

**Database: Ovid MEDLINE(R) ALL <conception to August 31, 2023>****Search Strategy:**

- 1 (infect\* or pathogen or virus\* or viral or bacteri\* or parasit\* or communicable disease\*).mp.
- 2 exp Infections/
- 3 (telomer\* or TTAGGG\* or chromosome end\* or chromosome cap\* or end-replication problem or end-replication malfunction\* or end-replication issue\* or end-replication impairment\* or end-replication failure\*).ti,ab.
- 4 Telomere Shortening/
- 5 Telomere/
- 6 ((case\* adj5 control\*) or (case adj3 comparison\*) or control group\* or cohort or longitudinal or prospective or retrospective).ti,ab. or "clinical trial".pt. or "clinical trial, phase i".pt. or "clinical trial, phase ii".pt. or "clinical trial, phase iii".pt. or "clinical trial, phase iv".pt. or controlled clinical trial.pt. or "multicenter study".pt. or "randomi?ed controlled trial".pt. or ((randomi?ed adj7 trial\*) or (controlled adj3 trial\*) or (clinical adj2 trial\*) or ((single or doubl\* or tripl\* or treb\*) and (blind\* or mask\*))).ti,ab,kw. or ("4 arm" or "four arm").ti,ab,kw. or (cross-sectional or prevalence or transversal).ti,ab,kw. or mendelian randomi?ation.ti,ab. or control patients.mp. or control subjects.mp. or control participants.mp. or patient\*.ti,ab. or subjects.ti,ab. or Case-Control Studies/ or Control Groups/ or Matched-Pair Analysis/ or Cohort Studies/ or Longitudinal Studies/ or Follow-Up Studies/ or Prospective Studies/ or Retrospective Studies/ or Double-Blind Method/ or Clinical Trials as Topic/ or Clinical Trials, Phase I as Topic/ or Clinical Trials, Phase II as Topic/ or Clinical Trials, Phase III as Topic/ or Clinical Trials, Phase IV as Topic/ or Controlled Clinical Trials as Topic/ or Randomized Controlled Trials as Topic/ or "Early Termination of Clinical Trials"/ or Multicenter Studies as Topic/ or Cross-Sectional Studies/ or Prevalence/ or Epidemiologic Studies/ or Mendelian Randomization Analysis/ or Observational Study/
- 7 1 or 2
- 8 3 or 4 or 5
- 9 6 and 7 and 8

**Database: Embase Classic+Embase <conception to 2023 August 31>****Search Strategy:**

- 1 (infect\* or pathogen or virus\* or viral or bacteri\* or parasit\* or communicable disease\*).mp.
- 2 exp Infection/
- 3 (telomer\* or TTAGGG\* or chromosome end\* or chromosome cap\* or end-replication problem\* or end-replication malfunction\* or end-replication issue\* or end-replication impairment\* or end-replication failure\*).ti,ab.
- 4 telomere shortening/
- 5 telomere length/
- 6 telomere/
- 7 ((case\* adj5 control\*) or (case adj3 comparison\*) or control group\* or cohort or longitudinal or prospective or retrospective).ti,ab. or "clinical trial".pt. or "clinical trial, phase i".pt. or "clinical trial, phase ii".pt. or "clinical trial, phase iii".pt. or "clinical trial, phase iv".pt. or controlled clinical trial.pt. or "multicenter study".pt. or "randomi?ed controlled trial".pt. or ((randomi?ed adj7 trial\*) or (controlled adj3 trial\*) or (clinical adj2 trial\*) or ((single or doubl\* or tripl\* or treb\*) and (blind\* or mask\*))).ti,ab,kw. or ("4 arm" or "four arm").ti,ab,kw. or (cross-sectional or prevalence or transversal).ti,ab,kw. or mendelian randomi?ation.ti,ab. or control patients.mp. or control subjects.mp. or control

participants.mp. or patient\*.ti,ab. or subjects.ti,ab. or case control study/ or control group/ or cohort analysis/ or longitudinal study/ or follow up/ or prospective study/ or retrospective study/ or double blind procedure/ or "clinical trial (topic)"/ or "phase 1 clinical trial (topic)"/ or "phase 2 clinical trial (topic)"/ or "phase 3 clinical trial (topic)"/ or "phase 4 clinical trial (topic)"/ or "controlled clinical trial (topic)"/ or "randomized controlled trial (topic)"/ or "early termination of clinical trial"/ or "multicenter study (topic)"/ or cross-sectional study/ or prevalence/ or epidemiology/ or Mendelian randomization analysis/

**8** 1 or 2

**9** 3 or 4 or 5 or 6

**10** 7 and 8 and 9

**Database: Global Health <conception to August 31, 2023>**

**Search Strategy:**

**1** (infect\* or pathogen or virus\* or viral or bacteri\* or parasit\* or communicable disease\*).mp.

**2** exp infections/

**3** exp infection/

**4** (telomer\* or TTAGGG\* or chromosome end\* or chromosome cap\* or end-replication problem\* or end-replication malfunction\* or end-replication issue\* or end-replication impairment\* or end-replication failure\*).ti,ab.

