

ICASR meeting, Prague 2024  
End-to-end processes: whole systems

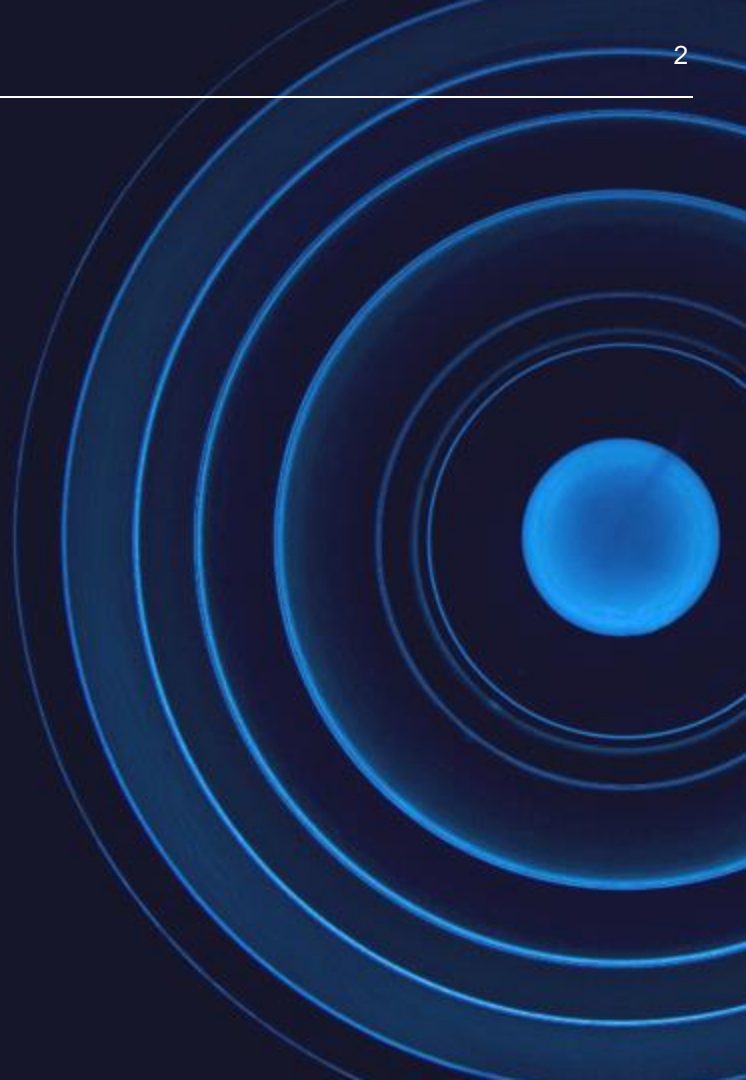
# Sustainable Knowledge Platform For Evidence Synthesis



**Gabriel Rada (@radagabriel)**  
[radagabriel@epistemonikos.org](mailto:radagabriel@epistemonikos.org)  
Epistemonikos Foundation

# Who we are?

The Epistemonikos Foundation is an independent, non-profit organization that aims to bring the most up-to-date, clear, and relevant evidence to the spaces where decisions about health are made.



# Sustainable Knowledge

Form of knowledge produced under ideal conditions  
of **quality, efficiency, and non-redundancy.**



# SUSTAINABLE KNOWLEDGE PLATFORM

BY EPISTEMONIKOS

<https://skplatform.org/>

The SK platform is a comprehensive system designed to streamline the entire evidence synthesis process, providing specialized tools to support each stage of the workflow.

The screenshot shows the top navigation bar of the Epistemikos Database | Trials website. The navigation bar is blue and contains the following elements from left to right: a purple 'BETA' badge, the Epistemikos logo and text 'EPISTEMONIKOS DATABASE | TRIALS', a search bar with a magnifying glass icon, and a user profile icon labeled 'Gabriel'. Below the navigation bar is a search query: `("Pneumonia"[EET] OR (pneumon* OR bronchopneumon* OR ((pulmonar* OR (lower AND respiratory) ) OR "lower-respiratory" OR lung OR chest) AND (infect* OR sepsis) ) OR LRTI* OR...`. Below the search bar is a filter section for 'PUBLICATION YEAR' with radio buttons for 'All', 'Last year', 'Last 5 years', and 'Last 10 years'. To the right of the filter section is an 'Export' button and a 'Start a Review' button with a circular arrow icon, which is circled in red. Further right is a 'Per page: 10' dropdown menu and a 'Results: 1 - 10 of 1,484' indicator with navigation arrows.




