



Reference guide



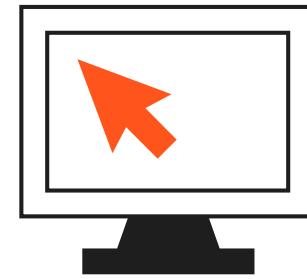
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This document contains interactive elements.

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**Welcome
to Embase**

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Welcome to Embase

Welcome to Embase

Embase is a comprehensive biomedical database that optimizes literature searches, enabling R&D teams to discover, innovate and develop with confidence, delivering mission-critical, trusted quality insights and solutions for better outcomes through enhanced innovation.

This guide is directed toward managers and team leads in:

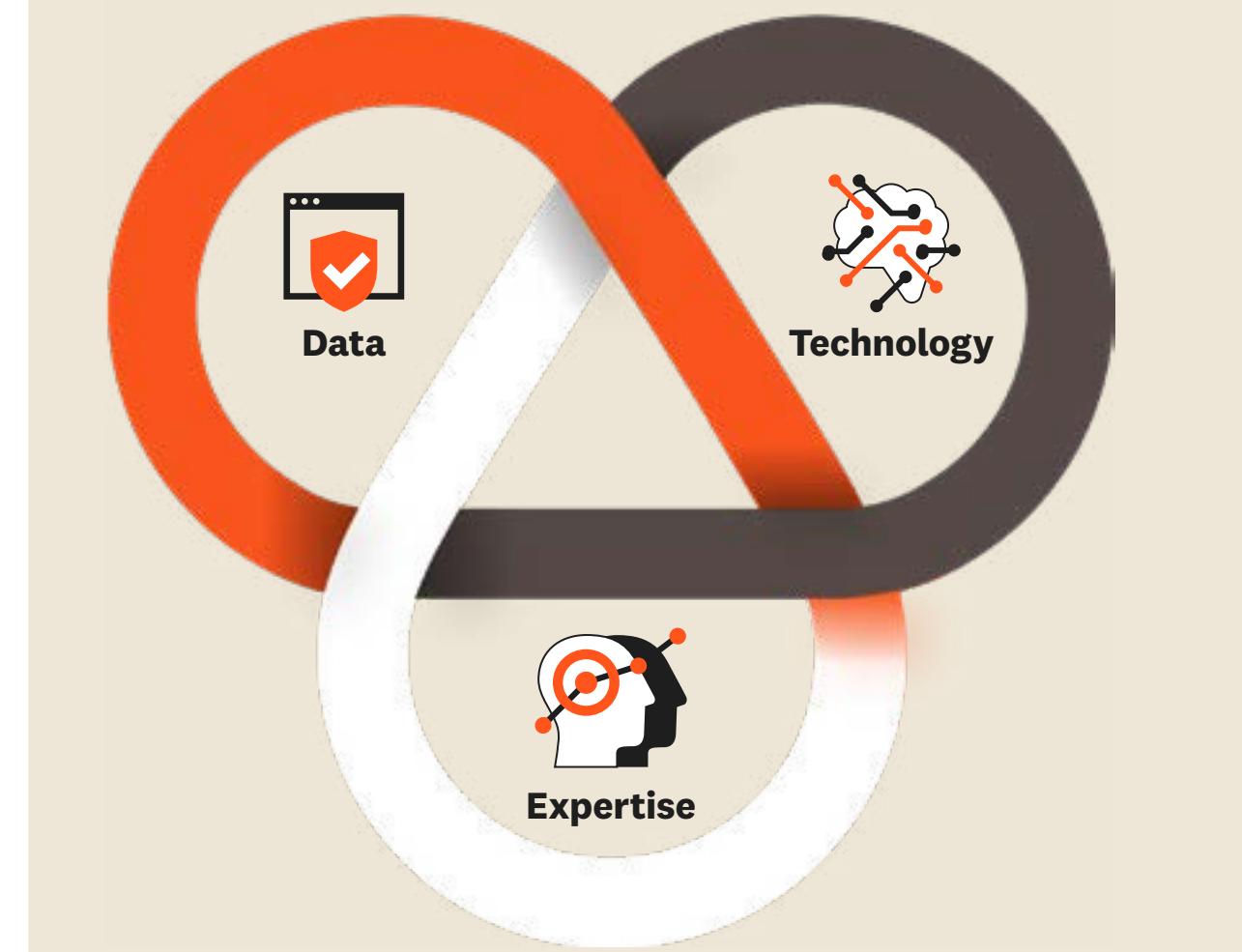
- Pharma, Biotechnology, MedTech, Diagnostics, CROs, CDMOs:** orchestrate biomedical evidence workflows and support the production of audit-ready documentation for systematic literature reviews (SLRs), pharmacovigilance (PV), clinical evaluation reports (CER) and HTA dossiers (including PRISMA flow diagrams where required).
- HEOR consultancies and advisors:** build reimbursement dossiers and communicate value using consistently cited literature.
- Academia or Government:** evaluate guidelines and policy questions and document transparent, reproducible evidence trails.

The skills you will develop

1. Design traceable searches with Emtree so terminology variance does not hide critical studies.
2. Translate plain-language questions into transparent queries and cited summaries with Embase AI.
3. Export records in RIS, CSV, Excel, Word and PDF; copy the exact query from History; save and rerun strategies via History, Saved Searches and Email Alerts to support PRISMA-compliant SLRs, PV, CER and HTA (as applicable).

This guide shows you how to search, verify, and export Embase evidence with full traceability.

Trusted content, technology and expertise to support biomedical research



How to access Embase AI

[Sign in to Embase](#)

[Get help with access](#)

Related products:

[EmBiology](#)
[PharmaPendium](#)
[Reaxys](#)
[ScienceDirect](#)

What do you want to do?

Choose your task, click on it and jump to the right Embase workflow

1. Dissecting a PV (pharmacovigilance) search string and comparing it to the search strings used by the EMA MLM to avoid double screening / double work.

