

COFFEE



LECTURE

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Enhance the coverage
of your PubMed
Literature Search with
the Embase Query
Translation Tool



Tania Rivero, MLIS
Research Support Services Team
Medical Library

Thursday,
05 December 2024
13:00, Zoom

u^b Embase Query Translator Tool

What are we covering?

- Searching beyond PubMed
- A word on search translation
- Brief introduction to Embase
- Use cases and tips
- Resources and support

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Embase Query Translator Tool

Enhance what? Why look further?



- Better scope of the literature
- Identify potentially relevant articles
- Mitigate bias
- Project requirements

Searching two or more databases decreased the risk of missing relevant studies: a metaresearch study

Hannah Ewald ¹, Irma Klerings ², Gernot Wagner ², Thomas L Heise ³, Jan M Stratil ⁴, Stefan K Lhachimi ⁵, Lars G Hemkens ⁶, Gerald Gartlehner ⁷, Susan Armijo-Olivo ⁸, Barbara Nussbaumer-Streit ²

Affiliations + expand

PMID: 35654269 DOI: [10.1016/j.jclinepi.2022.05.022](https://doi.org/10.1016/j.jclinepi.2022.05.022)

Optimal database combinations for literature searches in systematic reviews: a prospective exploratory study

Wichor M Bramer ¹, Melissa L Rethlefsen ², Jos Kleijnen ^{3 4}, Oscar H Franco ⁵

Affiliations + expand

PMID: 29208034 PMCID: [PMC5718002](https://pubmed.ncbi.nlm.nih.gov/PMC5718002/) DOI: [10.1186/s13643-017-0644-y](https://doi.org/10.1186/s13643-017-0644-y)

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A word on search translation

- Search translations are not 1:1
- Search features and subject headings vary from database to database
- Free-text terms should be applied consistently
- A user with in-depth knowledge can develop a good search strategy and evaluate accordingly

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Embase Query Translator Tool

A word on search translation

Feature	PubMed	Embase	APA PsycINFO (Ovid)
Controlled vocabulary	MeSH	Emtree	APA Thesaurus
Title search	[Title] or [TI]	:ti	.ti.
Abstract search	[Abstract] or [AB]	:ab	.ab.
Title/Abstract search	[Title/Abstract] or [TIAB]	:ti,ab	.ti,ab.
Author search	[Author] or [AU]	:au	.au.
Journal search	[Journal] or [TA]	:jt	.jn.
Exact phrase	"..."	!..!	"..."
Truncation	*	*	*
Proximity	"term1 term2"[Field:~n]	NEAR/n, NEXT/n	ADJn
Boolean operators	AND, OR, NOT	AND, OR, NOT	AND, OR, NOT

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Embase Query Translator Tool

A word on search translation



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Embase Query Translator Tool

A word on search translation



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Embase Query Translator Tool Considerations

Before using the translation tool:

Examine your PubMed search

- What were the initial results?
- Are you optimizing with what is available in the platform?

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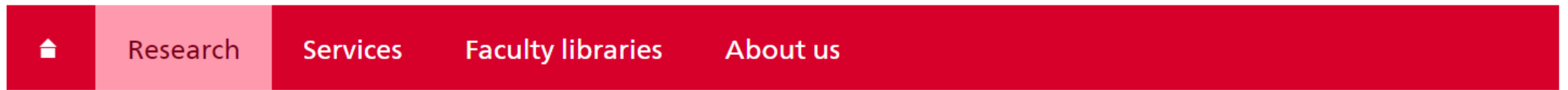
What is Embase?

- Leading database with extensive coverage in pharmacology, toxicology, biomedicine etc....
- It is one the key databases for evidence synthesis/systematic review projects
- Indexes ~ 8,952 journals and contains over 41 million records
- Includes grey literature such as preprints, conference abstracts
- Offers different search modes to suit user's preferences and research needs

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What is Embase?

University Library of Bern UB



- Research platform
- E-Media
- Databases**
- E-Journals
- E-Books
- E-Newspapers

Databases

- Embase** (via Elsevier) ←
- Embase** (via OvidSP)
- database subject (all) ▾

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Embase Query Translator Tool

What is Embase?



