#### **Appendix 1-Summary of Search Strategies**

### Ovid MEDLINE(R) <1946 to July Week 3 2024>

- 1 (abstract\* or title\*).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word] 1766586
- 2 screen\*.mp. 961146
- 3 exp Automation/ or automat\*.mp. 321040
- 4 (large language model\* or GPT\* or generative pre-trained transformer\*).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word]6791
- 5 exp Artificial Intelligence/ 201786
- 6 4 or 5 207641
- 7 1 and 2 and 3 and 6 154

## Embase Classic+Embase <1947 to 2024 July 30>

- 1 (abstract\* or title\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word] 2754630
- 2 screen\*.mp. 1858873
- 3 automat\*.mp. or exp automation/ 537179
- 4 (large language model\* or GPT\* or generative pre-trained transformer\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word] 12732
- 5 exp artificial intelligence/ 111507
- 6 4 or 5 121804
- 7 1 and 2 and 3 and 6 447

### Scopus Search Strategy

(TITLE-ABS-KEY (title\* OR abstract\*) AND TITLE-ABS-KEY (screen\*) AND TITLE-ABS-KEY (systematic AND review\*) AND TITLE-ABS-KEY (automa\* OR artificial AND intelligence\* OR large AND language AND model\*))

# Appendix 2-Prompt used to query GPT-4o-mini model

As an expert in systematic reviews, your task is to determine if the following article should be included in a systematic review based on its title and abstract (if available).

Title: {title}

Abstract: {abstract if abstract else "Not available"}

Inclusion criteria:

{criteria}

Please respond with 'Include' if the article meets the criteria, 'Exclude' if it does not, or 'Unclear' if you cannot make a determination. Then, provide a brief explanation for your decision.

Response format:

Decision: [Include/Exclude/Unclear] Explanation: [Your reasoning here]

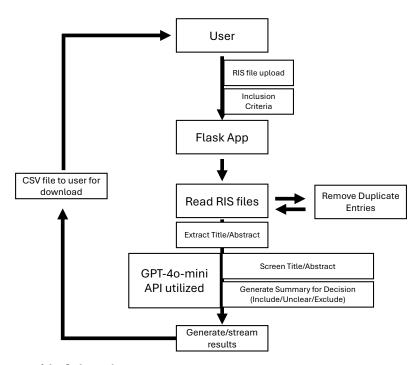


Figure S1 Schematic of the flask app design.

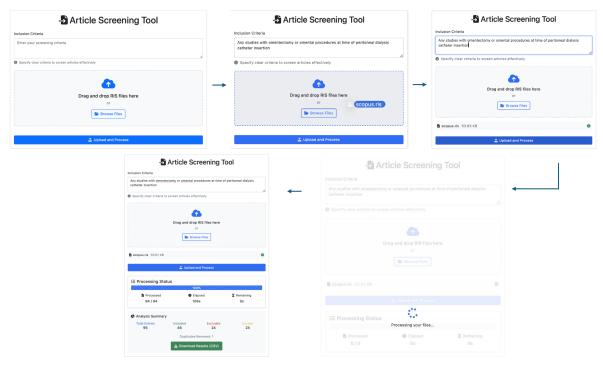


Figure S2 Step by step on how to use this article screening tool (of note, multiple ris files can be uploaded at the same time).