[→ PV Wizard](#)

2. Toxicity of a drug at a glance (animal and/or human).

[→ Drug](#)

3. PK (pharmacokinetics) of drugs depending on formulation / pharmacology or depending on the route of administration.

[→ Drug](#)

4. Mechanism of action of a drug (pharmacology).

[→ Drug](#)

5. Drug dose and drug concentration depending on formulation / pharmacology or depending on the route of administration

[→ Drug](#)

6. Drug combination (example: "lidocaine plus hyaluronic acid")

[→ Drug](#)

7. Off-label, compassionate use, unexpected therapeutic effect of drugs, and other special situations for pharmacovigilance.

[→ Drug \(PV subheadings\)](#)

8. Epidemiology (incidence, prevalence, mortality, morbidity etc.) of a disease in a country.

[→ Disease](#)

9. Randomized controlled trials, clinical-trial number reference.

[→ PICO +](#)
[→ ClinicalTrials.gov Records](#)

10. Comparison of several medical devices / drugs.

[→ Device +](#)
[→ Drug](#)

11. Clinical evaluation report (CER) for a medical device.

[→ Medical Device](#)

12. Setting up an alert for post-marketing surveillance of a medical device.

[→ My Tools](#)

13. Embase AI to generate an answer by prompting in natural language.

[→ Ask](#)

14. Translating from PubMed to Embase via the Query translator.

[→ Query Translator](#)

Core features

Core features



Hover over a feature to see more detail

1. Get a fast first overview of a topic

Quick Rapid evidence scan

Run one free-text query across all content to see whether literature is scarce or abundant.

1. Define the question as free text or Emmtree to align hypotheses with controlled vocabulary.
2. Bound the query with light filters to balance recall-precision and ensure reproducibility.
3. Expose the full query to audit Boolean logic, synonym mapping and limits, and decide whether you need a more structured search.
4. Verify results to validate coverage and identify missing evidence.
5. Refine parameters as new concepts emerge to strengthen subsequent analyses.



Pro tip: Use Quick Search for a fast overview of the information available for your topic.

Embase

Search Emmtree Journals Results My tools ② 14 Sign in

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

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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RELX™

2. Structure searches with precision using the PICO framework

PICO

Structured clinical question design

Guided PICO fields linked to Emmtree and study-design filters turn protocol questions into structured, auditable search strategies.

1. Define Population and Intervention with Emmtree to standardize patient groups and treatments.
2. Bound evidence by selecting Comparator and study design to control recall-precision.
3. Expose the full query to audit Boolean logic, synonym mapping and clinical filters.
4. Verify endpoints and inclusion criteria against retrieved trials and reviews to validate coverage.
5. Refine parameters as protocols evolve to ensure reproducibility and transparency.



Pro tip: Use the interactive Emmtree in PICO to optimize your queries.

3. Create comprehensive search queries for drug safety monitoring with the PV Wizard

PV Wizard

Structured adverse-event literature monitoring

ADR and special-situation tags plus Display full query turn PV Wizard strategies into consistent, high-recall and auditable ADR capture.

1. Define the product and synonyms; map substance and trade names to Emmtree preferred terms.
2. Bound with ADR terms, seriousness, population and date-range filters to control recall-precision.
3. Expose the full Boolean query, ADR and special-situation tags; save the strategy for audit.
4. Verify hits, extract cases; link citations to safety case processing.
5. Refine terms and alerts as signals evolve; rerun to populate PSUR/DSUR and RMP.



Pro tip: Check and use search strategies recommended by the EMA directly in Embase (via EMA's MLM searches).

4. Design device-specific safety searches with the Medical Device form

Medical Device

Structured device safety and performance search

Guided device fields with Emtree/GMDN terms and adverse-effect tags turn model-specific inputs into consistent, audit-ready device safety queries.

1. Define to align device names and brand synonyms with controlled Emtree vocabulary for audit precision.
2. Bound to focus on adverse-effect terms and study limits that ensure reproducible CER and PMCF evidence.
3. Expose to validate full query logic and mapping so reviewers can trace every parameter used.
4. Verify to confirm coverage and collapse overlapping records before exporting evidence for evaluation.
5. Refine to evolve device names and limits as new results appear, sustaining follow-up vigilance.



Pro tip: Use the adverse effects field to automatically add adverse effects reported for a device to your search query.

5. Build reproducible systematic searches with Advanced Search

Advanced Search

Fielded Boolean for audit-grade retrieval

Use field codes and Emmtree mapping to express one fully specified strategy you can report, replicate and re-run.

1. Define to align Emmtree terms and free text so synonyms map correctly for precise, auditable concepts.
2. Bound to focus with field codes and study filters to balance recall and precision in results.
3. Expose to validate Boolean logic and mapping, preserving a transparent, reusable query trail.
4. Verify to confirm coverage and export RIS/CSV for screening and documentation.
5. Refine to sustain limits and filters, updating alerts to maintain living reviews over time.



Pro tip: Advanced Search is best used by experienced searchers to build fully specified strategies for SLR, PV, CER and HTA work.

Cookie Settings'."/>

6. Retrieve evidence with in-depth semantic links between your drug and specific concepts

Drug

Pharmacological depth for dose and safety evidence

Use Emtree drug terms, subheadings and human/animal plus route filters to retrieve mechanism, dose, PK/PD and safety evidence for each compound.

1. Align drug names and synonyms with Emtree.
2. Focus with dose/tox/interaction subheadings and apply human/nonhuman, species (e.g. mouse, rat), animal-experiment and route filters; add animal-breed hedges when you need very specific models.
3. Confirm Boolean, routes, and human/nonhuman + species tags; save..
4. Check PK/PD coverage; export for regulatory tox reports.
5. Evolve terms as evidence grows; keep alerts on.



Pro tip: Use drug-specific subheadings, e.g. Routes, for detailed information around your drug of interest.

The screenshot shows the Embase search interface with the 'Drug' tab selected. The search bar contains the query 'e.g. "low molecular weight heparin"'. The 'Drug subheadings' filter is applied. The results list includes various drug-related subheadings like 'Adverse drug reaction', 'Drug development', and 'Pharmacokinetics'.

7. Map disease evidence for therapy, diagnosis and epidemiology

Disease

Clinical coverage and trend mapping

Use Emtree disease terms and subheadings to structure treatment, diagnosis and epidemiology searches for trend analysis.