Embase

Search

Emtree

Journals

Results

My tools



Quick search

Quick

PICO

PV Wizard

Medical device

Advanced

Drug

Disease

Device

Citation information

Query translator

Find articles by simple keyword search or build more complex queries

[Search tips](#)

Broad search e.g. 'heart attack' AND stress



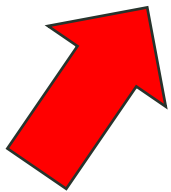
+ Add field

∨ Limit to

↻ Reset form

Show results

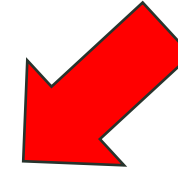
Display full query



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Embase Query Translator Tool

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Query translator



Translate PubMed syntax to Embase

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

Welcome to the translation tool!

Get started with example quer

[Covid-19](#) > [Meta-Analysis](#)

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Embase Query Translator Tool

What we know

- Helps identify literature without creating an Embase search from scratch
- Tool only translates single-block searches
- Some PubMed terms will not be translated accordingly
- If using the tool for a systematic review search, potentially relevant search terms may be missed/overlooked
- Editing your Embase search from the translation box is limited

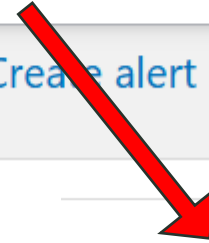
u^b Embase Query Translator Tool

Search Scenarios



atopic dermatitis therapy adults

[Advanced](#) [Create alert](#) [Create RSS](#)



Query translator

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]
atopic dermatitis therapy adults

Translate

2. Review Embase translation

'atopic dermatitis therapy adults'

Show 0 results

Take to Advanced search

Copy query



1

atopic dermatitis therapy adults



[Advanced](#) [Create alert](#) [Create RSS](#)

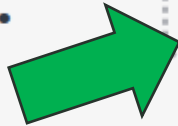
History and Search Details

2

Search **Actions** **Details** **Query**

#1

...



Search: **atopic dermatitis therapy adults** Sort by: **Publication Date**

("dermatitis, atopic"[MeSH Terms] OR ("dermatitis"[All Fields] AND "atopic"[All Fields]) OR "atopic dermatitis"[All Fields] OR ("atopic"[All Fields] AND "dermatitis"[All Fields])) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields]) AND ("adult"[MeSH Terms] OR "adult"[All Fields] OR "adults"[All Fields] OR "adult s"[All Fields])

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

("dermatitis, atopic"[MeSH Terms] OR ("dermatitis"[All Fields] AND "atopic"[All Fields]) OR "atopic dermatitis"[All Fields] OR ("atopic"[All Fields] AND "dermatitis"[All Fields])) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields]) AND ("adult"[MeSH Terms] OR "adult"[All Fields] OR "adults"[All Fields] OR "adult s"[All Fields])

Translate

Reset

2. Review Embase translation

('atopic dermatitis/'exp OR ('dermatitis' AND 'atopic') OR 'atopic dermatitis' OR ('atopic' AND 'dermatitis')) AND ('therapy/'exp OR 'therapeutics' OR 'therapies' OR 'therapy' OR 'therapy s' OR 'therapys') AND ('adult'/'exp OR 'adult' OR 'adults' OR 'adult s')

Show 13,938 results

Take to Advanced search

Copy query

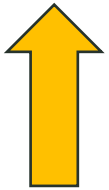
Translate PubMed syntax to Embase

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

```
("Child"[Mesh] OR "Adolescent"[Mesh] OR child*[Title/Abstract] OR teen*[Title/Abstract] OR youth*[Title/Abstract] OR adolescen*[Title/Abstract] OR kid[Title/Abstract] OR kids[Title/Abstract]) AND ("Coxiella burnetii"[Mesh] OR "Coxiella burneti*" [Title/Abstract] OR C-burneti*[Title/Abstract] OR C.burneti*[Title/Abstract])
```

Translate



2. Review Embase translation

```
( 'child'/exp OR 'adolescent'/exp OR 'child*':ti,ab,kw OR 'teen*':ti,ab,kw OR 'youth*':ti,ab,kw OR 'adolescen*':ti,ab,kw OR 'kid':ti,ab,kw OR 'kids':ti,ab,kw ) AND ( 'Coxiella burnetii'/exp OR 'coxiella burneti*':ti,ab,kw OR 'c-burneti*':ti,ab,kw OR 'c.burneti*':ti,ab,kw )
```

Show 541 results

Take to Advanced search

Copy query

OR C.burneti*[Title/Abstract])

'child'/exp

3,551,106 results

Translated from: *child*[mesh].

