{{rec\_title}}

*Note to user: Due to the way docx files are built, any tables pulled in via reference to .docx files are appended at the end of this template - you will want to cut and paste them to the relevant part of the manuscript.*

# Introduction

## Rationale

[DemonstrationOfNeed.docx]

[TheoreticalFramework.docx]

## Objectives

In {{q\_pop\_sex}} {{q\_pop\_species}} aged {{q\_pop\_age}}, what is the effect of {{q\_exp\_dose}} level of {{q\_exp\_exp}} at {{q\_exp\_timing}} for {{q\_exp\_dur}}, in comparison to {{q\_comp\_dose}} level of {{q\_comp\_exp}} at {{q\_comp\_timing}} for {{q\_comp\_dur}}, on {{q\_out\_primary}} as primary outcomes and {{q\_out\_second}} as secondary outcomes?

The population is {{q\_pop\_health}} and {{q\_pop\_add}}. The exposure is {{q\_exp\_add}}. The comparator is {{q\_comp\_add}}.

# Methods

## Eligibility criteria

[EligibilityCriteria.docx]

{{screen\_team}} will screen the results of the search strategy for eligibility for inclusion in the review. The approach taken to duplicate screening is {{screen\_dupe}}, and conflicts will be resolved by {{screen\_conflict}}. {{multi\_pubs}} will be the strategy for handling multiple publications from the same study.

## Search strategy

[LiteratureSearch.docx]

Searches will be updated {{rerun\_when}}. We will rerun searches in {{rerun\_sources}}. Screening for the rerun will be conducted {{rerun\_level}}. We will update our findings by {{rerun\_update}}.

## Critical appraisal of the included studies

### Risk of bias assessment

Risk of bias assessment will be conducted {{rob\_roles\_dupe}} by {{rob\_roles\_team}}. Disputes will be resolved by {{rob\_roles\_conflict}}.

[BiasAssessment.docx]

### Other assessment

[OtherAppraisal.docx]

## Evidence synthesis

[CharacteristicsOfStudies.docx]

[SynthesisMethods.docx]

## Certainty Assessment

[CertaintyAssessment.docx]

## Evidence Integration

[EvidenceIntegration.docx]

# Administrative information

## Information management practices

For the systematic review, we will use the following software: {{info\_refman}} for reference management; {{info\_knowman}} for knowledge and data management; {{info\_srsoft}} to facilitate conduct of each stage of the SR process; {{info\_statspack}} for data analysis and visualisation; and {{info\_aitools}} as automation and AI tools to support the SR.

## Roles of team members in relation to core SR competencies

The core competencies of the systematic review team are fulfilled as follows: {{comp\_infosci}} for search strategies and information science; {{comp\_eviapp}} for appraisal of the evidence; {{comp\_stats}} for statistics and meta-analysis; {{comp\_topic}} covering topic expertise; {{comp\_srmeth}} for SR methodologies; and {{comp\_guarant}} is the guarantor of the SR.

## Conflicts of interest

Conflicts of interest statements by each person involved in this planned SR can be found here: {{rec\_osfurl}}.

Here we describe the apparent conflicts of interest we identified for the persons involved in this research, and our process for preventing those interests compromising the integrity of decision-making processes throughout the course of the SR.

[ApparentConflicts.docx]

## Funding

For this systematic review, we are receiving funding and other support from the following sources: {{fund\_sources}}. Funders sponsoring this SR are as follows: {{fund\_funders}}. The funders have the following roles in the developing the protocol: {{fund\_fundrole}}.

Relevant grant numbers: {{fund\_grantnum}}

**Update and Amendments**

*PRISMA-P 4: If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments.*

# Appendix

[ExtractionForms.docx]