1. Define to align the disease and synonyms with Emtree for precise, auditable retrieval.
2. Bound to focus using subheadings (therapy, diagnosis, epidemiology) to balance recall-precision.
3. Expose to validate Boolean logic and limits; save history to preserve the query trail.
4. Verify to confirm coverage and manage overlapping records, then export RIS/CSV for screening and reporting.
5. Refine to track new evidence; update alerts for living reviews and trend analyses.



Pro tip: Save one disease query per indication and schedule alerts, then reuse that same query as the backbone for SLRs, epidemiology updates and signal detection, so all teams work from a single, shared disease evidence view.

The screenshot shows the Embase search interface with the 'Disease' tab selected. The search bar contains the query 'e.g. "acute myeloblastic leukaemia"'. Below the search bar, there are several search filters: 'Search', 'Mapping', 'Date', 'Sources', 'Fields', 'Disease subheadings' (which is highlighted in orange), 'Quick limits', 'EBM', 'Pub. types', 'Languages', and 'Search tips'. The 'Disease subheadings' section is expanded, showing a list of medical subheadings with checkboxes: Complication, Congenital disorder, Diagnosis, Disease management, Drug resistance, Drug therapy, Epidemiology, Etiology, Prevention, Radiotherapy, Rehabilitation, Side effect, Surgery, and Therapy. There are also 'OR' and 'AND' buttons for Boolean logic. At the bottom of the page, there are links for 'LIFE SCIENCE SOLUTIONS' (Professional Services, Embiology, Reaxys® Medicinal Chemistry, Reaxys®, PharmaPendium®, Embase®), 'SUPPORT' (Help, Webinars, Guides and videos, Contact Support Team, Accessibility), and 'PRODUCT' (About Embase, News, Upcoming webinars, Terms and Conditions, Privacy Policy). The Elsevier logo is at the bottom left, and the RELX logo is at the bottom right. Copyright and cookie information are also present at the bottom.

8. Retrieve device performance and safety evidence with Device

Device

Fielded search for device evidence retrieval

Use device fields, Emmtree device terms and subheadings to retrieve safety, performance and economic evidence for a device family.

1. Map device and brand synonyms with Emmtree; capture trade and manufacturer names from full text.
2. Focus with device subheadings adverse device effect, device comparison, device economics, clinical trial; set limits.
3. Reveal full Boolean, mapping and field choices in Query Reveal; save for audit.
4. Check coverage; export evidence in RIS, CSV, Word, Excel, PDF.
5. Update device terms and limits as evidence grows; set alerts for follow up.



Pro tip: Use the Device Fields subheading to search for device manufacturers or device trade names.

9. Trace and verify literature sources with Citation Information

Citation information

Retrieve traceable bibliographic evidence

Use DOI, PUI and bibliographic fields to retrieve the exact record and keep citations aligned across systems.

1. Define to specify article title, author, or year fields for targeted reference searches.
2. Bound to limit by source type, identifier, or publication year for recall-precision balance.
3. Expose to reveal bibliographic details-authors, journal, and identifiers — for full transparency.
4. Verify to confirm citation matches using DOI/PUI links before export or record comparison.
5. Refine to sustain reference accuracy by exporting verified lists for audits and documentation.



Pro tip: When you confirm a citation in Citation Information, copy the DOI and PUI into your reference manager or safety system so future audits can trace every evidence statement back to one verified record.

The screenshot shows the Embase search interface with the 'Citation information' tab selected. The search bar contains the query 'Heart J.; Heart Joya' and 'Heart J.'. Below the search bar, there are several search fields: 'Article title', 'Author' (with 'Edit' and 'Unselect all' options), 'Journal title', 'Abbreviated journal title', 'DOI', 'CODEN', 'ISSN', 'Volume', 'Issue', 'First page', and 'Publication years' (set to 2015-2025). At the bottom of the search form are buttons for 'Show 3 results' and 'Display full query'.

10. Convert PubMed queries into precise Embase syntax

Query translator

Fielded PubMed-to-Embase conversion

Paste a PubMed query to see the original and its Embase translation side by side, with Boolean and proximity operators preserved as Embase field codes.

1. Specify to import a PubMed query into the translator pane.
2. Review to verify mapped fields and logic for accuracy.
3. Adjust to edit operators, proximity, limits, and filters.
4. Check to confirm results; preview or open in Advanced Search.
5. Reuse to export the Embase query for PRISMA-ready records.



Pro tip: When you validate a PubMed strategy, translate it once in Query translator and save both the PubMed and Embase strings as a matched pair in your protocol or methods file — every future update can reuse that same pair without starting again.

PICO PV Wizard Medical device Query translator Embase AI

Translated from: systematic review*[ab, kw]
systematic review*

Choose another field code:
Start typing to filter the list

All fields, free text
Title :ti
Title or Abstract :ab, kw
Title, Abstract or Author keywords :ti, ab, kw
Author keywords :kw
Abstract :ab
Affiliation :af
Article - start page :sp
Author name :au
CAS registry number :rn
Clinical trial number :ct
Conference name :cn
Country of author :ca
Country of journal :cj
Device manufacturer name :dmf
Device trade name :dt
Digital Object Identifier (DOI) :doi
Drug manufacturer name :dmf
Drug trade name :dt
Embase accession number :an

PubMed

1. Add PubMed query
PubMed query e.g. *systematic review*[MeSH]
("Meta-Analysis" as Topic)[MeSH] OR "meta analy*"[TIAB] OR *metaanaly**[TIAB]
OR "Meta-Analysis"[PT] OR "Systematic Review"[PT] OR "Systematic Reviews as Topic"[MeSH] OR systematic review*[TIAB] OR systematic overview*[TIAB] OR
"Review Literature as Topic"[MeSH] OR *cochrane*[TIAB] OR *embase*[TIAB] OR
psychlit[TIAB] OR *psycit*[TIAB] OR *psychinfo*[TIAB] OR *psycinfo*[TIAB] OR
cinahl[TIAB] OR *cinhal*[TIAB] OR "science citation index"[TIAB] OR *isdb*[TIAB] OR
cancerlit[TIAB] OR (reference list*[TIAB] OR *bibliograph**[TIAB] OR *hand-search**[TIAB] OR "relevant journals"[TIAB] OR *manual search**[TIAB]) OR
("selection criteria"[TIAB] OR "data extraction"[TIAB] AND "Review"[PT]) NOT
("Comment"[PT] OR "Letter"[PT] OR "Editorial"[PT] OR "Animals"[MeSH] NOT
"Animals"[MeSH] AND "Humans"[MeSH]))

