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Which method is best for the induction of labour? A systematic review, network meta-analysis and cost-effectiveness analysis

Zarko Alfirevic, Edna Keeney, Therese Dowswell, Nicky J Welton, Nancy Medley, Sofia Dias, Leanne V Jones, Gillian Gyte and Deborah M Caldwell

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Which method is best for the induction of labour? A systematic review, network meta-analysis and cost-effectiveness analysis

Zarko Alfirevic,[1]* Edna Keeney,[2] Therese Dowswell,[1] Nicky J Welton,[2] Nancy Medley,[1] Sofia Dias,[2] Leanne V Jones,[1] Gillian Gyte[1] and Deborah M Caldwell[2]

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Abstract

Which method is best for the induction of labour? A systematic review, network meta-analysis and cost-effectiveness analysis

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Background: More than 150,000 pregnant women in England and Wales have their labour induced each year. Multiple pharmacological, mechanical and complementary methods are available to induce labour.

Objective: To assess the relative effectiveness, safety and cost-effectiveness of labour induction methods and, data permitting, effects in different clinical subgroups.

Methods: We carried out a systematic review using Cochrane methods. The Cochrane Pregnancy and Childbirth Group's Trials Register was searched (March 2014). This contains over 22,000 reports of controlled trials (published from 1923 onwards) retrieved from weekly searches of OVID MEDLINE (1966 to current); Cochrane Central Register of Controlled Trials (The Cochrane Library); EMBASE (1982 to current); Cumulative Index to Nursing and Allied Health Literature (1984 to current); ClinicalTrials.gov; the World Health Organization International Clinical Trials Registry Portal; and hand-searching of relevant conference proceedings and journals. We included randomised controlled trials examining interventions to induce labour compared with placebo, no treatment or other interventions in women eligible for third-trimester induction. We included outcomes relating to efficacy, safety and acceptability to women. In addition, for the economic analysis we searched the Database of Abstracts of Reviews of Effects, and Economic Evaluations Databases, NHS Economic Evaluation Database and the Health Technology Assessment database. We carried out a network meta-analysis (NMA) using all of the available evidence, both direct and indirect, to produce estimates of the relative effects of each treatment compared with others in a network. We developed a de novo decision tree model to estimate the cost-effectiveness of various methods. The costs included were the intervention and other hospital costs incurred (price year 2012–13). We reviewed the literature to identify preference-based utilities for the health-related outcomes in the model. We calculated incremental cost-effectiveness ratios, expected costs, utilities and net benefit. We represent uncertainty in the optimal intervention using cost-effectiveness acceptability curves.

Results: We identified 1190 studies; 611 were eligible for inclusion. The interventions most likely to achieve vaginal delivery (VD) within 24 hours were intravenous oxytocin with amniotomy [posterior rank 2; 95% credible intervals (CrIs) 1 to 9] and higher-dose (≥ 50 µg) vaginal misoprostol (rank 3; 95% CrI 1 to 6). Compared with placebo, several treatments reduced the odds of caesarean section, but we observed considerable uncertainty in treatment rankings. For uterine hyperstimulation, double-balloon catheter had the highest probability of being among the best three treatments, whereas vaginal misoprostol (≥ 50 µg) was most likely to increase the odds of excessive uterine activity. For other safety outcomes there were

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insufficient data or there was too much uncertainty to identify which treatments performed 'best'. Few studies collected information on women's views. Owing to incomplete reporting of the VD within 24 hours outcome, the cost-effectiveness analysis could compare only 20 interventions. The analysis suggested that most interventions have similar utility and differ mainly in cost. With a caveat of considerable uncertainty, titrated (low-dose) misoprostol solution and buccal/sublingual misoprostol had the highest likelihood of being cost-effective.

Limitations: There was considerable uncertainty in findings and there were insufficient data for some planned subgroup analyses.

Conclusions: Overall, misoprostol and oxytocin with amniotomy (for women with favourable cervix) is more successful than other agents in achieving VD within 24 hours. The ranking according to safety of different methods was less clear. The cost-effectiveness analysis suggested that titrated (low-dose) oral misoprostol solution resulted in the highest utility, whereas buccal/sublingual misoprostol had the lowest cost. There was a high degree of uncertainty as to the most cost-effective intervention.

Future work: Future trials should be powered to detect a method that is more cost-effective than misoprostol solution and report outcomes included in this NMA.

Study registration: This study is registered as PROSPERO CRD42013005116.

