to the Embase.com syntaxis.

Reported PubMed search query:

- (“Asbestos”[Mesh] OR asbest*[tiab] OR crocidolite[tiab] OR amosite[tiab] OR anthophyllite[tiab] OR anthophyllite[tiab] OR tremolite[tiab] OR actinolite[tiab] OR chrysotile[tiab] OR serpentine[tiab] OR amphibole[tiab])
- AND
- (“Protective Devices”[Mesh:NoExp] OR “Personal Protective Equipment”[Mesh] OR “Protective Clothing”[Mesh] OR protective cloth*[tiab] OR coverall*[tiab] OR protective layer*[tiab] OR hazmat[tiab] OR protective equipment*[tiab] OR PPE[tiab] OR protective device*[tiab] OR mask*[tiab] OR PAPR[tiab] OR air-purifying[tiab] OR respiratory protection*[tiab] OR respiratory device*[tiab] OR face piece*[tiab] OR facepiece*[tiab] OR face shield*[tiab] OR face visor*[tiab] OR hood*[tiab] OR air supplying*[tiab] OR supplied air[tiab] OR full face filter*[tiab] OR breathing apparatus[tiab] OR SCBA[tiab] OR donning[tiab] OR doffing[tiab] OR filter unit*[tiab] OR filtering unit*[tiab] OR filtering system*[tiab] OR filter system*[tiab] OR workplace protection factor*[tiab] OR assigned protection factor*[tiab])

Search in Embase – Query translator

Reported PubMed search query:

("Asbestos"[Mesh] OR asbest*[tiab] OR crocidolite[tiab] OR amosite[tiab] OR anthophyllite[tiab] OR anthophyllite[tiab] OR tremolite[tiab] OR actinolite[tiab] OR chrysotile[tiab] OR serpentine[tiab] OR amphibole[tiab]) AND ("Protective Devices"[Mesh:NoExp] OR "Personal Protective Equipment"[Mesh] OR "Protective Clothing"[Mesh] OR protective cloth*[tiab] OR coverall*[tiab] OR protective layer*[tiab] OR hazmat[tiab] OR protective equipment*[tiab] OR PPE[tiab] OR protective device*[tiab] OR mask*[tiab] OR PAPR[tiab] OR air-purifying[tiab] OR respiratory protection*[tiab] OR respiratory device*[tiab] OR face piece*[tiab] OR facepiece*[tiab] OR face shield*[tiab] OR face visor*[tiab] OR hood*[tiab] OR air supplying*[tiab] OR supplied air[tiab] OR full face filter*[tiab] OR breathing apparatus[tiab] OR SCBA[tiab] OR donning[tiab] OR doffing[tiab] OR filter unit*[tiab] OR filtering unit*[tiab] OR filtering system*[tiab] OR filter system*[tiab] OR workplace protection factor*[tiab] OR assigned protection factor*[tiab])



Automatic translation of Embase:

('asbestos'/exp OR 'asbest*':ti,ab,kw OR 'crocidolite':ti,ab,kw OR 'amosite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'tremolite':ti,ab,kw OR 'actinolite':ti,ab,kw OR 'chrysotile':ti,ab,kw OR 'serpentine':ti,ab,kw OR 'amphibole':ti,ab,kw) AND ('protective equipment'/de OR 'protective equipment'/exp OR 'protective clothing'/exp OR 'protective cloth*':ti,ab,kw OR 'coverall*':ti,ab,kw OR 'protective layer*':ti,ab,kw OR 'hazmat':ti,ab,kw OR 'protective equipment*':ti,ab,kw OR 'ppe':ti,ab,kw OR 'protective device*':ti,ab,kw OR 'mask*':ti,ab,kw OR 'papr':ti,ab,kw OR 'air-purifying':ti,ab,kw OR 'respiratory protection*':ti,ab,kw OR 'respiratory device*':ti,ab,kw OR 'face piece*':ti,ab,kw OR 'facepiece*':ti,ab,kw OR 'face shield*':ti,ab,kw OR 'face visor*':ti,ab,kw OR 'hood*':ti,ab,kw OR 'air supplying*':ti,ab,kw OR 'supplied air':ti,ab,kw OR 'full face filter*':ti,ab,kw OR 'breathing apparatus':ti,ab,kw OR 'scba':ti,ab,kw OR 'donning':ti,ab,kw OR 'doffing':ti,ab,kw OR 'filter unit*':ti,ab,kw OR 'filtering unit*':ti,ab,kw OR 'filtering system*':ti,ab,kw OR 'filter system*':ti,ab,kw OR 'workplace protection factor*':ti,ab,kw OR 'assigned protection factor*':ti,ab,kw)
Terms without exact match in Emtree and it used preferred term.

