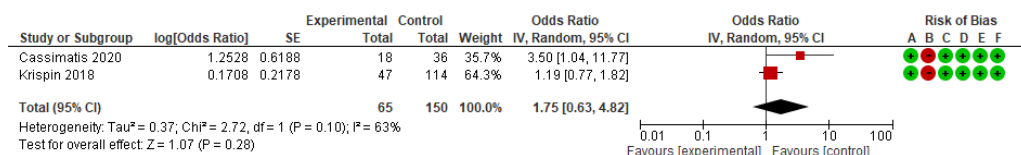


Supplementary file 4: Forest plots

Maternal outcomes for women with pregestational and/or gestational diabetes mellitus

1) Caesarean section



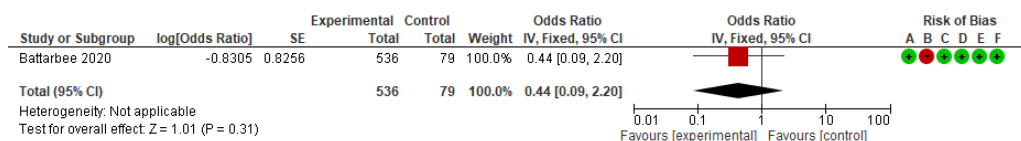
Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

Neonatal outcomes for women with pregestational and/or gestational diabetes mellitus

1) Neonatal death within 48 h of birth

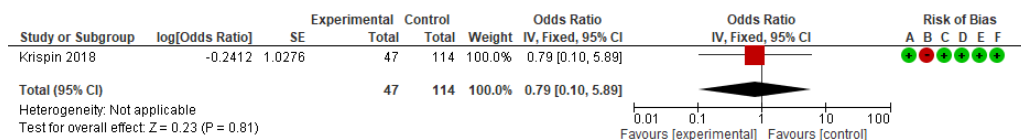


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

2) Apgar score < 7 at 5 min

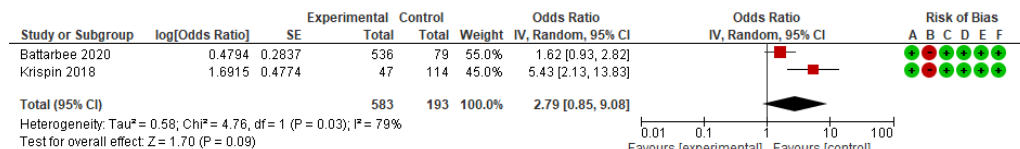


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

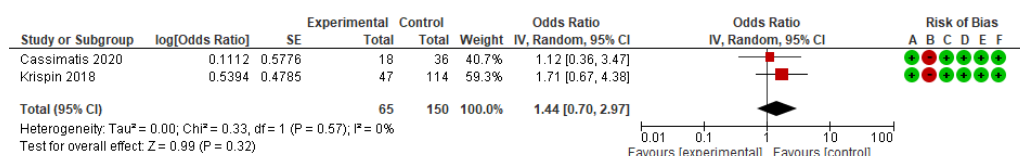
3) Respiratory distress syndrome (RDS)

Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

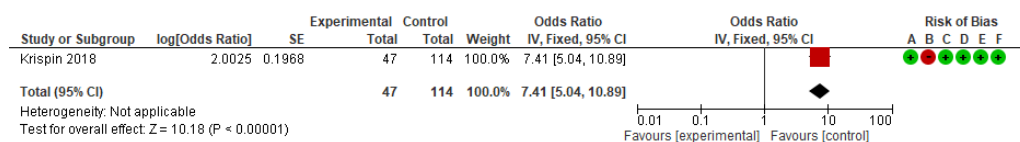
4) Neonatal hypoglycemia

Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

5) Admission to neonatal intensive care unit (NICU)

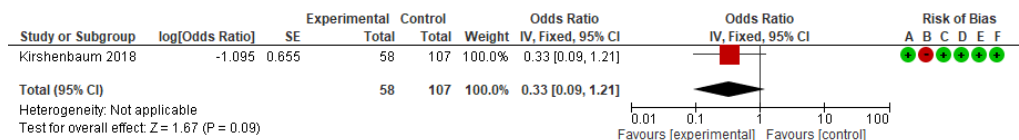
Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

Maternal outcomes for women undergoing elective cesarean section in the late preterm period

1) Hypertensive disorders

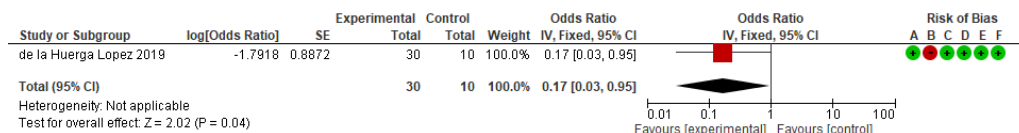


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

2) Gestational diabetes mellitus



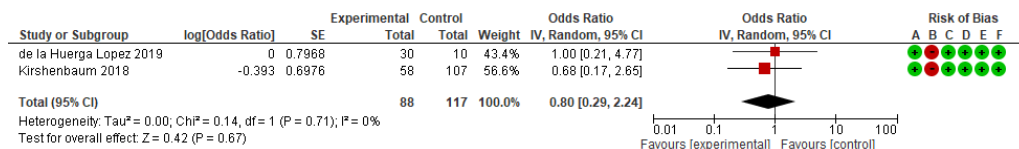
Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

Neonatal outcomes for women undergoing elective cesarean section in late preterm period

1) Respiratory distress syndrome (RDS)

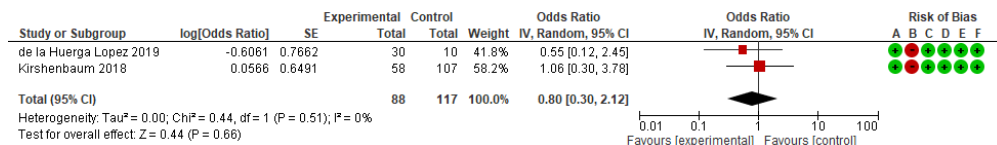


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

2) Use of mechanical ventilation

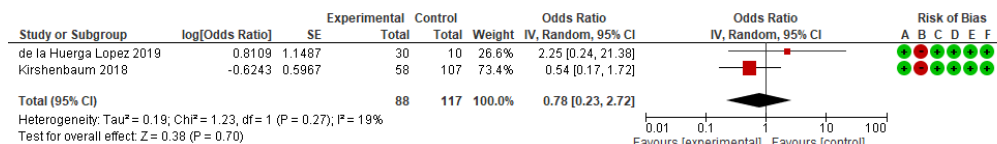


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

3) Admission to neonatal intensive care unit (NICU)

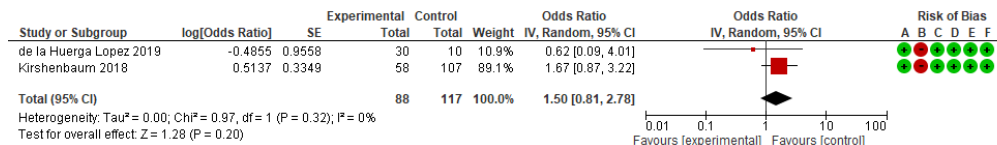


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

4) Neonatal hypoglycemia



Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval

5) Intraventricular hemorrhage (IVH)

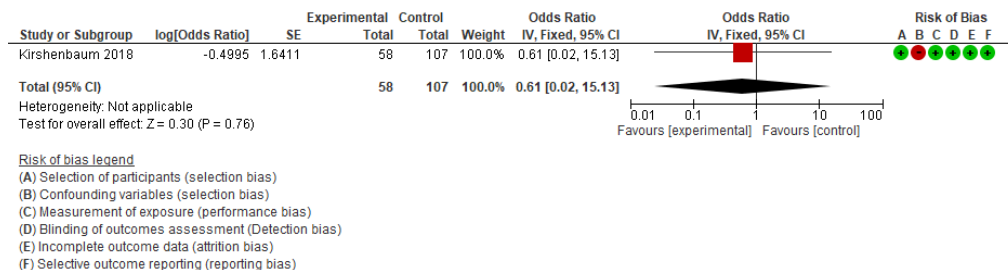


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

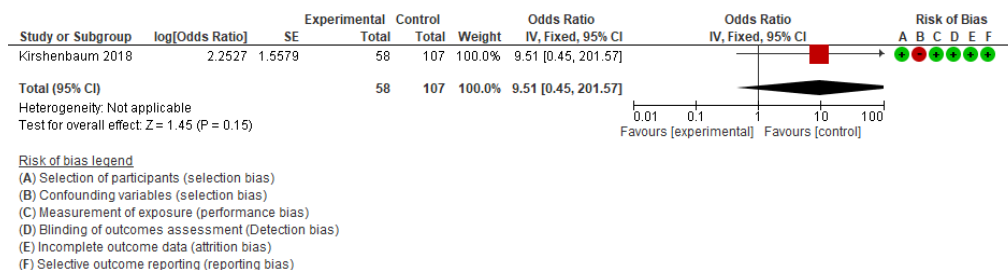
SE: Standard error; CI: Confidence interval

6) Necrotizing enterocolitis (NEC)



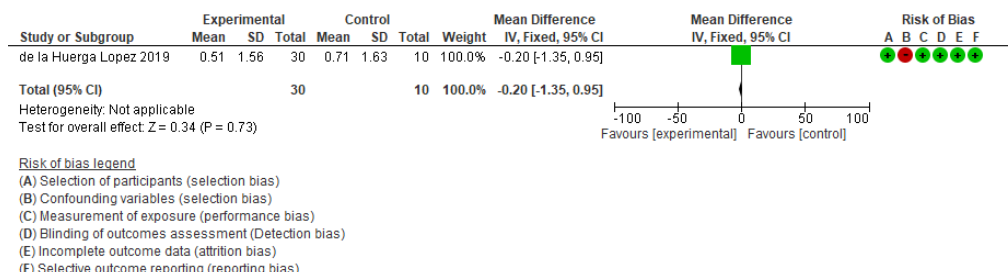
SE: Standard error; CI: Confidence interval

7) Apgar score ≤ 7 at 5min



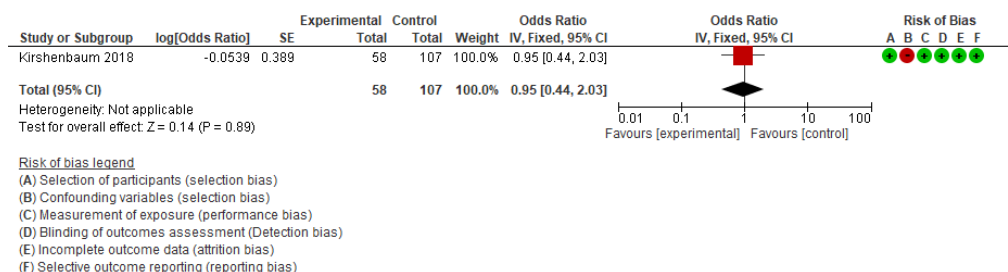
SE: Standard error; CI: Confidence interval

8) Mean duration of mechanical ventilation, days



SE: Standard error; CI: Confidence interval

9) Oxygen requirement for at least 4 hours

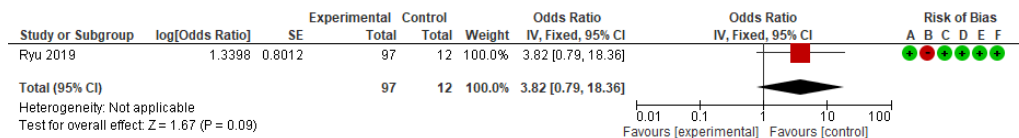


SE: Standard error; CI: Confidence interval

Maternal outcomes for women with histological chorioamnionitis

*There is no maternal outcome in clinical chorioamnionitis.