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Glossary

Amniotomy Surgical rupture of the amniotic membranes.

Apgar score A scoring system (0–10) to describe the condition of the newborn. A score > 7 at 5 minutes after the birth suggests that the infant is in a good condition.

Bishop score A scoring system to measure changes in the cervix (cervical length and dilatation); a Bishop score < 6 is often referred to as an unripe cervix (unfavourable), whereas ≥ 6 is referred to as a ripe cervix (favourable).

Catheter A length of rubberised tubing with an inflatable balloon to anchor the tubing in place. Urinary catheters are used to drain urine from the bladder (a Foley catheter is a type of urinary catheter). A catheter can be passed through the cervical canal and small balloon(s) is (are) inflated with sterile solution to hold the catheter in place. Catheters used for the induction of labour may have a single balloon (e.g. Foley catheter) or specially designed catheters with two balloons can be used.

Cluster randomised trial A type of randomised trial in which groups rather than individual participants are randomised to intervention or control.

Cochrane Collaboration International not-for-profit organisation preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health-care interventions.

Consistency The fundamental assumption underpinning a network meta-analysis. The assumption is also known as transitivity and states that (the benefit of A over B) is equal to (the benefit of A over C) minus (the benefit of B over C). Consistency suggests that the sets of studies used to obtain the indirect comparison are sufficiently similar in characteristics that potentially moderate the intervention effect.

Direct comparison A comparison of two or more interventions made within a study.

Direct evidence Evidence on the relative effects of interventions derived entirely from direct comparisons.

Expectant management Care that involves a period of observation rather than immediate intervention. In the context of planned induction of labour, this would give time to allow for the spontaneous onset of labour.

Gestational age The length of the pregnancy from the date of the last menstrual period; gestational age is usually recorded in weeks plus days.

Indirect comparison A comparison of two interventions via one or more common comparator. For example, the combination of intervention effects from AB and intervention effects from BC studies may (in some situations) be used to learn about the intervention effect AC.

Indirect evidence Evidence on the relative effectiveness of two interventions derived entirely from indirect comparisons. Indirect evidence may be available via more than one intermediate comparator.

Induction of labour Interventions (pharmacological, mechanical, complementary or alternative) to artificially stimulate the start of labour.

Intra Into (e.g. intravaginal, intracervical; when drugs are introduced into the vagina or cervical canal).

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Laminaria Devices that can be introduced into the cervical canal, which expand to stimulate cervical dilatation.

Membrane sweep Membrane sweeping or stripping involves the midwife or doctor detaching the amniotic membranes from the lower section of the uterus by a circular movement of an examining finger; this has been used to stimulate labour.

Meta-analysis Synthesis (pooling) of data from more than one study to estimate an overall result.

Network diagram A graphical depiction of how each intervention is connected to the others through direct comparisons. Each line, or edge, depicts a direct comparison between two intervention nodes.

Network meta-analysis The simultaneous comparison of multiple competing treatments in a single statistical analysis (also known as a mixed-treatment comparison). The method uses both direct and indirect evidence to estimate the relative effects of each treatment compared with all others in the network, even though some treatments may not have been directly compared with each other in trials.

Nitric oxide donors Chemicals produced by the body that have a role in many functions. Commercially produced nitric oxide donors are used to stimulate changes in the cervix as part of induction of labour. Types of nitric oxide donors include isosorbide mononitrate, isosorbide dinitrate, nitroglycerin and sodium nitroprusside.

Oxytocin A hormone produced by the body that has an important role in childbirth. Commercially manufactured oxytocin is used in the induction of labour to stimulate cervical dilatation and uterine contractions.

Parity Relates to the number of times a woman has given birth. A nulliparous woman has not given birth before; a multiparous woman has given birth at least once before.

Post term A pregnancy continuing beyond 41^{+0} weeks (also known as post dates).

Preterm birth Birth before 37^{+0} weeks of pregnancy.

Prostaglandin E_1 A type of Q4 prostaglandin (misoprostol is a synthetic analogue of PGE_1 used in the induction of labour).

Prostaglandin E_2 A type of prostaglandin used in the induction of labour (dinoprostone).

Prostaglandin F_2 A type of prostaglandin used in the induction of labour.

Prostaglandin F_2 alpha A naturally occurring prostaglandin, pharmaceutically termed **dinoprost**, used in medicine to induce labour and as an abortifacient.

Prostaglandins Hormones produced by the body, which are important in the onset of labour; synthetically manufactured prostaglandins can be used to start labour.