**SUSTAINABLE  
KNOWLEDGE  
PLATFORM**  
BY EPISTEMONIKOS



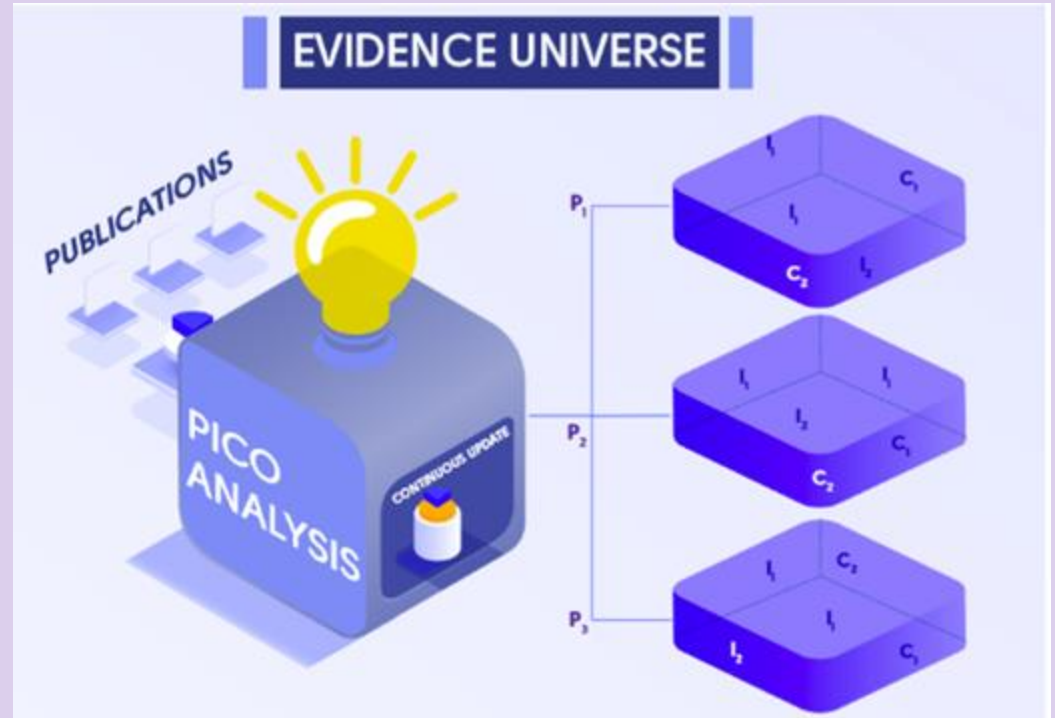
EVIDENCE SYNTHESIS ECOSYSTEM SERIES | [VOLUME 123](#), P162-165, JULY 01, 2020

## Future of Evidence Ecosystem Series: Evidence synthesis 2.0: when systematic, scoping, rapid, living, and overviews of reviews come together

[Elie A. Akl](#)   • [Neal R. Haddaway](#) • [Gabriel Rada](#) • [Tamara Loffi](#)

An aspirational model of evidence synthesis that may not only provide a holistic solution to the shortfalls, but can also bring us closer to the ideal model. We describe the 'evidence universe' required for evidence synthesis 2.0, how to build it, and how to use it.

The 'evidence universe' would be the environment that both emanates from and facilitates 'evidence synthesis 2.0'.



EET (Epistemonikos' Evidence Terms) is the controlled vocabulary developed by Epistemonikos Foundation. It is used for indexing articles in Epistemonikos' Databases

**EET explorer** Close

**Search terms**

Search for a term Search

**Behavior, attitudes and cognitive processes category**  
behavior, attitudes and cognitive processes category  
Behavior and attitudes

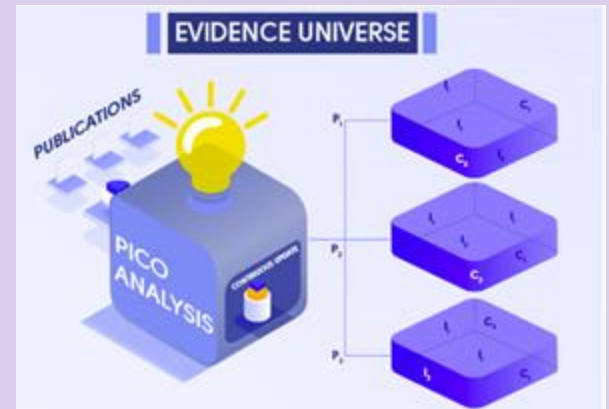
**Biological and physical processes category**  
biological and physical processes category  
Biological and physical processes