2. Review Embase translation
("meta analysis" [topic]/ic
OR "meta-analy*"/ic
OR "systematic review"/ic
"literatur"/exp) OR ("cod
"psychlit"/ab, kw OR "psychmeasurur- psychmetrur- psych
"psyinfo"/ab, kw OR "druhlit"/ab, kw OR "isdblit"/ab, kw OR
"science citation index"/ab, kw OR "isdb"/ab, kw OR "cancerlit"/ab, kw) OR
"reference list"/ab, kw OR "bibliograph"/ab, kw OR "hand-search"/ab, kw
OR "relevant journal"/ab, kw OR "manual search"/ab, kw) OR
("selection criteria"/ab, kw OR "data extraction"/ab, kw) AND "review"/it)
NOT ("comment"/it OR "letter"/it OR "editorial"/it OR ("animal"/exp NOT
"animal"/exp AND "human"/exp))

Embase

11. Map biomedical concepts precisely with Emtree

Structured, vocabulary-based searches improve recall and precision across biomedical literature

Emtree

Controlled vocabulary for precision and consistency

Use Emtree to standardize biomedical concepts so searches and queries consistently capture synonyms, variants and trade names.

1. Specify terms with the Emtree builder to capture preferred and synonym forms.
2. Constrain the query with focus terms and hierarchy to boost precision.
3. Reveal concept hierarchies to show relations among drugs, diseases, procedures.
4. Validate mappings; expand/merge variants to balance recall and precision.
5. Iterate standardization; re-index concepts to ensure consistent reuse.



Pro tip: Use different mapping options, like /exp (explosion) or /mj (major focus) to broaden or narrow your search according to your needs.

12. Interpret, filter, and validate retrieved evidence in Results

Results

Interpret, refine, and validate retrieved evidence

Use filters, ranking and full-record details in Results to turn a long hit list into a documented evidence set.

1. Limit Study design + Publication types to raise relevance.
2. Constrain Year, Language, Geography, Journal titles.
3. Toggle: Sources (Clinical trials, Conference abstracts, Preprints); use Drug, Disease, Device facets.

4. Open: record details; copy DOI, PUI/LNCT; save to a list.
5. Export: RIS, CSV, Word, Excel, PDF; copy query from History for PRISMA.

Most used filters: Sources; Publication types; Study design; Year; Language; Drug/Disease/Device facets; Journal titles.



Pro tip: Filtering by key subheadings helps narrow down the results to a set of references that discuss a very specific topic (e.g. adverse drug reactions).

13. Organize, monitor, and export verified results in My Tools

My Tools

Save, track, and export evidence sets

Save strategies, lists and alerts in My Tools so evidence sets stay current, traceable and ready to export.

1. Design structured result sets to capture and store validated records for reuse.
2. Constrain updates with scheduled alerts that capture only new or modified results.
3. Reveal list contents with filters and fielded metadata for transparency and traceability.
4. Validate exports via standardized formats (RIS, CSV, Excel) for audit submission.
5. Evolve lists and alerts as evidence grows to sustain reproducible, living reviews.



Pro tip: Use the shared searches option to collaborate with colleagues in your organization.

Embase

Search Emtree Journals Results My tools [?](#) [Trash](#) [User](#)

Temporary list Saved lists Email alerts Saved searches Export preferences

Manage your email alerts

Select all [Export](#) [Delete](#) [Edit preprint settings](#)

| Alert name | Status | Last results | Sent on |
|-------------|--------|--------------|---------|
| Candesartan | On | n/a | not set |
| Paracetamol | Off | n/a | not set |
| Souting | Off | n/a | not set |

Candesartan

On Last results: n/a Sent on [Turn off](#)

[Edit settings](#) [More options](#)

Query: (candesartan) AND (drug toxicity) AND (drug interaction) AND (pharmacovigilance) AND (unexpected adverse drug reaction)

Send now [Export history](#) [Rerun query](#)

[Take to advanced search](#)

[Show full](#)

Email address: c.rodriguezdelrio@elsevier.com

Email format: HTML

Frequency: Every week on Monday

Content: Citation Information

Articles in Press and in Process: Included

Preprints: Included

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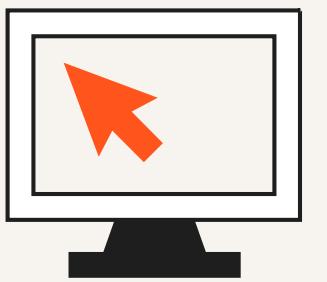
Embase AI

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Embase core AI features

1**Ask**

Natural-language input with visible query translation

Ask in natural language; Embase AI builds an Emtree-based Embase query you can view, copy and open in Results, so search logic stays transparent and auditable.

2**Summaries**

Generate concise, cited overviews
Generate short overviews with inline links to Embase records, so you can quickly scan the answer and click through to the underlying studies.

3**References and Citation**

Trace evidence back to its source
Show all supporting Embase records for each answer and export them (e.g. RIS / CSV) for regulatory documentation, review or further analysis.

4**Context-aware follow-up questions**

Iterative conversation
Ask follow-up questions in the same thread; Embase AI reuses prior context while generating fresh queries, summaries and citations in one traceable conversation.

1. Ask in natural language to build auditable Embase queries

Ask

Natural-language input with visible query translation

Map plain-language questions to Emtree-based Embase queries with visible translation for audit.

1. Formulate a scientific question (up to 2 000 characters).
2. Click on funnel to include preliminary data such as conference abstracts, preprints, articles in press, or clinical trials.gov data.
3. Run the query — Embase AI maps terms (Embase + free text).
4. Open in Results to see all records and apply SLR filters; the AI-generated query is visible for audit.



