

# LUNCH & LEARN



## What if...? Alternatives to PubMed (MEDLINE) and ClinicalTrials.gov

**Speaker:** PD. Dr. Siw Waffenschmidt,  
Head of Information Management Department at IQWiG

**Host:** Cochrane Germany

Gefördert durch:



Bundesministerium  
für Gesundheit

aufgrund eines Beschlusses  
des Deutschen Bundestages



## What if...? Alternatives to PubMed (MEDLINE) and ClinicalTrials.gov

PD Dr. Siw Waffenschmidt

Head of Information Management  
Department

## CDC orders pullback of new scientific papers involving its researchers, source says

By Julie Steenhuisen and Nancy L.  
February 3, 2025 3:57 PM GMT+1 · Up



## How Trump 2.0 is reshaping science

### Our published work in a government journal curiously disappeared

Several studies for a CDC journal were purged without explanation before a judge's order restored them. That's unacceptable — and un-American.

WHO ohne USA: Hiobsbotschaft für Gesundheit weltweit

Mittwoch, 29. Januar 2025

## Vier Milliarden Dollar pro Jahr US-Regierung kürzt Zuschüsse in der Forschung

Stand: 09.02.2025 04:14 Uhr

US-Universitäten müssen künftig mit deutlich weniger staatlichen Zuschüssen auskommen. Die Regierung will vier Milliarden US-Dollar pro Jahr einsparen. Viele Wissenschaftler zieht es nun ins Ausland - auch nach Deutschland.

US-Präsident Donald Trump will massive Kürzungen im Staatshaushalt vornehmen. Nun trifft es auch Universitäten und andere Forschungseinrichtungen. Die der US-Regierung unterstehenden Nationalen Gesundheitsinstitute (NIH) haben eine deutliche Kürzung ihrer Zuschüsse angekündigt. Die NIH teilten im Onlinedienst X mit, dass ihre Beiträge den sogenannten indirekten Kosten von Forschungseinrichtungen um mehr als Milliarden US-Dollar (etwa 2,5 Milliarden Euro) jährlich gekürzt würden.

### At 'Stand Up for Science' rally, Francis Collins warns major NIH research programs 'at severe risk'

Scientists and their supporters rally in 32 U.S. cities

## What if We Can't Rely on PubMed?

February 14, 2025

[Hilda Bastian](#)

[Science Communication](#)

## Impact of US policy on information retrieval



- German: <https://www.iqwig.de/presse/im-fokus/us-wissenschaftspolitik/auswirkungen-der-us-politik-auf-die-literaturrecherche/>
- English: <https://www.iqwig.de/en/presse/in-the-focus/us-science-policy/impact-of-us-policy-on-information-retrieval/>

## What we see ...

**March 1-2, 2025:** Pubmed blackout for 2 days (source: [nature](#))

HHS job cuts of approximately 20,000 positions, including 3,500 at the FDA, 2,400 at the CDC, and 1,200 at the NIH ([HHS Factsheet, 03/27/2025](#)).

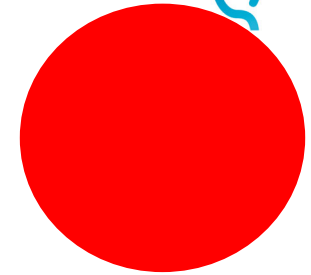
**(April 8, 2025:** NIH has excluded international scientists (e.g., China, Russia, Iran, etc.) from using certain databases (especially cancer registries) (source: [Fierce Biotech](#)))

**May 5, 2025:** ZBMed submits DFG application to develop an alternative to PubMed (source: [Heise Online](#)).

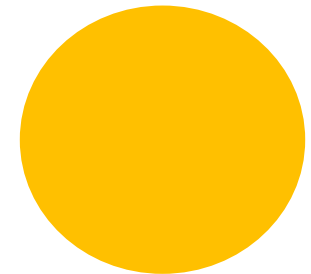
**July 25, 2025:** Maintenance work on all NLM resources: This is highly unusual, as changes have generally been carried out in parallel with ongoing operations and have always been specifically identified. It is not yet clear whether this new approach is due to staffing constraints or is related to content. All resources are now available again.

