

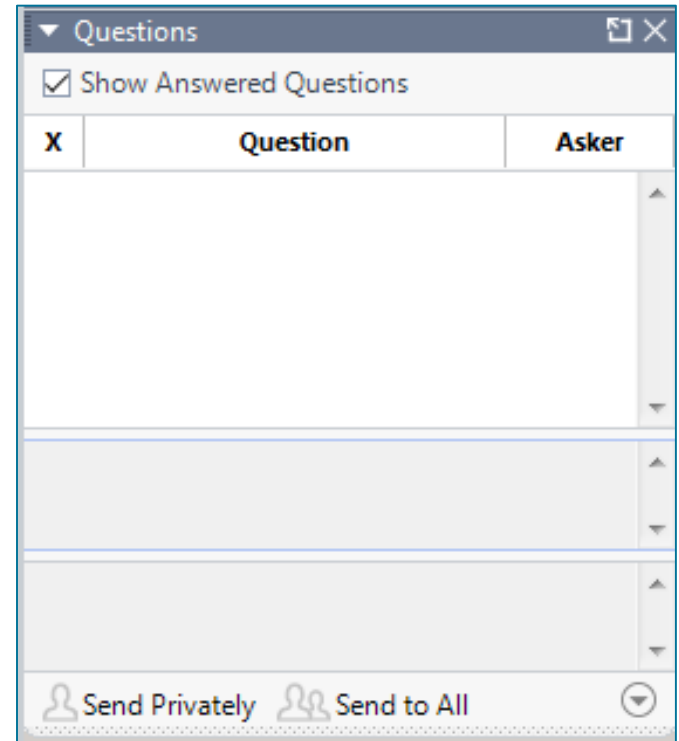
# Getting started with Embase – An introduction

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Solution Marketing Manager  
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August 23 2017



# Agenda

- Embase content and coverage
- What is Emtree and how is Embase indexed?
- How to search in Embase?
- Demo
- Q&A



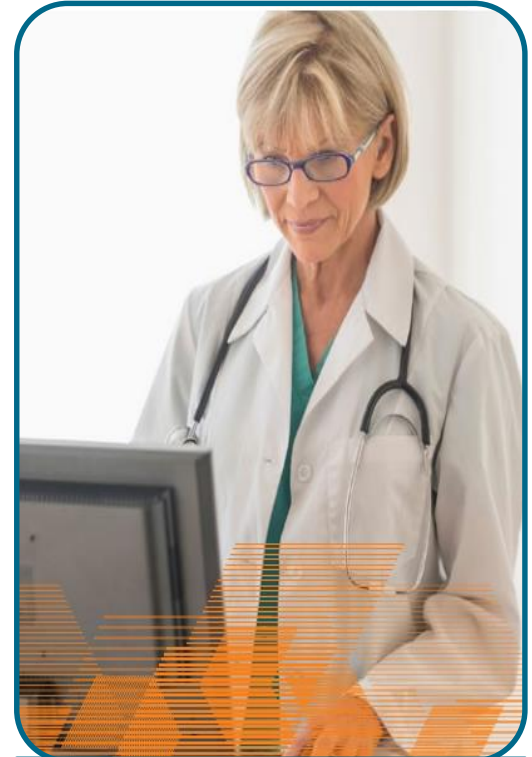
## Why do people use Embase?



Pharmacovigilance  
and drug safety



Clinical evaluation  
and device safety



Systematic review  
for evidence-based  
medicine

## How Embase delivers value?

“Efficient and useful **tool** for quick search through massive science data.

“**Indexing** is amazing!

“More successful queries in this database than in Pubmed



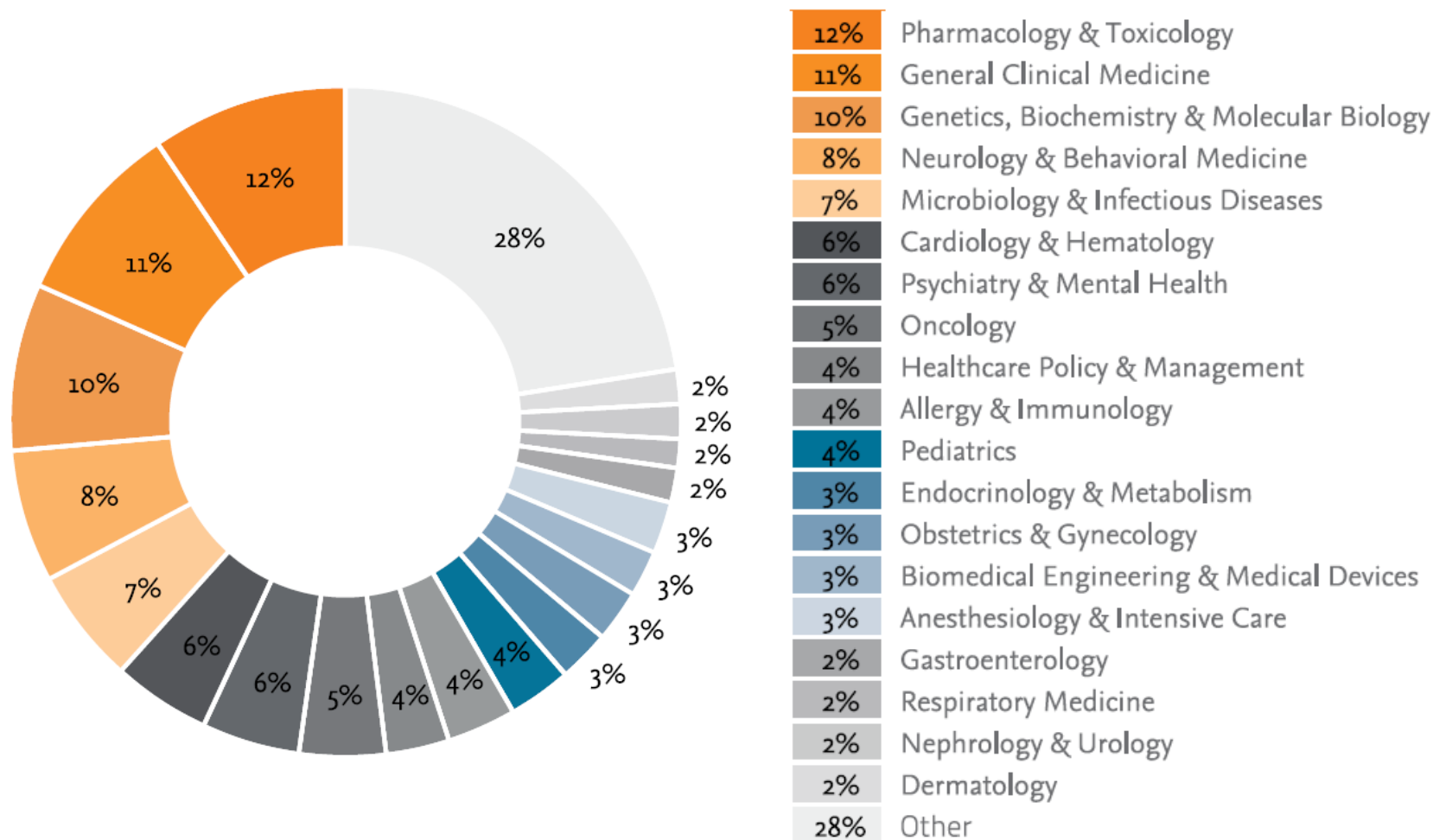
“the ability to **export** the citation from the original list, as well as from most of the citations, has made the whole experience tremendously fruitful.

“When typing in keywords, Embase readily offers the best used terms. This is so very helpful. The layout of Embase is so well done.

“It's one of the most important databases for research in the medical field. When performing exhaustive searches in the medical field, the

**content** of Embase has to be taken into account.

## Embase focuses on biomedical literature in key areas for drug, disease and device research



# Unique coverage of conference abstracts

Advanced Search

e.g. 'cancer gene therapy'/exp OR ((treatment OR therapy) NEAR/5 fluorouracil):ab

Search > Mapping ▾ Date ▾ Sources ▾ Fields ▲ Quick limits ▾ EBM ▾

Field labels

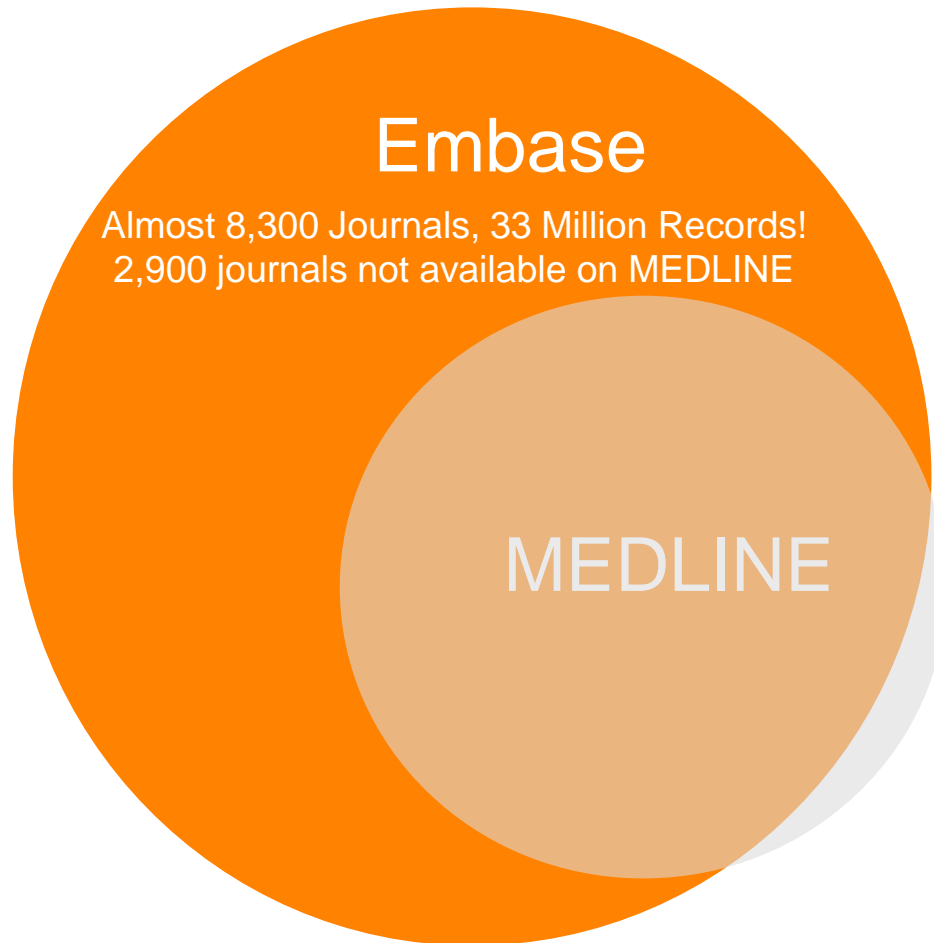
Abbreviated journal title :ta	CAS registry number :rn
Abstract :ab	Clinical trial number :cn
Accession number :an	CODEN :cd
Article title :ti	Conference date :dc
Author address :ad	Conference editor :ed
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Original non-English title :tt	Start page :sp

Publication types

<input type="checkbox"/> Article	<input type="checkbox"/> Erratum
<input type="checkbox"/> Article in Press	<input type="checkbox"/> Letter
<input type="checkbox"/> Conference Abstract	<input type="checkbox"/> Note
<input type="checkbox"/> Conference Paper	<input type="checkbox"/> Review
<input type="checkbox"/> Conference Review	<input type="checkbox"/> Short Survey
<input type="checkbox"/> Editorial	

<https://www.elsevier.com/solutions/embase-biomedical-research/embase-coverage-and-content>