**Biological structures category**  
biological structures category  
Biological structures

**Buildings, places and settings category**  
buildings, places and settings category  
Buildings, places and settings

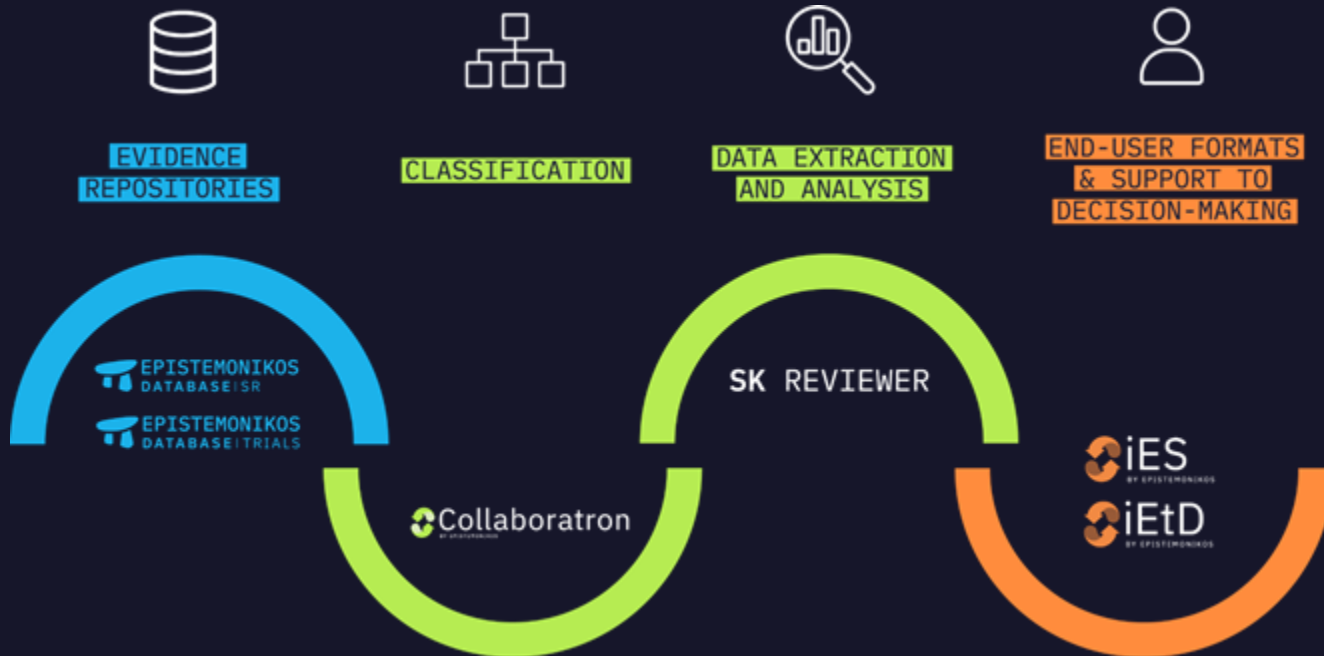
**Chemicals and drugs category**  
chemicals and drugs category  
Chemicals and drugs

« < 1 2 > »





# SK platform Tools

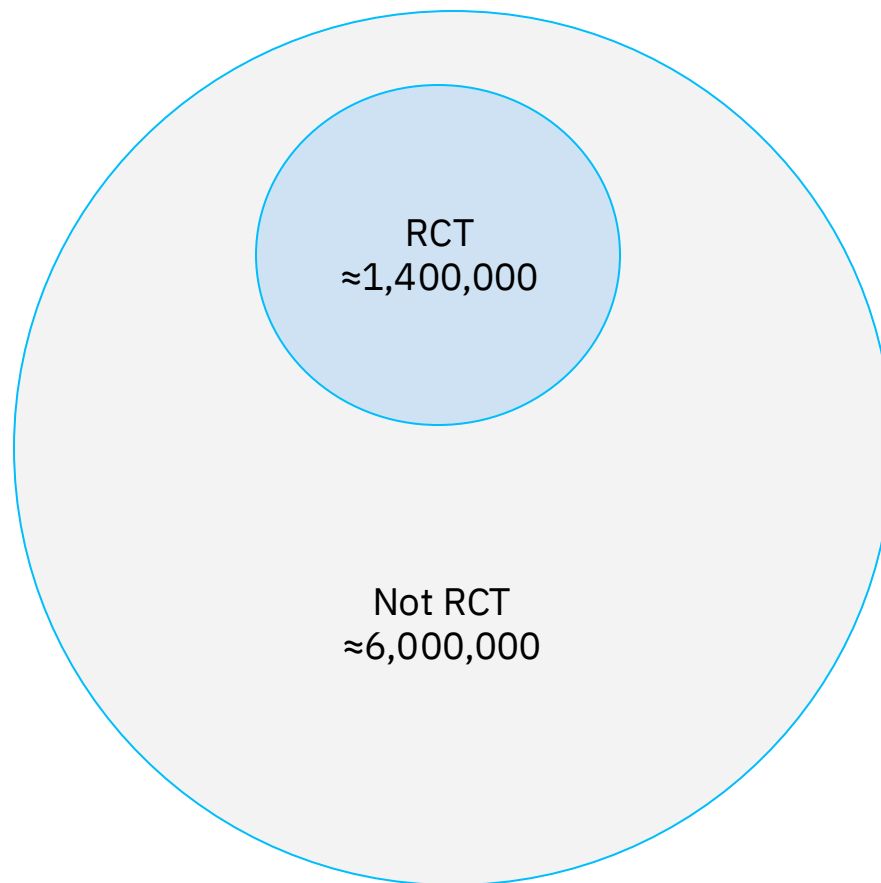


## SK Platform

# Initiating the SK platform from ED-Trials



The **Epistemonikos Database of Trials** is a comprehensive, freely accessible database of bibliographic reports of randomized trials.