**August 25, 2025:** server error, search is temporarily unavailable

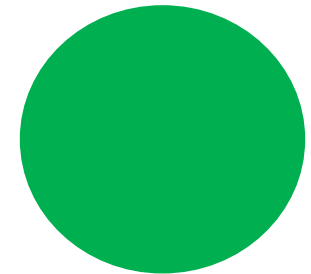
Pubmed and ClinicalTrials.gov **no longer accessible** for Europe



Systems no longer as **reliable**: Error messages in Pubmed; 'Filter unwanted terms/journals'



Alternatives available: Other sources no longer accessible (e.g. AHRQ reports, PubChem, StatPearls)



## Are there alternatives to PubMed (and ClinicalTrials.gov)?

A distinction should be made here

- Journal coverage
- Data enrichment: metadata (indexing, abstract),
- Search functionalities (e.g. related articles), search filter („Hedges“)

## Coverage of MEDLINE indexed journals

| Databases                    | n           |
|------------------------------|-------------|
| Journals in MEDLINE          | 5.264       |
| indexed in Embase            | 3.360 (64%) |
| indexed in Crossref          | 4.939 (94%) |
| <b>Database combinations</b> |             |
| + Embase Crossref            | 5.053 (96%) |

# Analysis via searchsmart.org

## Criteria

- data pool
- search functions
- availability

| Database (market-launch)                                    | Provider                                     | Type of organization / location | Data pool (medicine <sup>2</sup> ) | Data sources                               | Search interface and functions | Study filter (RCT/NRS/SR) with >95% sensitivity | MEDLINE currently included in the database | Cost      |
|-------------------------------------------------------------|----------------------------------------------|---------------------------------|------------------------------------|--------------------------------------------|--------------------------------|-------------------------------------------------|--------------------------------------------|-----------|
| Embase (via Ovid) (1974)                                    | Wolters Kluwer N.V.                          | Profit-orientated: NL           | 37M (21M)                          | Bibliographic database                     | ↑                              | Yes/No/Yes                                      | Yes                                        | Fee-based |
| Lens (2017)                                                 | Cambia                                       | NGO: Australia                  | 236M (59M)                         | Variety of sources (e.g. Crossref, PubMed) | →                              | No                                              | Yes                                        | Free      |
| Science Citation Index Expanded (via Web of Science) (1997) | Clarivate                                    | Profit-orientated: UK           | 60M (18M)                          | Bibliographic database                     | →                              | No <sup>3</sup>                                 | No                                         | Fee-based |
| Scopus (2004)                                               | Elsevier                                     | Profit-orientated: NL           | 84M (22M)                          | Bibliographic database                     | →                              | No <sup>3</sup>                                 | Yes                                        | Fee-based |
| <b>Other databases</b>                                      |                                              |                                 |                                    |                                            |                                |                                                 |                                            |           |
| Crossref (1999)                                             | Publishers International Linking Association | NGO: US                         | 131M (36M)                         | Digital library                            | ↓                              | No                                              | No                                         | Free      |
| Livivo (2015)                                               | ZB Med                                       | NGO: DE                         | 58M                                | Variety of sources (e.g. Crossref, PubMed) | →                              | No                                              | Yes                                        | Free      |
| Europe PMC (2007)                                           | EMBL's European Bioinformatics Institute     | NGOs, international             | 40M (21M)                          | Bibliographic database                     | ↑                              | No                                              | Yes                                        | Free      |

## Recommendations for alternatives to PubMed

|                           | Free of charge           | Fee based                                          |
|---------------------------|--------------------------|----------------------------------------------------|
| <b>Archive</b>            | Europe PMC, Lens         | Medline (OVID), Embase, Web of Science, Scopus     |
| <b>Current references</b> | Crossref (e.g. via Lens) | combination of Embase and Crossref (e.g. via Lens) |

## Europe PMC

- Developed by the European Bioinformatics Institute, funded by international science **Funders**, part of the PubMed Central International
- Europe PMC **integrates** content from a range of sources such as PubMed, PubMed Central (PMC), Agricola, and 34 life science preprint servers

