

## Appendix 1 (as supplied by the authors): Search strategy employed

### Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 to March 05, 2019> (350 items retrieved)

- 1 exp Pregnancy Outcome/ or exp Fetus/ or exp Congenital Abnormalities/ or exp Pregnancy Complications/ or exp Pregnancy, High Risk/ (1061573)
- 2 ((pregnancy or birth or f?etus or f?etal or labo?r or deliver\* or maternal) adj3 outcome\*).ti,ab,kf. (50040)
- 3 (preterm or prematur\* or pre term or pre mature or birth weight or small for gestational age or large for gestational age or miscarriage\* or spontaneous abortion\* or stillbirth or still birth or stillborn or still born or pre eclampsia or ((f?etal or f?etus or neonat\* or newborn\* or infant\* or congenital or birth) adj3 (abnormalit\* or abnormal\* or defect\*1 or malform\*))).ti,ab,kf. (323108)
- 4 (high risk adj3 pregnancy).ti,ab,kf. (2265)
- 5 ((membrane\* adj2 ruptur\*) or ((perinatal or fetal or maternal or infant\* or neonat\* or newborn\* or in-utero or uterine) adj2 (death or morality)) or (polyhydramnios or caesarean or c-section) or (gestational diabetes or gdm or ((diabet\* or glucose intoleran\*) adj3 pregnan\*))).ti,ab,kf. (73531)
- 6 Intensive Care, Neonatal/ or Intensive Care Units, Neonatal/ or (neonatal intensive care or nicu).ti,ab,kf. (28594)
- 7 (exp hypertension/ or (hypertensi\* or high blood pressure).ti,ab,kf.) and (pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum or gestational).ti,ab,hw,kf. (30814)
- 8 or/1-7 (1300633)
- 9 bed rest/ or (bed rest or bedrest or (activit\* adj3 restrict\*)).ti,ab,kf. (14078)
- 10 8 and 9 (1059)
- 11 ((pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum or prebirth or pre-birth) and (bed rest or bedrest or (activit\* adj3 restrict\*))).ti. or ((pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum or prebirth or pre-birth) adj3 (bed rest or bedrest or (activit\* adj3 restrict\*))).ab,kf. (154)
- 12 10 or 11 (1085)
- 13 (clinical trial or randomized controlled trial).pt. or (randomi?ed or placebo\* or randomly or trial or groups).ab. or intervention\*.mp. (3539322)
- 14 12 and 13 (351)
- 15 animals/ not (humans/ and animals/) (4520408)
- 16 14 not 15 (350)

### Embase <1974 to Current>

- 1 exp Pregnancy Outcome/ or exp Fetus/ or exp Congenital Disorder/ or exp Pregnancy Complication/ or exp High Risk Pregnancy/ (1485060)
- 2 ((pregnancy or birth or f?etus or f?etal or labo?r or deliver\* or maternal) adj3 outcome\*).ti,ab,kw. (73299)
- 3 (preterm or prematur\* or pre term or pre mature or birth weight or small for gestational age or large for gestational age or miscarriage\* or spontaneous abortion\* or stillbirth or still birth or stillborn or still born or pre eclampsia or ((f?etal or f?etus or neonat\* or newborn\* or infant\* or congenital or birth) adj3 (abnormalit\* or abnormal\* or defect\*1 or malform\*))).ti,ab,kw. (417206)
- 4 (high risk adj3 pregnancy).ti,ab,kw. (3414)