1) Caesarean section (HC)



Risk of bias legend
 (A) Selection of participants (selection bias)
 (B) Confounding variables (selection bias)
 (C) Measurement of exposure (performance bias)
 (D) Blinding of outcomes assessment (Detection bias)
 (E) Incomplete outcome data (attrition bias)
 (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

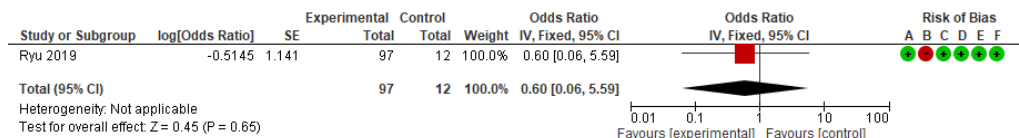
2) Gestational diabetes mellitus (HC)



Risk of bias legend
 (A) Selection of participants (selection bias)
 (B) Confounding variables (selection bias)
 (C) Measurement of exposure (performance bias)
 (D) Blinding of outcomes assessment (Detection bias)
 (E) Incomplete outcome data (attrition bias)
 (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

3) Preeclampsia or eclampsia (HC)

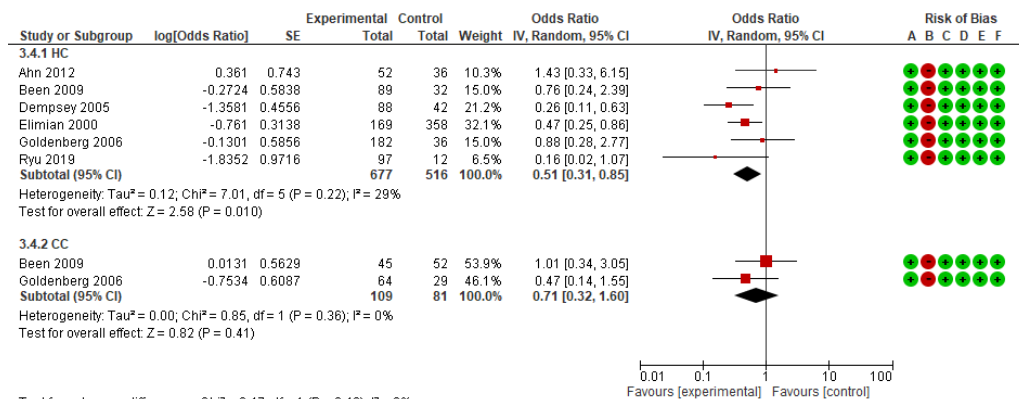


Risk of bias legend
 (A) Selection of participants (selection bias)
 (B) Confounding variables (selection bias)
 (C) Measurement of exposure (performance bias)
 (D) Blinding of outcomes assessment (Detection bias)
 (E) Incomplete outcome data (attrition bias)
 (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

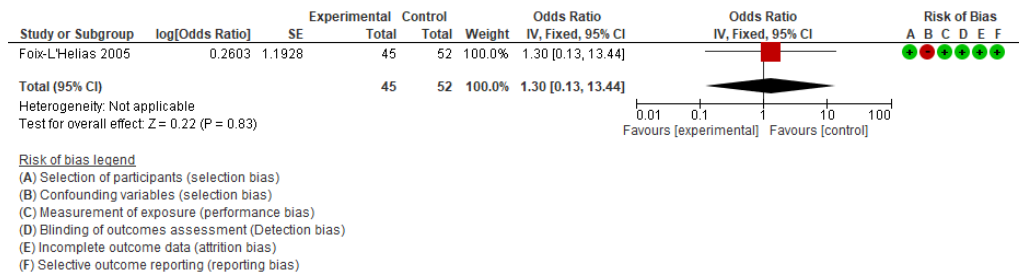
Neonatal outcomes for women with histological chorioamnionitis (HC) and clinical chorioamnionitis (CC)

1) Neonatal death



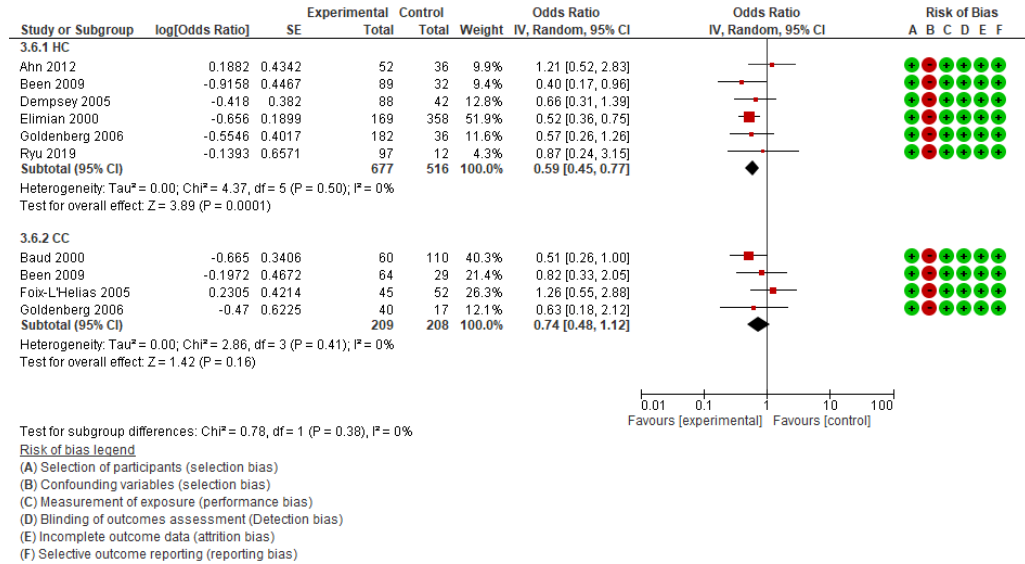
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

2) Death before discharge home (CC)



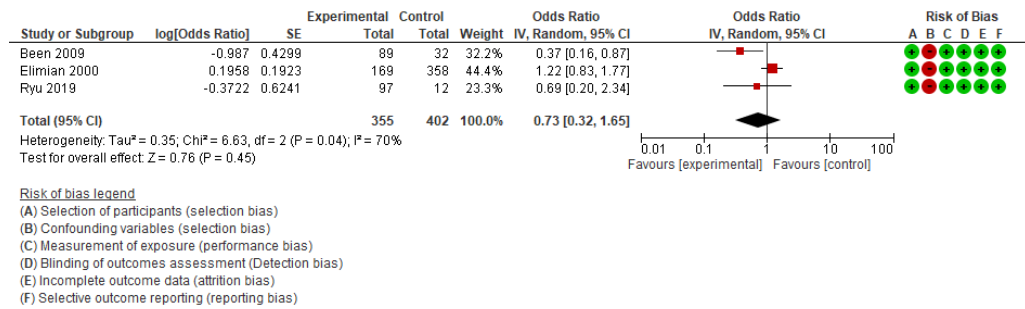
SE: Standard error; CI: Confidence interval; CC: Clinical chorioamnionitis

3) Respiratory distress syndrome (RDS)



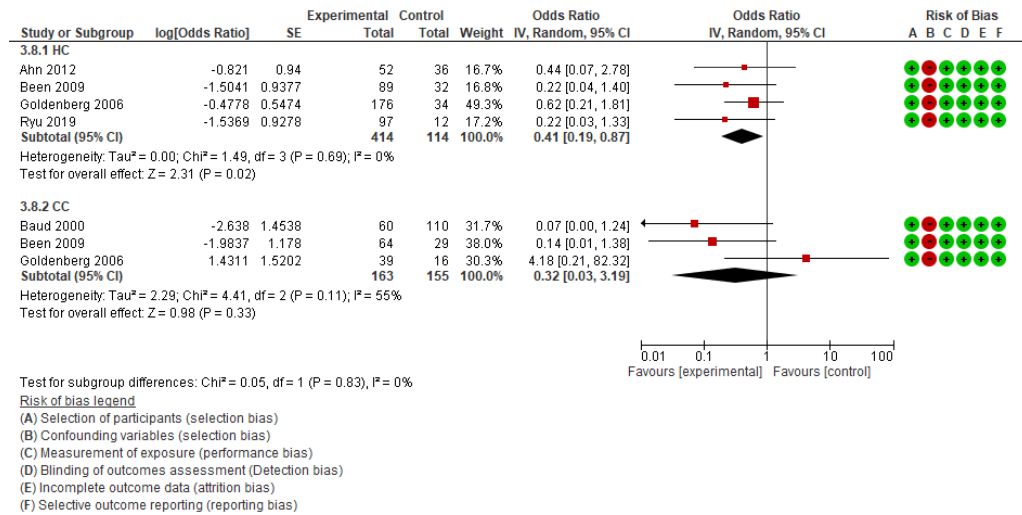
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

4) Surfactant use (HC)



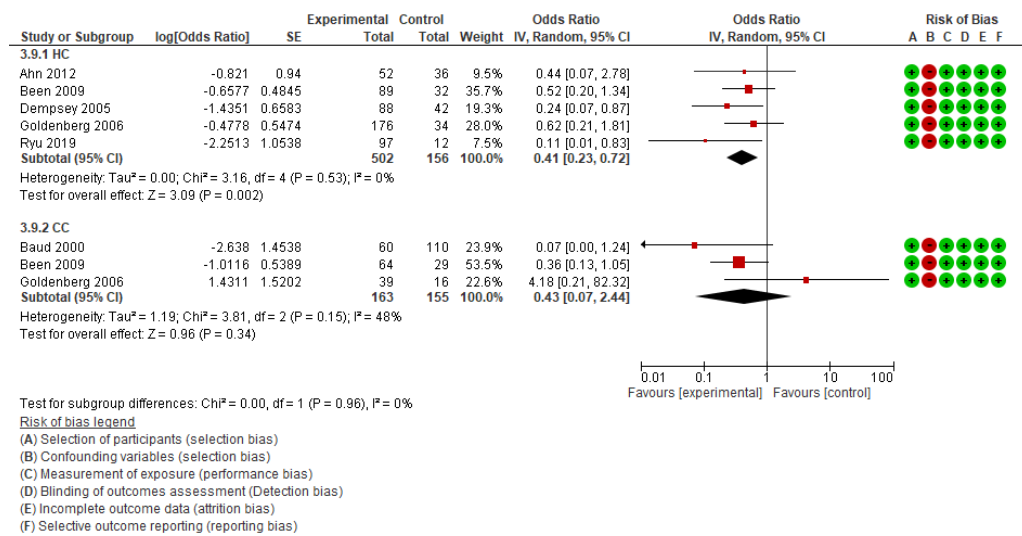
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

5) Severe intraventricular hemorrhage (IVH)



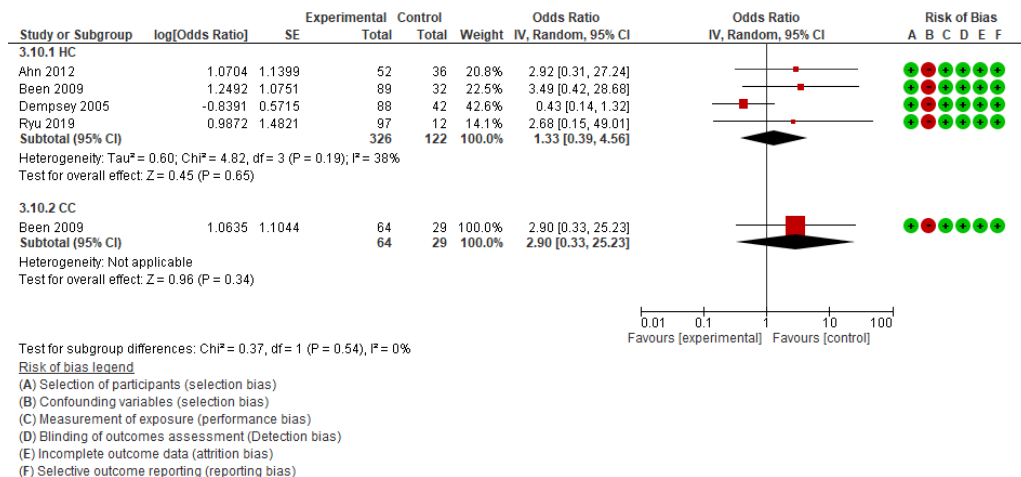
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

6) Intraventricular hemorrhage (IVH)



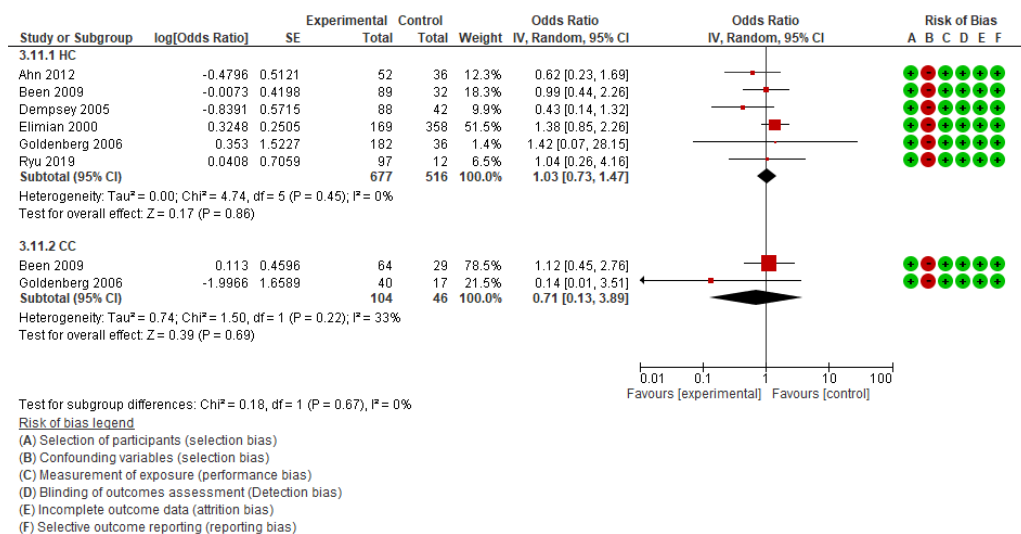
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