## Search

[Help](#)[Start Tour](#)

#1

Title/Abstract



0 hits

Add

[Clear strategy](#)[Search](#)[Collapse](#)

The **Epistemonikos Database of Trials** contains over **1,350,000** records of randomized trials sourced from multiple electronic databases, preprint servers, trial registries, and other sources. Notable sources include randomized trials included in systematic reviews from the Epistemonikos Database of Systematic Reviews and trials uploaded by researchers to the Open Evidence Synthesis Data Archive (OESDA).

# Taxonomy browser

EET explorer

× Close

## Search terms

Search for a term

Search

### Behavior, attitudes and cognitive processes category

behavior, attitudes and cognitive processes category

Behavior and attitudes

### Biological and physical processes category

biological and physical processes category

Biological and physical processes

### Biological structures category

biological structures category

Biological structures

### Buildings, places and settings category

buildings, places and settings category


Buildings, places and settings

### Chemicals and drugs category

chemicals and drugs category

Chemicals and drugs

<< < 1 2 > >>

Selected terms 

Confirm selection

## Search

[Help](#)[Start Tour](#)

#1

Title/Abstract



0 hits


Add

[Clear strategy](#)[Search](#)[Collapse ^](#)

The **Epistemonikos Database of Trials** contains over **1,350,000** records of randomized trials sourced from multiple electronic databases, preprint servers, trial registries, and other sources. Notable sources include randomized trials included in systematic reviews from the Epistemonikos Database of Systematic Reviews and trials uploaded by researchers to the Open Evidence Synthesis Data Archive (OESDA).

# Advanced search interface

BETA



[Home](#)
[Search](#)
[About](#)
[Methods](#)
[Contact](#)

👤 | Camila

## Search

🔗 Help
🚀 Start Tour

#1	Title/Abstract	pneumon* OR bronchopneumon* OR ( ( pulmonar* OR ( lower AND respiratory ) OR "lower-respiratory" OR lung OR chest ) AND ( infect* OR sepsis ) ) OR LRTI* OR ALRI*	19,219 hits	Add
#2	EET	<span style="background-color: #003366; color: white; padding: 2px;">Pneumonia</span> × Search for a term	9,222 hits	Add
#3	EET	<span style="background-color: #003366; color: white; padding: 2px;">Corticosteroids</span> × Search for a term	32,005 hits	Add
#4	Title/Abstract	corticostero* OR corticoid* OR steroid OR steroids OR glucocortico*	27,912 hits	Add

### Strategy composer

(#1 OR #2) AND (#3 OR #4)
1,450 hits
Autojoin with AND  OFF

### Single-block strategy

```
((pneumon* OR bronchopneumon* OR ( ( pulmonar* OR ( lower AND respiratory ) OR "lower-respiratory" OR lung OR chest ) AND ( infect* OR sepsis ) ) OR LRTI* OR ALRI*) OR "Pneumonia"[EET]) AND ("Corticosteroids"[EET] OR (corticostero* OR corticoid* OR steroid OR steroids OR glucocortico*))
```

Clear strategy

Update results

🔍 ((pneumon\* OR bronchopneumon\* OR (( pulmonar\* OR ( lower AND respiratory ) OR "lower-respiratory" OR lung OR chest ) AND ( infect\* OR sepsis ) ) OR LRTI\* OR ALRI\* ) OR "Pneumonia"... [Edit query](#) ▾

PUBLICATION YEAR

- All
- Last year
- Last 5 years
- Last 10 years
- Custom range

TYPE OF PUBLICATION

- Book
- Conference
- Journal
- Pre-print
- Registry of Trials
- Report
- Thesis
- Unpublished
- Web page

Export 

Start a Review 

Per page: 10 ▾

Results: 1 - 10 of 1,450



**Burst steroid therapy for acute heart failure: The CORTAHF randomized, open-label, pilot trial.**

YEAR 2024  
 JOURNAL European journal of heart failure  
 AUTHORS Cotter G, Davison BA, Freund Y, Voors AA, Edwards C et al  
 DOI [10.1093/ehj/ehf.3452](https://doi.org/10.1093/ehj/ehf.3452)

AIMS  
 Burst steroid therapy, effective in acute respiratory diseases, may benefit patients with acute heart failure (AHF) in whom inflammatory activation is associated with...  
[Show more](#) ▾

**Effects of a pro-resolving drug in COVID-19: preclinical studies to a randomized, placebo-controlled, phase Ib/IIa trial in hospitalized patients**

YEAR 2024  
 JOURNAL British journal of pharmacology  
 AUTHORS Almeida PRJ, Periard AM, Tana FL, Avila RE, Milhorato LB et al  
 DOI [10.1111/bjph.17322](https://doi.org/10.1111/bjph.17322)

INTRODUCTION  
 Pro-resolving molecules may curb disease caused by viruses without altering the capacity of the host to deal with infection, AP1189 is a melanocortin receptor-biase...  
[Show more](#) ▾



## Start a Review



### Get started on your evidence review with the SK platform.

After logging in or registering on the SK platform, it will seamlessly connect to your search in the Epistemonikos Database of Trials, ensuring that any new articles matching your criteria are readily available.