# Comprehensive content coverage



\* [Changed MEDLINE coverage since 2017](#)  
[May due to Elsevier publisher embargo policy](#)

\*\* We are actively working to close the gap.  
Users can use [this query](#) to search the missing titles in MEDLINE

# Comprehensive content coverage

Covered in Embase (≈ 8300 titles)			*
Indexed by Embase		by MEDLINE	
Embase unique titles ≈ 3000	Embase/MEDLINE overlapping titles = 3317	MEDLINE unique titles = 2037	*

\* MEDLINE unique titles not covered in Embase (275 journal titles)

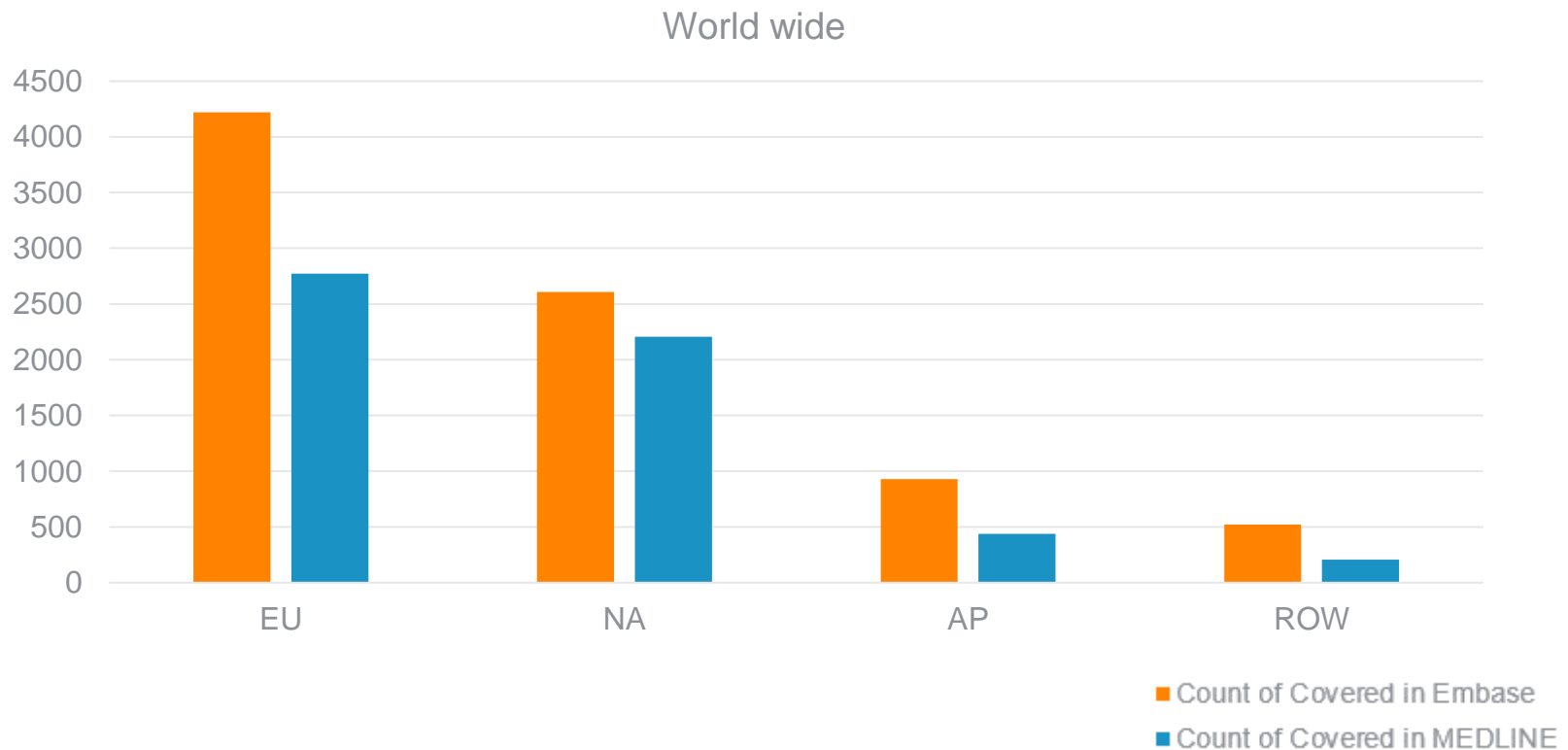
**More content: MEDLINE In-Process and In-Press records and PubMed-not-MEDLINE records in Embase**

- [Changed MEDLINE coverage since 2017 May due to Elsevier publisher embargo policy](#)
- As of July 2017
- We are actively working to close the gap. Users can use [this query](#) to search the missing titles in MEDLINE



## Worldwide coverage

Embase covers all the content contained in MEDLINE and unique coverage, including conference abstracts and **European journals**.



## non-English content

Language	Embase (per year)	MEDLINE (per year)	Unique in Embase
English **	1,413,745	623,018	790,727
Chinese	23,798	13,675	10,123
French	12,094	6,170	5,924
Spanish	12,333	4,273	8,060
Japanese	6,703	5,010	1,693
Russian	5,522	3,979	1,543
Portuguese	2,718	1,493	1,225
Polish	1,712	982	730
Turkish	1,534	421	1,113
Korean	364	146	360

[1] Search query: e.g [1-1-2016]/sd NOT [1-1-2017]/sd AND [dutch]/lim AND [embase]/lim NOT [medline]/lim

[2] Searched in Embase.com

## More randomized controlled trials, especially non-English records

Language	Embase.com	MEDLINE (PubMed)	Embase Advantage	Percent
Chinese	11042	7427	3615	49%
French	3384	2876	508	18%
Spanish	2876	2128	748	35%
Japanese	2139	1237	902	73%
Russian	2018	1923	95	5%
Portuguese	1154	614	540	88%
Polish	575	376	199	53%
Turkish	944	109	835	766%
Korean	193	83	110	133%

[1] Search query: e.g. 'randomized controlled trial'/NOT [31-5-2017]/sd AND [french]/lim

[2] Search query: e.g. (((("1000/1/1"[MeSH Date]:"20exp 17/5/31"[MeSH Date] AND medline[sb]) AND Randomized Controlled Trial[ptyp])) AND french[Language]

# Indexing and Emtree

# Importance of indexing

## Case presentation

A 36-year-old Caucasian man presented to our hospital with refractory hypotension, severe cardiac insufficiency and multi-organ failure due to mixed intoxication with **atenolol, nifedipine, Lacidipine and sertraline**. Together with standard treatment, we performed extra-corporeal membrane oxygenation to overcome refractory cardiogenic shock and lead the patient to achieve a full

PMID- 21699679

OWN - NLM

STAT- PubMed-not-MEDLINE

## Case presentation

A 36-year-old Caucasian man with a history of hypertensive suicide attempts was brought to our emergency department with a total estimated amount of 10 g of atenolol in association with Lacidipine and **fluoxetine**.

Table 1  
Drug, plasma and ultra-filtrate levels and clearance<sup>a</sup>

Medication	Emergency Department arrival 60 minutes after drug ingestion	After plasma exchange therapy 8 hours after drug ingestion		After 72 hours of HV-CVVH	
	Plasma levels	Plasma levels	Ultra-filtrate	Plasma levels	Ultra-filtrate
Sertraline, µg/mL	0.55	-	-	-	-
Nifedipine, µg/mL	2.23	0.45	-	-	-

### Drug Terms

activated carbon, epinephrine, **atenolol**, beta adrenergic receptor blocking agent, bicarbonate, calcium channel blocking agent, calcium chloride, dobutamine, dopamine, **fluoxetine**, glucagon, glucose, insulin, isoprenaline, **lacidipine**, macrogol, **nifedipine**, noradrenalin, **sertraline**, vasopressin

### Disease Terms

acute heart failure, cardiogenic shock, **drug fatality**, **drug intoxication**, hypotension, multiple organ failure

### Other Terms

adult, article, case report, continuous hemodiafiltration, continuous infusion, convalescence, drug clearance, drug dose reduction, drug megadose, drug substitution, **extracorporeal oxygenation**, hemodynamics, human, male, mortality, plasmapheresis, priority journal, treatment outcome

Embase®

# Importance of indexing

The screenshot displays a medical database interface with a sidebar on the left and a main results area on the right. The sidebar lists various categories: **Drugs**, **Diseases**, **Devices**, and **Floating Subheadings**. Under **Drugs**, a list of drugs is shown with checkboxes and counts. **fluoxetine** is selected and highlighted in yellow. Below the drug list, a blue bar instructs the user to 'Click on 'Apply' to apply your selection' and an 'Export' button is visible. The main results area, titled **Results**, shows a search for 'fluoxetine' with 1 result. The result is titled 'Extra-corporeal life support for near-fatal multi-drug intoxication' by Rona R., Cortinovis B., Marcolin R., Patroniti N., Isgr S., Marelli C., Fumagalli R., published in the *Journal of Medical Case Reports* 2011 5 Article Number 231, cited by 4. Overlaid on the interface are two pop-up windows. The 'Key subheadings' window lists indexing options: 'adverse drug reaction' (0), 'drug combination' (1, highlighted in yellow), 'drug comparison' (0), 'drug interaction' (0), and 'drug therapy' (0). The 'Drug combination' window shows a search bar with the text 'type any drug combination (autocomplete)' and a list of suggested drug combinations: 'all', 'atenolol' (1), 'lacidipine' (1), 'nifedipine' (1), and 'sertraline' (1). An 'Export' button and an 'Apply' button are also present in the bottom right of the interface.

**Drugs**

Drug	Details	Count
<input type="checkbox"/> calcium channel blocking agent		1
<input type="checkbox"/> calcium chloride	Details ▶	1
<input type="checkbox"/> dobutamine	Details ▶	1
<input type="checkbox"/> dopamine	Details ▶	1
<input type="checkbox"/> epinephrine	Details ▶	1
<input checked="" type="checkbox"/> fluoxetine	Details ▶	1
<input type="checkbox"/> glucagon	Details ▶	1
<input type="checkbox"/> glucose	Details ▶	1

Click on 'Apply' to apply your selection

> Export

**Diseases** ▼

**Devices** ▼

**Floating Subheadings** ▼

**Results** View | Print | Export | Email | Order | Add to Clipboard

Select number of items ▼ Selected: 0 (clear)

☐ 1 Extra-corporeal life support for near-fatal multi-drug intoxication  
Rona R., Cortinovis B., Marcolin R., Patroniti N., Isgr S., Marelli C., Fumagalli R.  
*Journal of Medical Case Reports* 2011 5 Article Number 231 Cited by: 4

**Key subheadings**

Subheading	Count
<input type="checkbox"/> adverse drug reaction	0
<input checked="" type="checkbox"/> drug combination	1
<input type="checkbox"/> drug comparison	0
<input type="checkbox"/> drug interaction	0
<input type="checkbox"/> drug therapy	0

**Drug combination**

type any drug combination (autocomplete) x

Drug combination	Count
<input type="checkbox"/> all	
<input checked="" type="checkbox"/> atenolol	1
<input checked="" type="checkbox"/> lacidipine	1
<input checked="" type="checkbox"/> nifedipine	1
<input checked="" type="checkbox"/> sertraline	1

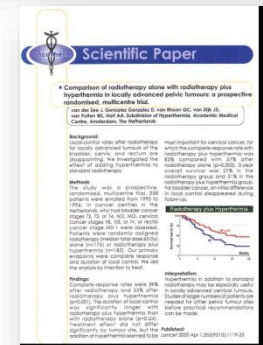
Export Apply >

# Indexing principles

Indexing for Embase is a manual process performed by trained indexers with a biomedical background, with the exception of articles designated for automatic indexing.