Open term in Emtree > Remove term

2. Review Embase translation

(('child'/exp OR 'adolescent'/exp OR 'child*':ti,ab,kw OR 'teen*':ti,ab,kw OR 'youth*':ti,ab,kw OR 'adolescen*':ti,ab,kw OR 'kid':ti,ab,kw OR 'kids':ti,ab,kw)) AND ('Coxiella burnetii*':ti,ab,kw OR 'coxiella burneti*':ti,ab,kw OR 'c-burneti*':ti,ab,kw OR 'c.burneti*':ti,ab,kw)

Translated from: *child*[mesh]. Initial translation 'child'/exp

child

Extend search using: /exp ✓

3,551,106 results

Emtree position Term information

Search term in Emtree

child

● Emtree

└─● groups by age and sex

└─└─● groups by age

└─└─└─● juvenile

└─└─└─└─● child

- abandoned child
- adopted child
- boy
- brain damaged child
- child of impaired parents
- disabled child
- foster child

child

Extend search using: /exp ^

3,551,106 results



Explosion /exp



Searches your term (or maps to the preferred Emtree term) and related narrower or children terms

Major focus /mj	139,639
Index term /de	2,439,097
Explosion and Major focus /exp/mj	231,528
<u>Explosion /exp</u>	3,551,106
As broad as possible /br	4,107,697
Explosion and all synonyms /syn	4,823,458

Adolescent

A person 13 to 18 years of age.

PubMed search builder options

[Subheadings:](#)

legislation and jurisprudence

physiology

Restrict to MeSH Major Topic.

Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): M01.060.057

MeSH Unique ID: D000293

Entry Terms:

- Adolescents
- Adolescence
- Adolescents, Female
- Adolescent, Female
- Female Adolescent
- Female Adolescents
- Adolescents, Male
- Adolescent, Male
- Male Adolescent
- Male Adolescents
- Youth
- Youths
- Teens
- Teen
- Teenagers
- Teenager

See Also:

- [Minors](#)

[All MeSH Categories](#)

[Persons Category](#)

[Persons](#)

[Age Groups](#)

Adolescent



Embase

adolescent

Extend search using: [/exp](#) v

2,030,967 results

Emtree position

Term information

^ Synonyms (2)

+ Add to query

teenager

adolescent

^ Emtree scope note

adolescent:

Used as an age indicator in human or animal studies; in humans, 13–17 years of age