- 5 (exp hypertension/ or (hypertensi\* or high blood pressure).ti,ab,kw.) and (pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum).ti,ab,kw,hw. (51302)
- 6 exp newborn intensive care/ or exp neonatal intensive care unit/ or (neonatal intensive care or nicu).ti,ab,kw. (43238)
- 7 exp pregnancy diabetes mellitus/ or (gestational diabetes or gdm or (membrane\* adj2 ruptur\*) or ((perinatal or fetal or maternal or infant\* or neonat\* or newborn\* or in-utero or uterine) adj2 (death or morality)) or polyhydramnios or caesarean or c-section).ti,ab,kw. (107179)
- 8 or/1-7 (1829129)
- 9 bed rest/ or (bed rest or bedrest or (activit\* adj3 restrict\*)).ti,ab,kw. (18908)
- 10 8 and 9 (1795)
- 11 ((pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum or prebirth or pre-birth) and (bed rest or bedrest or (activit\* adj3 restrict\*))).ti. or ((pregnan\* or antenatal or prenatal or antepartum or prepartum or ante partum or pre partum or prebirth or pre-birth) adj3 (bed rest or bedrest or (activit\* adj3 restrict\*))).ab,kw. (180)
- 12 10 or 11 (1837)
- 13 limit 12 to (clinical trial or randomized controlled trial or controlled clinical trial) (183)
- 14 (randomi?ed or placebo\* or randomly or trial or groups).ab,kw. or intervention\*.mp. (4485750)
- 15 12 and 14 (525)
- 16 13 or 15 (573)
- 17 animal/ not (human/ and animal/) (1029111)
- 18 16 not 17 (573)

### **Cochrane Library (177 items retrieved)**

- #1 [mh "Pregnancy Outcome"] or [mh Fetus] or [mh "Congenital Abnormalities"] or [mh "Pregnancy Complications"] or [mh "Pregnancy, High Risk"]
- #2 ((pregnancy or birth or fetus or fetal or labor or deliver\* or maternal) near/3 outcome\*):ti,ab,kw or (preterm or prematur\* or "birth weight" or "small for gestational age" or "large for gestational age" or miscarriage\* or "spontaneous abortion\*" or stillbirth OR "still birth" OR stillborn OR "still born" or "pre eclampsia" or ((fetal or fetus or neonat\* or newborn\* or infant\* or congenital) near/3 (abnormal\* or defect or defects or malform\*) or ("high risk" near/3 pregnancy)):ti,ab,kw
- #3 (gestational diabetes or (membrane\* near/2 ruptur\*) or ((perinatal or fetal or maternal or infant\* or neonat\* or newborn\*) near/2 (death or morality)) or polyhydramnios or caesarean or "c-section" or gdm or ((diabet\* or glucose intoleran\*) near/3 pregnan\*)):ti,ab,kw
- #4 ([mh hypertension] OR (hypertensi\* or "high blood pressure"):ti,ab,kw) and (pregnan\* or antenatal or prenatal or antepartum or prepartum or "ante partum" or "pre partum" or gestational):ti,ab,kw
- #5 [mh "Intensive Care, Neonatal"] OR [mh "intensive care units, neonatal"] or ("neonatal intensive care" or nicu):ti,ab,kw
- #6 #1 or #2 or #3 or #5
- #7 [mh "bed rest"] or (bed rest or bedrest or (activit\* near/3 restrict\*)):ti,ab,kw
- #8 #6 AND #7
- #9 ((pregnan\* or antenatal or prenatal or antepartum or prepartum or "ante partum" or "pre partum" OR prebirth or "pre-birth" and ("bed rest" or bedrest or (activit\* near/3 restrict\*)):ti or ((pregnan\* or antenatal or prenatal or antepartum or prepartum or "ante partum" or "pre partum" OR prebirth or "pre-birth") near/3 ("bed rest" or bedrest or (activit\* near/3 restrict\*)):ab
- #10 #8 or #9

### **CINAHL Plus with Full-text (166 items retrieved)**

S1 ( (MH "Pregnancy Outcomes") OR (MH "Pregnancy Complications+") OR (MH "Congenital, Hereditary, and Neonatal Diseases and Abnormalities+") OR (MH "Pregnancy, High Risk") ) OR ( (pregnancy or birth or fetus or fetal or foetus or foetal or labor or labour or deliver\* or maternal) n3 (outcome\* or complication\* or "high risk") ) OR ( ( fetus OR fetal OR perinatal OR neonat\* OR infant\* OR maternal ) n2 ( death OR mortality ) ) OR ( ( fetus OR foetus OR fetal OR foetal OR perinatal OR neonat\* OR infant\* OR congenital ) n2 (abnormal\* or defect or defects or malform\*) ) OR ( membrane\* n2 ruptur\* OR preterm OR prematur\* OR "birth weight" OR "small for gestational age" OR "large for gestational age" OR miscarriage\* OR "spontaneous abortion\*" OR stillbirth OR "still birth" OR stillborn OR "still born" ) OR ( "pre eclampsia" AND ( hypertensi\* OR "high blood pressure" OR gestational) and ( pregnan\* OR deliver\* OR prenatal OR antenatal OR perinatal OR prepartum OR antepartum OR "pre partum" OR "ante partum" ) ) ) OR ( "gestational diabetes" OR gdm or (diabet\* or "glucose intoleran\*") n3 pregnan\* ) OR ( (MH "Intensive Care Units, Neonatal") OR nicu OR "neonatal intensive care" )