Indexers read and analyze the full text of articles in order to identify relevant concepts, and index them with the most specific Emtree terms.



Index terms are controlled by the Emtree thesaurus resulting in consistent coverage of concepts that may be expressed in many different ways in the literature.





Contents lists available at SciVerse ScienceDirect

## Pulmonary Pharmacology &amp; Therapeutics

journal homepage: [www.elsevier.com/locate/ypupt](http://www.elsevier.com/locate/ypupt)

## A randomised, placebo- and active-controlled dose-finding study of aclidinium bromide administered twice a day in COPD patients

D. Singh<sup>a,\*</sup>, H. Magnussen<sup>b</sup>, A. Kirsten<sup>b</sup>, S. Mindt<sup>c</sup>, C. Caracta<sup>d</sup>, B. Seoane<sup>e</sup>, D. Jarreta<sup>e</sup>, E. Garcia Gil<sup>e</sup><sup>a</sup> University of Manchester, Medicines Evaluation Unit, University Hospital of South Manchester, Langley Building, Southmoor Road, Manchester M23 9QZ, UK<sup>b</sup> Pulmonary Research Institute at Hospital Grosshansdorf, Woehrendamm 80, D-22927 Grosshansdorf, Germany<sup>c</sup> Klinische Forschung Hamburg GmbH, Hoheluftchaussee 18, 20253 Hamburg, Germany<sup>d</sup> Forest Research Institute, Harborside Financial Center, Jersey City, NJ 07311, USA<sup>e</sup> Almirall R&D Centre, Ronda General Mitre 151, 08022 Barcelona, Spain

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## Article history:

Received 14 December 2011

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## Keywords:

Aclidinium

Bronchodilation

COPD

Phase II

Twice-daily

## ABSTRACT

This Phase IIb, double-blind, double-dummy, placebo- and active-comparator-controlled crossover study ([ClinicalTrials.gov](http://ClinicalTrials.gov) identifier: NCT01120093) assessed efficacy and safety of three doses of aclidinium bromide in patients with moderate to severe chronic obstructive pulmonary disease. Patients were randomised to one of five treatment sequences each consisting of twice-daily (BID) aclidinium 100 µg, 200 µg, 400 µg (via Genuair<sup>®</sup>), formoterol 12 µg (via Aerolizer<sup>®</sup>) and matched placebo for 7 days, with a 5- to 9-day washout period. Primary endpoint was mean change from baseline in forced expiratory volume in 1 s (FEV<sub>1</sub>) normalised area under the curve (AUC)<sub>0-12</sub> on Day 7. Secondary endpoints were: change from baseline in FEV<sub>1</sub> normalised AUC<sub>12-24</sub>, FEV<sub>1</sub> normalised AUC<sub>0-24</sub> and morning pre-dose FEV<sub>1</sub> on Day 7. Adverse events were monitored throughout the study. Of 79 randomised patients, 68 (86.1%) completed the study. After 7 days of treatment, aclidinium and formoterol produced statistically significantly greater changes from baseline in FEV<sub>1</sub> normalised AUC<sub>0-12</sub> vs placebo ( $p < 0.0001$ ). FEV<sub>1</sub> normalised AUC<sub>12-24</sub>, FEV<sub>1</sub> normalised AUC<sub>0-24</sub>, and morning pre-dose FEV<sub>1</sub> were also statistically significantly greater with all aclidinium doses vs placebo ( $p < 0.0001$ ). Improvements in primary and





## A randomised, placebo- and active-controlled dose-finding study of acclidinium bromide administered twice a day in COPD patients

D. Singh<sup>a,\*</sup>, H. Magnussen<sup>b</sup>, A. Kirsten<sup>b</sup>, S. Mindt<sup>c</sup>, C. Caracta<sup>d</sup>, B. Seoane<sup>e</sup>, D. Jarreta<sup>e</sup>, E. Garcia Gil<sup>e</sup>

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<sup>d</sup>Forest Research Institute, Harborside Financial Center, Jersey City, NJ 07311, USA

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# Embase indexing

The article full-text  
is read to extract  
significant concepts

background data on impact, time, position, etc.

The purpose of this Phase IIb study was to assess the bronchodilatory effects of three doses of aclidinium (100 µg, 200 µg and 400 µg) BID in patients with moderate to severe COPD compared with placebo to guide dose selection for additional Phase III studies. The long-acting  $\beta_2$ -agonist (LABA) formoterol (12 µg BID) was used as an active comparator, so that the profile of aclidinium BID could be compared to a BID bronchodilator that is currently used in clinical practice.

## 2. Methods

### 2.1. Study subjects

Patients aged  $\geq 40$  years with a clinical diagnosis of stable moderate to severe COPD according to the current guidelines [8] were enrolled in the study. At screening, patients were required to have a post-salbutamol forced expiratory volume in 1 s (FEV<sub>1</sub>)/forced vital capacity (FVC) ratio  $< 70\%$ , a post-salbutamol FEV<sub>1</sub>  $\geq 30\%$  and  $< 80\%$  of the predicted normal value, and be current or former cigarette smokers of  $\geq 10$  pack-years. Patients with a history or current diagnosis of asthma, with any respiratory tract infection or who had experienced a COPD exacerbation in the 6 weeks prior to screening (3 months if it resulted in hospitalisation) were excluded. Other exclusion criteria were: other clinically significant respiratory or cardiovascular conditions, and contraindications for anticholinergic drugs.

### 2.2. Study design

This was a double-blind, double-dummy, placebo- and active-comparator-controlled crossover study in patients with COPD (ClinicalTrials.gov identifier: NCT01120093) conducted in 11 centres in Germany and Belgium. Following a screening visit, eligible patients underwent a 14-day run-in period prior to randomisation. Patients were randomised to one of five 7-day treatment sequences (separated by 5- to 9-day washout periods) using a 5  $\times$  5 Latin square crossover design [9]. Treatments were aclidinium 100 µg, 200 µg, 400 µg BID (via Genuair<sup>®</sup>, Almirall, Barcelona, Spain) and formoterol 12 µg (via Foradil Aerolizer<sup>®</sup>, Novartis AG, Basel, Switzerland) and matched placebo. The Genuair<sup>®</sup> inhaler is a novel multidose, breath-actuated dry powder inhaler (DPI) that generates a highly reproducible mean fine particle dose and delivers aclidinium effectively to lungs over a range of inhalation flows [10,11]. Genuair<sup>®</sup> incorporates multiple feedback mechanisms to ensure that doses are administered correctly, including a colour window changing from green to red and an audible click [10]. The Aerolizer<sup>®</sup> inhaler is a single-dose, breath-actuated DPI, which also performs consistently in terms of dosing efficiency [12]. But the feedback to the patient on whether the dose has been administered successfully is based on the single-dose, capsule-based nature of this inhaler [12].

Patients received the morning and evening dose 12 h apart for 7 consecutive days and were assessed on Days 1 and 7 of each treatment period. Salbutamol (100 µg per puff), as-needed, was allowed during the run-in and after randomisation. Inhaled glucocorticosteroids, oral and parenteral glucocorticosteroids (up to 10 mg/day), and oral sustained-release theophyllines were permitted if their use was stable  $\geq 4$  weeks prior to screening. Tiotropium was stopped at least 72 h prior to screening and LABAs

or other glucocorticosteroids required for rescue or systemic glucocorticosteroids or resulted in hospitalisation.

This study was conducted according to International Conference on Harmonization/Good Clinical Practice guidelines and the Declaration of Helsinki. The protocol was approved by local institutional review boards and ethics committees (Ethikkommission Schleswig-Holstein, Segeberg, Germany; Commissie voor Medische Ethiek, Universitair Ziekenhuis Gent, Belgium). All patients provided written informed consent prior to the study.

### 2.3. Assessments

#### 2.3.1. Efficacy

At screening, spirometry measurements were taken at two intervals (1 h apart) prior to the morning dose, and then at 0.5, 1, 2, 3, 4 and 6 h post-morning dose on Day 1. On Day 7, measurements were taken at the same times as Day 1 and also at 8, 10, 12 (pre-evening dose), 13, 14, 15, 16, 22, 23 and 24 h post-morning dose. Spirometers and all necessary equipment were provided by a centralised company (CareFusion) for specific use in this study. Spirometers were calibrated every day of use and after maintenance; instrument recommendations were followed to ensure accurate and comparable spirometric data. Spirometry assessments were performed in triplicate, and all three measurements were required to meet acceptability and repeatability criteria according to current recommendations [13]. If either of these criteria were not met, additional measurements (up to a maximum of eight) were taken until the criteria were met. Baseline was defined as the mean of the two pre-dose spirometry measurements on Day 1 of each treatment period. The use of relief medication was recorded in patient diary cards. Convenience of use of both inhaler devices was assessed at the end of the study using a seven-item questionnaire.

#### 2.3.2. Safety

Adverse events (AEs) were monitored throughout the study and were graded as mild, moderate or severe. AEs were considered treatment-emergent (TEAEs) if they started on or after the first dose of study drug, or if the severity of a medical condition worsened after study drug. Other safety investigations included 12-lead electrocardiogram (ECG, performed both pre-dose and 2-h post-dose), blood-pressure measurements, and assessments of clinical laboratory parameters and vital signs.

### 2.4. Endpoints

The primary efficacy variable was mean change from baseline in FEV<sub>1</sub> normalised area under the curve (AUC) for the 12-h period immediately after morning dose (AUC<sub>0-12</sub>) on Day 7. Secondary efficacy endpoints included: change from baseline in FEV<sub>1</sub> normalised AUC<sub>12-24</sub>, FEV<sub>1</sub> normalised AUC<sub>0-24</sub>, and morning pre-dose (trough) FEV<sub>1</sub> at Day 7. Additional efficacy endpoints included: change from baseline in FVC normalised AUC<sub>0-12</sub>, AUC<sub>12-24</sub> and AUC<sub>0-24</sub> at Day 7; change from baseline in morning peak FEV<sub>1</sub> on Day 1 and Day 7; morning trough FVC on Day 7; and change from baseline in the use of relief medication after 7 days of treatment (baseline was assessed as relief medication use during the run-in period).

Safety and tolerability endpoints included AEs and change from baseline in blood pressure, ECG, laboratory parameters and vital signs.

## Embase indexing

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is read to extract  
significant concepts

**Table 4**

**Treatment-emergent adverse events** reported by  $\geq 2$  patients in any treatment group (safety population).

	Number (%) of patients reporting adverse events				
	Placebo	Aclidinium			Formoterol
	<i>N</i> = 76	100 $\mu$ g <i>N</i> = 73	200 $\mu$ g <i>N</i> = 73	400 $\mu$ g <i>N</i> = 74	12 $\mu$ g <i>N</i> = 74
Any TEAE	16 (21.1)	11 (15.1)	13 (17.8)	14 (18.9)	11 (14.9)
Any severe TEAE	1 (1.3)	0 (0)	2 (2.7)	2 (2.7)	1 (1.4)
Headache	5 (6.6)	4 (5.5)	4 (5.5)	5 (6.8)	2 (2.7)
Nasopharyngitis	1 (1.3)	0 (0)	0 (0)	3 (4.1)	1 (1.4)
Toothache	0 (0)	1 (1.4)	0 (0)	2 (2.7)	0 (0)
Cough	2 (2.6)	1 (1.4)	1 (1.4)	1 (1.4)	1 (1.4)
Pruritus	2 (2.6)	1 (1.4)	1 (1.4)	0 (0)	2 (2.7)
Diarrhoea	2 (2.6)	1 (1.4)	1 (1.4)	0 (0)	0 (0)





















SAE, serious adverse event; TEAE, treatment-emergent adverse event.