Rankogram A two-dimensional treatment-specific plot, presenting on the horizontal axis the possible ranks of the treatment and on the vertical axis the probability for the treatment to assume each of the possible ranks according to a specific outcome.

Systematic review A review of literature focused on a research question that uses prespecified methods to identify, evaluate, select and synthesise research evidence. A systematic review may include meta-analysis.

Transitivity See *Consistency*.

Uterine hyperstimulation Contractions of the uterus that are too strong, too long or too frequent. Uterine hyperstimulation can result in changes in the fetal heart rate (uterine hyperstimulation syndrome).

Uterine hypersystole Uterine contractions that are too strong.

Uterine tachysystole Uterine contractions that are too frequent.

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List of abbreviations

CCT	clinical controlled trial
CEAC	cost-effectiveness acceptability curve
CENTRAL	Cochrane Central Register of Controlled Trials
CPCG	Cochrane Pregnancy and Childbirth Group
CrI	credible interval
CS	caesarean section
DIC	deviance information criterion
EQ-5D™	European Quality of Life-5 Dimensions
EVPI	expected value of perfect information
EVPPI	expected value of partial perfect information
FHR	fetal heart rate
HIV	human immunodeficiency virus
HTA	Health Technology Assessment
ICER	incremental cost-effectiveness ratio
ICU	intensive care unit
ISMN	isosorbide mononitrate
i.v.	intravenous
MCMC	Markov chain Monte Carlo
NHS EED	NHS Economic Evaluation Database
NICE	National Institute for Health and Care Excellence
NICU	neonatal intensive care unit
NMA	network meta-analysis
NO	nitric oxide
OR	odds ratio
PGE_1	prostaglandin E_1
PGE_2	prostaglandin E_2
PGF_2	prostaglandin F_2
$PGF_2\alpha$	prostaglandin F_2 alpha
PICO	population, intervention and relevant comparators, outcomes
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PROM	prelabour rupture of the amniotic membranes
QALY	quality-adjusted life-year
RCT	randomised controlled trial
RE	random effect
SD	standard deviation
VAS	visual analogue scale
VD	vaginal delivery
VD24	vaginal delivery within 24 hours
VD > 24	vaginal delivery after 24 hours

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Plain English summary

More than 150,000 pregnant women in England and Wales have their labours induced each year. Multiple pharmacological, non-pharmacological, mechanical and complementary methods are available to induce labour. As the number of women facing induction increases, and as new evidence from trials emerges, it has become urgent to address questions about which methods of inducing labour are most effective, cost-effective, safe and acceptable to women.

We carried out a systematic review, network meta-analysis (NMA) and cost-effectiveness analysis to look at all the evidence on different methods for inducing labour. NMA produces estimates for each treatment compared with every other in a network, even though some pairs may not have been directly compared.

We included 611 trials in the review. Results suggest that oxytocin with amniotomy and misoprostol are more successful than other methods in achieving vaginal delivery within 24 hours. The safety profile of different methods in terms of risk of caesarean section, instrumental delivery, too-strong uterine contractions, admission to neonatal care unit and Apgar score < 7 at 5 minutes was less clear.

In the cost-effectiveness analysis, titrated (low-dose) oral misoprostol solution had the best outcomes for mothers and babies, whereas buccal/sublingual misoprostol had the lowest cost to the UK NHS. Uncertainty in our findings suggests further research is warranted to find better, safer and cheaper methods. We urge researchers to explore women's views of the process as part of any future trial, report outcomes completely, and measure the impact from the perspective of the mother and baby.

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Scientific summary

Background

More than 150,000 pregnant women in England and Wales will have their labours induced each year. There are multiple pharmacological, non-pharmacological, mechanical and complementary methods available to induce labour. Different induction methods have advantages and disadvantages; they vary in effectiveness, safety and cost. We carried out a systematic review, network meta-analysis (NMA) and cost-effectiveness analysis to identify the best method for induction of labour. Findings have implications for women, clinicians and the UK NHS.

Objectives

To assess the effectiveness and safety of a range of induction methods to determine which method (or methods) achieves the best outcomes by providing a quantitative summary of the evidence on the relative effects of different methods; to develop a decision model to evaluate the cost-effectiveness of the different methods for induction; and if evidence is available, to explore effectiveness and cost-effectiveness in different clinical subgroups [with intact or ruptured membranes, at different gestational ages, in women following a previous caesarean section (CS) and with low (< 6) or higher Bishop scores].