### Your search strategy:

```
((pneumon* OR bronchopneumon* OR ( ( pulmonar* OR ( lower AND respiratory ) OR "lower-respiratory" OR lung OR chest ) AND ( infect* OR sepsis ) ) OR LRTI* OR ALRI* ) OR "Pneumonia"[EET]) AND ("Corticosteroids"[EET] OR (corticostero* OR corticoid* OR steroid OR steroids OR glucocortico*))
```

Cancel



Send to SK-Platform

Search results are automatically sent to the SK Platform and linked via API for seamless future updates.

# Select the type of synthesis

- Only one option available at this moment, in connection with ED-Trials

**Synthesis info**

**Project**  
Your synthesis will be created in the project **Free Trial > Epistemonikos Database of Trials**.



**Synthesis name**

**Synthesis approach**

**Review type**

**Type of systematic review**

**Included article design**

# General information

The screenshot displays the user interface of the Epistemonikos platform. On the left is a dark blue sidebar with a navigation menu. The 'General information' option is highlighted with a red rectangular box. The main content area on the right shows the details of a synthesis approach for a specific research question.

**General information**

- Define methods
- Tools
- Writing

**IN ADULTS WITH PNEUMONIA, DOES THE USE OF CORTICOSTEROIDS REDUCE MORTALITY AND COMPLICATIONS COMPARED TO STANDARD CARE ALONE?**

Epistemonikos... > In adults with...

### Synthesis approach

Edit

**Review type**  
Systematic review

**Type of systematic review**  
Systematic review of effectiveness

**Included article design**  
Randomized trials only

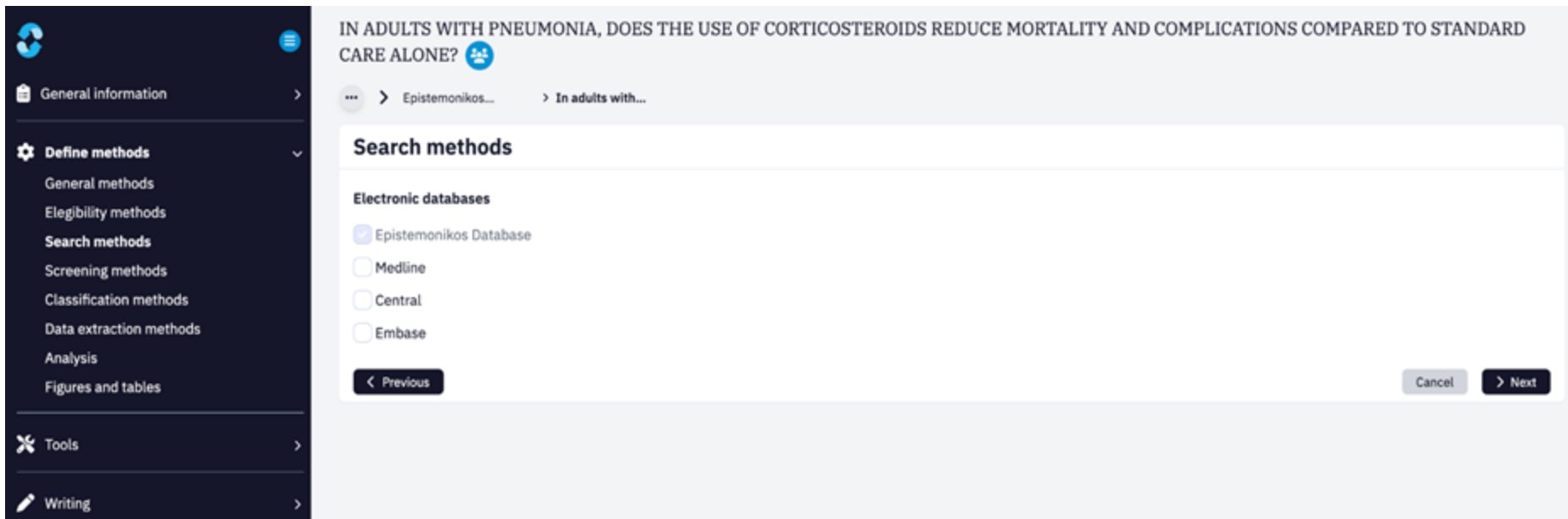
**Timeframe**  
Standard


**Update strategy**  
Not intended for updates

**Comparison approach**  
Pairwise comparison

Next

# Define Methods



IN ADULTS WITH PNEUMONIA, DOES THE USE OF CORTICOSTEROIDS REDUCE MORTALITY AND COMPLICATIONS COMPARED TO STANDARD CARE ALONE? 

Epistemonikos... > In adults with...

### Search methods

**Electronic databases**

- Epistemonikos Database
- Medline
- Central
- Embase

[< Previous](#) [Cancel](#) [> Next](#)

# TOOLS

# Question

- **Formulation of the PICO question/ MATCH between your question and the knowledge base**

IN ADULTS WITH PNEUMONIA, DOES THE USE OF CORTICOSTEROIDS REDUCE MORTALITY AND COMPLICATIONS COMPARED TO STANDARD CARE ALONE? 

... > Epistemonikos... > In adults with...