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Record 1





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This Phase IIb, double-blind, double-dummy, placebo- and active-comparator-controlled crossover study (COPD) patients with moderate to severe chronic obstructive pulmonary disease. Patients were randomised to one formoterol 12 µg (via Aerolizer®) and matched placebo for 7 days, with a 5- to 9-day washout period. Primary endpoint was the change from baseline in FEV<sub>1</sub> normalised AUC<sub>0-12</sub> on Day 7. Secondary endpoints were: change from baseline in FEV<sub>1</sub> normalised AUC<sub>0-24</sub>, FEV<sub>1</sub> Of 79 randomised patients, 68 (86.1%) completed the study. After 7 days of treatment, acclidinium and formoterol 0.0001). FEV<sub>1</sub> normalised AUC<sub>0-24</sub>, FEV<sub>1</sub> normalised AUC<sub>0-12</sub>, and morning pre-dose FEV<sub>1</sub> were also statistically significant endpoints were statistically significantly greater with acclidinium 400 µg vs 100 µg. The safety profile of acclidinium was dependent clinically meaningful improvements in FEV<sub>1</sub> compared with placebo. This study also confirmed the need for further investigation in Phase III trials. © 2012 Elsevier Ltd.

**Drug Terms**[acclidinium bromide](#) , [formoterol fumarate](#) , [placebo](#) , [salbutamol](#) **Disease Terms**[chronic obstructive lung disease](#) , [coughing](#) , [diarrhea](#) , [ECG abnormality](#) , [headache](#) , [pruritus](#) **Device Terms**[powder inhaler](#) **Other Terms**[adult](#) , [article](#) , [bronchodilatation](#) , [controlled study](#) , [crossover procedure](#) , [disease severity](#) , [drug monitoring](#) , [drug safety](#) , [evening dosage](#) , [female](#) , [forced expiratory volume](#) , [forced vital capacity](#) , [multicenter study](#) , [phase 2 clinical trial](#) , [priority journal](#) , [randomized controlled trial](#) **Author Keywords**Acclidinium, AE, AUC, BID, Bronchodilation, COPD, DPI, ECG, FEV<sub>1</sub>, FVC, ITT, LABA, LAMA, LS, Phase II, SAE, SE, Safety**Correspondence Address****Singh D.**  University of Manchester, Medicines Evaluation Unit, University Hospital of South Manchester**Author Addresses****Singh D.**  University of Manchester, Medicines Evaluation Unit, University Hospital of South Manchester**Magnussen H.** , **Kirsten A.**  Pulmonary Research Institute at Hospital Grosshansdorf Woehrendamm 80, D-22927 Grosshansdorf, Germany.**Mindt S.**  Klinische Forschung Hamburg GmbH Hoheluftchaussee 18, 20253 Hamburg, Germany.**Copyright**

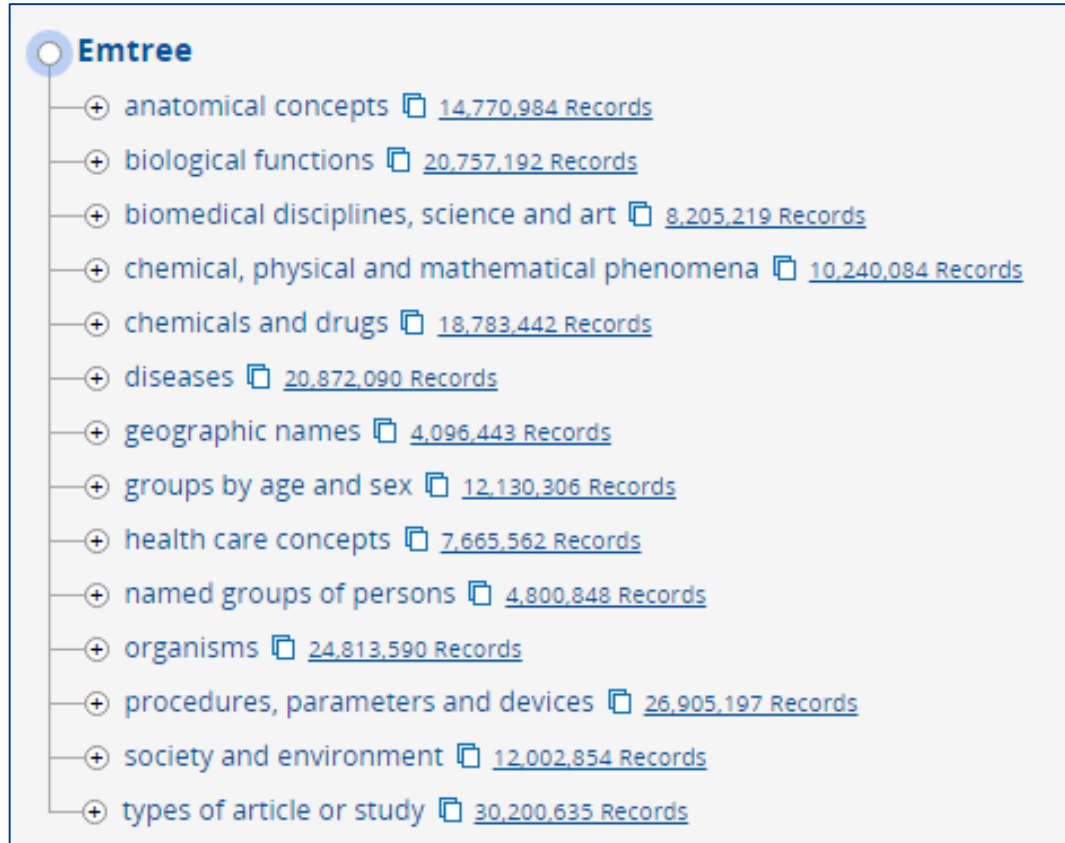
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**Additional Information**

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Abbreviated Journal Title	Pulm. Pharmacol. Ther.
ISSN	10945539, 15229629 (electronic)
CODEN	PPTHF
Source Type	Journal
Source Publication Date	June 2012
Entry Date	2012-05-18 (Full record), 2012-05-16 (Article in Press/In process)
Publication Type	Article
Page Range	248-253
Country of Author	United Kingdom
Country of Source	United Kingdom
Language of Article	English
Language of Summary	English
Publisher Item Identifier	S1094553912000508
Digital object identifier (DOI)	10.1016/j.pupt.2012.03.008
MEDLINE PMID	<a href="#">22497752</a>
Embase Accession Number	2012260646
Number of References	20
Cited by in Scopus	<a href="#">30</a>
Device Tradenames	Aerolizer (Novartis, Switzerland), Genuair (Almirall, Spain)
Drug Tradenames	foradil (Novartis, Switzerland)
Device Manufacturers	Almirall (Spain), Novartis (Switzerland)
Drug Manufacturers	Novartis (Switzerland)
CAS Registry Numbers	acclidinium bromide ( <a href="#">320345-99-1</a>  ) formoterol fumarate ( <a href="#">43229-80-7</a>  ) salbutamol ( <a href="#">18559-94-9</a>  , <a href="#">35763-26-9</a>  )
Clinical Trial Numbers	ClinicalTrials.gov ( <a href="#">NCT01120093</a> )

# What is Emtree?

A controlled vocabulary for Biomedicine and related Life Sciences



What is facet?

The levels of a thesaurus subject hierarchy are called facets. Each facet represents a broad category of subjects.



## Emtree Facts

**75,000 preferred terms**

**320,000 synonyms**

**Drug Facet: 32,000 preferred terms and over  
200,000 synonyms**

**Including all MeSH terms**

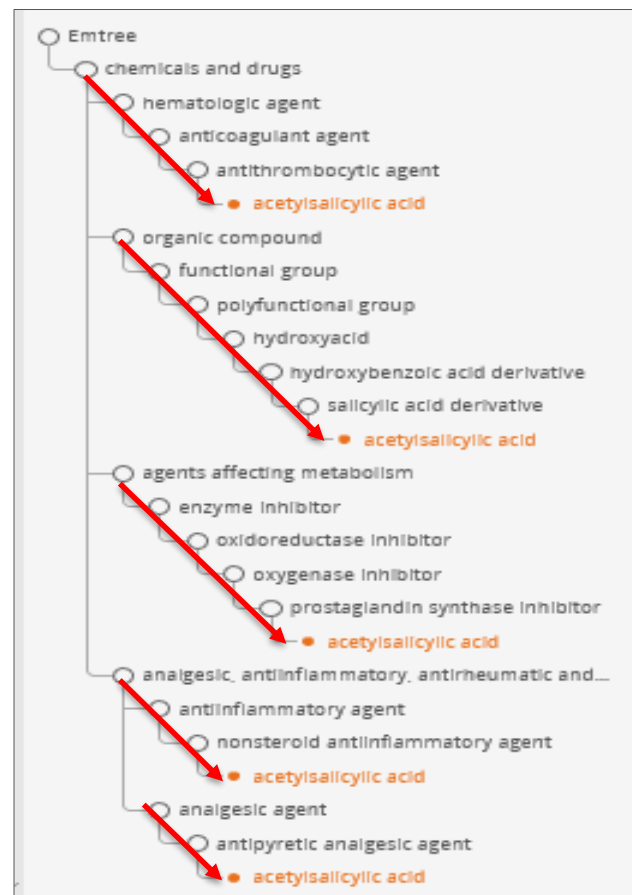
**Emtree update 3 times a year, including back-  
posting**