7) Early-onset sepsis



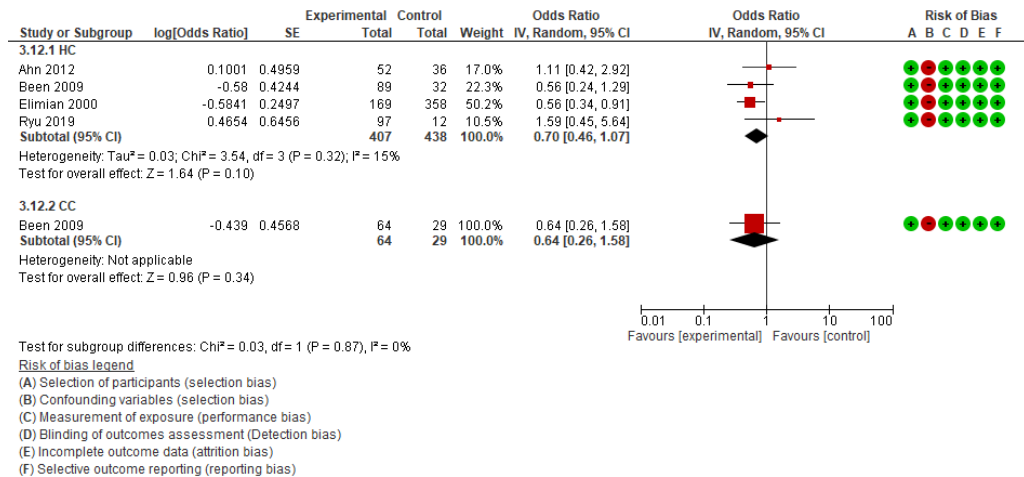
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

8) Sepsis



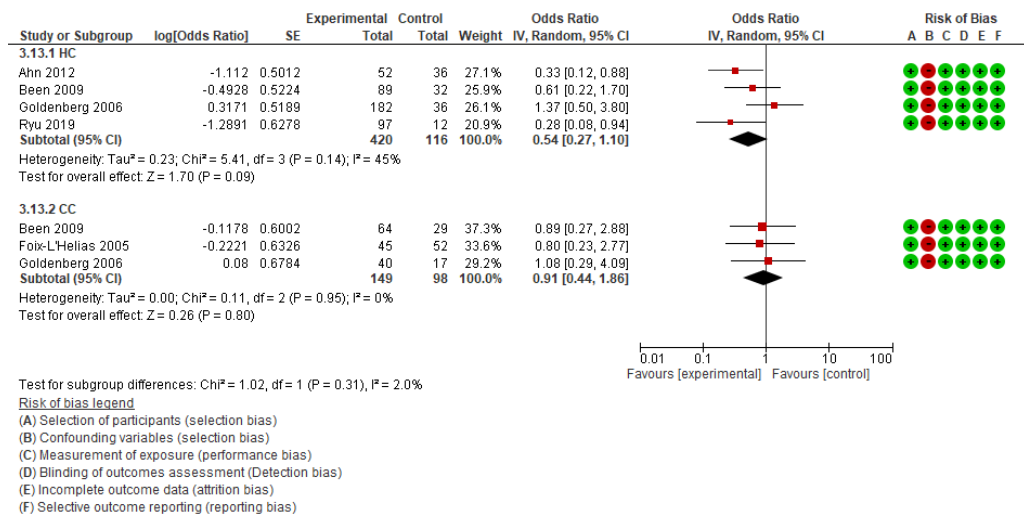
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

9) Patent ductus arteriosus (PDA)



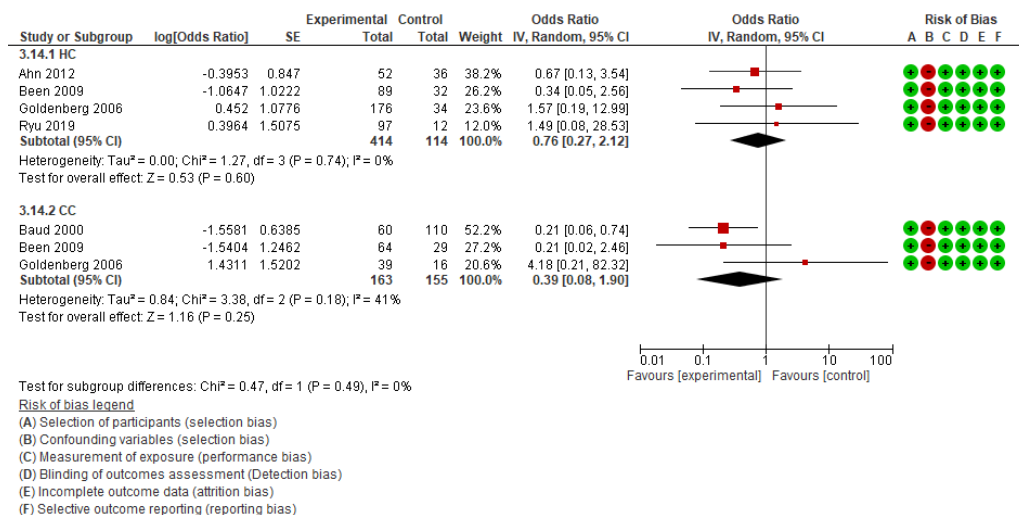
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

10) Bronchopulmonary dysplasia (BPD)/ Chronic lung disease (CLD)



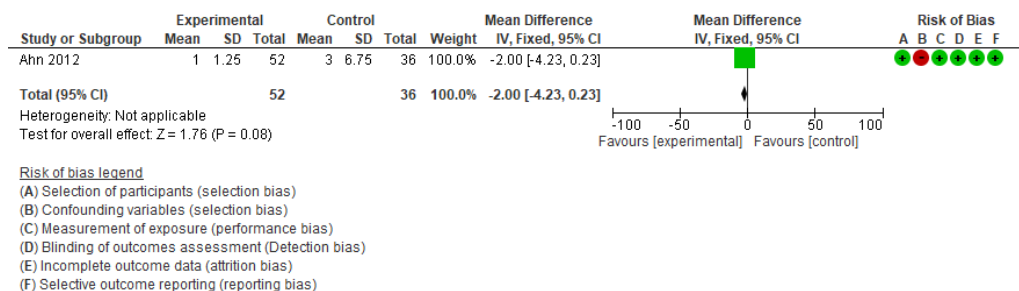
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

11) Periventricular leukomalacia (PVL)



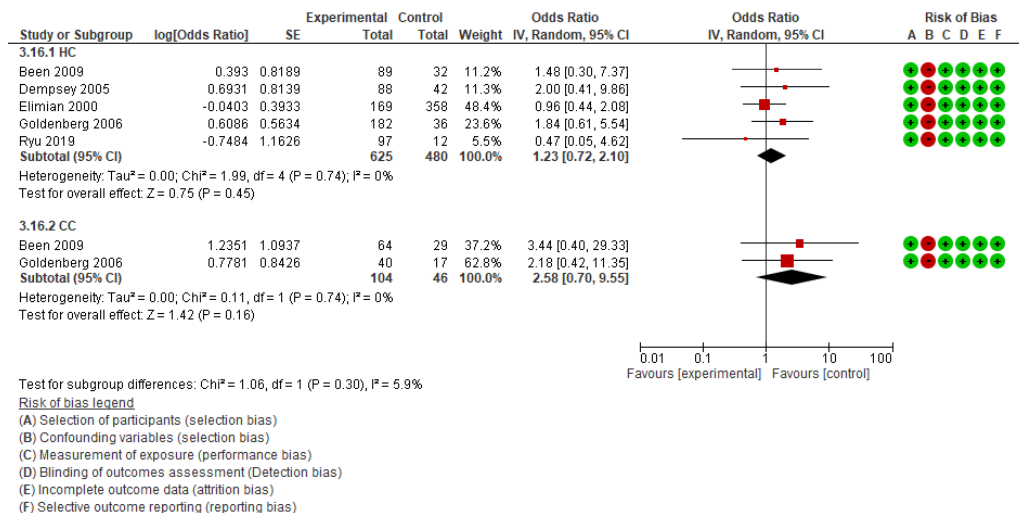
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

12) Mean duration of mechanical ventilation, days (HC)



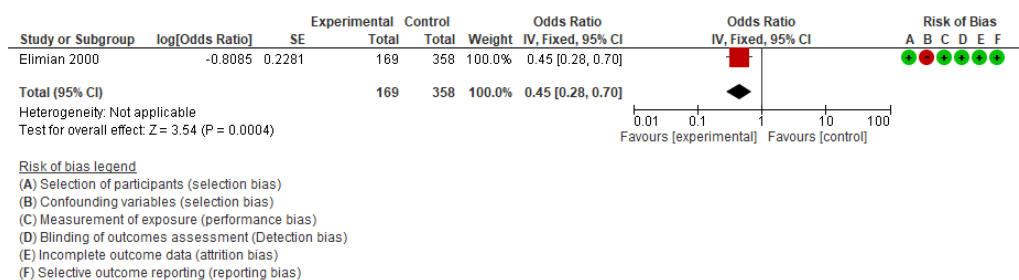
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

13) Necrotizing enterocolitis (NEC)



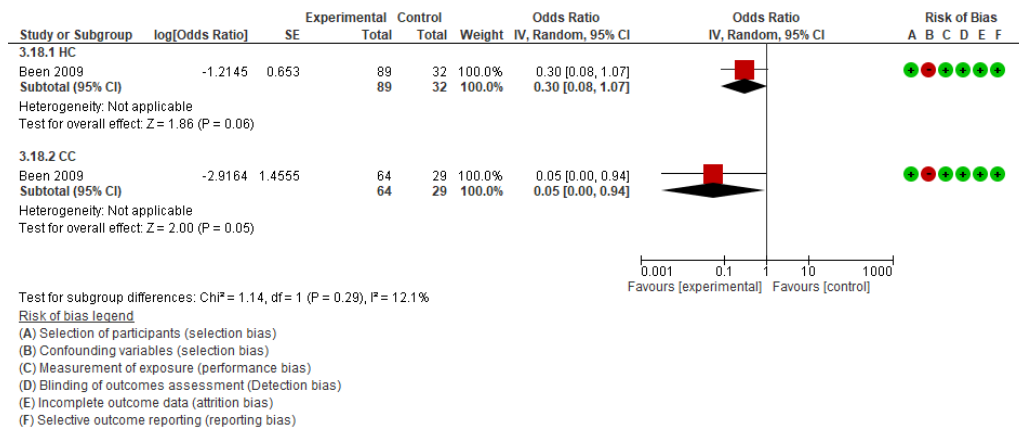
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

14) Apgar score < 7 at 5 minutes (HC)



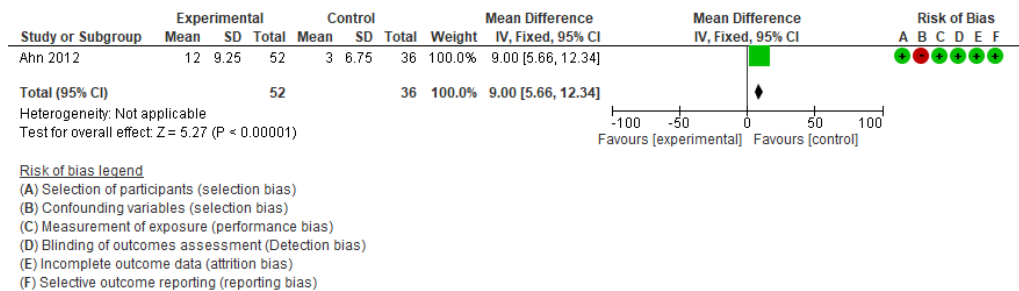
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

15) Use of mechanical ventilation



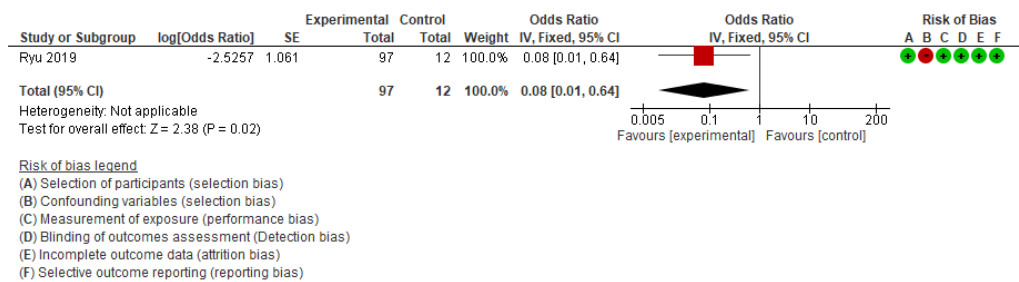
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

16) Duration of oxygen use, days (HC)