[searchsmart.org](https://searchsmart.org)

### Search functionality and interface

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Systematic keyword searching: **extensive** ●

Backward citation searching: **sufficient** ●

Forward citation searching: **sufficient** ●

Query builder: ● ●

Search history: ● ●

Match preview: ● ●

Sorting options: 4 ●

# Lens.org

- Cambia, Australia
- Patent documents and scholarly work (multidisciplinary)

[searchsmart.org](https://searchsmart.org)

## Search functionality and interface

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Systematic keyword searching: extensive ●

Backward citation searching: extensive ●

Forward citation searching: extensive ●

Query builder: ✓ ⓘ

Search history: ✓ ⓘ

Match preview: ✗ ⓘ

Sorting options: 11 📄

## Crossref

- Publisher International Linking Association Inc., US
- Largest DOI Registration Agency of the International DOI Foundation
- Enables persistent cross-platform citation linking

[searchsmart.org](https://searchsmart.org)

## Search functionality and interface

Systematic keyword searching: **limited** ●

Backward citation searching: **limited** ●

Forward citation searching: **limited** ●

Query builder: **×** **i**

Search history: **×** **i**

Match preview: **×** **i**

Sorting options: 2 

## Recommendations for alternatives to ClinicalTrials.gov

|                                  | Study registries                                                                                                                                                         |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Archive                          | ICTRP Search Portal in combination with the Internet Archive WayBack Machine for study documents                                                                         |
| Future registration and searches | <ul style="list-style-type: none"><li>• Registration via national or international study registries (e.g. ISRCTN)</li><li>• Search via the ICTRP Search Portal</li></ul> |

# GALAXI 1 (Guselkumab/ Crohn's disease, A25-75)

☐ **NCT03466411** **Active, not recruiting** [WITH RESULTS](#)

## A Study of the Efficacy and Safety of Guselkumab in Participants With Moderately to Severely Active Crohn's Disease

### Conditions

#### Crohn's Disease

| Main                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <small>Note: This record shows only 24 elements of the WHO Trial Registration Data Set. To view changes that have been made to the source record, or for additional information about this trial, click on the URL below to go to the source record in the primary registry.</small> |                                                                                                                                                                                                                                  |
| <b>Register:</b>                                                                                                                                                                                                                                                                     | ClinicalTrials.gov                                                                                                                                                                                                               |
| <b>Last refreshed on:</b>                                                                                                                                                                                                                                                            | 25 August 2025                                                                                                                                                                                                                   |
| <b>Main ID:</b>                                                                                                                                                                                                                                                                      | NCT03466411                                                                                                                                                                                                                      |
| <b>Date of registration:</b>                                                                                                                                                                                                                                                         | 08/03/2018                                                                                                                                                                                                                       |
| <b>Prospective Registration:</b>                                                                                                                                                                                                                                                     | Yes                                                                                                                                                                                                                              |
| <b>Primary sponsor:</b>                                                                                                                                                                                                                                                              | Janssen Research & Development, LLC                                                                                                                                                                                              |
| <b>Public title:</b>                                                                                                                                                                                                                                                                 | A Study of the Efficacy and Safety of Guselkumab in Participants With Moderately to Severely Active Crohn's Disease GALAXI                                                                                                       |
| <b>Scientific title:</b>                                                                                                                                                                                                                                                             | A Phase 2/3, Randomized, Double-blind, Placebo- and Active-controlled, Parallel-group, Multicenter Protocol to Evaluate the Efficacy and Safety of Guselkumab in Participants With Moderately to Severely Active Crohn's Disease |
| <b>Date of first enrolment:</b>                                                                                                                                                                                                                                                      | April 13, 2018                                                                                                                                                                                                                   |
| <b>Target sample size:</b>                                                                                                                                                                                                                                                           | 1409                                                                                                                                                                                                                             |
| <b>Recruitment status:</b>                                                                                                                                                                                                                                                           | Active, not recruiting                                                                                                                                                                                                           |
| <b>URL:</b>                                                                                                                                                                                                                                                                          | <a href="https://clinicaltrials.gov/ct2/show/NCT03466411">https://clinicaltrials.gov/ct2/show/NCT03466411</a>                                                                                                                    |
| <b>Study type:</b>                                                                                                                                                                                                                                                                   | Interventional                                                                                                                                                                                                                   |
| <b>Study design:</b>                                                                                                                                                                                                                                                                 | Allocation: Randomized. Intervention model: Parallel Assignment. Primary purpose: Treatment. Masking: Double (Participant, Investigator).                                                                                        |
| <b>Phase:</b>                                                                                                                                                                                                                                                                        | Phase 2/Phase 3                                                                                                                                                                                                                  |