Search term in Emtree
adolescent



⊙ Emtree

└─ ⊙ groups by age and sex

└─ ⊙ groups by age

└─ ⊙ juvenile

└─ ⊙ adolescent

└─ ○ adolescent parent

└─ ● hospitalized adolescent

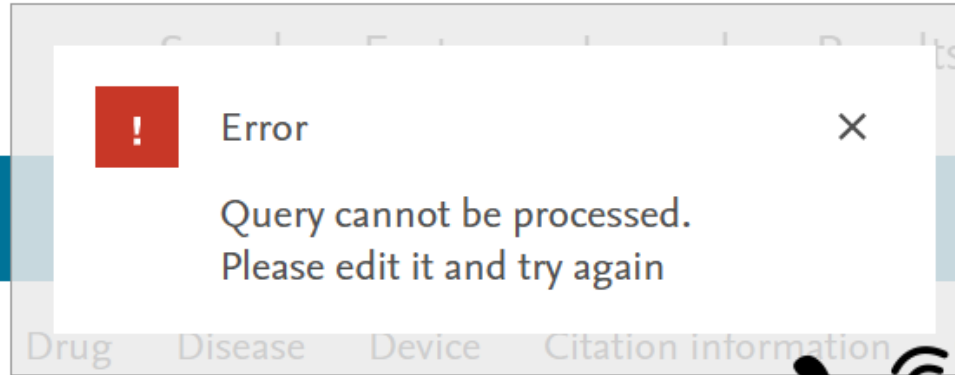
└─ ● institutionalized adolescent



Embase

Query translator

Quick PICO PV Wizard Medical device Advanced

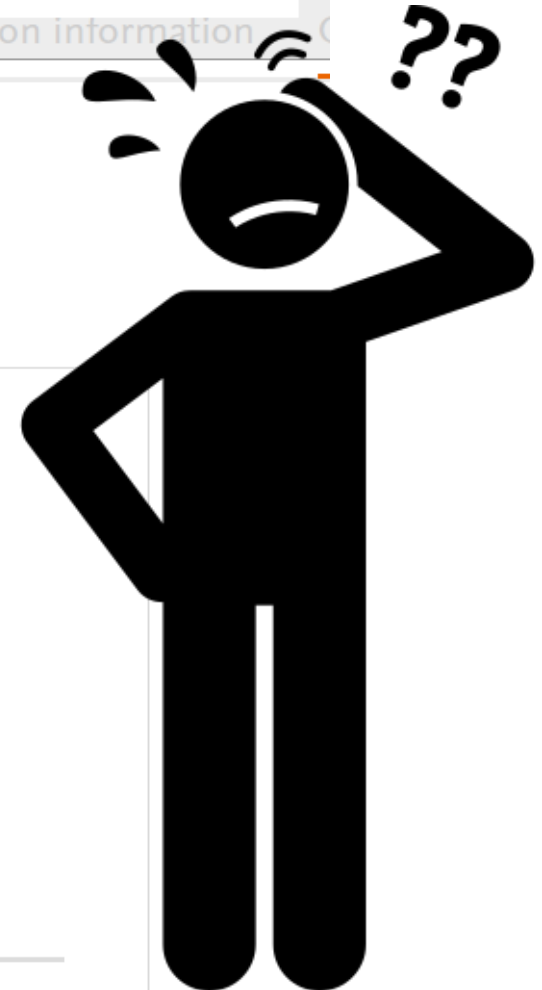


Translate PubMed syntax to Embase

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

```
("Child"[Mesh] OR "Adolescent"[Mesh] OR child*[Title/Abstract] OR teen*[Title/Abstract] OR youth*[Title/Abstract] OR adolescen*[Title/Abstract] OR kid[Title/Abstract] OR kids[Title/Abstract] AND ("Coxiella burnetii"[Mesh] OR "Coxiella burneti*" [Title/Abstract] OR C-burneti*[Title/Abstract] OR C.burneti*[Title/Abstract])
```



'child'

Translated from: *child[me]*.



Supposed to be MeSH
syntax

i There is no corresponding field code for [me] in Embase, so it will be searched in All fields.

Choose another field code >

Accept

Remove term

2. Review Embase translation

(**'child'** OR 'adolescent'/exp OR 'child*':ti,ab,kw OR
'youth*':ti,ab,kw OR 'adolescen*':ti,ab,kw OR 'kid':ti,a

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

"diabetes mellitus"[Title:~3]

Translate

2. Review Embase translation

('diabetes' NEAR/4 'mellitus'):ti

1. Add PubMed query

PubMed query e.g. aspirin[MeSH]

"diabetes mellitus"[Title:~0]

Translate

2. Review Embas

'diabetes mellitus'

'diabetes mellitus'

Translated from: *diabetes mellitus*[title:~0].

i There is no corresponding field code for [title:~0] in Embase, so it will be searched in All fields.

Choose another field code >

Accept

Remove term

2. Review Embase translation

'diabetes':ti,ab,kw,de,dn,df,mn,tn

Translated from: *diabetes*[text word].

Change field code > Remove term

2. Review Embase translation

'diabetes':ti,ab,kw,de,dn,df,mn,tn

Translated from: *diabetes*[text word].

diabetes

Choose another field code:

[Search fields](#)

All fields *free text*

Title :*ti*

Title or Abstract :*ab,ti*

Title, Abstract or Author keywords :*ti,ab,kw*

Author keywords :*kw*

Abstract :*ab*

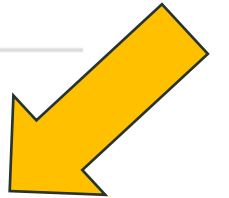
Affiliation :*ff*

Article - start page :*sp*

Author name :*au*

CAS registry number :*rn*

Clinical trial number :*cn*



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Saving your search

Search Emtree Journals Results My tools **1**

Saved searches

Temporary list Saved lists Email alerts Saved searches Preferences

2

Saved searches

3

Private Shared MLM

+ Create  Edit  Delete

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Embase Query Translator Tool

Deduplication



Deduklick

 Systematic Review Accelerator



[Bramer Method for EndNote](#)