Pro tip: After using Ask, always open Display full query, send the query to Advanced Search and save [i](#). Treat the human-readable translation as your canonical strategy, not the AI text, so every update and PRISMA diagram points back to that versioned query.

Embase

Search Emtree Journals Results My tools

Embase AI

Address your research questions using Embase

We prioritize responses based on peer-reviewed sources, ensuring you receive the most credible and validated information available.

Responses are AI-generated without human review. Use scientific judgment before applying.

Example questions:

What are the current diabetes treatments?
What are the adverse events of gene therapy?
How do current treatments improve quality of life for type 2 diabetes patients?

Ask for biomedical insights

RELX

2. Summarize biomedical evidence with verifiable citations

Summaries

Generate concise, cited overviews

Generate short, cited overviews with inline links to Embase records so you can read the summary and inspect the sources.

1. Retrieve top evidence (peer-reviewed; preliminary and individual toggles are active).
2. Generate headline + paragraph with inline citations; Show all references (up to 30)
3. Open a citation to audit abstract, index terms, and metadata.
4. Export summary + citations for documentation;
5. ask a follow-up question in the same thread.



Pro tip: Use a summary to map the topic, then export its cited set and send the same question into PICO or Advanced so your protocol or review always starts from a traceable seed of known studies.

The screenshot shows a search interface with the query "What are the current diabetes treatments?". The results are displayed in a card format. The main text section discusses current diabetes treatments, mentioning hypoglycemic agents, insulin therapy, GLP1 receptor agonists, autophagy enhancers, TRPV1-targeted drugs, stem cell therapy, nanomedicine, and lifestyle modifications. It notes that these approaches aim to manage blood glucose levels and address complications. Below this, sections for "Current Diabetes Treatments", "Innovative Therapies", and "Management of Complications" are shown, each with detailed text and references. A table at the bottom summarizes treatment types, examples, and purposes. At the bottom of the card, a note states: "These treatments, as highlighted in the context, represent a combination of traditional and innovative approaches to improve diabetes care and patient outcomes." A "Show all references" link is at the bottom right.

| Treatment Type | Examples | Purpose |
|-------------------------|--|--|
| Conventional Therapies | Hypoglycemic agents, insulin therapy | Blood glucose control |
| Emerging Therapies | Stem cell therapy, nanomedicine, TRPV1-targeted drugs, autophagy enhancers | Tissue repair, regeneration, and addressing complications |
| Complication Management | Anticonvulsants, antidepressants, wound care, emergency protocols | Pain relief, wound healing, and management of life-threatening emergencies |

3. Verify every statement through linked, auditable references

References and Citation

Trace evidence back to its source

Show all supporting references and open the Embase records, including abstract and identifiers, to verify each cited source.

1. Open Show all references to view the complete list (up to 30 references).
2. Select a citation to inspect abstract, indexed terms, and metadata (DOI, PUI, LNCT).
3. Use Export references to download RIS/CSV for audit and regulatory submission.
4. Cross-check citations with ClinicalTrials.gov, preprints and conference abstracts for completeness.



Pro tip: Once you've checked the references, export them once from *References and Citation* and treat that RIS/CSV file as the canonical evidence list for the project — use the same file for PRISMA, safety systems and links into EmBiology, PharmaPendium and ScienceDirect.

Multimodal Approaches
Combining surgical and conservative treatments often yields optimal results. For example, liposuction followed by compression therapy and physiotherapy can enhance outcomes [17, 18].

Summary Table of Treatments

| Treatment | Effectiveness | Notes |
|------------------------------|--|---|
| Liposuction | Reduces pain, swelling, and fat accumulation; improves quality of life | Most effective for advanced stages; long-term benefits reported [19]. |
| Compression Therapy | Reduces pain and swelling | Recommended as part of multimodal treatment [18]. |
| Physiotherapy/Rehabilitation | Improves mobility, reduces swelling and pain | Includes manual lymph drainage, hydrotherapy, and exercise [20]. |
| Ketogenic Diet | Reduces inflammation and improves body composition | Promising but requires further research [21]. |
| TECAR Therapy | Short-term pain relief and limb circumference reduction | Adjunct to standard care [13]. |

Conclusion
The management of lipedema requires a tailored approach combining surgical, conservative, and dietary interventions. Liposuction remains the most effective treatment for reducing fat accumulation and alleviating symptoms, while conservative therapies and dietary modifications play supportive roles in improving overall quality of life. Further research is needed to refine these strategies and explore long-term outcomes.

References

- [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17]

[Show all references >](#)

4. Refine the search without starting over

Context-aware follow-up questions

Iterative conversation

Ask follow-up questions in the same thread so new summaries, queries and citations reuse the earlier context in one auditable conversation.

1. Type a follow-up question in the same thread (e.g., “How does this compare in terms of safety?”).
2. Embase AI interprets context and re-runs the query with updated Emtree terms.

3. Produces a new summary and citations linked to the previous results.
4. Export the entire conversation (Q + A + citations) as one auditable record.



Pro tip: Use follow-up questions for “compare and contrast” work. Ask about another drug, population or outcome in the same thread, then export the whole conversation so the reasoning path is documented alongside the evidence.

The screenshot shows the Embase AI interface. At the top, a message says: "what treatments have shown positive results for managing lipedema?". Below it, a search bar shows the query: "Searching for - what treatments have shown positive results for managing lipedema?". The main content area displays a summary of treatments for managing lipedema, including sections on "Treatments for Managing Lipedema" and "Surgical Treatments". The summary includes a list of citations and a "Conservative Treatments" section. The interface has a light gray background with blue and black text. At the bottom, there is a navigation bar with icons for "Home", "Search", "New search", "Results", "Add to favorites", "Add to temporary", and "Print".

Core content

Embase core content

1**Journals**

Manually curated full-text indexing for traceable literature

Provides a curated corpus of peer-reviewed journals, each full-text indexed and mapped to Emtree so evidence can be filtered, audited and exported with confidence.

2**Conference Abstracts**

Capture early evidence from unpublished research

Captures structured conference abstracts indexed with Emtree, so early-stage trial and study signals can be found quickly and linked forward to later publications.