Methods

We carried out a systematic review using Cochrane methods. The search was carried out by an information specialist using a predefined strategy. The final search date was March 2014. Two reviewers independently assessed all reports identified by the search for eligibility for inclusion. Studies were included if they were randomised controlled trials (RCTs) examining interventions to induce labour compared with placebo, no treatment or other interventions. Participants were women who were eligible for third-trimester induction of labour. We focused on key outcomes relating to efficacy, safety and acceptability of the method to women: vaginal delivery (VD) not achieved within 24 hours; uterine hyperstimulation with fetal heart rate (FHR) changes; CS; serious neonatal morbidity or death; serious maternal morbidity or death; instrumental delivery; maternal satisfaction with the method used; neonatal intensive care unit admission; Apgar score < 7 at 5 minutes.

We extracted data on the type of intervention and, when appropriate, dose and route of administration. We assessed risk of bias as high, low or unclear, based on the method used to conceal allocation. We noted whether or not the method was used in hospital (inpatient) or outpatient settings. We recorded information on characteristics of participants, including gestational age, parity, previous CS, state of amniotic membranes and Bishop score.

For key outcomes we carried out a NMA. The method uses all of the available evidence, both direct and indirect, to produce estimates of the relative effects of each treatment compared with every other in a network, even though some pairs may not have been directly compared. This method allows the relative effects of a range of treatments to be compared for the outcome of interest.

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We developed a de novo decision tree model to estimate the cost-effectiveness of various methods for the induction of labour using the data obtained from the systematic review and NMA. We adapted the NMA to account for multiple outcomes to inform probabilities for all of the outcomes and interventions in the model. This was done using Bayesian Markov chain Monte Carlo simulation, so that all correlations and uncertainties were fully reflected in the estimates. The costs included in the economic analysis were the intervention costs, costs of method of delivery, and length of neonatal stay in level I, II or III units. The price year was 2012–13. We attributed a utility score to each of the outcomes in our model, which represents the strength of preferences for a set of health-related outcomes, where utility scores take values of between 0 and 1, with '1' representing perfect health. We reviewed the literature to identify preference-based utilities for the health-related outcomes in the model. We performed a probabilistic cost-effectiveness analysis, conceptualised as a hypothetical cohort of patients who vary in their probabilities, utilities and costs, and who experience the consequences of each induction strategy. Total utilities and costs are then averaged over this cohort to obtain the expected total utility and expected total cost for each induction strategy. We conducted a fully incremental analysis, reporting incremental cost-effectiveness ratios, interpreted as the additional expected cost per additional unit gain in utility for an intervention compared with the previous non-dominated intervention, and cost-efficiency frontiers, which plot expected cost against expected utility for each intervention. We report expected costs, expected utilities and expected net benefit (the difference between expected utilities and costs, for which utilities are monetaried by multiplying by the willingness-to-pay per unit increase in utility). We prefer the intervention that maximises expected net benefit. We represent uncertainty in the optimal intervention using cost-effectiveness acceptability curves and the cost-effectiveness plane.

Results

A total of 1508 reports corresponding to 1190 separate studies were identified.

Thirty-four active treatment types/regimens were included in our review, including different dose regimes and routes of administration. Overall, the search identified > 1000 studies and, after eligibility assessment using our PICO criteria (population, intervention and relevant comparators, outcomes), 579 studies were excluded and 611 trials were included in the review. Together, the included trials reported findings for > 100,000 women who were randomised to different methods for third-trimester induction of labour.

The active interventions most likely to achieve VD within 24 hours were intravenous (i.v.) oxytocin with amniotomy (mainly tested in trials recruiting women with favourable cervix), higher-dose ≥ 50 µg of vaginal misoprostol and vaginal prostaglandin E_2 (PGE_2; a type of prostaglandin used in the induction of labour) pessary (normal release). Titrated (low-dose) oral misoprostol solution and sustained-release misoprostol vaginal pessary also performed well; however, there was greater uncertainty around the effect of these interventions for this outcome.

Compared with placebo, several treatments showed statistically significant reduction in the odds of CS: titrated low-dose misoprostol, vaginal misoprostol at both ≥ 50 µg and < 50 µg, vaginal PGE_2 gel, intracervical PGE_2, oral misoprostol tablet (≥ 50 µg), Foley catheter, membrane sweeping and buccal/sublingual misoprostol. In this group, titrated oral misoprostol achieved the lowest odds of an eventual CS but there was still considerable uncertainty in this finding, as observed by the posterior mean rank order of sixth (out of 33) and 95% credible interval from second to thirteenth (out of 33). There was little to distinguish between the other interventions and, again, we observed considerable uncertainty in treatment rankings.