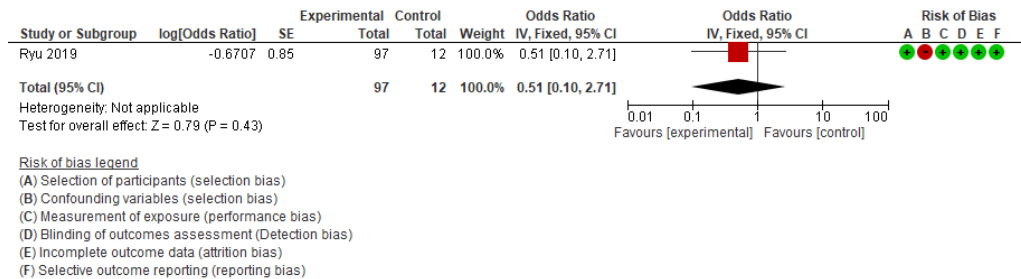
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

17) Hypotension within 7 postnatal days (HC)



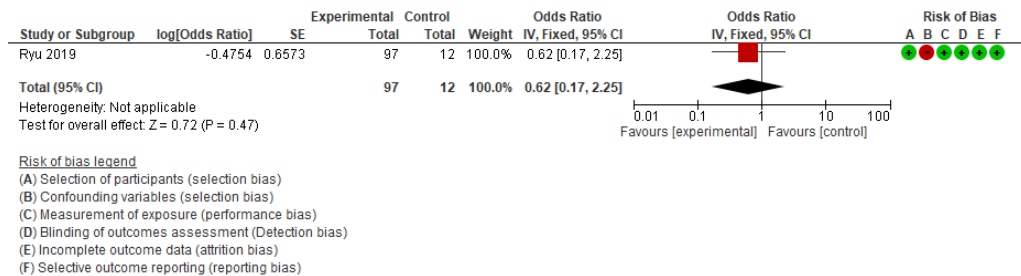
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

18) Retinopathy of prematurity requiring treatment (HC)



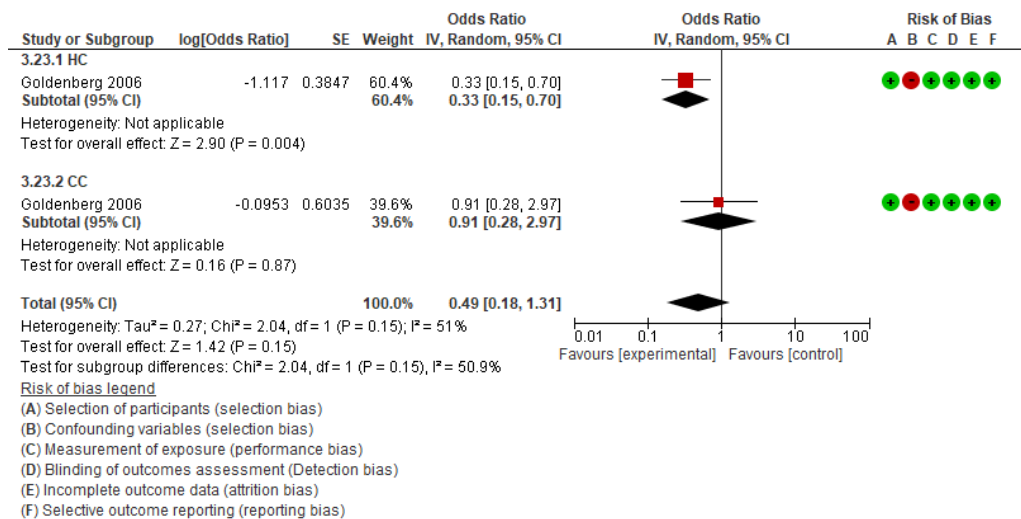
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

19) Discharge with respiratory support (HC)



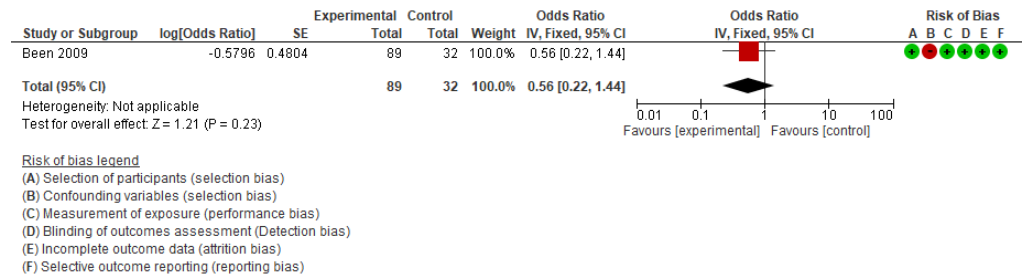
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

20) Systemic inflammatory response syndrome



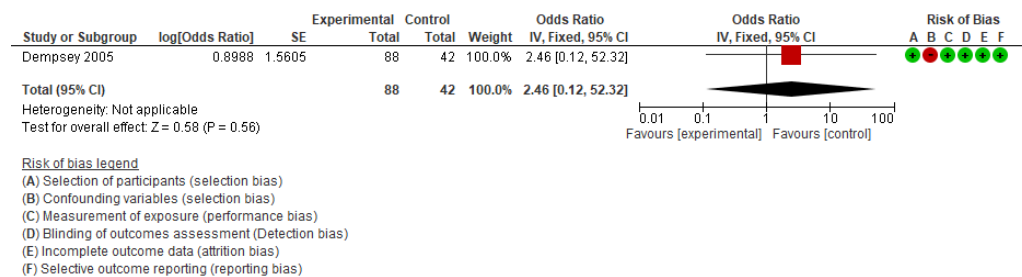
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis; CC: Clinical chorioamnionitis

21) Severe respiratory distress syndrome (RDS) (HC)



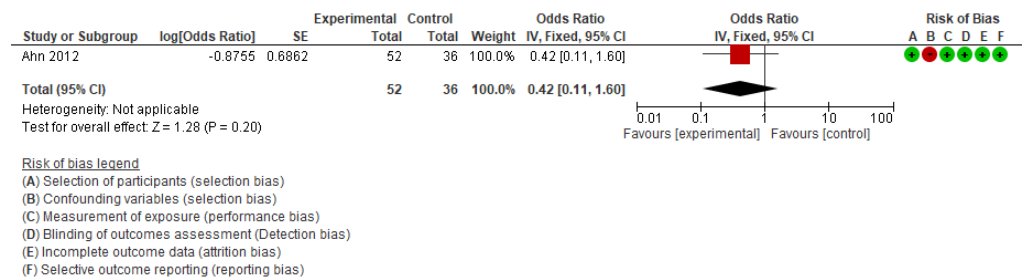
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

22) Meningitis (HC)



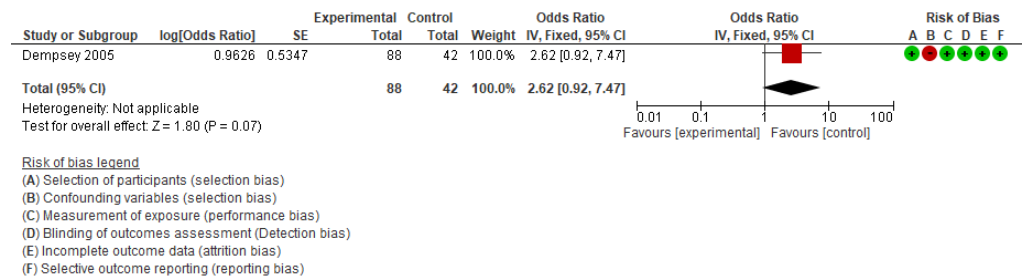
SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

23) Intrahepatic cholestasis (HC)



SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

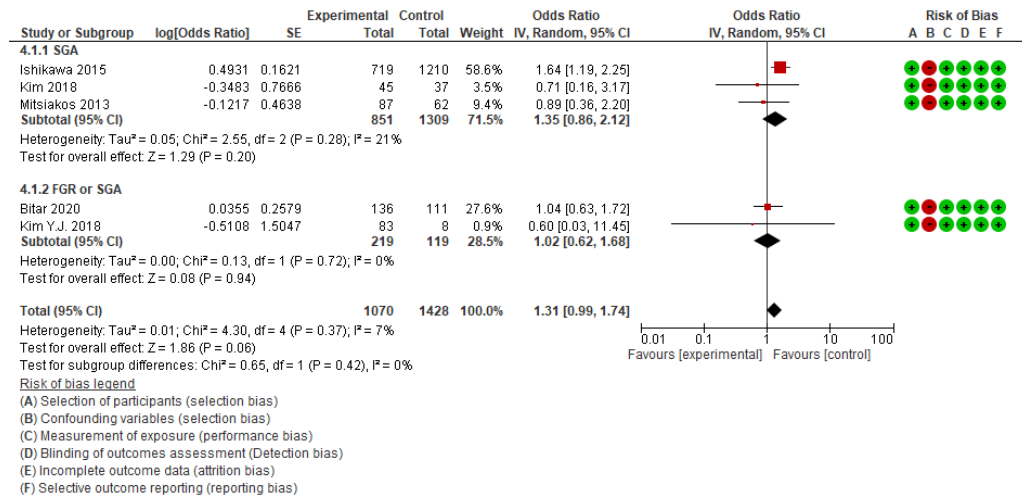
24) Pneumonia (HC)



SE: Standard error; CI: Confidence interval; HC: Histological chorioamnionitis

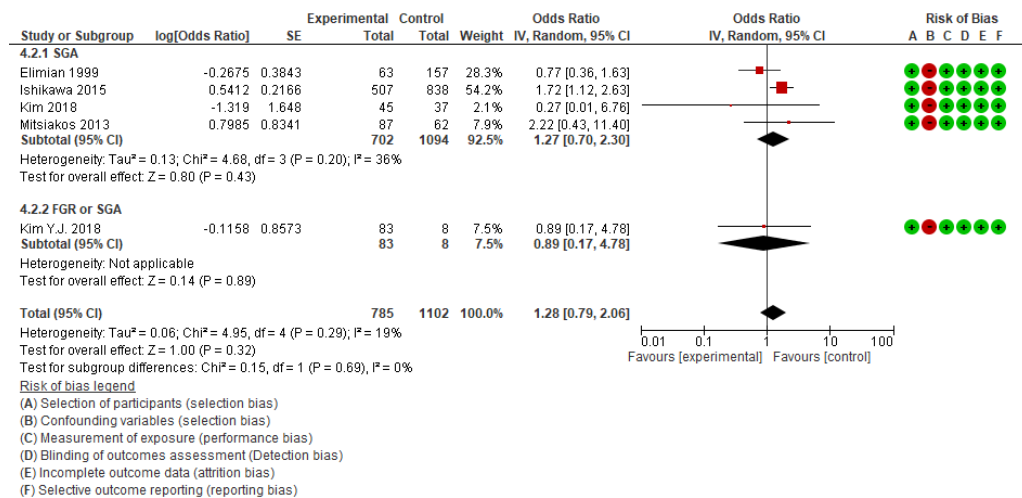
Maternal outcomes for women with growth-restricted fetuses and/or small-for-gestational age infants

1) Caesarean section



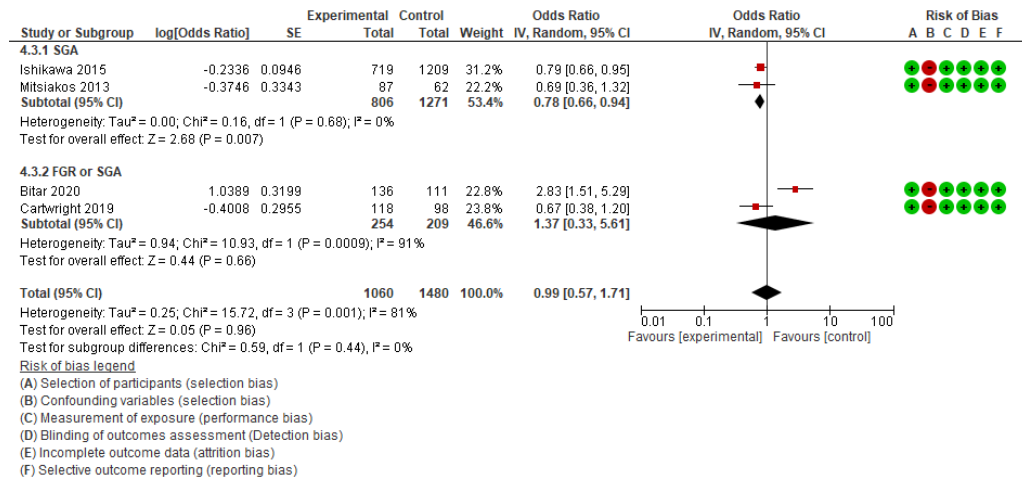
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

2) Chorioamnionitis (histologic and /or clinical)



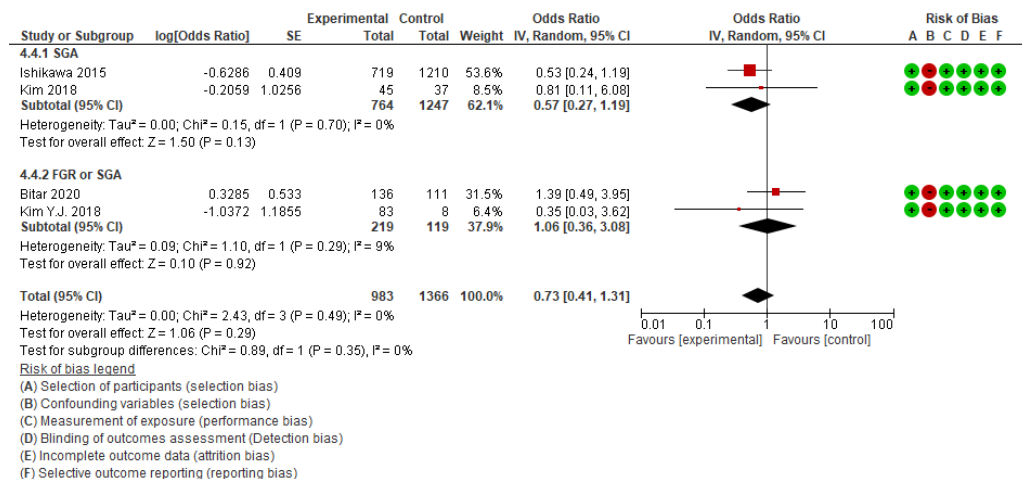
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

3) Preeclampsia.