# Explore Emtree

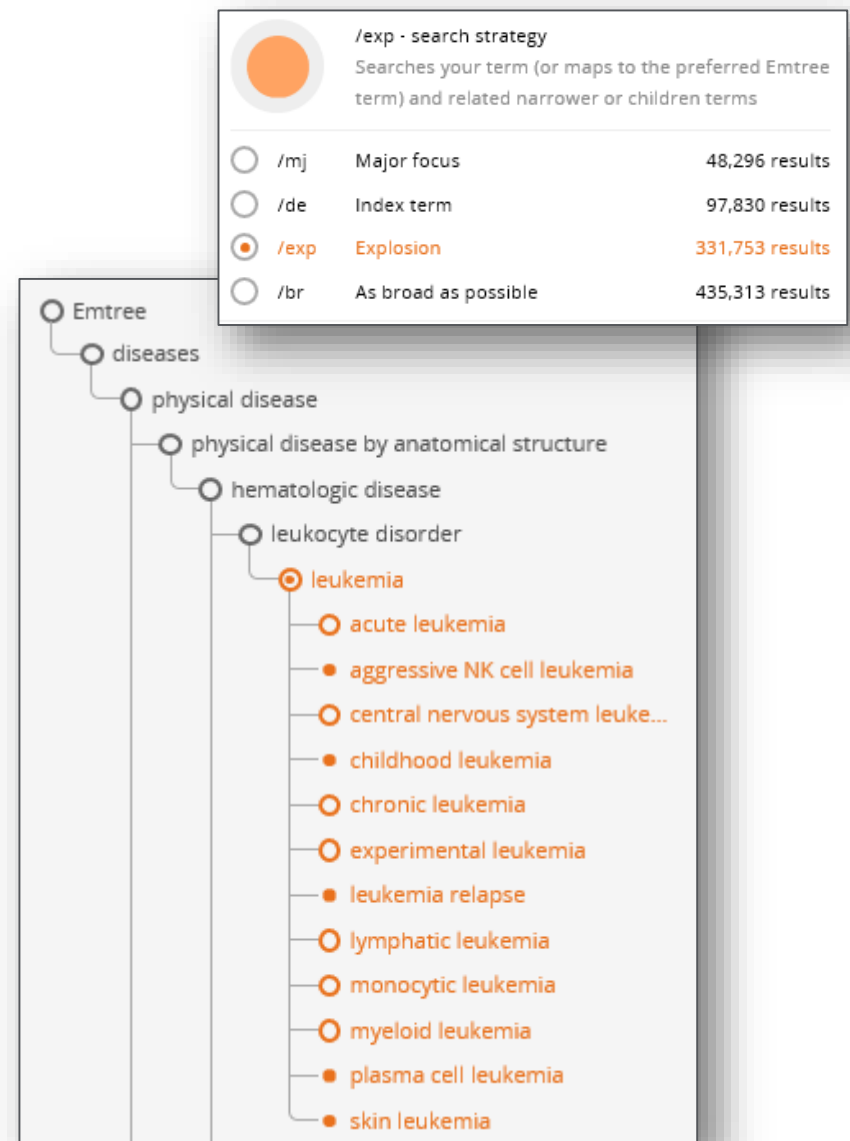
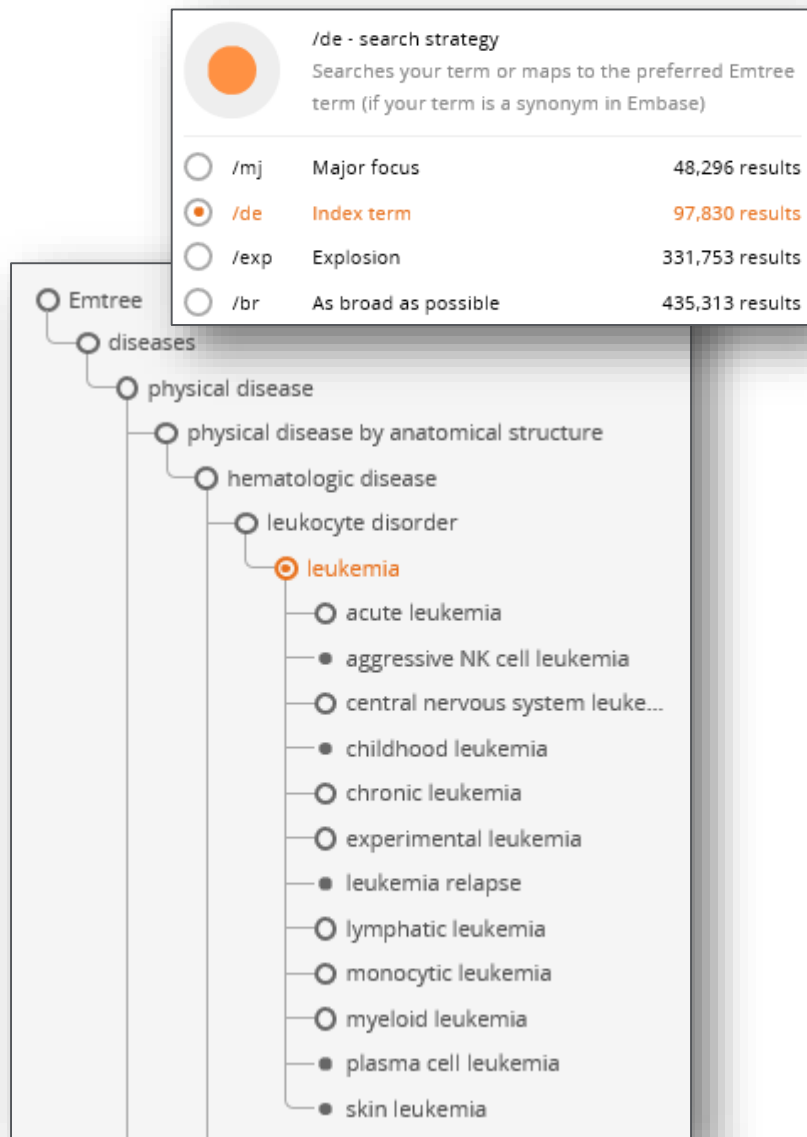
## The hierarchy of terms defines the context

Drugs can be classified via different routes:

- Drug class:
  - therapeutic use
  - system affected
  - mechanism of action
- Pharmacological activity
- Chemical structure



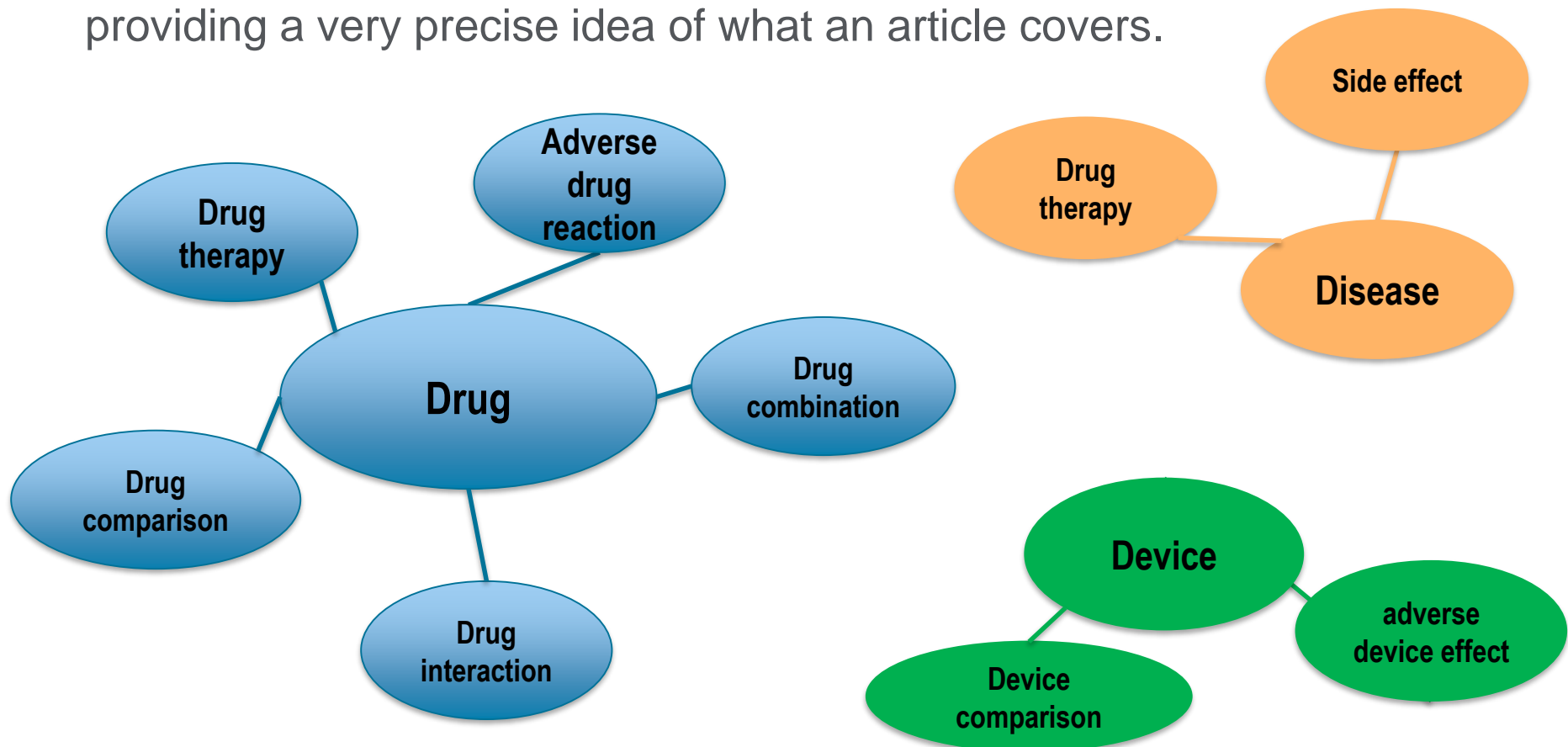
# Make use of the Emtree structure: explosion searching





## Subheadings

**Subheadings** are Emtree terms that are also used as concept qualifiers for drugs, diseases and devices to refine their meaning, providing a very precise idea of what an article covers.



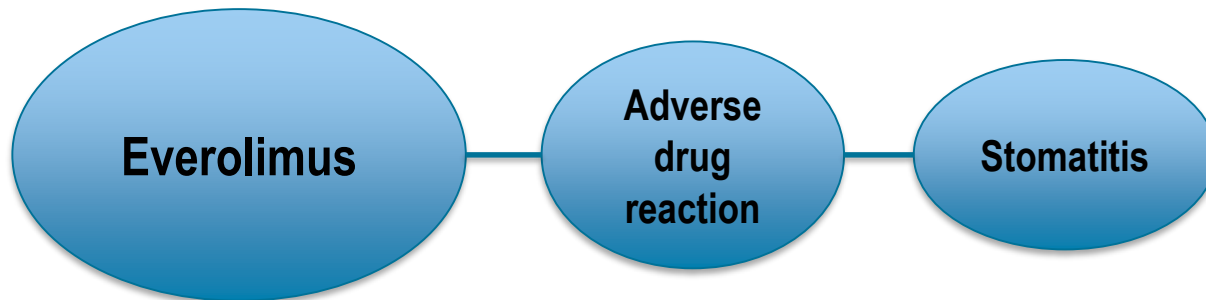
## Indexing: triple-linking

**Triple-indexing** is three level indexing of the full text of an article.

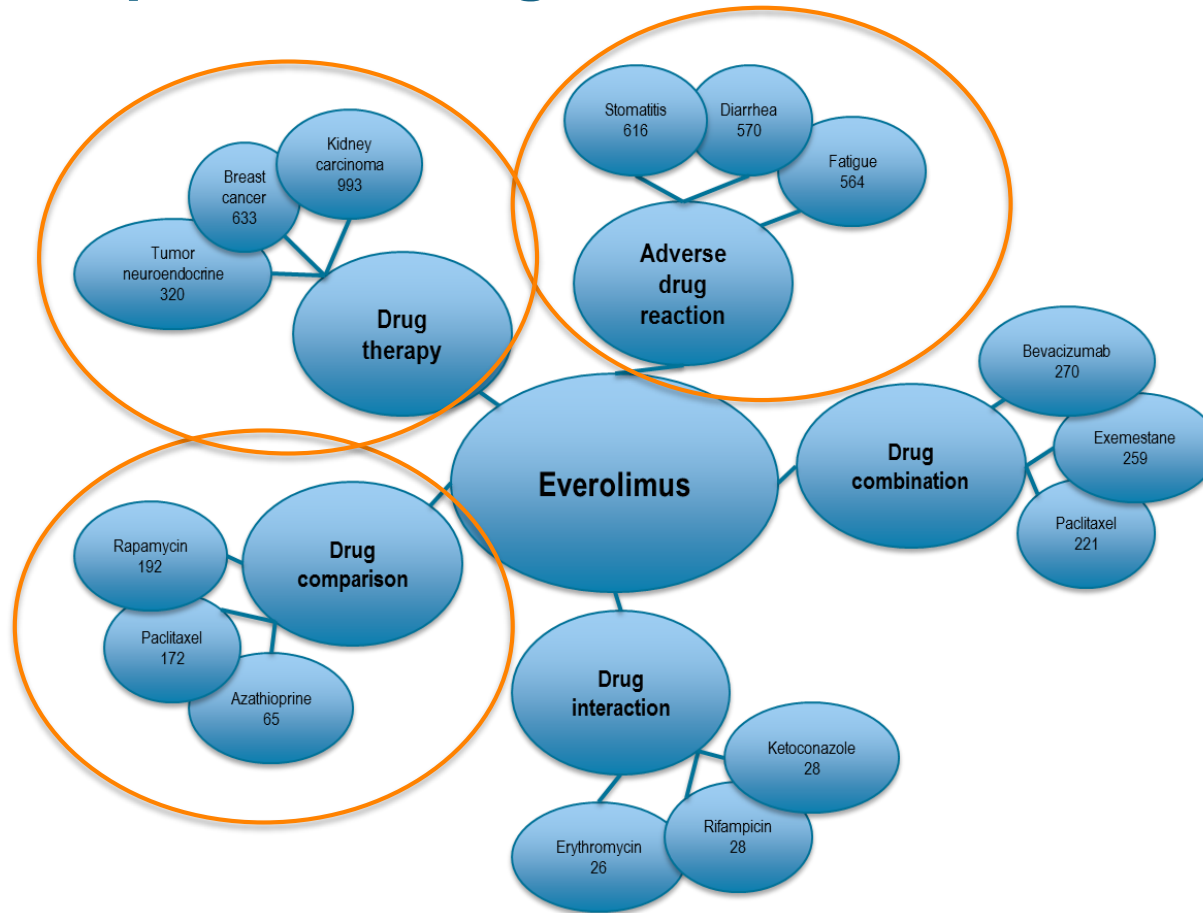
It consists of:

- Term (drug or device or disease)
- Key subheading (**relationship**)
- Linked terms (e.g. stomatitis, hypertension, stroke, nausea, etc.)