3**Preprints**

Access structured early-stage biomedical findings

Indexes preprints from major servers such as bioRxiv, medRxiv and SSRN with Emtree terms, making emerging findings searchable and traceable alongside later peer-reviewed evidence, while remaining clearly flagged as preliminary.

4**Embase Classic (1947–)**

Longitudinal evidence

Extends analyses back through earlier decades by harmonizing historic records to current Emtree terms and linking legacy IDs to modern Embase entries.

5**ClinicalTrials.gov Records**

Protocol to publication traceability

Integrates ClinicalTrials.gov records with NCT/LNCT identifiers and Embase indexing, so registered trials can be traced from registry entry through protocols to published outcomes.

1. Find rigorously indexed journal evidence you can audit fast

Journals

Manually curated full-text indexing for traceable literature

Use curated, full-text indexed journals with Emtree terms so peer-reviewed evidence can be filtered, audited and exported quickly.

1. Validate peer-reviewed sources with full-text indexing and clear taxonomy.
2. Define article filters by journal title, source, and publication type to isolate peer-reviewed content.
3. Anchor queries with Emtree terms for diseases, drugs, and devices to boost precision.
4. Expose linked metadata and identifiers (DOI, PUI); save to a list.
5. Verify and refine recall and precision; export RIS, CSV, Word, Excel, PDF.



Pro tip: Start complex projects with a Journals-only filter to build a clean peer-reviewed baseline, then add conference abstracts, preprints and trial records as a separate pass so you can always distinguish confirmed evidence from emerging signals.

Lancet 2001;357:9253 (331-335)

Efficacy of inhaled human insulin in type 1 diabetes mellitus: A randomised proof-of-concept study

View author addresses

Abstract

Background Effective glycaemic control in type 1 diabetes mellitus usually requires two or more insulin injections daily. Inhaled intrapulmonary delivery of insulin offers a potential new way to deliver meal-related insulin, eliminating the need for preprandial injections. Methods: 73 patients with type 1 diabetes mellitus were studied in an open-label, proof-of-concept, parallel-group randomised trial. Patients in the experimental group received preprandial inhaled insulin plus a bedtime subcutaneous ultralente insulin injection. Patients in the control group received their usual meal-related insulin regimen plus two to three injections per day. Patients monitored their blood glucose four times daily, and adjusted insulin doses weekly to achieve preprandial glucose targets of 5.6–8.9 mmol/L. The primary outcome measure was change in glycosylated haemoglobin (Hb_{A1c}) after 12 weeks. Secondary outcomes were fasting and postprandial glucose response to a mixed meal; hypoglycaemia frequency and severity; pulmonary function; and patients' satisfaction. Findings: Changes in Hb_{A1c} were indistinguishable between groups (difference 0.2% [95% CI −0.2 to 0.5]). Changes in fasting and postprandial glucose concentrations, and occurrence and severity of hypoglycaemia were also similar between groups. Inhaled insulin was well tolerated and had no effect on pulmonary function (ie, spirometry, lung volumes, diffusion capacity, and oxygen saturation). Interpretation: This proof-of-concept study shows that preprandial insulin can be given by inhalation in individuals with insulin-deficient type 1 diabetes as a less invasive alternative to conventional preprandial insulin injections.

Methods

Patients

Drug terms

Find term in Emtree

hemoglobin A1c, insulin zinc suspension, insulin, insulin zinc suspension, insulin

Disease terms

Find term in Emtree

hypoglycemia, insulin dependent diabetes mellitus

Show all subheadings

Insulin zinc suspension

Other subheadings: drug therapy, subcutaneous drug administration

2. Capture early evidence from global conference abstracts

Conference Abstracts

Capture early evidence from unpublished research

Use structured abstracts and Emtree subheadings to capture early-stage trial signals and link them forward to later studies.

1. Define topic, meeting, or sponsor filters to focus retrieval on relevant domains.
2. Bind queries with Emtree subheadings to isolate disease, drug, device, or method signals.
3. Expose study type, phase, sample size, and endpoints to separate preliminary trials from opinion.
4. Verify traceability by linking abstracts to later journal articles and trial registry entries.
5. Refine alerts as new conferences are indexed to maintain continuous early signal coverage.



Pro tip: Track key meetings with saved conference-only searches and alerts, then periodically rerun the same queries with the “journal article” filter to see which early signals have matured into full publications.

Neuro-Oncology Advances 2025 7 (i27) Supplement 2

COGNITIVE DECLINE FROM WHOLE BRAIN RADIATION THERAPY: A SYSTEMATIC REVIEW OF PHASE II AND III TRIALS ON THERAPEUTIC ADVANCES

[View author addresses](#)

Abstract

Brain radiation can cause cognitive impairment in up to 90% of patients, significantly reducing quality of life (QOL). Various management strategies have been explored, though none are FDA-approved. This systematic review evaluates interventions aimed at mitigating radiation-induced cognitive decline. Using MeSH terms for brain radiation, cognitive decline, and therapeutics, we screened PubMed, Google Scholar, Cochrane, and Embase. Of 245 initial articles, we included nine phase II and III studies. Shaw et al. (2006) reported that donepezil (n=34) in a phase II trial improved QOL and various cognitive domains at 24 weeks (p<0.05), including attention, memory, and verbal fluency, with minimal toxicity. Rapp et al. compared donepezil (n=99) with placebo (n=99), demonstrating similar composite cognitive scores but improved memory scores (HVLT-R; recognition: 10.91 vs. 10.34, p=0.027; discrimination: 1.10 vs. 9.16, p=0.007), and motor dexterity (GP-D 105.06 vs. 116.99, p=0.016) at 24 weeks. Attia et al. (2012) reported that ginkgo biloba improved executive function, attention, and QOL in a phase II trial (n=34) at 24 weeks (p<0.05) but had a high discontinuation rate. Brown et al. (2013) reported that memantine (n=235) vs. placebo (n=238) at 24 weeks led to reduced decline in delayed-recall (p=0.058), delayed-recognition (p=0.015), MMSE (p=0.009), and time to cognitive decline (HR 0.78, p=0.01). Other parameters were favorable, albeit statistically nonsignificant. Toxicity profiles were similar. Brown et al. (2013) demonstrated that hippocampal-avoidant whole-brain radiation therapy (HA-WBRT) plus memantine (n=261) reduced cognitive, executive function, learning, and memory decline at 6 months (p<0.016) compared to traditional WBRT plus memantine (n=257), without affecting survival. Gondi et al. (2023) confirmed these findings at 1-year follow-up, reporting reduced symptom-burden (p<0.001) and cognitive (HR 0.74, p=0.016), executive function (p=0.001), and memory (p<0.001) decline. This review underscores the efficacy of these interventions in mitigating radiation-induced cognitive decline, providing a foundation for research and potential regulatory approval.