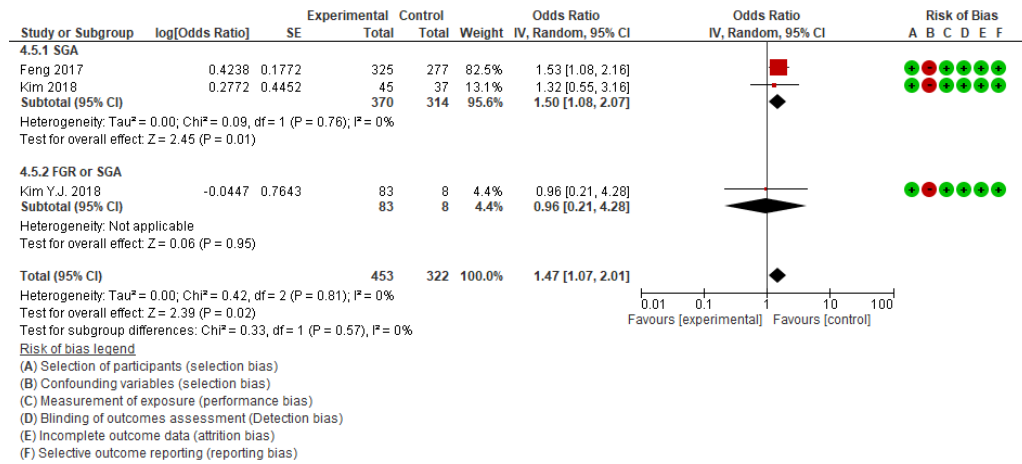
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

4) Gestational diabetes mellitus.



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

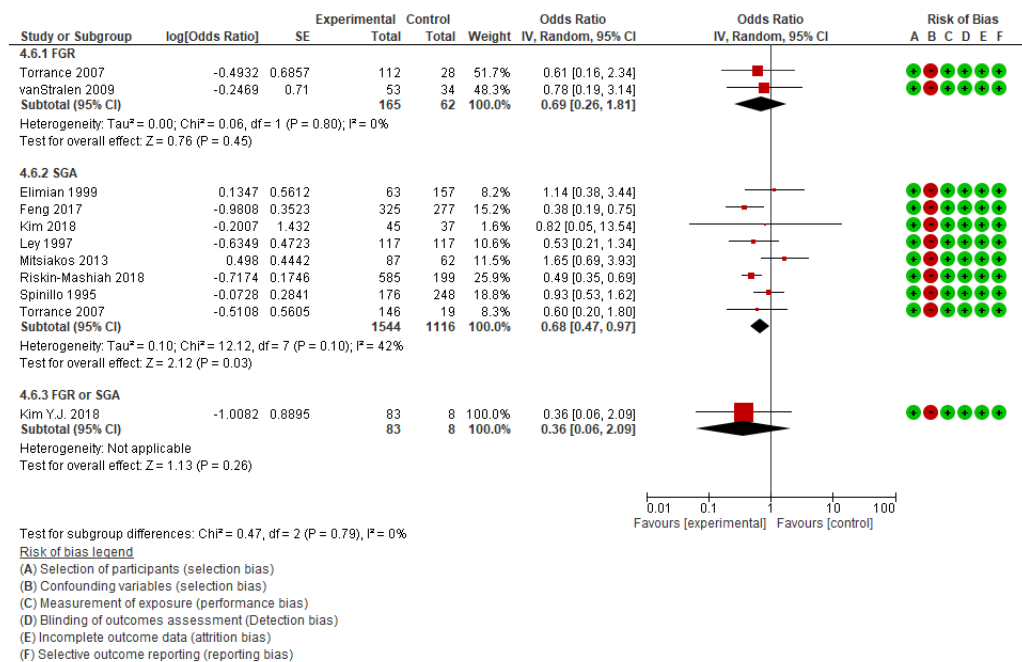
5) Pregnancy induced hypertension.



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

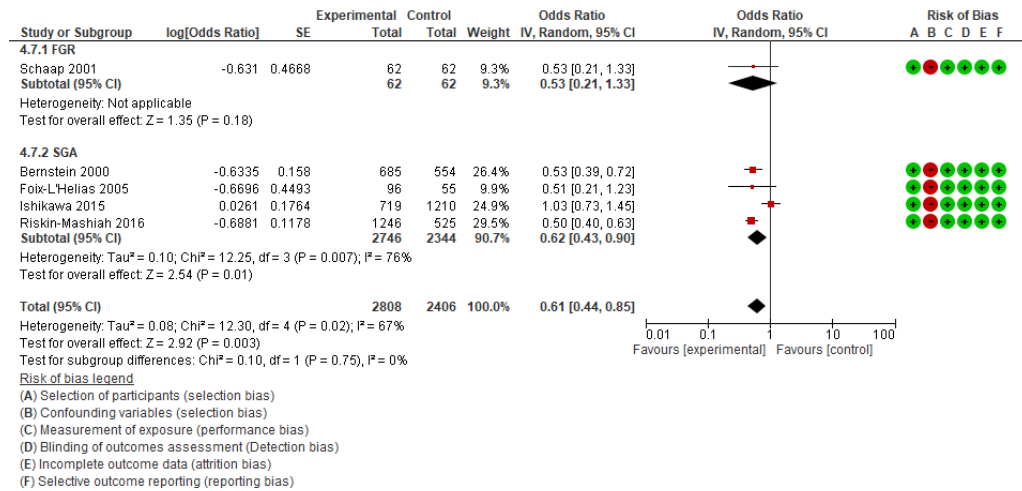
Neonatal outcomes for women with growth-restricted fetuses

1) Neonatal death



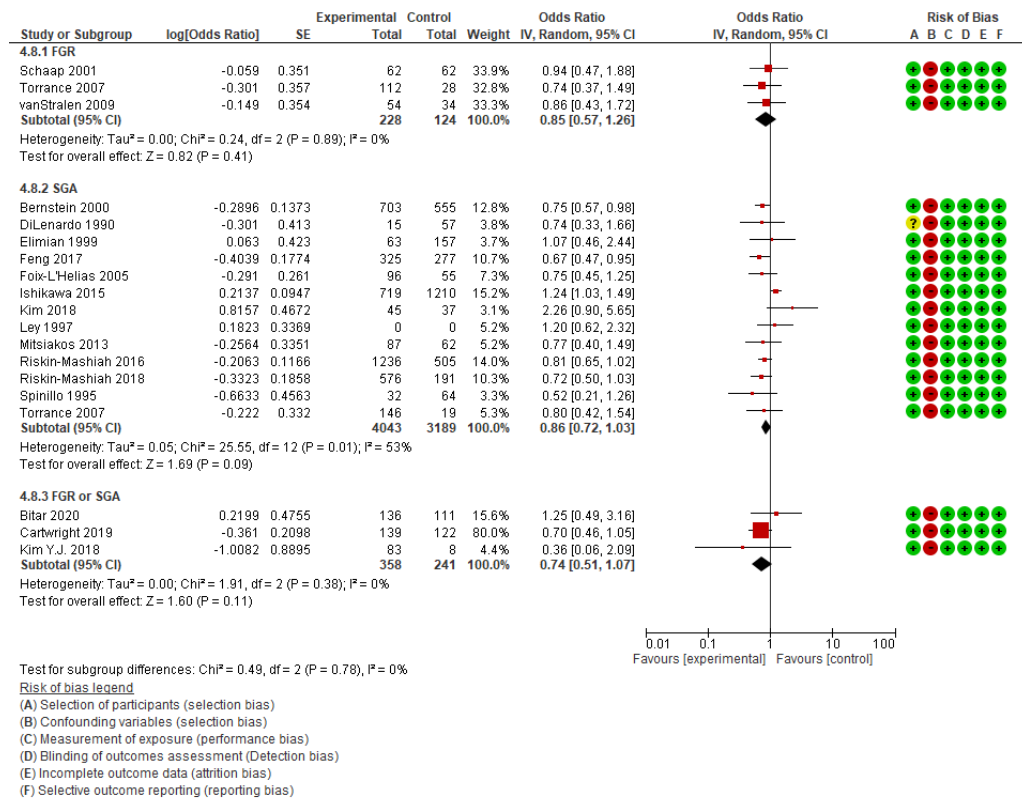
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

2) Death before discharge home



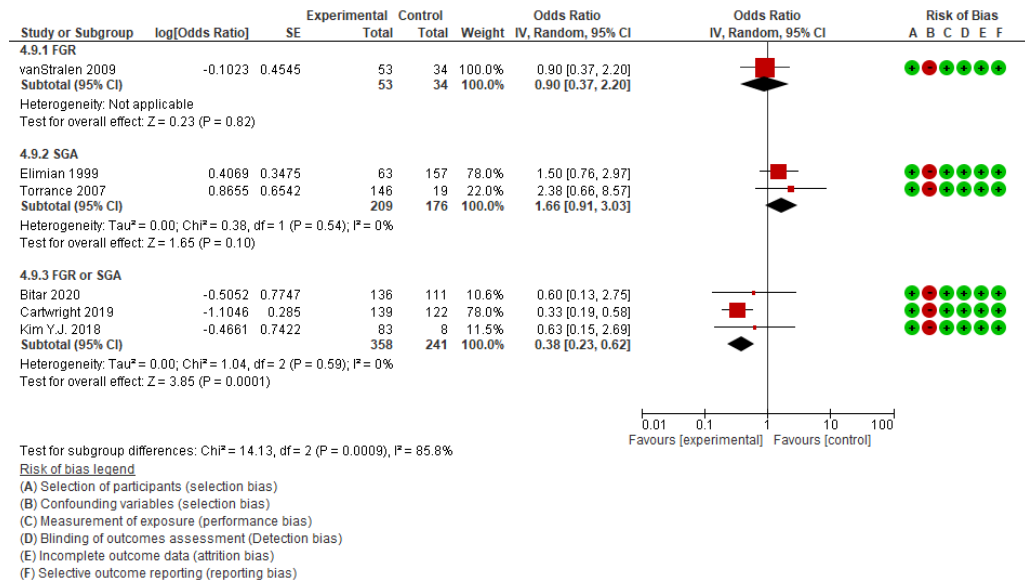
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

3) Respiratory distress syndrome (RDS) and moderate / severe RDS



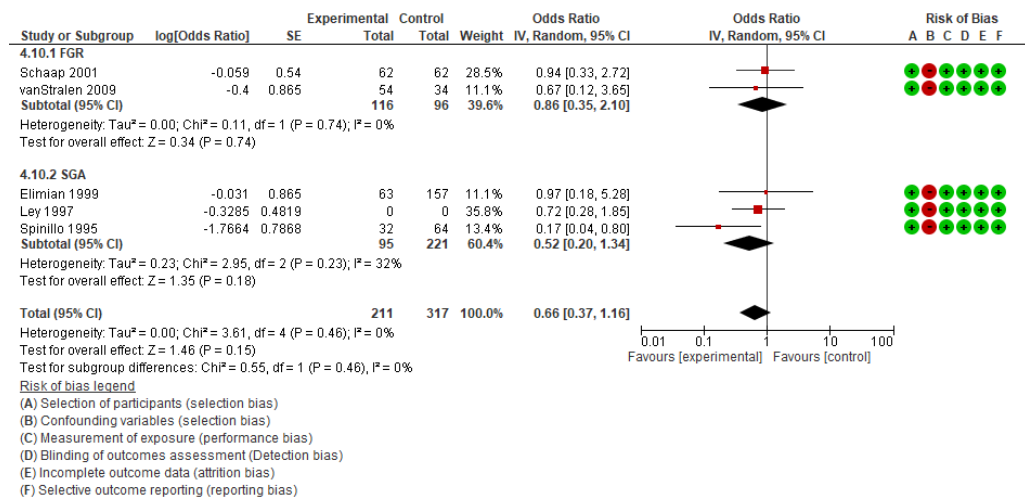
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