Triple indexing has started in Q1 of 2007 for the **drug triples** (drug therapy from Q2 of 2009). **Devices** began in Q2 of 2014.



## E.g. Triple indexing can be used to identify relationships of the drug Everolimus



**Manually  
extracted  
semantic  
relationships**

Triple linking and drug-repurposing

- [http://help.elsevier.com/app/answers/detail/a\\_id/11345/p/9754](http://help.elsevier.com/app/answers/detail/a_id/11345/p/9754)
- [http://help.elsevier.com/app/answers/detail/a\\_id/6082/p/9754](http://help.elsevier.com/app/answers/detail/a_id/6082/p/9754)

# Tools in Embase.com

Embase®

Search options

Search

Emtree

Journals

Results

My tools

Xuanyan Xu

Logout



1



Quick Search

Browse options

Select Language | ▼

Quick

PICO

PV Wizard

Advanced

Drug

Disease

Device

Article

Authors

Quick search ▼

stem cell thera



stem cell therapy use: stem cell transplantation

119,735

e.g. american heart

AND ▼

Journal name ▼

AND ▼

Author name ▼

e.g. watson j



AND ▼

Author's first name ▼

e.g. Mary Jane



+ Add search field

Reset form

Limit to:

☐ Publication years (including):

2017 ▼

to

2017 ▼

☐ Records added to Embase:

1-1-2016



to

31-12-2016



Evidence Based Medicine

☐ Cochrane Review☐ Systematic Review☐ Meta Analysis☐ Controlled Clinical Trial☐ Randomized Controlled Trial

## Search tips

## How do I use this search form?

Type into a text box. The autocomplete function will suggest complete words and phrases from Emtree.

To view results click 'Show # results'. The number of results is calculated as you build your search.

To search for a phrase, use single or double quotes around the phrase, e.g. 'heart attack'.

## What is Quick search?

It combines Emtree term explosion with free text search in all fields, e.g. hypertension will be searched as 'hypertension'/exp OR 'hypertension'.

## How can I get fewer results?

Select 'all fields' from the drop-down if you want to exclude explosion (example: quick search) and search free text only. You can also focus your search to specific fields by selecting them from the drop-downs.

# Using PICO search form for systematic searching

Find best term

☒ Emtree

- ☐ anatomical concepts
- ☐ biological functions
- ☐ biomedical disciplines, science and art
- ☐ chemical, physical and mathematical phenomena
- ☐ chemicals and drugs
- ☐ diseases
- ☐ geographic names
- ☐ groups by age and sex
- ☐ health care concepts
- ☐ named groups of persons
- ☐ organisms
- ☐ procedures, parameters and devices
- ☐ society and environment
- ☐ types of article or study

## PICO Search

Note: Filling any search line is optional

Population

Intervention

e.g. insulin

Comparison

e.g. placebo

Outcome

e.g. risk

Study design (or miscellaneous)

e.g. randomized controlled trial

# Using PV wizard search form

Embase®

Search ▾ Browse ▾ Results My tools ▾ [Select Language](#) ▾ Xuanyan Xu

**Emtree**

Find best term 🔍

- Emtree
- anatomical concepts
- biological functions
- biomedical disciplines, science and art
- chemical, physical and mathematical phenomena
- chemicals and drugs
- diseases
- geographic names
- groups by age and sex
- health care concepts
- named groups of persons
- organisms
- procedures, parameters and devices
- society and environment
- types of article or study

**PV wizard**

**Search Five elements**

**MLM Query**  
[EMA's MLM searches >](#)

Drug name Alternative drug names Adverse drug reactions Special situations Human limit

Drug name

e.g. Paracetamol [Clear field](#)

**Edit Query**

**Subheadings**

<input checked="" type="checkbox"/> Adverse drug reaction	<input type="checkbox"/> Drug combination
<input checked="" type="checkbox"/> Drug toxicity	<input type="checkbox"/> Drug comparison
<input checked="" type="checkbox"/> Drug interaction	<input type="checkbox"/> Drug therapy

**Pre-filled subheadings**

# Index miner

The screenshot shows the Embase search interface. The search query is 'paediatric population'. The results page displays 253 results for search #1. The Index miner tool is open, showing a list of indexed terms with checkboxes for selection. The 'Selected terms' list on the right includes 'child', 'school child', 'adolescent', 'preschool child', 'infant', 'pediatrics', and 'newborn'.

Results Filters: Sources, Drugs, Diseases, Devices, Floating Subheadings, Age, Gender, Study types, Publication types, Journal titles, Publication years, Authors.

253 results for search #1

Index Terms (List) 7

Clear selected X

Occurrence (selected) | Alphanumeric

Selected terms

- child
- school child
- adolescent
- preschool child
- infant
- pediatrics
- newborn

1 2 3 4 5 ... >

Or And Add to query >

This option will allow you to see the full list of indexed terms in the result set, and select the ones you want to include to expand the search.



# Find similar records

- Embase will display 100 records similar to a record (e.g. L123456789)
- Search syntax will be L123456789/sim
- Search will be executed as a combination of major focus terms:  
'term 1'/mj AND 'term 2'/mj OR ('term 1'/mj AND 'term 3'/mj) OR ('term 1'/mj AND 'term 4'/mj) OR ('term 2'/mj AND 'term 3'/mj) OR ('term 2'/mj AND 'term 4'/mj) ... OR ('term n-1'/mj AND 'term n'/mj) NOT L123456789
- Results will be sorted by relevance and limited to top 100

The screenshot displays the Embase search results page. At the top, the search history shows a search for 'L158.5588/sim' (highlighted with a red circle). Below this, it indicates '100 results for search #1'. The results are sorted by 'Relevance' (selected). The first two results are listed:

- 1** Effect of heat-shock induced oxidative stress is suppressed in BcZAT12 expressing drought tolerant tomato  
Shah K, Singh M., Rai A.C.  
*Phytochemistry* 2013 95 (109-117)  
MEDLINE [Abstract](#) [Index Terms](#) [View Full Text](#) [Similar records >](#)
- 2** bZIP transcription factors in the oomycete *Phytophthora infestans* with novel DNA-binding domains are involved in defense against oxidative stress  
Gamboa-Meléndez H., Huerta A.I., Judelson H.S.  
*Eukaryotic Cell* 2013 12:10 (1403-1412)  
MEDLINE [Abstract](#) [Index Terms](#) [View Full Text](#) [Similar records >](#)

The 'Similar records' links for both results are highlighted with red circles.

# Managing results

The screenshot shows a search results management interface. At the top, there's a 'History' section with a search entry '#1' for 'heart infarction' showing 315,459 results. Below this, there are three orange arrows pointing to specific features: one to the 'Export' button in the 'Results' section, one to the 'Edit' button (pencil icon) in the search entry bar, and one to the 'Email alert' button (envelope icon) in the search entry bar. The interface also includes options for 'Set email alert', 'Set RSS feed', and 'Search details'.

☐ **History** Save | Delete | Print view | Export | Email Combine > using ☒ And ☐ Or ^ Collapse

☐ #1 'heart infarction' 315,459

315,459 results for search #1 Set email alert Set RSS feed Search details

☐ **Results** View | Print | Export | Email | Order | Add to Clipboard 1 — 200 >

Edit Email alert RSS feed

Export, print or share results -  
choose from formats including  
RIS, text or CSV

Edit the search to apply  
additional limits

Set up e-mail alerts to  
automatically receive new  
search results (frequencies  
range from daily to yearly)

# How Embase delivers value?

...by including literature and information resources in a timely manner

Conference proceedings



Scientific Journals



In Press (unpublished)



**We make sure you don't miss any biomedical literature**

...by reading full-text to identify drugs, diseases, adverse affects, clinical trials, drug trade names etc.

**Deep indexing using own taxonomy (EMTREE)**

**The only close alternative is reading all the articles**

...by enabling advanced search filters and intuitive search tools to pinpoint relevant literature and manageable record set

**Very powerful Search Environment**

**Good precision and recall balance**

...by allowing users to automate searching and result management



E-mail Alerting



API

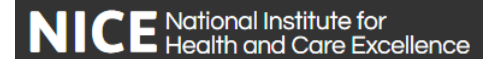


Interoperability

**Automation and documentation**

**QUOSA™ PV**

# Embase is recommended by the regulatory bodies and authorities for maintaining awareness of safety profiles



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

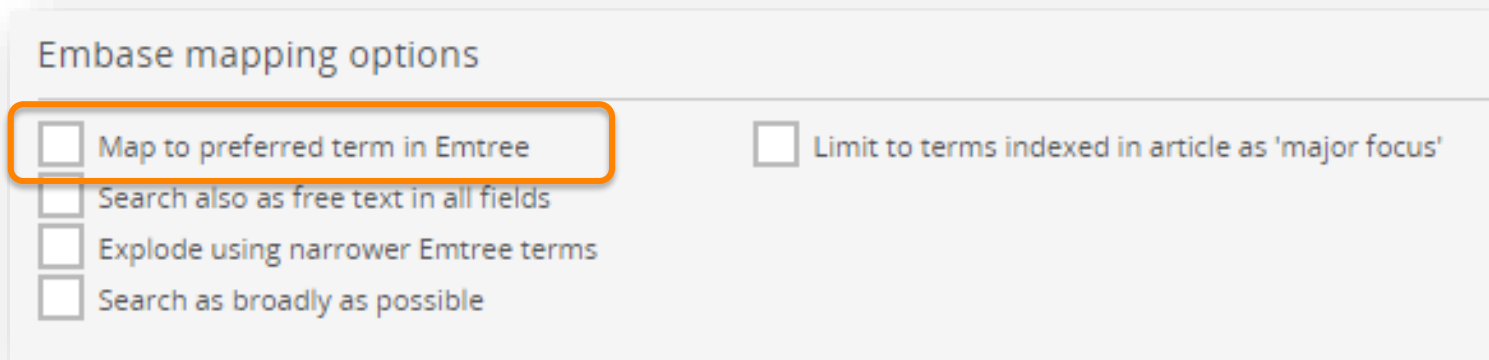


EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE GENERAL

Consumer Goods  
Cosmetics and Medical Devices

# Basic searching

## Mapping: Level of comprehensiveness



The image shows a screenshot of a software interface titled "Embase mapping options". It contains several checkboxes for configuring search results. The first checkbox, "Map to preferred term in Emtree", is highlighted with an orange rectangular border. Other options include "Limit to terms indexed in article as 'major focus'", "Search also as free text in all fields", "Explode using narrower Emtree terms", and "Search as broadly as possible".

