

Search Strategy for Systematic Review

The literature search was performed in the following electronic databases:

- MEDLINE (Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE and Versions(R), 1946 to April 5, 2025)
- EMBASE (Ovid interface, 1979 to April 5, 2025)
- Cochrane Central Register of Controlled Trials (Wiley interface, current issue)

Additionally, ClinicalTrials.gov was searched to identify ongoing or unpublished trials. The journal "Pleura and Peritoneum", which is not indexed in the aforementioned databases, was manually screened through its official website (<https://www.degruyter.com/view/j/pp>).

The search strategy was developed in collaboration with a Health Sciences Librarian at the University of Turin, Italy, with expertise in systematic review methodology.

All study designs and article types published in English were considered. The searches were limited to studies published from 2011 onward, corresponding to the earliest documented in-human use of pressurized intraperitoneal chemotherapy. Searches were performed in Title and Abstract fields unless otherwise specified.

EMBASE (Ovid) search strategy:

1. PIPAC.ti,ab.
2. exp chemotherapy/
3. chemotherap*.ti,ab.
4. 2 or 3

5. (capnoperito* or pneumoperito* or pressur*).ti,ab.
6. (abdom* or intra-abdom* or intraabdom* or perito* or intraperito* or intra-perito*).ti,ab.
7. 4 and 5 and 6
8. 1 or 7
9. limit 8 to (human and English language and yr="2011 -Current")

MEDLINE (Ovid) search strategy:

1. PIPAC.ti,ab.
2. exp Antineoplastic Agents/
3. chemotherap*.ti,ab.
4. 2 or 3
5. (capnoperito* or pneumoperito* or pressur*).ti,ab.
6. (abdom* or intra-abdom* or intraabdom* or perito* or intraperito* or intra-perito*).ti,ab.
7. 4 and 5 and 6
8. 1 or 7
9. Limit 8 to (English language and humans and yr="2011 -Current")

Cochrane Central Register of Controlled Trials:

The Cochrane database was searched using the same strategy as for MEDLINE, without applying filters for language or population. Searches were performed in the title, abstract, and keyword fields.

Journal search:

Titles and abstracts from the journal "Pleura and Peritoneum" were manually screened due to its non-indexed status.

ClinicalTrials.gov:

Search terms included "PIPAC" OR "Pressurized Intraperitoneal Aerosol Chemotherapy" combined

with "systemic chemotherapy" OR "bidirectional". Filters applied: studies posted from 2011 onward, English language, all study types.