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Original MeSH Term	Automatic Embase translation
“Protective Devices”[Mesh:NoExp]	'protective equipment'/de
“Personal Protective Equipment”[Mesh]	'protective equipment'/exp

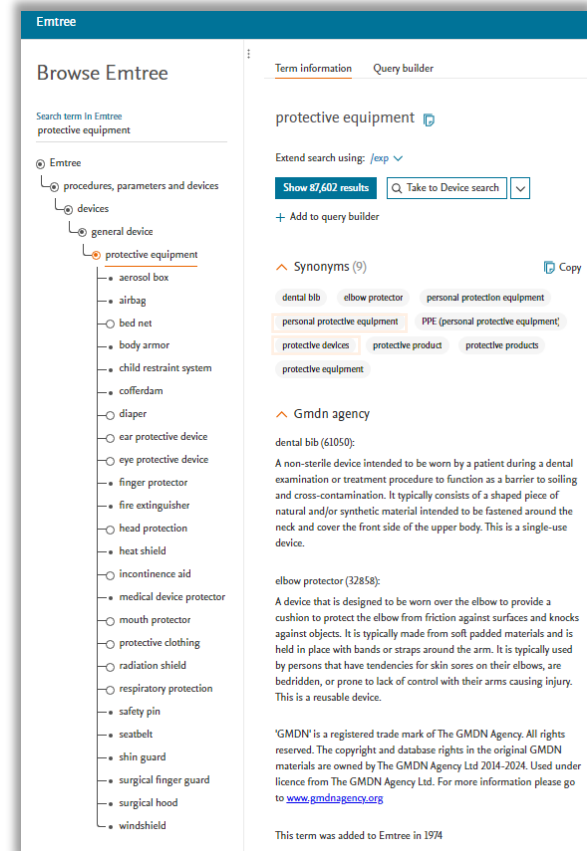
Terms **without exact match** in Emtree and it used preferred term.

Search term in Emtree

protective devices use: protective equipment 87,543



- In Embase ‘Protective Devices’ and ‘Personal Protective Equipment’ are listed as Synonyms of the Emtree Term ‘Protective Equipment’ (preferred term).
- The mapping 'protective equipment'/exp includes 'protective equipment'/de

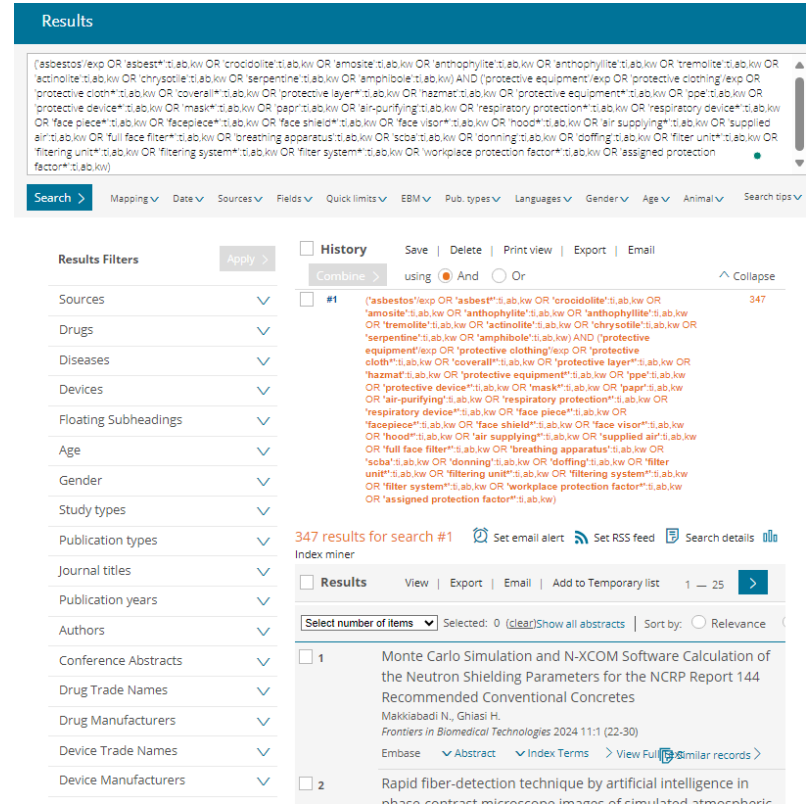


The screenshot shows the Emtree interface with the search term 'protective equipment'. The left sidebar displays a hierarchical tree structure under 'protective equipment', listing various sub-terms like 'aerosol box', 'airbag', 'bed net', etc. The right panel shows 'Term information' for 'protective equipment', including a list of synonyms (dental bib, elbow protector, personal protection equipment, etc.) and a GMDN agency description for 'dental bib (61050)'. The interface also shows the number of results (87,602) and options to extend the search or add to a query builder.