Embase Query Translator Tool

Reporting

Section/topic	#	Checklist item
INFORMATION SOURCES AND METHODS		
Database name	1	Name each individual database searched, stating the platform for each.
Multi-database searching	2	If databases were searched simultaneously on a single platform, state the name of the platform, listing all of the databases searched.
Study registries	3	List any study registries searched.
Online resources and browsing	4	Describe any online or print source purposefully searched or browsed (e.g., tables of contents, print conference proceedings, web sites), and how this was done.
Citation searching	5	Indicate whether cited references or citing references were examined, and describe any methods used for locating cited/citing references (e.g., browsing reference lists, using references).
Contacts	6	Indicate whether additional studies or data were identified through contacts.
Other methods	7	Describe any additional information sources or methods used.
SEARCH STRATEGIES		
Full search strategies	8	Include the search strategies for each database searched. Specify that no limits were used, or describe any limits (e.g., language, date, design) and provide justification for their use.
Limits and restrictions	9	Specify that no limits were used, or describe any limits (e.g., language, date, design) and provide justification for their use.
Search filters	10	Indicate whether published search filters were used.
Prior work	11	Indicate when search strategies from other literature reviews were used.
Updates	12	Report the methods used to update the search.
Dates of searches	13	For each search strategy, provide the date when the search was conducted.
PEER REVIEW		
Peer review	14	Describe any search peer review process.
MANAGING RECORDS		
Total Records	15	Document the total number of records identified.
Deduplication	16	Describe the processes and any software used to identify and remove duplicates.

PRISMA for Searching (PRISMA-Search)

The PRISMA extension for searching was published in 2021. The checklist includes 16 reporting items, each of which is detailed with exemplar reporting and rationale.

Key documents

- **Checklist:** [PDF](#) | [Word](#) | [Excel](#)
- **Statement / Explanatory paper:** Rethlefsen ML, Kirtley S, Waffenschmidt S, Ayala AP, Moher D, Page MJ, Koffel JB; PRISMA-S Group. PRISMA-S: an extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews. Syst Rev. 2021;10(1):39. doi: [10.1186/s13643-020-01542-z](https://doi.org/10.1186/s13643-020-01542-z)
- **FAQs paper:** Rethlefsen ML, Page MJ. PRISMA 2020 and PRISMA-S: common questions on tracking records and the flow diagram. J Med Libr Assoc. 2022;110(2):253-257. doi: [10.5195/jmla.2022.1449](https://doi.org/10.5195/jmla.2022.1449)

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Embase Query Translator Tool

Take-aways

- This tool can offer an efficient way to scope the literature and identify additional studies
- Consider the advantages and limitations
- Check and review search syntax
- Consult with an information specialist about search tools and search strategies

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Embase Query Translator Tool

Resources and support



ELSEVIER

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Embase Support Center

All Topics



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 [Disease and drug search](#)

 [Using PICO](#)

[View more](#)

 [Refining your search](#)

[View more](#)

 [Using PV Wizard](#)

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Resources and support

Medicine and Pharmacy Portal

unibe.ch/ub/medresearch

Research Support Medicine and Pharmacy

The Medicine and Pharmacy portal supports your studies, research and teaching. We share news and information about subject-specific events and services offered by University of Bern's Library, along with useful tools for your scientific work.

For all information please visit the [Portal Medicine and Pharmacy](#).



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Resources and support

Medicine and Pharmacy Portal

The Medicine and Pharmacy Portal offers support for your studies, research and teaching. Here you may find news and information about subject-specific events and services offered by the university library as well as useful tools for your scientific work. Quick links:

Research Support Request

Courses Academic Writing & Systematic Searching

Coffee Lectures

Systematic Searching Guide



Research Support Request - Medicine & Pharmacy

Please fill in the form. We get in touch with you as soon as possible. Thank you.

① Services ② Personal data ③ Your project

What can we do for you?

- Consultation (advice only; free of charge*)
- Librarian-assisted search (we carry out a search, max. 2 hours are free of charge*)
- Systematic Review Services / Evidence Synthesis Services (project collaboration, various areas of support; fee-based, Insel free of charge*)
- Scientific writing and editing services (fee-based*)
- Design and deliver a course / workshop*
- Other

Thanks



**for your
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Next Coffee Lectures:



Research Support Services
Science and Medical Libraries
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support_med.ub@unibe.ch

Thanks



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[http://
bib.unibe.ch/scimed](http://bib.unibe.ch/scimed)

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Now there is time for...

Questions & Discussion

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support_med.ub@unibe.ch