4) Surfactant use



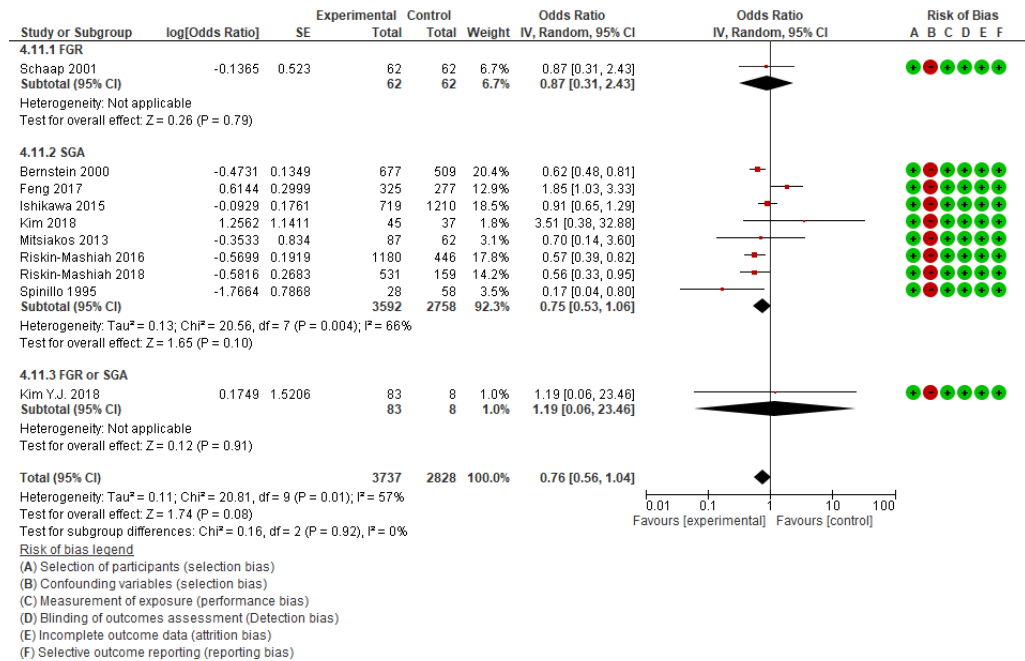
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

5) Major brain lesion (IVH, ICH, PVH, PVL)



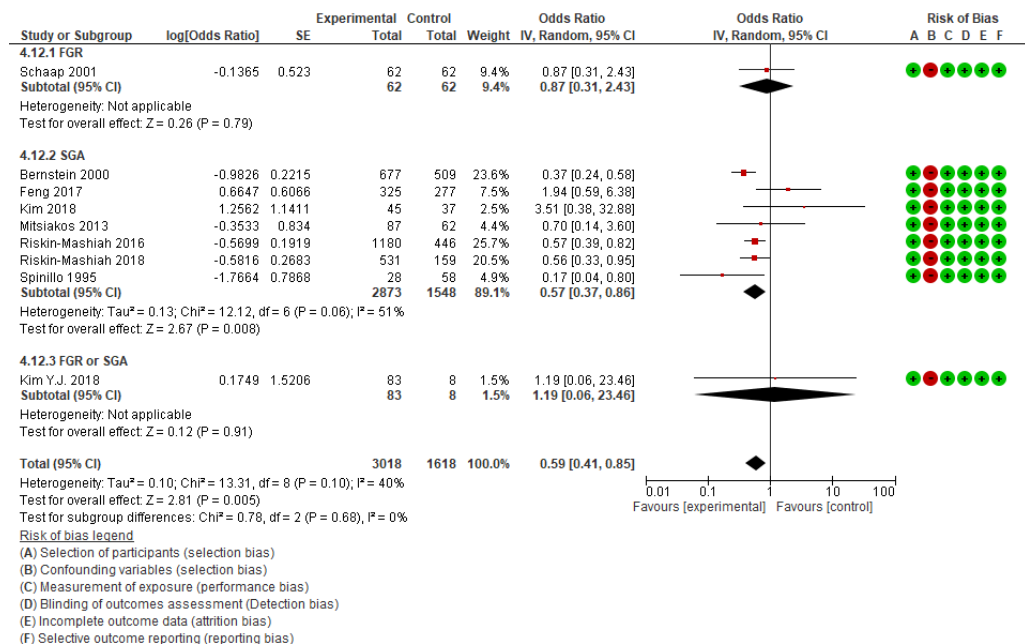
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

6) Interventricular haemorrhage



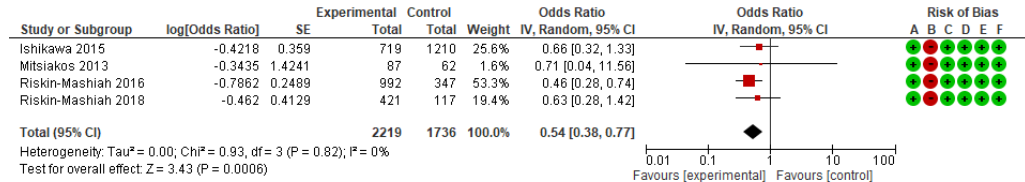
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

7) Severe interventricular haemorrhage (grade3-4)



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

8) Periventricular leukomalacia (SGA)

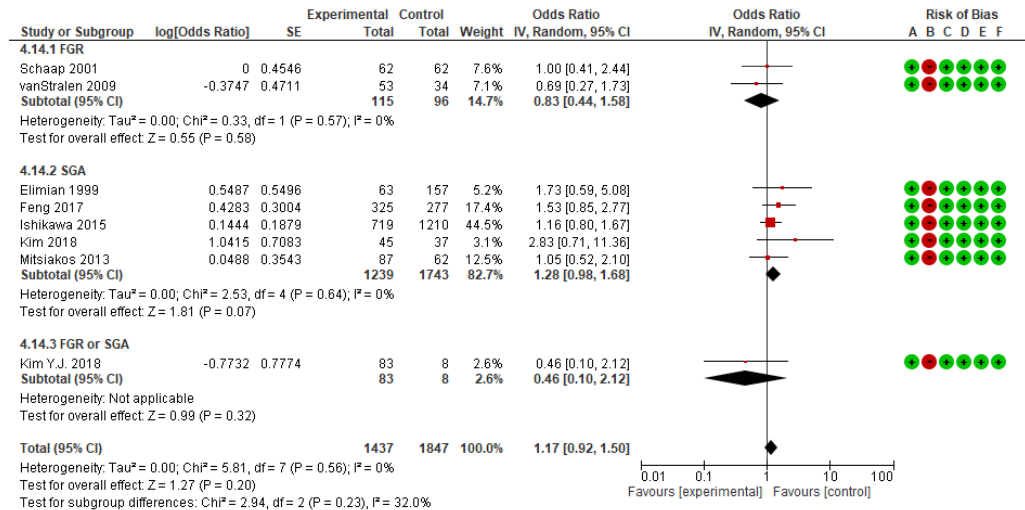


Risk of bias legend

- (A) Selection of participants (selection bias)
- (B) Confounding variables (selection bias)
- (C) Measurement of exposure (performance bias)
- (D) Blinding of outcomes assessment (Detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective outcome reporting (reporting bias)

SE: Standard error; CI: Confidence interval; SGA: Small for gestational age

9) Neonatal sepsis

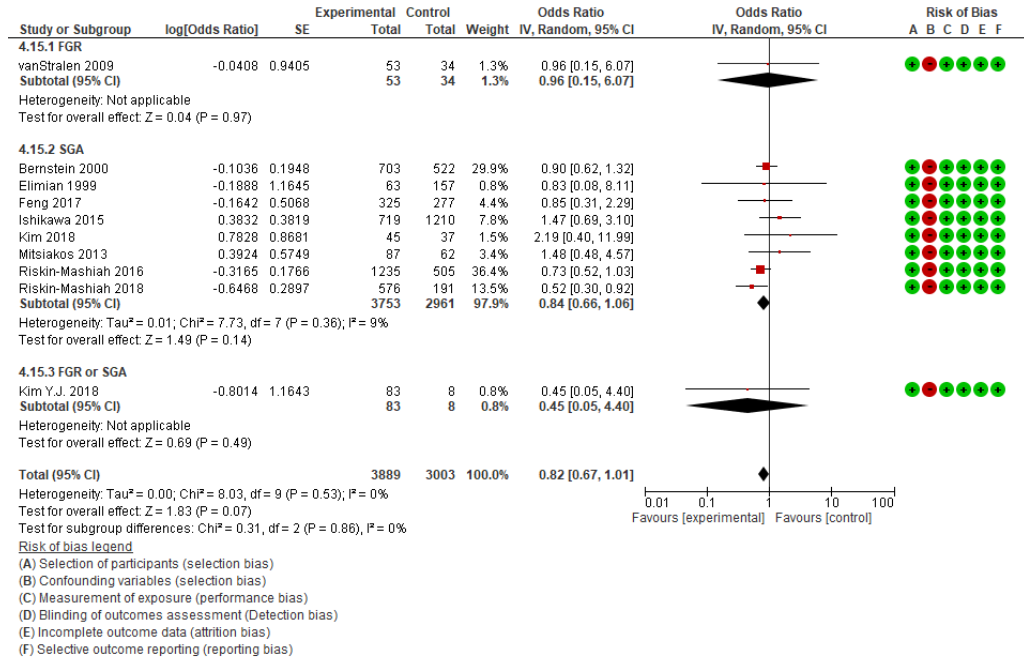


Risk of bias legend

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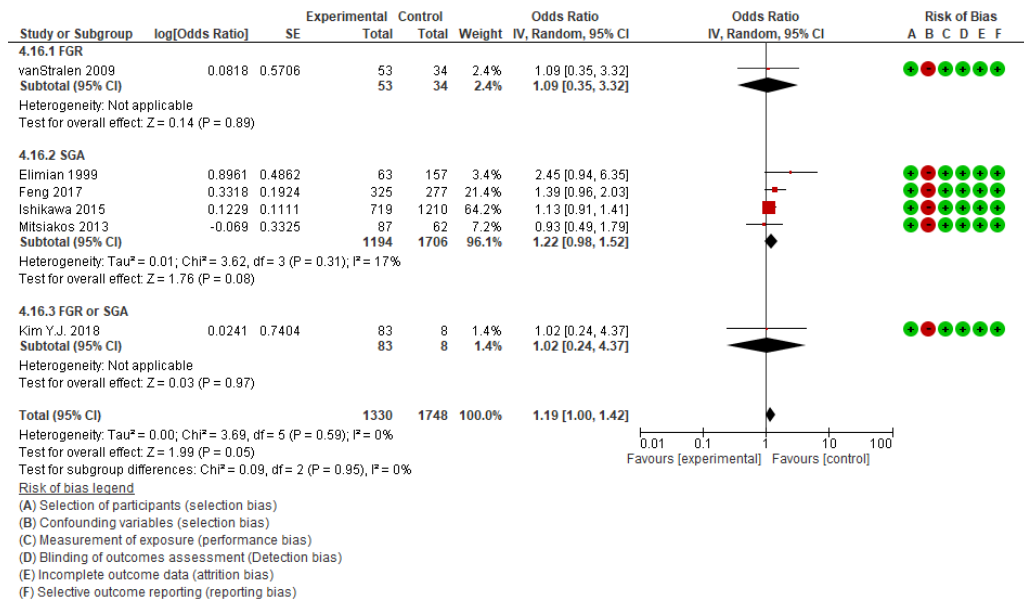
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

10) Necrotizing enterocolitis



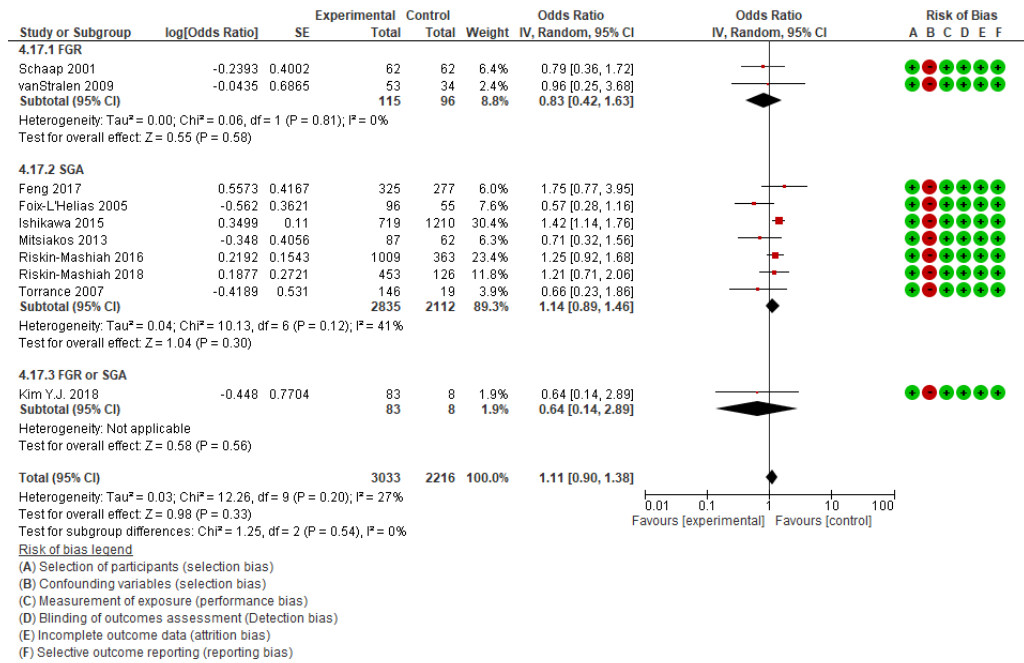
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