**5** telomeres/

**6** ((case\* adj5 control\*) or (case adj3 comparison\*) or control group\* or cohort or longitudinal or prospective or retrospective).ti,ab. or "clinical trial".pt. or "clinical trial, phase i".pt. or "clinical trial, phase ii".pt. or clinical trial, phase iii.pt. or clinical trial, phase iv.pt. or controlled clinical trial.pt. or "multicenter study".pt. or "randomi?ed controlled trial".pt. or ((randomi?ed adj7 trial\*) or (controlled adj3 trial\*) or (clinical adj2 trial\*) or ((single or doubl\* or tripl\* or treb\*) and (blind\* or mask\*))).ti,ab. or ("4 arm" or "four arm").ti,ab. or (cross-sectional or prevalence or transversal).ti,ab. or mendelian randomi?ation.ti,ab. or control patients.mp. or control subjects.mp. or control participants.mp. or patient\*.ti,ab. or subjects.ti,ab. or case-control studies/ or cohort studies/ or longitudinal studies/ or retrospective studies/ or clinical trials/ or randomized controlled trials/ or cross-sectional studies/ or disease prevalence/ or seroprevalence/ or epidemiological surveys/ or observational studies/

**7** 1 or 2 or 3

**8** 4 or 5

**9** 6 and 7 and 8

Web of Science **conception to August 31, 2023**

1: TS=(infect\* or pathogen or virus\* or viral or bacteri\* or parasit\* or "communicable disease\*")

2: TS=(telomer\* or TTAGGG\* or "chromosome end\*" or "chromosome cap\*" or "end-replication problem\*" or "end-replication malfunction\*" or "end-replication issue\*" or "end-replication impairment\*" or "end-replication failure\*")

3: TS=((case\* NEAR/5 control\*) or (case NEAR/3 comparison\*) or "control group\*" or cohort or longitudinal or prospective or retrospective or (randomi?ed NEAR/7 trial\*) or (controlled NEAR/3 trial\*) or (clinical NEAR/2 trial\*) or ((single or doubl\* or tripl\* or treb\*) and (blind\* or mask\*)) or "4 arm" or "four arm" or "cross-sectional" or prevalence or transversal or "mendelian randomi?ation" or patient\* or subjects)

4: TS= ("control patients" or "control subjects" or "control participants")

5: #4 OR #3

6: #5 AND #2 AND #1

SCOPUS **conception to August 31, 2023**

Search within	Search
Article title, Abstract, Keywords	infect* OR pathogen OR virus* OR viral OR bacteri* OR parasit* OR {communicable disease*}
Article title, Abstract, Keywords	telomer* OR ttaggg* OR {chromosome end*} OR {chromosome cap*} OR {end-replication problem*} OR {end-replication malfunction*} OR

	{end-replication issue*} OR {end-replication impairment*} OR {end-replication failure*}
Article title, Abstract, Keywords	{case* W/5 control* } OR {case W/3 comparison* } OR {control group*} OR cohort OR longitudinal OR prospective OR retrospective OR {randomi?ed W/7 trial* } OR {controlled W/3 trial* } OR {clinical W/2 trial* } OR ((single OR doubl* OR tripl* OR treb* ) AND ( blind* OR mask* )) OR {4 arm} OR {four arm} OR cross-sectional OR prevalence OR transversal OR {mendelian randomi?ation} OR patient* OR subjects OR participant*

Cochrane: Conception to August 31, 2023

- 1) infect\* or pathogen or virus\* or viral or bacteri\* or parasit\* or (**communicable NEXT disease\***)
- 2) MeSH descriptor: [Infections] explode all trees

- 3) telomer\* or TTAGGG\* or (chromosome NEXT end\*) or (chromosome NEXT cap\*) or (end-replication NEXT problem\*) or (end-replication NEXT malfunction\*) or (end-replication NEXT issue\*) or (end-replication NEXT impairment\*) or (end-replication NEXT failure\*)
- 4) MeSH descriptor: [Telomere] explode all trees
- 5) MeSH descriptor: [Telomere Shortening] explode all trees
- 6) #1 or #2
- 7) #3 or #4 or #5
- 8) #6 and #7