Embase mapping options

- ☒ Map to preferred term in Emtree
- ☐ Limit to terms indexed in article as 'major focus'
- ☐ Search also as free text in all fields
- ☐ Explode using narrower Emtree terms
- ☐ Search as broadly as possible

**/de: search the preferred term**

**Stem Cell Therapy** is a synonym of **Stem Cell Transplantation**

Searching 'stem cell therapy' will be mapped to searching the preferred term 'stem cell transplantation'

'stem cell therapy'/de      36,166

'stem cell transplantation'/de      36,166

# Mapping: Level of comprehensiveness

## Embase mapping options

- ☐ Map to preferred term in Emtree
  - ☒ Search also as free text in all fields
  - ☐ Explode using narrower Emtree terms
  - ☐ Search as broadly as possible
- ☐ Limit to terms indexed in article as 'major focus'

search in all fields of a record

including title, abstract, author keyword, institute name, all fields

☐ 2 Successful haploidentical **stem cell transplantation** with prophylactic administration of liposomal amphotericin B after invasive pulmonary zygomycosis

Ochi T., Katayama Y., Okatani T., Imanaka R., Kyo K., Itagaki M., Katsutani S., Iwat

*Medical Mycology Case Reports* 2017 18 (1-4)

Embase [Abstract](#) [Index Terms](#) [View Full Text](#)

A 54-year-old woman with acute myeloid leukemia (AML) achieved complete remission by induction consolidation therapy. As zygomycosis could not be cured by liposomal amphotericin B and she relapsed 7 months after onset, she received haploidentical **stem cell transplantation** under ad experiencing severe acute graft-versus-host disease, she remains alive with no relapse of either

© 2017 The Authors

☐ 2 Successful haploidentical **stem cell transplantation** with prophylactic administration of liposomal amphotericin B after invasive pulmonary zygomycosis

Ochi T., Katayama Y., Okatani T., Imanaka R., Kyo K., Itagaki M., Katsutani S., Iwato K., Asaoku H.

*Medical Mycology Case Reports* 2017 18 (1-4)

Embase [Abstract](#) [Index Terms](#) [View Full Text](#) [Similar records](#)

**Drug Terms**

amphotericin B lipid complex<sup>®</sup>, azacitidine<sup>®</sup>, colony stimulating factor 1<sup>®</sup>, cytarabine<sup>®</sup>, enocitabine<sup>®</sup>, fludarabine<sup>®</sup>, granulocyte colony stimulating factor<sup>®</sup>, HLA antibody<sup>®</sup>, idarubicin<sup>®</sup>, melphalan<sup>®</sup>, mercaptopurine<sup>®</sup>, methotrexate<sup>®</sup>, methylprednisolone<sup>®</sup>, micafungin<sup>®</sup>, mycophenolate mofetil<sup>®</sup>, prednisolone<sup>®</sup>, rituximab<sup>®</sup>, steroid<sup>®</sup>, tacrolimus<sup>®</sup>, thymocyte antibody<sup>®</sup>, voriconazole<sup>®</sup>

**Disease Terms**

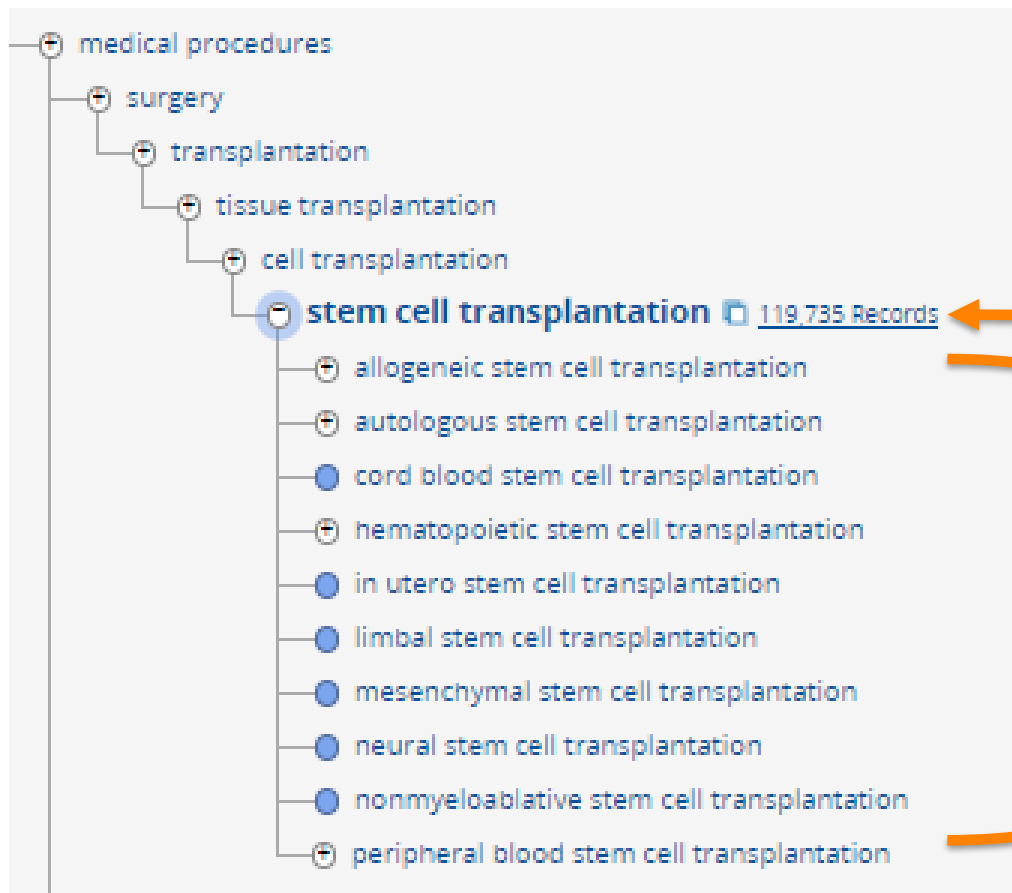
acute graft versus host disease<sup>®</sup>, acute myeloid leukemia<sup>®</sup>, anaphylaxis<sup>®</sup>, bone marrow hypoplasia<sup>®</sup>, chronic graft versus host disease<sup>®</sup>, dyspnea<sup>®</sup>, fever<sup>®</sup>, invasive pulmonary zygomycosis<sup>®</sup>, leukemia relapse<sup>®</sup>, lung mycosis<sup>®</sup>, myelodysplastic syndrome<sup>®</sup>, neutropenia<sup>®</sup>, pancytopenia<sup>®</sup>, systemic mycosis<sup>®</sup>, thorax pain<sup>®</sup>, zygomycosis<sup>®</sup>

**Other Terms**

adult<sup>®</sup>, antifungal therapy<sup>®</sup>, article<sup>®</sup>, bone marrow biopsy<sup>®</sup>, cancer combination chemotherapy<sup>®</sup>, case report<sup>®</sup>, cell proliferation<sup>®</sup>, chimera<sup>®</sup>, consolidation chemotherapy<sup>®</sup>, daughter<sup>®</sup>, drug dose reduction<sup>®</sup>, drug megadose<sup>®</sup>, drug withdrawal<sup>®</sup>, engraftment<sup>®</sup>, female<sup>®</sup>, haploidentical stem cell transplantation<sup>®</sup>, hematopoiesis<sup>®</sup>, histopathology<sup>®</sup>, hospital discharge<sup>®</sup>, human<sup>®</sup>, human tissue<sup>®</sup>, induction chemotherapy<sup>®</sup>, leukemia remission<sup>®</sup>, lung lobectomy<sup>®</sup>, maintenance chemotherapy<sup>®</sup>, middle aged<sup>®</sup>, multiple cycle treatment<sup>®</sup>, multiplex polymerase chain reaction<sup>®</sup>, myeloblast<sup>®</sup>, neutrophil<sup>®</sup>, peripheral blood stem cell transplantation<sup>®</sup>, priority journal<sup>®</sup>, prophylaxis<sup>®</sup>, radiotherapy dosage<sup>®</sup>, short tandem repeat<sup>®</sup>, steroid therapy<sup>®</sup>, transplantation conditioning<sup>®</sup>, treatment outcome<sup>®</sup>, whole body radiation<sup>®</sup>

# Mapping: Level of comprehensiveness

/exp: explode using narrower Emtree terms



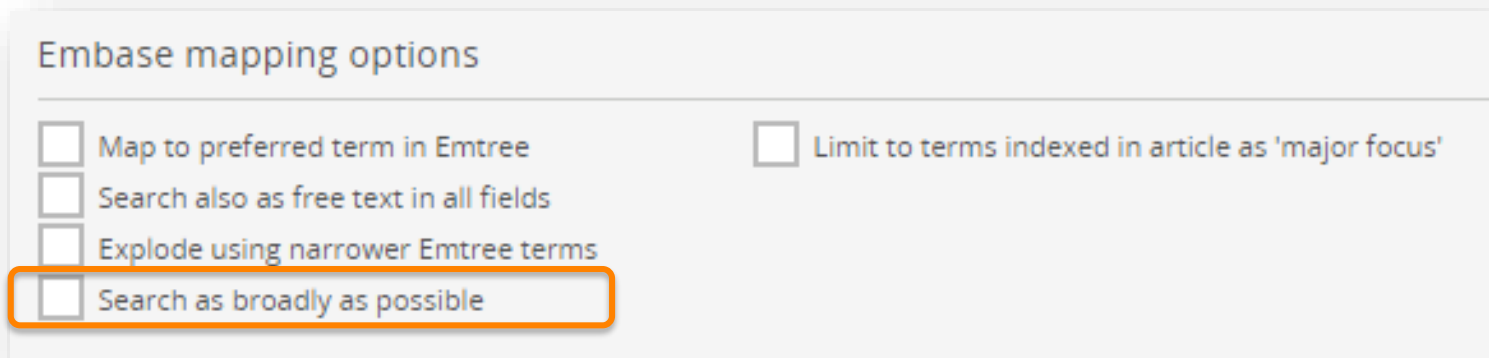
Preferred term (/de)



Narrower terms – included  
in an /exp search



## Mapping: Level of comprehensiveness



The image shows a screenshot of a software interface titled "Embase mapping options". It contains five checkboxes arranged in two columns. The first column has four checkboxes, and the second column has one. The bottom checkbox in the first column, "Search as broadly as possible", is highlighted with an orange rectangular border.