Drug terms

donepezil, memantine, placebo

Disease terms

cognitive deficit, memory disorder, radiation induced cognitive impairment

Other terms

adult, attention, brain radiation, cognition, conference abstract, drug therapy, executive function, follow up, Food and Drug Administration, Ginkgo biloba, hippocampus, human, learning, Medical Subject Headings, memory, phase 2 clinical trial, quality of life, recall, symptom burden, systematic review, whole brain radiotherapy

Additional information

| | |
|------------------------------------|---|
| Publication type | Conference Abstract |
| Embase identification number (PUI) | 1648727520 |
| Digital Object Identifier (DOI) | 10.1093/noajnl/vdafl23.101 |
| Entry date | 2025-10-09 (Full record) |
| Updated date(s) | 2025-10-09 |
| Source of indexing | Embase |
| Page range | i27 |
| Language of article | English |
| Language of summary | English |
| Source type | Journal |
| Abbreviated journal title | NeuroOncol. Adv. |
| Source publication date | 2025-08-01 |
| ISSN | 26322498 (print) |
| Country of source | Netherlands |
| Conference name | 2025 SNO/ASCO CNS Metastases Conference |
| Conference date | 2025-08-14 to 2025-08-16 |
| Conference location | United States, Baltimore, MD |
| Country of author | United States |

3. Retrieve early biomedical findings from indexed preprints

Preprints

Access structured early-stage biomedical findings

Use indexed preprints from bioRxiv, medRxiv and SSRN with Emtree tags to capture emerging findings quickly and link them to later evidence.

1. Define repository and study-type filters (bioRxiv, medRxiv, SSRN) to isolate signals.
2. Bound by disease, target, or intervention; apply Emtree terms to narrow scope.
3. Expose metadata and design tags to assess novelty and methods across fields.
4. Verify overlap with peer-reviewed articles to check reproducibility and bias.
5. Refine frequently; track protocol updates and new results to keep an audit trail.



Pro tip: Keep your preprint search separate from the peer-reviewed strategy and compare them regularly, so you can see which early hypotheses hold up once full articles are published.

This preprint is now published, DOI: 10.3390/cells11172745

bioRxiv 2021

ACTN2 mutant causes proteopathy in human iPSC-derived cardiomyocytes

[View author addresses](#)

Abstract

Genetic variants in α -actinin-2 (ACTN2) are associated with several forms of (cardio)myopathy. We previously reported a heterozygous missense (c.740C>T) ACTN2 gene variant, associated with hypertrophic cardiomyopathy, and characterized by an electro-mechanical phenotype in human induced pluripotent stem cell-derived cardiomyocytes (hiPSC-CMs). Here, we created with CRISPR/Cas9 genetic tools two heterozygous functional knock-out hiPSC lines with a second wild-type (ACTN2wt) and missense ACTN2 (ACTN2mut) allele, respectively. We evaluated their impact on cardiomyocyte structure and function, using a combination of different technologies, including immunofluorescence and live cell imaging, RNA-seq, and mass spectrometry. This study showed that ACTN2mut present a higher percentage of multinucleation, protein aggregation, hypertrophy, myofibrillar disarray and activation of both the ubiquitin-proteasome system and the autophagy-lysosomal pathway as compared to ACTN2wt in 2D-cultured hiPSC-CMs. Furthermore, the expression of ACTN2mut was associated with a marked reduction of sarcomere-associated protein levels in 2D-cultured hiPSC-CMs and force impairment in engineered heart tissues. In conclusion, our study highlights the activation of proteolytic systems in ACTN2mut hiPSC-CMs likely to cope with ACTN2 aggregation and therefore directs towards proteopathy as an additional cellular pathology caused by this ACTN2 variant, which may contribute to human ACTN2-associated cardiomyopathies.

Drug terms

- alpha actinin 2
- endogenous compound
- proteasome
- ubiquitin

Disease terms

- cardiomyopathy
- hypertrophy

Other terms

- allele
- autophagy (cellular)
- cardiac muscle cell
- controlled study
- CRISPR-CAS9 system
- engineered heart tissue
- gene frequency
- genetic association
- heterozygosity
- human
- human cell
- immunofluorescence
- Induced pluripotent stem cell
- knockout gene
- live cell imaging
- lysosome
- mass spectrometry
- protein aggregation
- protein expression

RNA sequencing

- sarcomere
- structure activity relation
- wild type

Additional information

| | |
|------------------------------------|--------------------------|
| Publication type | Preprint |
| Embase identification number (PID) | 12035510305 |
| Digital Object Identifier (DOI) | 10.3390/cells11172745 |
| Associated DOI | 10.3390/cells11172745 |
| Entry date | 2021-09-31 (Full record) |
| Source of indexing | Preprints |
| Language of article | English |
| Language of summary | English |
| Number of references | 42 |
| Source type | Preprint Archive |
| Abbreviated journal title | bioRxiv |
| Source publication date | 2021-10-28 |
| ISSN | 2677-3205 (electronic) |
| Country of source | United States |
| Country of author | Germany |
| Authors' ORCIDs | |

4. Retrieve historical biomedical evidence with Embase Classic

Embase Classic (1947-)

Longitudinal evidence

Use Embase Classic's harmonized historic-modern Emtree indexing to extend safety and trend analyses back through earlier decades.

