

A comprehensive approach to assess the existing evidence and appropriateness of anticancer drugs on advanced cancer: the ASTAC project

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Background

Appropriateness of Systemic Treatments for Advanced Cancers (ASTAC) is a collaborative research project aiming to assess the appropriateness of anticancer drugs in advanced digestive non-intestinal cancers (ADNIC), contributing to reduce potential scenarios of misuse.

Objective

To describe the ASTAC approach for broad evidence synthesis.

Methods

We synthesised evidence on efficacy and safety through overviews, evidence gap maps (EGMs) and systematic reviews (SRs), according to the following steps:

- 1) We searched in MEDLINE, EMBASE, Cochrane, Epistemonikos and PROSPERO for SRs, randomised controlled trials (RCTs) and observational studies regarding our research questions.
- 2) We classified the identified SRs according to cancer location, and conducted three overviews. These overviews included all relevant SRs. We created matrices of evidence and de novo meta-analyses.
- 3) For conducting the EGMs, we used all the previously identified SRs (plus the RCT and observational studies already identified), and we ran a new and broader search strategy. We re-started the screening process, complementing the search with clinicaltrials.gov.
- 4) Once we had all the SRs, RCTs and observational studies identified, we conducted three EGMs. The EGMs informed which new SRs were more appropriate to conduct.
- 5) We used the RCTs included in the EGMs for the new SRs. At this stage, we also conducted a forward citation search to retrieve newer studies.
- 6) We conducted data extraction and analysis for the SRs, comparing our assessments with those made by authors of other SRs (identified by previous overviews).

In parallel, we conducted a multicenter retrospective cohort study to describe ADNIC patients' treatments, for judging the appropriateness of these interventions.

Results

The project is in its final stage. At the moment of this submission, we have published three overviews, two EGMs and one SR and submitted other EGM. We are in the final phase of four other SRs. In parallel, we are finishing data analysis for the cohort study.

Conclusions

ASTAC has managed to combine optimally different methodological approaches for synthesising evidence, contrasting them with current clinical practice. Evidence to treat ADNICs with anticancer drugs is sparse and, in consequence, treatments could be often considered inappropriate.

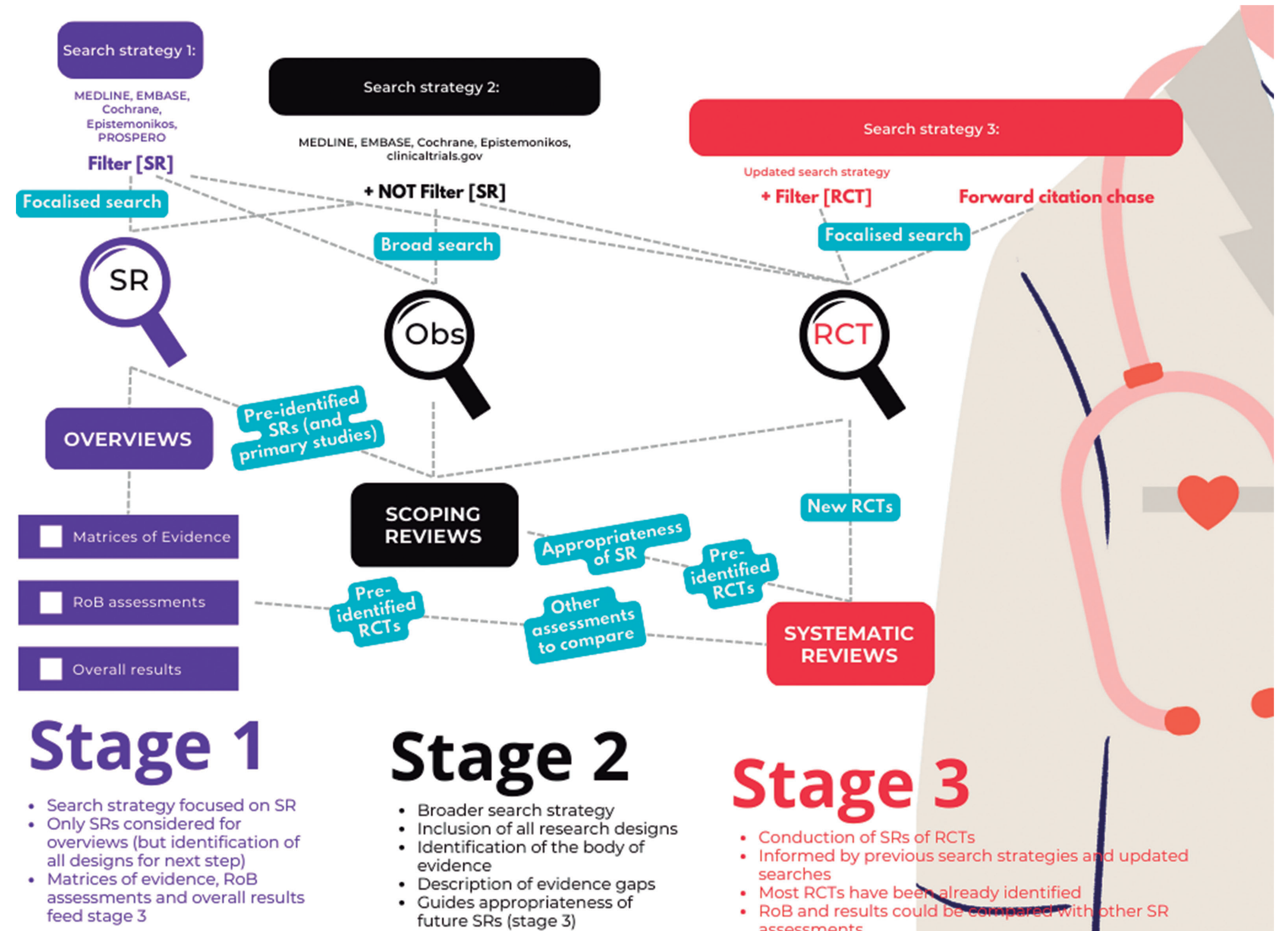


Figure 1: Steps of the ASTAC project

You can access the publications here