Embase mapping options	
<input type="checkbox"/> Map to preferred term in Emtree	<input type="checkbox"/> Limit to terms indexed in article as 'major focus'
<input type="checkbox"/> Search also as free text in all fields	
<input type="checkbox"/> Explode using narrower Emtree terms	
<input type="checkbox"/> Search as broadly as possible	

/br Search as broad as possible. It combines:

- Map to preferred term in Emtree
- Search also as free text in all fields
- Explode using narrower Emtree terms

'stem cell transplantation'/exp 119,735

'stem cell transplantation'/br 130,135

'stem cell transplantation'/exp OR 'stem cell transplantation' 130,135

# Synonyms

## stem cell transplantation 119 735 Records

- ⊕ allogeneic stem cell transplantation
- ⊕ autologous stem cell transplantation
- cord blood stem cell transplantation

⊕ hemi

● in ut

● limb

● mes

● neur

● non

⊕ perip

### History

This term was added to Emtree in 1974

### Synonyms

4 acetamidophenol; 4 acetaminophenol; 4 acetylaminophenol; 4 hydroxyacetanilide; 4' hydroxyacetanilide; a-mol; abenol; acamol; acamol forte suppositories for kids; acenol; acephen; acet suppositories; acetalgine; acetaminophenol; acetaminophene; acetaminophenol; acetamol; acetomenophen; acetylaminophenol; adorem; afebrin; algiadin; algocit; algotropy; alphagesic; alvedon; amadil; anacin 3; anafion; analgesic; apamide; apap; apirex; apotel; arthralgen; atamel; ben-u-ron; benuron; biogesic; biogesic suspension; bodrex; calapol; caladol; calonal; calpol; causalon; cemol; christamol; claradol; clophen; cp 500; cp500; dafalgan; daga; datril; depon; depyretin; dirox; dismifen; disprol; dolal; dolex; dolex 500; doliprane; dolitabs; dolofen; dolomol; dolorol; dolotemp; dolprone; doltem; drilan; dristan af; duorol; dymadon; efferalgan; efferalgan 500; efferalganodis; efferelgan; enelfa; eneril; eraldor; eu med; exopon; expandol; febrilix; fendon; fervex; fibrinol; fortolin; gelocatil; geluprane 500; gunaceta; headache strength allerest; hedex; helporal; infants' feverall; injectapap; janupap; kamolas; kyofen; lekadol; lemgrip; letamol; liquiprin; lotemp; lyteca; malidens; medamol; meforagesic; metagesic; metalid; mexalen; milidon 500; minopan; mypara; n acetyl 4 aminophenol; n acetyl para aminophenol; n-acetyl-p-aminophenol; nalgelik; napamol; napap; naprex; nebs; nektol 500; neocitran; neodalmin; neopap; nevral; nilapur; nobedon; nysacetol; ofirmev; pacemol; pacimol; pamal; pamol; panadol; panadol actifast; panadol soluble; panamax; panasorb; panodil; para acetamidophenol; para acetylaminophenol; para hydroxyacetanilide; para suppo; paracet; paracetaminophenol; paracetamol ester; paracetamole; parafusiv; parageniol; paragin; paralen; paralief; paramax; paramidol; parapaed; parapaed junior; parapaed six plus; paratabs; parvid; pasolind; pasolind n; paximol; pedipan; penral-night; perfalgan; phenaphen; pinex; polarfen; predimol; prompt; puernol; pyrigesic; raperon; rapidol; relaphen; reliv; remedol; revanin; rhinapen elixir; rhodapap; roxamol gelcaps; salzone; sedes a; serimol; setamol; sinaspril; sinebriv; sinedol; sinpro; supofen; tabalgin; tachipirin; tachipirina; taganopain; tapar; tempra; tempte; temzzard; termofren; tralgon; tralgon elixir; tramil; treuphadol; turpan; tylenol; tylenol (caplet); tylenol (geltab); tylenol extra fuerte; tylenol forte; tylenol nr 1; tyles; valadol; wegmal; winadol; winasorb; xebamol; zolben; zydinol

### History

This term was added to Emtree in 1991

### Synonyms

stem cell based therapy; stem cell ther

### CAS Registry Numbers

[103-90-2](#)

### Dorland's dictionary

acetaminophen = the amide of acetic acid and p-aminophenol, having analgesic and antipyretic effects similar to aspirin's but only weak antiinflammatory effects. Administered orally and rectally. Called also paracetamol.

paracetamol = acetaminophen.

Tylenol = trademark for preparations of acetaminophen.

Definition from *Dorland's Medical Dictionary*, 32nd edition, copyright © 2011 by Elsevier. For more information please go to [www.dorlands.com](http://www.dorlands.com)

# Using PICO to include synonyms

## Pico Search

Quick **PICO** PV Wizard Advanced Drug Disease Device Article Authors

4 synonyms ✕

for stem cell transplantation

ALL ☒

stem cell based therapy ☒

stem cell therapy ☒

stem cell transplantation ☒

transplantation, stem cell ☒

Note: Filling any search line is optional

Population

e.g. diabetes

Intervention

stem cell transplantation /exp ▼ **+ 4 synonyms:all** ▼

Comparison

e.g. placebo

Outcome

e.g. risk

Study design (or miscellaneous)

e.g. randomized controlled trial

# Balance comprehension and precision

- **To increase comprehension**

- Include sub-terms/derivatives with an explosion search
- Include synonyms in a free text search => PICO form can help

- **To increase precision**

e.g. 'low molecular weight heparin'

**Search >** Mapping ▾ Date ▾ Sources ▾ Drug fields ▾ Drug subheadings ▲ Routes ▾ Quick II

**Subheadings**

<input type="checkbox"/> Adverse drug reaction	<input type="checkbox"/> Drug concentration	<input type="checkbox"/> E
<input type="checkbox"/> Clinical trial	<input type="checkbox"/> Drug development	<input type="checkbox"/> P
<input type="checkbox"/> Drug administration	<input type="checkbox"/> Drug dose	<input type="checkbox"/> P
<input type="checkbox"/> Drug analysis	<input type="checkbox"/> Drug Interaction	<input type="checkbox"/> P
<input type="checkbox"/> Drug combination	<input type="checkbox"/> Drug therapy	<input type="checkbox"/> P
<input type="checkbox"/> Drug comparison	<input type="checkbox"/> Drug toxicity	

OR AND

## Results Filters

+ Expand — Collapse all

Apply >

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	▾
Device Manufacturers	▾

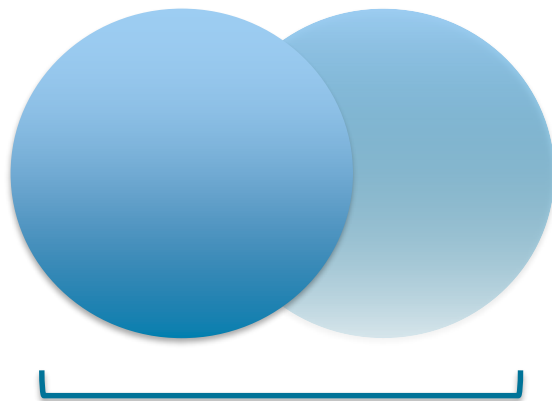
Apply >

## Tips for searching – Boolean operators

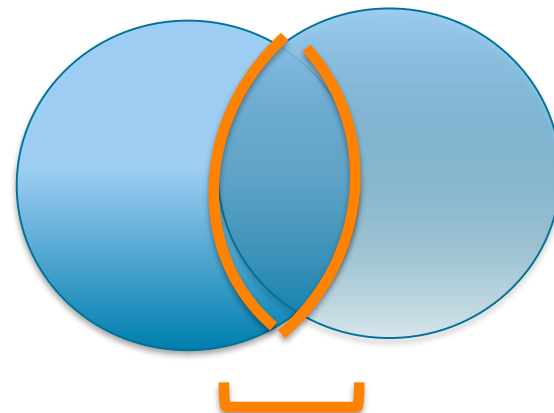
The Boolean logical operators **AND**, **OR**, **NOT**, **NEAR** and **NEXT** can be used to combine search terms or query numbers in a variety of ways:

- Aged **OR** elderly **OR** geriatric – At least one word must be mentioned in each record
- Depression **AND** tricyclic – Both words must be present in each record

Boolean operators can be combined and nested with parentheses within a single search statement:



OR



AND

## Tips for searching

- When conducting a search of Article title and Abstract for author free-text expressions consider using **proximity operators** (**NEXT**, **NEAR**) as appropriate

**cardiac NEAR/5 catheter retrieves:**

*"Despite complicated **cardiac** **anatomy**,  
**catheter** ablation of AT..."*

*"... patients undergoing **catheter** **ablation** for  
**cardiac** arrhythmias ..."*

*"...a continuous thermodilution **cardiac**  
**output pulmonary artery catheter**."*

- When performing free-text searches, remember to **consider variant spellings** including British and American spellings and terminology
  - e.g., tumor vs tumour; diaper vs nappy; pediatric vs paediatric; otorhinolaryngology vs ear, nose and throat; overuse injury vs repetitive strain injury

# Where Can you Learn More?

e.g. 'cancer gene therapy'/exp OR ((treatment OR therapy) NEAR/5 fluorouracil):ab

[Search >](#) [Mapping ^](#) [Date v](#) [Sources v](#) [Fields v](#) [Quick limits v](#) [EBM v](#) [Pub. types v](#) [Languages v](#) [Gender v](#) [Age v](#) [Animal v](#) [Search tips v](#)

Embase mapping options Clear page selections Collapse

☒ Map to preferred term in Emtree ☐ Limit to terms indexed in article as 'major focus'

☐ Search also as free text in all fields

☐ Explode using narrower Emtree terms

☐ Search as broadly as possible

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## ▼ Searching

[Overview](#) (12)[Quick Searches](#) (6)[Advanced, Drug, Disease and Device search](#) (15)[Search syntax and operators](#) (10)[Browsing](#) (8)[PICO Searches](#) (6)

➤ **New Embase Support Center**

# Demo



- What are the best empirical antibiotic treatment options for bacterial meningitis?
- Population = patients with bacterial meningitis
- Intervention = antibiotic agent
- Comparison = no treatment
- Outcome = (blank)

- Retrieve all the adverse events mentioned about paracetamol

- Compare the everolimus eluting coronary stent with biolimus eluting coronary stent
- Intervention: everolimus eluting coronary stent
- Comparison: biolimus eluting coronary stent

- Recent reports of cardiac adverse effects of beta agonists in the treatment of asthma patients
- Drug search: beta agonist
- Disease: asthma with subheading: therapy
- Disease: heart disease with subheading: side effect
- Combine, and select records added date



# Thank you!

Questions?  
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# Searching basics to master

## Boolean operators

- The Boolean logical operators **AND**, **OR**, **NOT**, **NEAR** and **NEXT** can be used to combine search terms or query numbers in a variety of ways:
  - Depression **AND** tricyclic – Both words must be present in each record
  - Aged **OR** elderly **OR** geriatric – At least one word must be mentioned in each record
- Boolean operators can be combined and nested with parentheses within a single search statement:
  - (aged **OR** elderly **OR** geriatric) **AND** (depression **OR** insomnia)

### Notes:

- If no other operator is specified, **AND** is the default operator; *heart failure* is searched as *heart AND failure* if not enclosed in quotation marks
- Boolean operators can be used in any search form, including Quick Search
- Phrases: searched in quotation marks; 'heart failure'

# Searching basics to master

## Proximity operators

- Proximity operators let you search for words or phrases at any specified distance from each other

### NEAR/n:

- This requests terms which are within 'n' words of each other, in either direction.

#### **cardiac NEAR/5 catheter retrieves:**

*"Despite complicated **cardiac** anatomy, **catheter** ablation of AT..."*

*"... patients undergoing **catheter** ablation for **cardiac** arrhythmias ..."*

*"...a continuous thermodilution **cardiac** output pulmonary artery **catheter**."*

### NEXT/n:

- This requests terms which are within 'n' words of each other, in the order specified.

#### **hip NEXT/3 prosthesis retrieves:**

*"... rheumatoid arthritis, joint surgery, **hip** or knee **prosthesis** ..."*

*"metal on metal **hip** resurfacing, **prosthesis** failure (complication, diagnosis)..."*

### Notes:

- The proximity operators NEAR and NEXT can be used with parentheses, truncation and field limits, for example: (symptom\* NEAR/5 (headache\* OR 'head ache')):TI,AB

# Searching basics to master

## Wildcard operators

- **Wildcards (truncation characters) let you search for word roots, variations in spelling, many plural forms, etc.**
  - Variable truncation: Use an asterisk (\*)
    - ✓ *sul\*ur* retrieves *sulfur, sulphur*
    - ✓ *cat\** retrieves *cat, cats, catalyst, catastrophe*
  - A question mark (?) indicates exactly one variable character
    - ✓ *sulf?nyl* retrieves records that contain words like 'sulfonyl' and 'sulfinyl'
    - ✓ *catheter?* retrieves records that contain words like 'catheters', but not 'catheter' or 'catheterization'

### Notes:

- *Wildcards (\*, ?) are now searchable in phrases e.g. 'heart infarct\*' or "metabol\* disorder"*
- The wildcard \* cannot be used with fewer than two characters e.g. 'm\* disorder' will not return results