## ClinicalTrials.gov

[Find Studies](#) ▾ [Study Basics](#) ▾ [Submit Studies](#) ▾ [Data and API](#) ▾ [Policy](#) ▾ [About](#) ▾

[My Saved Studies \(0\)](#) →

**ClinicalTrials.gov is a place to learn about clinical studies from around the world.**



**The U.S. government does not review or approve the safety and science of all studies listed on this website.**



Read our full [disclaimer](#) for details.

**Focus Your Search** (all filters optional)

[Expert Search](#)

**Condition/disease** ⓘ

**Other terms** ⓘ

NCT03466411|

**Intervention/treatment** ⓘ

## ISRCTN Registry – UK's Clinical Study Registry

- commercial (NGO, infrastructure via BMC /Springer Nat.)
- fee based (250 GBP)
- decent search functionalities

[Login](#)[Advanced search](#)[View all studies](#)[About ▾](#)[Study registration ▾](#)[Report your results](#)[Transparency Tracker](#)[Get help ▾](#)

### Advanced Search

All search fields are optional.

For more guidance on setting up search terms, please see our [Search Tips](#) page.

Text search ▾

Keyword search 

[+ Add another search field](#)

Advanced Search

warrenschmidt - vnat it (03.09.2023)

## What next steps are needed?

In Europe, the key stakeholders in the healthcare sector should ask themselves how they can counter an outage of PubMed and ClinicalTrials.gov

Meaningful steps:

- Could existing databases or new initiatives (e.g. Open Life Science Publication Database [[OLSPub](#)] from the ZB Med in future) take over?
- Creation of professional search functions
- study registries: expand and open up existing alternatives

## What else is needed?

**Sustainable structures, independent** of the current political situation

## Questions/ discussion

- What experience/ information do the other institutions have at the moment?
- Are there any joint/ local activities already planned?
- Other ideas?

## Institute for Quality and Efficiency in Health Care (IQWiG)

Thank you for your attention!

Questions and comments:

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# Lunch & Learn



HANDOUT



RECORDING



Further handouts and recordings of our past webinars:

<https://www.cochrane.de/workshops-events/workshops/lunch-learn-kurzwebinare>

Next Lunch & Learn:

*05. November 2025: Systematische Literaturrecherche in PubMed – Eine Einführung (in German)*

# Evaluation



[https://survey.lamapoll.de/Lunch  
and Learn PubMed Alternative  
n/de](https://survey.lamapoll.de/Lunch_and_Learn_PubMed_Alternativen/de)

[workshops@cochrane.de](mailto:workshops@cochrane.de)

Zuverlässige Evidenz.  
Informierte Entscheidungen.  
Bessere Gesundheit.



Gefördert durch:



Bundesministerium  
für Gesundheit

aufgrund eines Beschlusses  
des Deutschen Bundestages





## Workshops

Systematische Übersichtsarbeiten  
erstellen

*Fully booked – waiting list*

25. - 26. & 29. - 30. September 2025 (online)



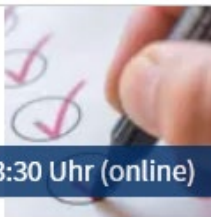
RCTs kritisch bewerten - RoB 2

24. Oktober 2025 09:00 - 16:00 Uhr (online)



Systematische Übersichtsarbeiten  
kritisch bewerten - AMSTAR 2

14. November 2025 09:00 - 13:30 Uhr (online)



GRADE

**GRADE**

02. - 04. Dezember 2025 (online)

Translations



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WISSEN WAS WIRKT

Evaluation



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