11) Patent ductus arteriosus



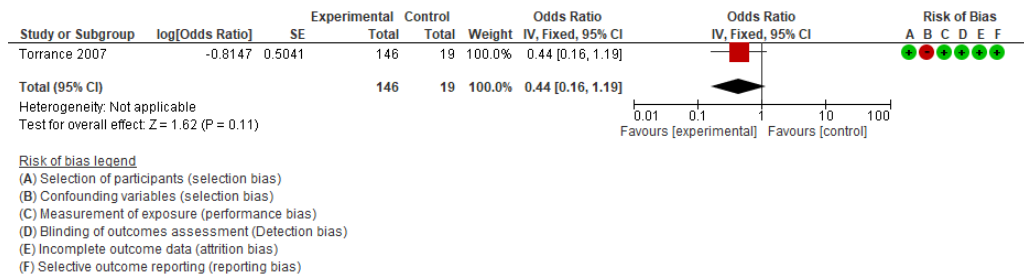
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

12) Chronic lung disease / bronchopulmonary dysplasia



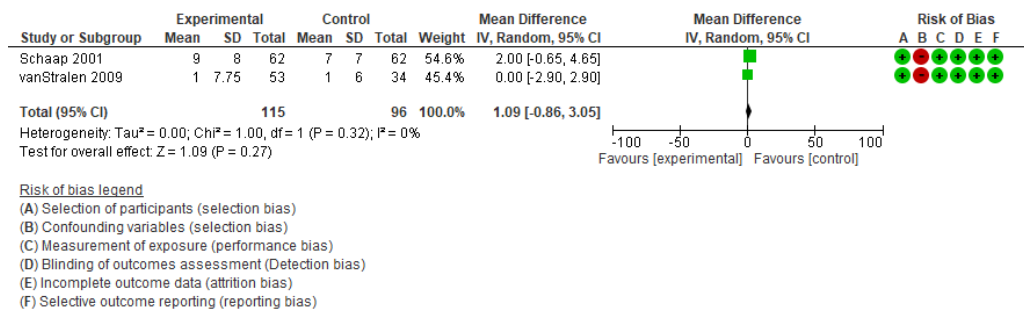
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

13) Small for gestational age (< 2.3rd percentile for gestational age) (SGA)



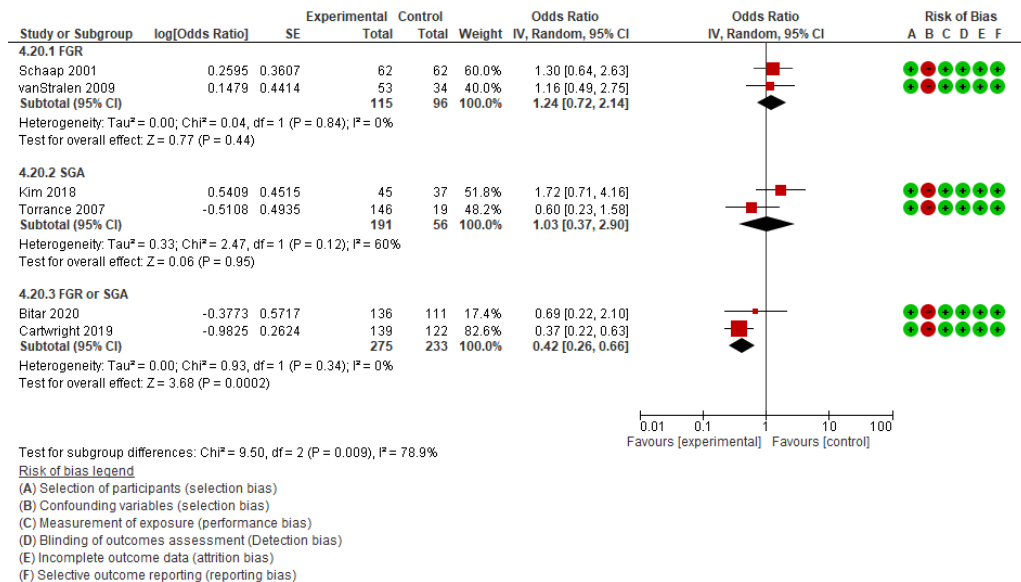
SE: Standard error; CI: Confidence interval

14) Duration of mechanical ventilation (FGR)



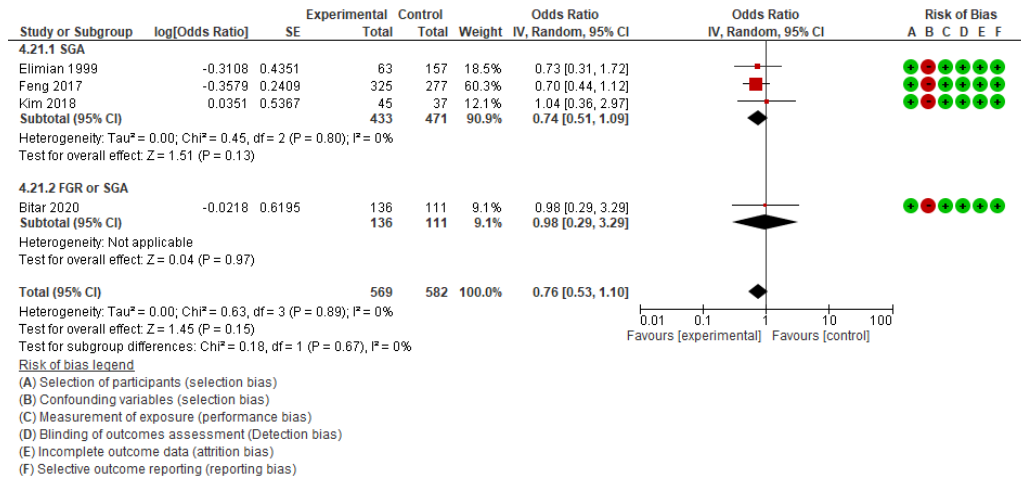
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction

15) Use of mechanical ventilation



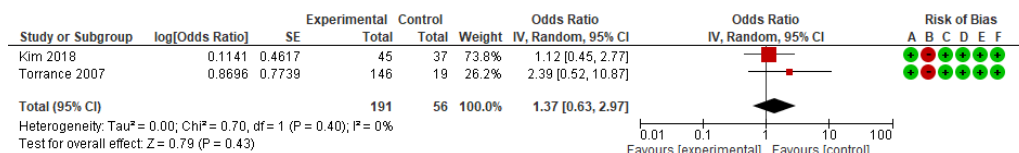
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

16) Apgar score < 7 at 5 minutes



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

17) Apgar score < 5 at 1 minute (SGA)

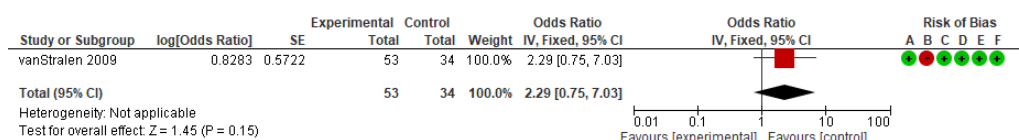


Risk of bias legend

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SE: Standard error; CI: Confidence interval; SGA: Small for gestational age

18) Hypotension (FGR)



Risk of bias legend

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SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction

19) Growth < 10th percentile in early childhood (FGR)

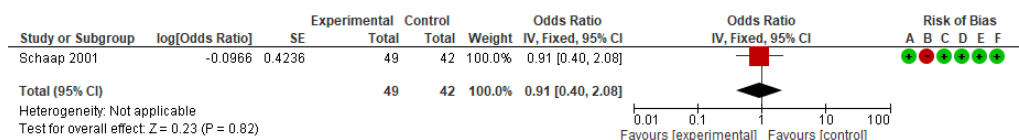


Risk of bias legend

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SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction

20) Abnormal behavior at long-term follow-up at school age (FGR)

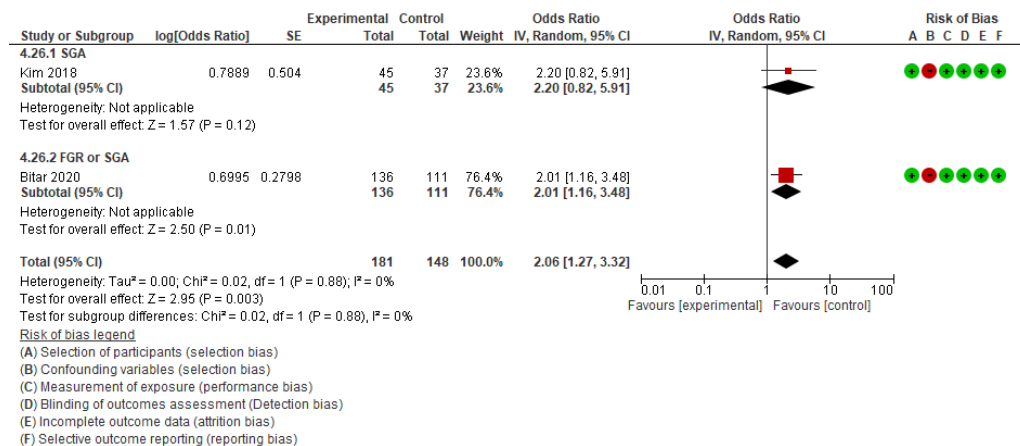


Risk of bias legend

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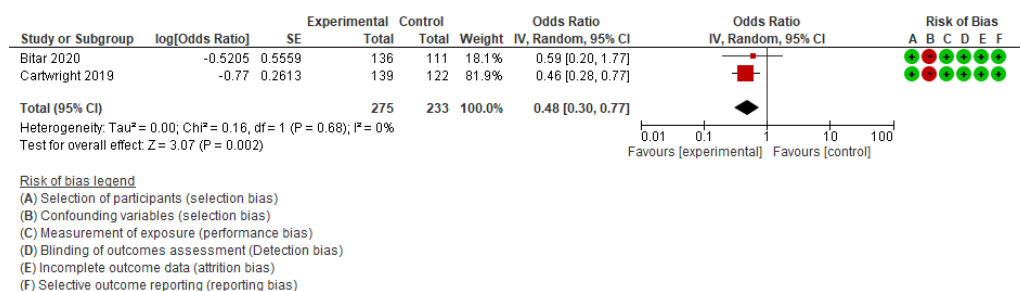
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction

21) Neonatal hypoglycemia



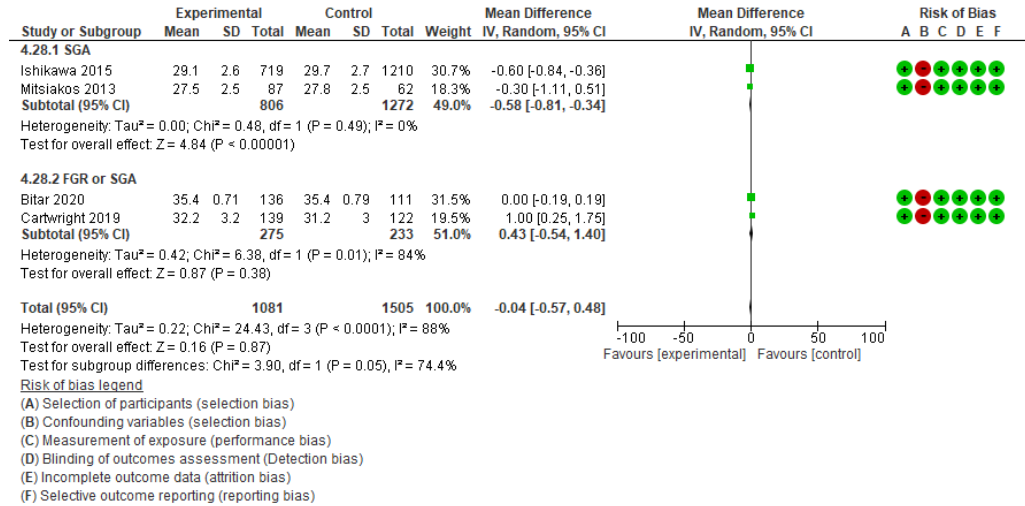
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

