

Supplementary Material

Supplementary Table 1. Primary & secondary outcomes to be extracted/ requested for included studies

<ul style="list-style-type: none">• Maternal / birth outcomes<ul style="list-style-type: none">○ Primary: maternal glycaemic control (glucose, insulin, and glycosylated haemoglobin [HbA1c], and incidence of hyper/hypoglycaemia) + incidence of GDM in women without GDM○ gestational weight gain○ preterm birth (iatrogenic or spontaneous)○ pregnancy-induced hypertension, pre-eclampsia, and eclampsia○ mode of birth (spontaneous vaginal, instrumental, caesarean section)○ maternal satisfaction with experience of pregnancy and birth○ maternal death○ maternal obstetric complications (haemorrhage, infection, thrombosis, admission to intensive care unit, incontinence, perineal trauma)○ maternal adverse events or side effects (gastrointestinal disturbance, vomiting)○ maternal diabetic complications: diabetic ketoacidosis (DKA), retinopathy, nephropathy, macrovascular disease○ development of type 2 diabetes during pregnancy or postpartum
<ul style="list-style-type: none">• Neonatal outcomes<ul style="list-style-type: none">○ Primary: hypoglycaemia, birthweight (and birthweight centile), birth length, head circumference, and gestational age at delivery○ cord-blood insulin, glucose, and C-peptide○ miscarriage, stillbirth, neonatal or infant death○ congenital malformation○ macrosomia, small for gestational age (SGA), low birthweight○ shoulder dystocia, birth trauma (bone fracture, nerve palsy)○ admission and length of stay at different levels of care including neonatal intensive care unit, high-dependency unit, special care unit or transitional care unit○ Apgar score <7 at 5 min○ respiratory distress, sepsis, transient heart failure, resuscitation, jaundice, hypocalcaemia, polycythaemia, hypoxic ischaemic encephalopathy, impairment of neurodevelopment.○ long term infant child outcomes (neurodevelopment/ cognitive, anthropometric, etc)

Supplementary Table 2. Sample search strategy for OVID Medline

1. metformin/	51. randomly.ti,ab.
2. metformin.mp.	52. trial.ti.
3. metformin hydrochloride.mp.	53. or/46-52
4. metformin HCL.mp.	54. exp animals/ not exp humans/
5. hypoglycemic?.mp.	55. 53 not 54
6. hypoglycaemic?.mp.	56. Meta-Analysis as Topic/
7. anti?diabetic?.mp.	57. meta analy\$.tw.
8. antihyperglycemic?.mp.	58. metaanaly\$.tw.
9. antihyperglycaemic?.mp.	59. Meta-Analysis/
10. glucose?lowering.mp.	60. (systematic adj (review\$1 or overview\$1)).tw.
11. dimethylbiguanidine.mp.	61. exp Review Literature as Topic/
12. dimethylguanylguanidine.mp.	62. or/56-61
13. glucophage.mp.	63. cochrane.ab.
14. biguanide?.mp.	64. embase.ab.
15. buformin.mp.	65. (psychlit or psyclit).ab.
16. phenformin.mp.	66. (psychinfo or psycinfo).ab.
17. sitagliptin.mp.	67. (cinahl or cinhal).ab.
18. glumetza.mp.	68. science citation index.ab.
19. carbophage.mp.	69. bids.ab.
20. obimet.mp.	70. cancerlit.ab.
21. glufornin.mp.	71. or/63-70
22. dianben.mp.	72. reference list\$.ab.
23. diabex.mp.	73. bibliograph\$.ab.
24. diaformin.mp.	74. hand-search\$.ab.
25. siofor.mp.	75. relevant journals.ab.
26. metfogamma.mp.	76. manual search\$.ab.
27. glifor.mp.	77. or/72-76
28. riomet.mp.	78. selection criteria.ab.
29. janumet.mp.	79. data extraction.ab.
30. fortamet.mp.	80. 78 or 79
31. obimet.mp.	81. Review/
32. pregnancy.mp.	82. 80 and 81
33. pregnan?.mp.	83. Comment/
34. reproductive.mp.	84. Letter/
35. maternal.mp.	85. Editorial/
36. neonatal.mp.	86. animal/
37. gestation?.mp.	87. human/
38. infant.mp.	88. 86 not (86 and 87)
39. offspring.mp.	89. or/83-85,88
40. f?etal.mp.	90. 62 or 71 or 77 or 82
41. neonat?.mp.	91. 90 not 89
42. ?natal.mp.	92. 53 or 91
43. gestational diabetes.mp.	93. 45 and 92
44. GDM.mp.	94. limit 93 to humans
45. or/1-44	95. or/1-31
46. randomi?ed controlled trial.pt.	96. or/32-44
47. controlled clinical trial.pt.	97. 95 and 96
48. randomi?ed.ti,ab.	98. 92 and 97
49. placebo.ti,ab.	99. limit 98 to humans
50. clinical trials as topic.sh.	