## Question

### Population

people with pneumonia

Q People with pneumonia (any population)

x



Add Population +

### Intervention

corticosteroids

Q Corticosteroids (intervention)

x



Add Intervention +

### Comparison

Enter comparison

Q Select one or more terms that best matches your question component

x



Add Comparison +

## Automated classifiers

AI classifiers to facilitate the reference screening process (i.e. reduce the workload of screening)

Individual classifiers for each component

CORTICOSTEROIDS FOR PEOPLE WITH PNEUMONIA: A SYSTEMATIC REVIEW Organizations > Test syntheses > Test

### Tools

< Previous

#### Automatic classifiers

From this page, you can easily apply automatic AI classifiers to streamline classifiers to see a preview of how much they can reduce your workload, 1 at any stage of the screening process, ensuring that you remain in control

Active	Question component	Classifiers
<input checked="" type="checkbox"/>	Diseases	Pneumonia x
<input checked="" type="checkbox"/>	Intervention	Corticosteroids x
<input checked="" type="checkbox"/>	Comparison	Standard care x
<input checked="" type="checkbox"/>	Article design	Randomized trial x

Population

- ▼ Pneumonia (any population) [x] [x]
- Population
- > People with pneumonia [x] [x]
- Population
- ▼ People without pneumonia [x] [x]
- Population
- People at risk of pneumonia [x] [x]

Start automatic classification

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# Automated classifiers

Flexibility to activate or deactivate the classifiers at any stage of the screening process.

CORTICOSTEROIDS IN ADULTS WITH PNEUMONIA: A SYSTEMATIC REVIEW
Organizations > Test syntheses > Test

-  General information >
-  Define methods >
-  **Tools >**
  - Search strategy
  - Screening
  - Automatic classifiers
-  Writing >

### Tools

< Previous
Next >

#### Automated classifiers


From this page, you can easily apply automatic AI classifiers to streamline your reference screening process. Apply any automatic classifiers to see a preview of how much they can reduce your workload. You have the flexibility to activate or deactivate these classifiers at any stage of the screening process, ensuring that you remain in control and can adjust to changing needs effortlessly.

Total references from the Search strategies and Uploaded files		1,667 (100%)
Active	Question component	Classifiers
<input checked="" type="checkbox"/>	<b>Population</b> People with pneumonia	Pneumonia x 600 (36%)
<input checked="" type="checkbox"/>	<b>Intervention</b> Corticosteroids	corticosteroids x 900 (54%)
<input type="checkbox"/>	<b>Comparison</b>	Search classifier
<input type="checkbox"/>	<b>Outcomes</b>	Search classifier
<input checked="" type="checkbox"/>	<b>Article design</b> Randomised controlled trials	Randomised trial x 230 (14%)
<a href="#">+ Add automatic classifier</a>		
<b>Total after workload reduction</b>		Less than 200 (12%)

[Start automatic classification](#)


95% reduction


A Venn diagram with three overlapping circles labeled A, B, and C. The central intersection where all three circles meet is shaded black. An arrow points from this shaded area up to a blue box containing the text '95% reduction'.


**SK**  
 PLATFORM  
AN EPIDEMIOLOGICAL

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# SK Screening Tool

If classifiers applied, you start screening the remaining references.  
 Studified screening also available

**Screening from SK Platform: In adults with pneumonia, does the use of corticosteroids reduce mortality and complications compared to standard care alone?** Close

Title and Abstract

Awaiting classification


Search

 Study
 
Publication year

Highlighting

**CARDEA**
Yes to all

**A Study of Auxora in Patients With Severe COVID-19 Pneumonia**

<b>Year</b>	2020
<b>Journal</b>	clinicaltrials.gov
<b>Authors</b>	CalciMedica, Inc.
<b>Doi</b>	

Part 1 of this trial enrolled 30 patients to receive Auxora (formerly CM4620) in a 2:1 randomized, open label trial of patients with severe and critical COVID-19 pneumonia. Part 2 will consist of a randomized, double blind, placebo-controlled (RCT) study that will evaluate efficacy, safety, and the pharmacokinetic profile of Auxora in patients with severe COVID-19 pneumonia. The number of patients with an imputed PaO2/FiO2 >200 randomized into the study will be capped at 26. 320 patients with a PaO2/FiO2 ≤200 will be enrolled. Patients with an estimated PaO2/FiO2 of 75-200 will be stratified to ensure balanced randomization between the Auxora and placebo arms. Subgroup analyses will be performed to explore how time to recovery is influenced by baseline variables and to evaluate the treatment effect at different levels of each of these variables. The dose of Auxora will be 2.0 mg/kg (1.25 mL/kg) administered at 0 hour, and then 1.6 mg/kg (1 mL/kg) at 24 hours and 1.6 mg/kg (1 mL/kg) at 48 hours from the SFISD. The dose of placebo will be 1.25 mL/kg administered at 0 hour and then 1 mL/kg at 24 hours and 1 mL/kg at 48 hours from the SFISD. Remdesivir, corticosteroids and convalescent plasma will be allowed. The infusion of Auxora will start within 12 hours from the time the patient or LAR provides informed consent. Efficacy analyses will be presented by treatment group (Auxora vs Placebo) based on the Efficacy Analysis Set of the imputed PaO2/FiO2 ≤200 subgroup, except where it is specified otherwise. The statistical analysis approach will be designed to assess the significance of the primary and first secondary endpoint using the Benjamini and Hochberg method to control the overall trial level alpha level.