S2 bedrest OR "bed rest" OR activit\* n3 restrict\*

S3 S1 AND S2

S4 TI ( bedrest OR "bed rest" OR activit\* n3 restrict\* ) AND ( pregnan\* OR prenatal OR antenatal OR perinatal OR prepartum OR antepartum OR "pre partum" OR "ante partum" ) ) OR AB ( bedrest OR "bed rest" OR activit\* n3 restrict\* ) n3 ( pregnan\* OR prenatal OR antenatal OR perinatal OR prepartum OR antepartum OR "pre partum" OR "ante partum" ) )

S5 S3 OR S4

S6 random\* OR groups OR placebo\* OR trial OR intervention\*

S7 S5 AND S6

### **Scopus (594 items retrieved)**

( TITLE-ABS-KEY ( ( ( pregnancy OR birth OR maternal OR fetus OR fetal OR perinatal ) W/2 ( complication\* OR outcome\* OR "high risk" ) ) OR ( ( fetus OR fetal OR perinatal OR neonat\* OR infant\* OR maternal ) W/2 ( death OR mortality ) ) OR ( ( fetus OR fetal OR perinatal OR neonat\* OR infant\* OR congenital ) W/2 ( abnormal\* OR defect OR defects OR malform\* ) ) OR ( membrane\* W/2 ruptur\* ) OR preterm OR prematur\* OR "birth weight" OR "small for gestational age" OR "large for gestational age" OR miscarriage\* OR "spontaneous abortion\*" OR stillbirth OR "still birth" OR stillborn OR "still born" OR "pre eclampsia" OR "gestational diabetes" OR gdm OR ( ( diabet\* OR "glucose intoleran\*" ) W/3 pregnan\* ) ) OR nicu OR "neonatal intensive care" ) OR ( TITLE-ABS-KEY ( hypertensi\* OR "high blood pressure" ) AND TITLE-ABS-KEY ( pregnan\* OR deliver\* OR prenatal OR antenatal OR perinatal OR prepartum OR antepartum OR "pre partum" OR "ante partum" OR gestational ) ) AND TITLE-ABS-KEY ( bedrest OR "bed rest" OR ( activit\* W/3 restrict\* ) ) AND ( TITLE-ABS-KEY ( random\* OR groups OR placebo\* OR trial OR intervention\* ) ) )

### **Web of Science Core Collection (324 items retrieved)**

(TS=( ( pregnancy OR birth OR maternal OR fetus OR fetal OR perinatal ) near/2 ( complication\* OR outcome\* OR "high risk" ) OR ( fetus OR fetal OR perinatal OR neonat\* OR infant\* OR maternal ) near/2 ( death OR mortality ) OR ( fetus OR fetal OR perinatal OR neonat\*

OR infant\* OR congenital ) near/2 ( abnormal\* OR defect OR defects OR malform\* ) OR  
membrane\* near/2 ruptur\* OR preterm OR prematur\* OR "birth weight" OR "small for  
gestational age" OR "large for gestational age" OR miscarriage\* OR "spontaneous abortion\*" OR  
stillbirth OR "still birth" OR stillborn OR "still born" OR "pre eclampsia" OR "gestational  
diabetes" OR gdm OR ( ( diabet\* OR "glucose intoleran\*" ) near/3 pregnan\* ) OR nicu OR  
"neonatal intensive care" ) OR (TS=( hypertensi\* OR "high blood pressure" ) AND TS=(  
pregnan\* OR deliver\* OR prenatal OR antenatal OR perinatal OR prepartum OR antepartum  
OR "pre partum" OR "ante partum" OR gestational )) ) AND TS=( bedrest OR "bed rest" OR  
activit\* near/3 restrict\* ) AND TS=( random\* OR groups OR placebo\* OR trial OR intervention\* )