Search in Embase – Query translator

Revised translation of Embase:

('asbestos'/exp OR 'asbest*':ti,ab,kw OR 'crocidolite':ti,ab,kw OR 'amosite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'tremolite':ti,ab,kw OR 'actinolite':ti,ab,kw OR 'chrysotile':ti,ab,kw) AND ('protective equipment'/exp OR 'protective clothing'/exp OR 'protective cloth*':ti,ab,kw OR 'coverall*':ti,ab,kw OR 'protective layer*':ti,ab,kw OR 'hazmat':ti,ab,kw OR 'protective equipment*':ti,ab,kw OR 'ppe':ti,ab,kw OR 'protective device*':ti,ab,kw OR 'mask*':ti,ab,kw OR 'papr':ti,ab,kw OR 'air-purifying':ti,ab,kw OR 'respiratory protection*':ti,ab,kw OR 'respiratory device*':ti,ab,kw OR 'face piece*':ti,ab,kw OR 'face shield*':ti,ab,kw OR 'face visor*':ti,ab,kw OR 'hood*':ti,ab,kw OR 'air supplying*':ti,ab,kw OR 'supplied air':ti,ab,kw OR 'full face filter*':ti,ab,kw OR 'breathing apparatus':ti,ab,kw OR 'scba':ti,ab,kw OR 'donning':ti,ab,kw OR 'doffing':ti,ab,kw OR 'filter unit*':ti,ab,kw OR 'filtering unit*':ti,ab,kw OR 'filtering system*':ti,ab,kw OR 'filter system*':ti,ab,kw OR 'workplace protection factor*':ti,ab,kw OR 'assigned protection factor*':ti,ab,kw)



The screenshot shows the Embase search results page. At the top, the search query is displayed: ('asbestos'/exp OR 'asbest*':ti,ab,kw OR 'crocidolite':ti,ab,kw OR 'amosite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'anthophyllite':ti,ab,kw OR 'tremolite':ti,ab,kw OR 'actinolite':ti,ab,kw OR 'chrysotile':ti,ab,kw OR 'serpentine':ti,ab,kw OR 'amphibole':ti,ab,kw) AND ('protective equipment'/exp OR 'protective clothing'/exp OR 'protective cloth*':ti,ab,kw OR 'coverall*':ti,ab,kw OR 'protective layer*':ti,ab,kw OR 'hazmat':ti,ab,kw OR 'protective equipment*':ti,ab,kw OR 'ppe':ti,ab,kw OR 'protective device*':ti,ab,kw OR 'mask*':ti,ab,kw OR 'papr':ti,ab,kw OR 'air-purifying':ti,ab,kw OR 'respiratory protection*':ti,ab,kw OR 'respiratory device*':ti,ab,kw OR 'face piece*':ti,ab,kw OR 'facepiece*':ti,ab,kw OR 'face shield*':ti,ab,kw OR 'face visor*':ti,ab,kw OR 'hood*':ti,ab,kw OR 'air supplying*':ti,ab,kw OR 'supplied air':ti,ab,kw OR 'full face filter*':ti,ab,kw OR 'breathing apparatus':ti,ab,kw OR 'scba':ti,ab,kw OR 'donning':ti,ab,kw OR 'doffing':ti,ab,kw OR 'filter unit*':ti,ab,kw OR 'filtering unit*':ti,ab,kw OR 'filtering system*':ti,ab,kw OR 'filter system*':ti,ab,kw OR 'workplace protection factor*':ti,ab,kw OR 'assigned protection factor*':ti,ab,kw). Below the query, there are navigation options like 'Search', 'Mapping', 'Data', 'Sources', 'Fields', 'Quick limits', 'EBM', 'Pub. types', 'Languages', 'Gender', 'Age', 'Animal', and 'Search tips'. The 'Results Filters' section on the left lists various categories such as Sources, Drugs, Diseases, Devices, Floating Subheadings, Age, Gender, Study types, Publication types, Journal titles, Publication years, Authors, Conference Abstracts, Drug Trade Names, Drug Manufacturers, Device Trade Names, and Device Manufacturers. The 'History' section shows the current search using 'And' logic. The main results area displays 347 results for search #1. The first result is 'Monte Carlo Simulation and N-XCOM Software Calculation of the Neutron Shielding Parameters for the NCRP Report 144 Recommended Conventional Concretes' by Makkiabadi N, Ghiasi H, published in Frontiers in Biomedical Technologies 2024 11:1 (22-30). The second result is 'Rapid fiber-detection technique by artificial intelligence in phase-contrast microscopy images of simulated atmospheric'.