22) Oxygen therapy (FGR or SGA)



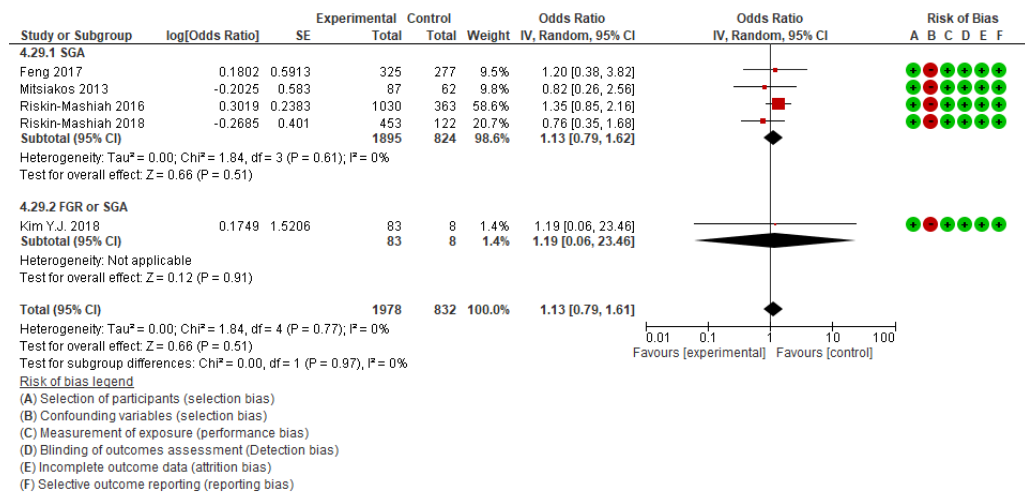
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

23) Gestational age at birth



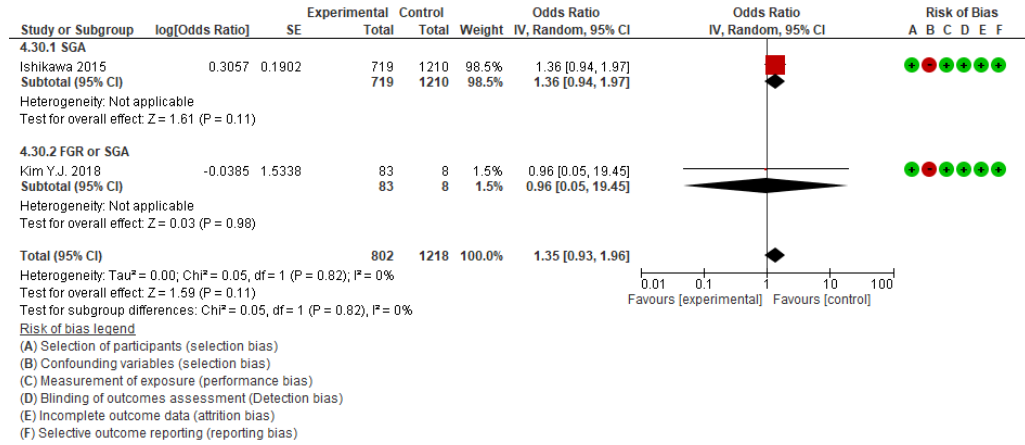
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

24) Retinopathy of prematurity



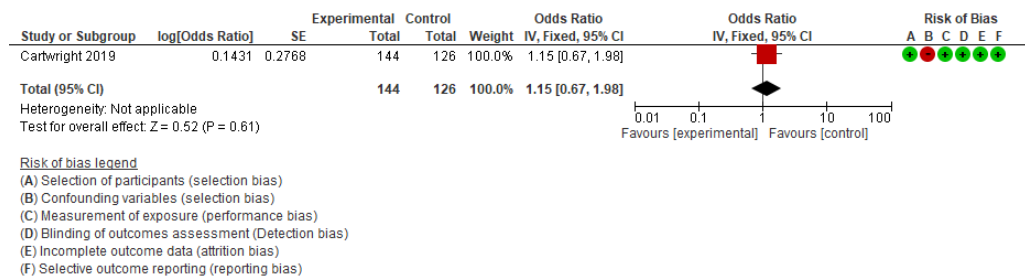
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

25) Neonatal adrenal insufficiency



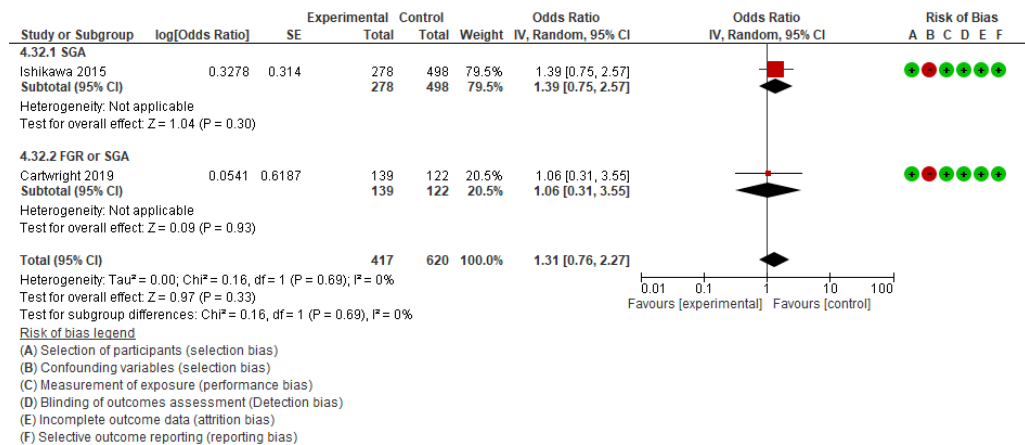
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

26) Survival free of disability (FGR or SGA)



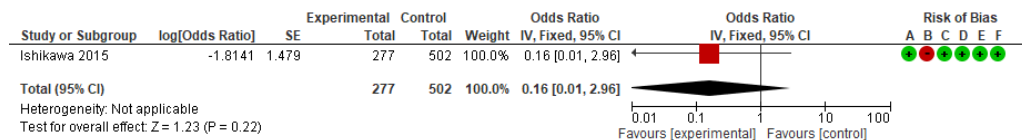
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

27) Cerebral palsy



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

28) Severe hearing impairment (SGA)

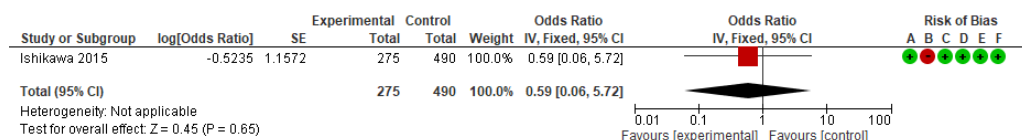


Risk of bias legend

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SE: Standard error; CI: Confidence interval; SGA: Small for gestational age

29) Visual impairment (SGA)

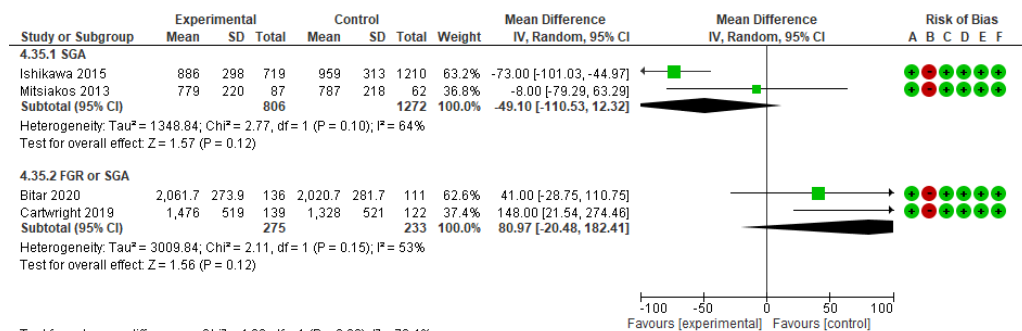


Risk of bias legend

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SE: Standard error; CI: Confidence interval; SGA: Small for gestational age

30) Birth weight

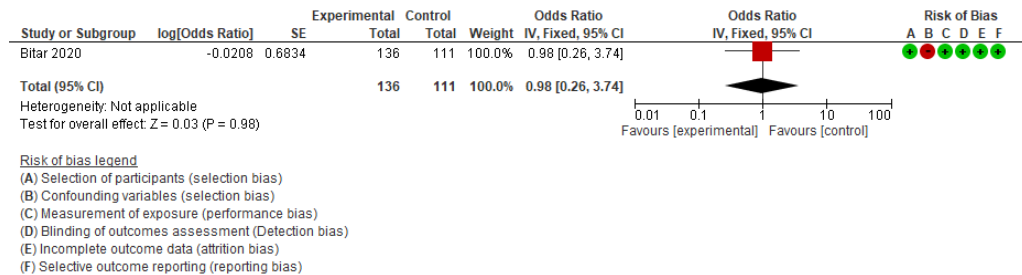


Risk of bias legend

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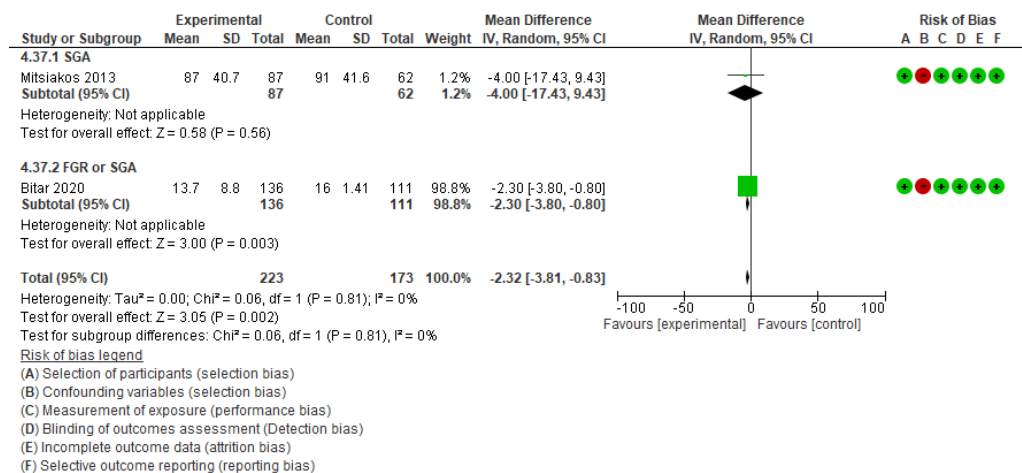
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

31) Admission to neonatal intensive care unit (FGR or SGA)



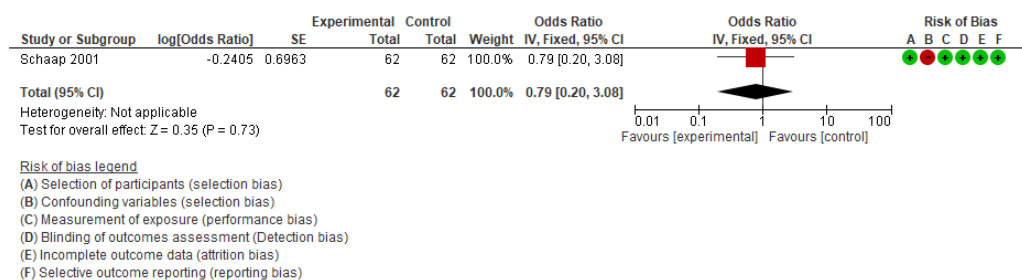
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

32) Duration of hospital stay



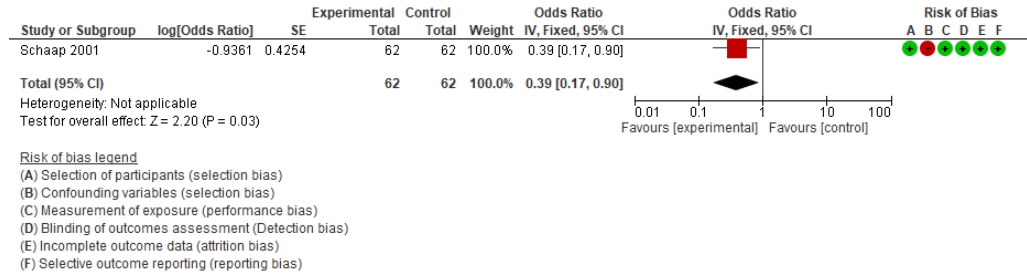
SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction; SGA: Small for gestational age

33) Death at long-term follow-up (school age) (FGR)



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction

34) Death or disability/handicap at 2yrs' corrected age (FGR)



SE: Standard error; CI: Confidence interval; FGR: Fetus growth restriction