1. Define span and topics (e.g., 1947-1973) to capture early pharm, tox, and trials.
2. Normalize with current Emtree to harmonize legacy drug/disease/device terms.
3. Link legacy abstracts, trade names, and IDs to current records for context.
4. Verify outcome and terminology continuity across time; save lists for audit.
5. Integrate Classic with current Embase to trend mechanisms, safety signals, and repurposing leads.



Pro tip: Build your main query in current Embase, then widen the date range into Embase Classic using the same Emtree terms so pre-1970 signals, terminology shifts and repurposing leads sit on the same evidence spine as modern data.

The American Heart Journal 1940 32:5 (645-652)

Orthostatic paroxysmal ventricular tachycardia

Abstract

Observation of a woman of 24 without evidence of heart disease, but suffering from paroxysmal ventricular tachycardia. The attacks, which appeared only when the patient was erect, were precipitated by excitement or mild exertion, and disappeared during the last three months of pregnancy. The authors mention the rôle of the sympathetic nervous system in the vascular adjustments taking place in man on assuming an upright posture. They assume that the attacks were due to unusually strong sympathetic tone produced by assuming this posture. The effect of intravenous injection of 0.5 mgm of ergotamine tartrate, after which the attack ceased, seems to confirm this view.

Drug terms

ergotamine tartrate

Disease terms

heart disease hypertension paroxysmal tachycardia neoplasm

Other terms

adrenal gland adrenergic system body position excitement exercise female human intravenous drug administration patient pregnancy sympathetic tone

Additional information

| | |
|------------------------------------|------------------------------|
| Publication type | Article |
| Embase identification number (PUI) | L280402038 |
| Digital Object Identifier (DOI) | 10.1016/0002-8703(46)90672-2 |
| Entry date | 1940-12-01 (Full record) |
| Source of indexing | Embase Classic |
| Page range | 645 - 652 |
| Language of article | English |
| Language of summary | English |
| Source type | Journal |
| Abbreviated journal title | The Am. Heart J. |
| Source publication date | 1940 |
| ISSN | 00028703 (print) |

5. Link registered trials to published evidence you can audit

ClinicalTrials.gov Records

Protocol to publication traceability

Use integrated ClinicalTrials.gov records with Emtree mapping to link registered trials to protocols and published outcomes for audit.

1. Filter: Sources Clinical trials; Pub type Clinical trial; Journal titles clinicaltrials.gov.
2. Bound: add study design/phase filters; keywords for intervention and sponsor.
3. Expose: open record; copy NCT/LNCT, PUI, and any linked publications.
4. Verify: compare registered endpoints vs published outcomes; note discrepancies.
5. Track: revisit registry updates to maintain oversight of active trials.



Pro tip: Save a trial-filtered query and rerun it before each submission or safety review so any new registry updates and publications are captured with the same documented logic.

This data was added to Embase on 2025-10-13. Please click on the full text link for the most up-to-date information.

clincialtrials.gov 2025

Evaluation of the Incidence of Myocardial Damage Following Upper and Lower Gastrointestinal Endoscopy in High-risk Patients: MINS-Endoscopy Study

Abstract
Brief Summary
 Hypoperfusion occurs following anaesthesia induction as a result of: 1. a reduction in venous return and cardiac output subsequent to the dilatation of the venous reservoir, and 2. a reduction in mean arterial pressure (MAP) secondary to arteriolar vasodilatation (reduction in arterial resistance) and decreased cardiac output. Many studies in the literature have focused on intraoperative hypotension and have reported an association between intensity x duration of hypotension and the occurrence of postoperative adverse events. Smaller interventional studies have suggested that improving stroke volume (SV, and therefore cardiac output) using fluid titration could reduce postoperative complications. Among postoperative adverse events consecutive to hypoperfusion, the occurrence of myocardial injury after noncardiac surgery (MINS) is well documented and is correlated to postoperative mortality at day 30. Upper and lower gastro-intestinal (GI) endoscopies are frequently performed under sedation (i.e.: general anaesthesia without orotracheal intubation) as daycare procedures. More than 10% of all anaesthesia worldwide is administered for GI endoscopic procedures. A substantial proportion of patients undergoing these procedures have significant comorbidities, classifying them as ASA 3 or ASA 4. However, despite the higher risk associated to their comorbidities, these patients are most often monitored intraoperatively as if they were ASA 1 or ASA 2, i.e.: using intermittent oscillometric blood pressure measurements every 5 minutes, an electrocardiogram and peripheral oxygen saturation measurement. They are also usually considered eligible for daycare procedures. However, hypoperfusion occurs during upper and lower GI endoscopies as a result of anaesthesia combined with abdominal insufflation (stomach followed by colon) and always starts with a decrease in SV, followed by a decrease in MAP. The exact incidence of MINS following endoscopic procedures in high-risk patients has not been investigated to our knowledge and is not known precisely. The first part of this pragmatic study would consist in collecting pre-op and post-op (4 hours post procedure) plasma troponin level in ASA 3 or ASA 4 patients scheduled for upper and lower GI endoscopy at the time of routine blood collection. The patient will also be monitored using a ClearSight® continuous hemodynamic monitoring device.

Drug terms
 carbonylurea mixture plus electrolytes troponin

Disease terms
 postoperative complication heart muscle injury hypotension

Device terms
 blood reservoir corecoaster monitoring device

Other terms
 high risk patient duration surgical mortality incidence comorbidity stay inpatients venous return mean arterial pressure heart stroke volume oxygen saturation heart output vasodilatation intervention study general anaesthesia aeration surgery endoscopy anaesthesia induction endotracheal intubation gastrointestinal endoscopy sedation blood sampling blood pressure measurement dialysis trial human

Author keywords
GI Endoscopy

Additional information

| | |
|------------------------------------|--|
| Publication type | Clinical Trial |
| Embase identification number (PUI) | LNCT07129549 |
| Entry date | 2025-10-13 (Full record) 2025-10-13 (Article in Press/in Process) |
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| Language of article | English |
| Language of summary | English |
| Source type | Clinical Trial Repository |
| Abbreviated journal title | clinicaltrials.gov |
| Source publication date | 2025-09-16 |
| Country of source | United States |

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