Uterine hyperstimulation with FHR changes was one of the key safety outcomes. Here, double-balloon catheter had the highest probability of being among the best three treatments, whereas vaginal misoprostol (≥ 50 µg), which was among the best treatments for efficacy, was most likely to increase the odds of excessive uterine activity.

For other safety outcomes there were insufficient data or there was too much uncertainty around estimates to identify which treatments performed 'best'.

Very few studies collected information on women's views. On the whole, women tended to have positive views, or at least accepted the induction process, but there was insufficient information to determine whether or not some methods were preferred over others.

There was considerable uncertainty of our cost-effectiveness estimates, with the majority of the interventions having very similar utility values, and mainly differing in total costs. The cost-effectiveness analysis suggested that all of the methods of induction were cost-saving compared with no treatment, and titrated (low-dose) misoprostol solution and buccal/sublingual misoprostol had the highest probability of being cost-effective, although this was very uncertain.

Only two subgroup analyses were possible with the data available, and these were based on a small number of studies and so should be interpreted as hypothesis generating. In the subgroup of women with intact membranes, and limiting to interventions feasible on the NHS, i.v. oxytocin with amniotomy was identified as the intervention most likely to be most cost-effective. In the subgroup of women with an unfavourable cervix, titrated low-dose oral misoprostol solution and buccal/sublingual misoprostol were found to be the interventions that were most likely to be most cost-effective.

Conclusions

Our NMA suggested that oxytocin with amniotomy and higher-dose ($\geq$ 50 µg) vaginal misoprostol were more successful than other agents in achieving VD within 24 hours, although the former was tested in trials predominantly recruiting women with favourable cervix. The safety profile of different methods was less clear. The cost-effectiveness analysis suggested that titrated (low-dose) oral misoprostol solution is the intervention with the highest utility for mothers and babies, whereas buccal/sublingual misoprostol has the lowest cost to the NHS. Both of these interventions had the highest chance of being most cost-effective. However, the considerable uncertainty in our findings points the way for further research. When induction of labour is clinically indicated, placebo or no-intervention arms may not be feasible or even ethical. Therefore, rather than restrict RCTs to low-risk women, we suggest that titrated oral misoprostol solution should be used as a comparator, particularly in the NHS setting. Future RCTs should be powered to detect a method that is more cost-effective that misoprostol solution. We urge all triallists to report 11 outcomes included in this NMA in all future RCTs. There is also an urgent need to explore women's views of the process as part of any future trial, and measure utilities from the perspective of the mother and baby, preferably using the European Quality of Life-5 Dimensions instrument.

Study registration

This study is registered as PROSPERO CRD42013005116.

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Chapter 1 Introduction

Description of the health problem

There were 698,512 live births in England and Wales in 2013.[1] More than one in five births followed labour induction; this represents > 150,000 pregnant women in England[2] and Wales[3] per year. There is evidence that the number of labour inductions has been steadily increasing over the past two decades. NHS England maternity statistics for 2010 noted that 21.3% of births followed induction of labour, and by 2012–13 this figure had increased to 23.3%.[4]

Induction of labour is carried out for a number of clinical indications.[5,6] The most common reasons include post-term pregnancy (defined as 41^{+0} weeks' gestation), prelabour rupture of the amniotic membranes (PROM) or when the well-being of the woman or baby may be compromised by prolonging the pregnancy (e.g. in cases of fetal growth restriction or pre-eclampsia).

There is a broad range of methods available for induction of labour. The choice of method may depend on national guidelines and local protocol, as well as individual clinical factors. The advantages and disadvantages of different methods vary, and the choice of method has implications for women and the UK NHS.

From a clinical perspective, the decision about which method to use for induction of labour can be influenced by the woman's readiness for labour, for example whether or not membranes have ruptured spontaneously or whether or not the cervix remains undilated at the start of the induction process. Different methods used for inducing labour have different mechanisms of action, and vary in terms of how quickly birth is achieved and the likelihood of causing complications in women with different clinical characteristics. Thus, the choice of method will take into account the reason for induction and its urgency. The woman's obstetric and medical history is also considered. For example, there is evidence that women may be more sensitive to drugs that stimulate the uterus if they have had a previous birth, and women who have a scar from a previous caesarean birth are at increased risk of uterine rupture, which can result in hysterectomy and fetal death.[7]

Different methods also have different direct costs, and some methods require continuous monitoring of the woman throughout labour. Consequently, the choice of induction method may have significant implications for NHS resources, especially if the method is known to increase the risk of complications requiring a caesarean section (CS).