Is this reference potentially eligible?

Yes

No

Full-text is needed to vote ?

# Data extraction

AI classifiers generate a draft for each element selected

Pre-designed templates available.



- General information >
- Define methods >
- Tools >
  - Search strategy
  - Screening
  - Automatic classifiers
  - Data extraction manager
  - Data extraction template
  - Data extraction
- Writing >

CORTICOSTEROIDS FOR PEOPLE WITH PNEUMONIA: A SYSTEMATIC REVIEW Organizations > Test synthesis > Test

## Tools

[< Previous](#) [Next >](#)

### Data extraction

Research in Critical Care Critical Care

**RESEARCH** Open Access

#### Auxora vs. placebo for the treatment of patients with severe COVID-19 pneumonia: a randomized-controlled clinical trial

Charles Bruen<sup>1</sup>, Muttar Al Saadi<sup>2</sup>, Edward A. Michelson<sup>3</sup>, Maged Seneq<sup>4</sup>, Bas Memisha-Haydi<sup>5</sup>, Joseph Kibari<sup>6</sup>, Jeffrey Zhang<sup>7</sup>, Kenneth Sautterman<sup>8</sup>, Sudarshan Reddy<sup>9</sup>, and Peter C. Ho<sup>10</sup>

**Abstract**  
**Background:** Calcium release-activated calcium (CRAC) channel inhibitors block proinflammatory cytokine release, preserve endothelial integrity and may effectively treat patients with severe COVID-19 pneumonia.  
**Methods:** (MCEA) was a phase 2, randomized, double-blind, placebo-controlled trial evaluating the addition of Auxora, a CRAC channel inhibitor, to corticosteroids and standard of care in adults with severe COVID-19 pneumonia. Eligible patients were adults with a 14-day-onset duration, with COVID-19 infection, a diagnosis of COVID-19 confirmed by laboratory testing using polymerase chain reaction in either sputum or other sites and pneumonia. Randomized by chest imaging. Patients were also required to be receiving oxygen therapy using either a high-flow or low-flow nasal cannula at the time of enrollment and have at the time of enrollment a baseline inspired PaO<sub>2</sub>/FiO<sub>2</sub> ratio  $\leq 15$  and  $\leq 100$ . The PaO<sub>2</sub>/FiO<sub>2</sub> was measured from a PaO<sub>2</sub>/FiO<sub>2</sub> stream by pulse oximetry using a non-linear equation. Patients could not be receiving other non-invasive or invasive mechanical ventilation at the time of enrollment. The primary endpoint was time to recovery through Day 60, with secondary endpoints of all-cause mortality at Day 60 and Day 90. Due to declining rates of COVID-19 hospitalizations and admission of standard of care medications prohibited by regulatory guidance, the trial was stopped early.  
**Results:** The pre-specified efficacy set consisted of the 261 patients with a baseline inspired PaO<sub>2</sub>/FiO<sub>2</sub>  $\leq 100$  with 130 and 131 in the Auxora and placebo groups, respectively. Time to recovery was 7 vs. 10 days ( $P=0.007$ ) for patients who received Auxora vs. placebo, respectively. The all-cause mortality rate at Day 60 was 13.8% with Auxora vs. 20.6% with placebo ( $P=0.448$ ). Day 90 all-cause mortality was 1.7% and 17.0%, respectively ( $P=0.016$ ). Similar trends were noted in all randomized patients, patients on high-flow nasal cannula at baseline or those with a baseline inspired PaO<sub>2</sub>/FiO<sub>2</sub>  $\leq 100$ . Serious adverse events (SAEs) were less frequent in patients treated with Auxora vs. placebo and occurred in 34 patients (24.7%) receiving Auxora and 49 (35.9%) receiving placebo ( $P=0.066$ ). The most common SAEs were respiratory failure, acute respiratory distress syndrome, and pneumonia.  
**Conclusions:** Auxora was safe and well-tolerated with strong signals in both time to recovery and all-cause mortality through Day 60 in patients with severe COVID-19 pneumonia. Further studies of Auxora in patients with severe COVID-19 pneumonia are warranted.