Search in Embase – Query translator

Results

```
(asbestos/exp OR asbest*:ti,ab,kw OR crocidolite:ti,ab,kw OR amosite:ti,ab,kw OR anthophyllite:ti,ab,kw OR anthophyllite:ti,ab,kw OR tremolite:ti,ab,kw OR actinolite:ti,ab,kw OR chrysotile:ti,ab,kw OR serpentine:ti,ab,kw OR amphibole:ti,ab,kw) AND ('protective equipment/exp OR 'protective clothing/exp OR 'protective cloth*:ti,ab,kw OR 'coverall*:ti,ab,kw OR 'protective layer*:ti,ab,kw OR 'hazmat:ti,ab,kw OR 'protective equipment*:ti,ab,kw OR 'ppe:ti,ab,kw OR 'protective device*:ti,ab,kw OR 'mask*:ti,ab,kw OR 'paper:ti,ab,kw OR 'air-purifying:ti,ab,kw OR 'respiratory protection*:ti,ab,kw OR 'respiratory device*:ti,ab,kw OR 'face piece*:ti,ab,kw OR 'facepiece*:ti,ab,kw OR 'face shield*:ti,ab,kw OR 'face visor*:ti,ab,kw OR 'hood*:ti,ab,kw OR 'air-supplying*:ti,ab,kw OR 'supplied air':ti,ab,kw OR 'full face filter*:ti,ab,kw OR 'breathing apparatus:ti,ab,kw OR 'scba:ti,ab,kw OR 'donning:ti,ab,kw OR 'doffing:ti,ab,kw OR 'filter unit*:ti,ab,kw OR 'filtering unit*:ti,ab,kw OR 'filtering system*:ti,ab,kw OR 'filter system*:ti,ab,kw OR 'workplace protection factor*:ti,ab,kw OR 'assigned protection factor*:ti,ab,kw)
```

Search > Mapping ▾ Date ▾ Sources ▾ Fields ▾ Quick limits ▾ EBM ▾ Pub. types ▾ Languages ▾ Gender ▾ Age ▾ Animal ▾

Results Filters Apply >

Sources ▾

Drugs ▾

Diseases ▾

Devices ▾

- protective equipment 91
- protective clothing 49
- gas mask 34
- ventilator 31
- filter 18
- building material 16
- radiation shield 14
- clothing 9
- fiber 9
- + More > Export

History Save | Delete | Print view | Export | Email

Combine > using And Or Collapse

#1 (asbestos/exp OR asbest*:ti,ab,kw OR crocidolite:ti,ab,kw OR amosite:ti,ab,kw OR anthophyllite:ti,ab,kw OR anthophyllite:ti,ab,kw OR tremolite:ti,ab,kw OR actinolite:ti,ab,kw OR chrysotile:ti,ab,kw OR serpentine:ti,ab,kw OR amphibole:ti,ab,kw) AND ('protective equipment/exp OR 'protective clothing/exp OR 'protective cloth*:ti,ab,kw OR 'coverall*:ti,ab,kw OR 'protective layer*:ti,ab,kw OR 'hazmat:ti,ab,kw OR 'protective equipment*:ti,ab,kw OR 'ppe:ti,ab,kw OR 'protective device*:ti,ab,kw OR 'mask*:ti,ab,kw OR 'paper:ti,ab,kw OR 'air-purifying:ti,ab,kw OR 'respiratory protection*:ti,ab,kw OR 'respiratory device*:ti,ab,kw OR 'face piece*:ti,ab,kw OR 'facepiece*:ti,ab,kw OR 'face shield*:ti,ab,kw OR 'face visor*:ti,ab,kw OR 'hood*:ti,ab,kw OR 'air-supplying*:ti,ab,kw OR 'supplied air':ti,ab,kw OR 'full face filter*:ti,ab,kw OR 'breathing apparatus:ti,ab,kw OR 'scba:ti,ab,kw OR 'donning:ti,ab,kw OR 'doffing:ti,ab,kw OR 'filter unit*:ti,ab,kw OR 'filtering unit*:ti,ab,kw OR 'filtering system*:ti,ab,kw OR 'filter system*:ti,ab,kw OR 'workplace protection factor*:ti,ab,kw OR 'assigned protection factor*:ti,ab,kw) 347

347 results for search #1 Set email alert Set RSS feed Search details Index miner

After reviewing the available Device terms for filtering, the Emtree term 'gas mask' was identified:

- 'Gas mask' is a child term of 'respiratory protection'
- The current search strategy does not include 'Gas mask', nor its synonyms.
- The search strategy also does not explicitly include the Emtree term 'Respiratory protection', which seems relevant given the portion 'respiratory protection*:ti,ab,kw OR 'respiratory device*:ti,ab,kw' of the initial search strategy.

It would be worthwhile to add the terms 'Respiratory protection' and 'Gas mask' to make the strategy as exhaustive as possible?



Which other Emtree terms can improve the search strategy?



Thank you for
attending this
lecture!

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Q&A

The recording has been interrupted. If you prefer to unmute your microphone to ask your question, click on Reactions , then click on Raise Hand .