

## PD43 Single-Arm Studies In Literature Reviews: Trials Versus Case Series

Mary Chappell ([mary.chappell@york.ac.uk](mailto:mary.chappell@york.ac.uk)),  
Anita Fitzgerald, Alice Sanderson, Deborah Watkins,  
Paul Miller, Lavinia Ferrante di Ruffano,  
Mary Edwards and Rachael McCool

**Introduction:** Single-arm studies, particularly single-arm trials (SATs), are increasingly being used in submissions for marketing authorization and health technology assessment. As reviewers of evidence, we sought to better understand the validity of SATs, compared with observational single-arm studies (case series), and how to assess them in our reviews.

**Methods:** We conducted a highly pragmatic literature review to create a convenience sample of recent systematic reviews published from January to July 2023 to establish the following: (i) what single-arm study designs are included; (ii) what quality assessment tools are used; and (iii) whether there is a difference in effect size and variability among different study designs. A single reviewer identified reviews of interventions that included single-arm studies and extracted information on the numbers of included SATs and case series, and the quality assessment tools used. Any misclassifications by review authors were identified. For meta-analyses, outcome data were extracted and a subgroup analysis comparing SATs and case series was conducted.

**Results:** Work is still underway to complete this investigation. So far, it appears that a large proportion of systematic reviews misclassify SATs and case series studies and few use appropriate quality assessment tools. There is not yet any evidence of a systematic difference between SATs and case series in terms of effect size.

**Conclusions:** Findings suggest that there is poor understanding of SATs in the review community. There are limited specific quality assessment tools for SATs and review authors frequently use inappropriate tools to assess them. More research is likely to be needed to investigate the relative validity of SATs and single-arm observational studies.

## PD45 A Rapid Evidence Synthesis Method For Cancer Screening Recommendations In A Hospital Setting

Carlos Muñoz-Montecinos, Catalina González-Browne,  
Felipe Maza and  
Camila Quirland ([camila.quirland@falp.org](mailto:camila.quirland@falp.org))

**Introduction:** International agencies advocate for population-based cancer screening to prevent cancer-related deaths. The Arturo Lopez

Perez Oncology Institute is interested in implementing screening programs, but international recommendations differ on program details such as screening tests, target population, age range, and frequency. A review of international evidence-based recommendations is essential for advising stakeholders on the effective implementation of screening programs.

**Methods:** A rapid scoping review was performed to identify international recommendations on cancer screening programs. Evidence-based recommendations derived from the World Health Organization and the European Union were analyzed. We also searched for evidence-based recommendations from the following health technology assessment agencies with specific sections for evaluating screening strategies: the Canadian Agency for Drugs and Technologies in Health (Canada), the Institute for Quality and Efficiency in Health Care (Germany), the Medical Services Advisory Committee (Australia), and the National Institute of Health and Care Excellence (UK). Additionally, we explored international cancer screening programs implemented by health systems in the aforementioned countries or in countries with implemented screening programs. Finally, we searched for recommendations from scientific societies on cancer screening strategies. This iterative process was repeated for five different cancers.

**Results:** We found a total of 32 favorable or unfavorable recommendations for breast, cervical, colorectal, lung, gastric, and prostate cancer screening. Breast and cervical cancer had the highest number of favorable recommendations, with complete agreement on the type of test and only small differences regarding age range and periodicity. On the other hand, we found some recommendations against population-based screening for prostate and gastric cancer and limited agreement for both test type and target population. Direct comparisons between the recommendations served as a guide to elaborate a cancer screening program based on the most recommended strategies.

**Conclusions:** This rapid scoping review allowed us to assess the consistency of cancer screening recommendations. Major differences were found mainly between recommendations from international agencies and scientific societies. As a result, a cancer screening program was designed based on the most recommended strategies.

## PD49 Developing Evidence-Based Optimal Testing Strategies To Monitor Long-Term Conditions In Primary Care

Martha Elwenspoek ([martha.elwenspoek@bristol.ac.uk](mailto:martha.elwenspoek@bristol.ac.uk)),  
Rachel O'Donnell, Katie Charlwood, Alice Malpass,  
Mary Ward, Howard Thom, Jonathan Banks,  
Clare Thomas, Hayley Jones, Jonathan Sterne,  
Francesco Palma, Christina Stokes, Alastair Hay,  
Jessica Watson and Penny Whiting

**Introduction:** Most patients with long-term conditions (LTC) receive regular blood tests to monitor disease progression and