Correspondence: peterc.ho@skcc.edu.hk  
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## Tools: already available

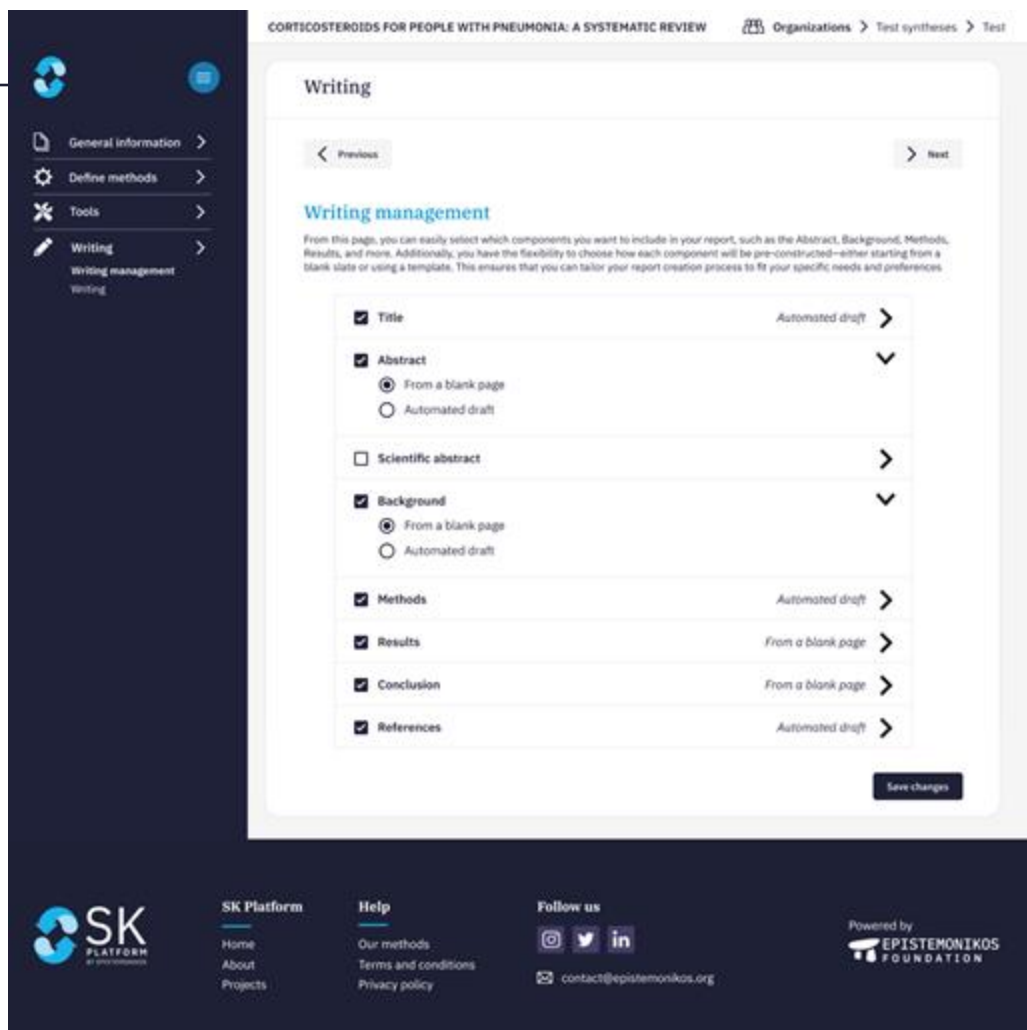
- **Boolean search assistant (available in Epistemonikos' Databases)**
- **Automated retrieval of results via API (Epistemonikos and Pubmed)**
- **RIS upload from main databases**
- **Automated deduplication**
- **AI classifiers / other technologies / OESDA**
- **Screening**

## Tools available with support

- **Other types of reviews**
- **Upload of references from non-standard sources**
- **Studies included in other reviews**
- **Review of references**
- **Review of other publications of the included trials**
- **AI assisted data extraction**
- **Analysis and generation of figures (PRISMA, Forest plot, RoB figures, Maps.**
- **SoF tables and interactive SoF tables.**

# Writing section

- Generation of an automated report.
- Includes a written PRISMA flow diagram to summarize the selection process, and the search strategy. This report can be manually edited on the platform if necessary.



**Writing**

< Previous Next >

**Writing management**

From this page, you can easily select which components you want to include in your report, such as the Abstract, Background, Methods, Results, and more. Additionally, you have the flexibility to choose how each component will be pre-constructed—either starting from a blank slate or using a template. This ensures that you can tailor your report creation process to fit your specific needs and preferences.


<input checked="" type="checkbox"/> Title	Automated draft	>
<input checked="" type="checkbox"/> Abstract	<input checked="" type="radio"/> From a blank page <input type="radio"/> Automated draft	∨
<input type="checkbox"/> Scientific abstract		>
<input checked="" type="checkbox"/> Background	<input checked="" type="radio"/> From a blank page <input type="radio"/> Automated draft	∨
<input checked="" type="checkbox"/> Methods	Automated draft	>
<input checked="" type="checkbox"/> Results	From a blank page	>
<input checked="" type="checkbox"/> Conclusion	From a blank page	>
<input checked="" type="checkbox"/> References	Automated draft	>


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# Writing

- **Automated draft writing**
- **Generation of an interactive web version of the review in our interactive Evidence Synthesis (iES) tool**

# Interactive Evidence Synthesis

Maximize the potential of your review by transforming it into an interactive tool

BROWSE



**WS: The Sustainable Knowledge Platform for Evidence  
Synthesis Product**  
Thursday, Sep 12, 2024  
14:00 - 15:30  
Hall G7





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