Women may wish to experience a natural onset of labour, and there is evidence that an induced labour can have a negative impact on their overall experience of childbirth.[8] Some methods of induction are painful or unpleasant, and some are associated with distressing side effects, such as headache or nausea. Women may also have preferences about which method is used and may prefer non-pharmacological approaches. On the other hand, women will want their baby to be born safely, and timely induction may improve outcomes for women and babies.[5] Women facing decisions about induction of labour require up-to-date information about the range of options available, including alternative and complementary methods.

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Description of available interventions and current service provision/policy

In the NHS context, choice of induction method is typically between prostaglandins and oxytocin combined with artificial rupture of membranes. UK clinical guidelines published in 2008[9] identified vaginal prostaglandin E_2 (PGE_2) as 'the preferred method of induction'. We note that this recommendation was not based on a quantitative overview of the evidence of the effects and safety of all available methods, or from the synthesis and analysis of data from a range of comparisons. Furthermore, this guideline[9] did not recommend any particular type (gel, tablet or pessary) or dose of PGE_2 because trial evidence has rarely compared different PGE_2 preparations. Potential updating of the current guidance is awaiting the publication of this report.[10]

Despite its importance, the question of resource use for the NHS has been relatively under-studied, and uncertainty remains about the costs that are associated with induction of labour. There is evidence that inducing labour in women with complications is associated with lower health-service costs than costs associated with expectant management.[11–13] However, there is little evidence on the costs associated with specific methods of induction compared with others. Randomised trials in which one method of induction has been compared with another have only rarely included economic analyses.[14]

A broad range of pharmacological, mechanical, complementary and alternative methods have been used to induce labour. In the remaining sections of this chapter, we describe all of the pharmacological and mechanical methods for third-trimester induction of labour or cervical ripening which have been used in clinical practice and that have been examined in randomised trials. Complementary or alternative methods have been less commonly used in NHS settings but have been used in comparable settings in other countries. Complementary and alternative methods are included here, as information on the effects and safety of such methods may be important for women who prefer a less medicalised birth.

Pharmacological methods for the induction of labour

Prostaglandins: prostaglandin E_2 and prostaglandin F_2 alpha

Prostaglandins are hormones produced naturally by the body that are important in the onset of labour. Synthetically manufactured prostaglandins have been used in clinical practice since the 1960s to ripen the cervix and induce uterine contractions. They are more frequently used in women when the cervix is unripe (i.e. with a Bishop score < 6). Prostaglandins promote cervical ripening and encourage the onset of labour by acting on cervical collagen so as to encourage the cervix to soften and stretch in preparation for childbirth. Prostaglandins may also stimulate uterine contractions.

Despite the widespread use of prostaglandins as part of labour induction, they can cause a number of side effects, including nausea, vomiting, diarrhoea and fever. In addition, because of their effect on the uterus, prostaglandins can cause contractions that last too long, or are too frequent or are too strong. Excessive uterine activity, or hyperstimulation, may be associated with fetal distress, and in a small number of cases can lead to uterine rupture, especially in those women who have uterine scarring from surgery or a previous caesarean birth.

A large number of prostaglandin preparations have been available for labour induction, including prostaglandin F_2 alpha ($PGF_2\alpha$, dinoprost), prostaglandin E_2 (PGE_2), prostaglandin E (PGE_1) and misoprostol (a synthetic analogue of PGE_1, which is described separately: see *Misoprostol*). In the past, $PGF_2\alpha$ was frequently used in clinical practice but, more recently, PGE_2 (dinoprostone) has become the most commonly used formulation. Commercially produced PGE_2 analogues are expensive and require refrigeration. These factors have limited use in low-resource settings.

Prostaglandins are available in a variety of formulations and doses, and may be given via various routes of administration, including vaginally, intracervically, orally and, less frequently, intravenously.

Vaginal and intracervical administration

Prostaglandin preparations for vaginal and intracervical administration include gels, lactose-based vaginal tablets, suppositories, pessaries or inserts.[15,16] Dosages of prostaglandins (mainly PGE_2) vary, depending on route and local protocol (frequently 0.5 mg for intracervical use, 2–3 mg for intravaginal use and 10 mg for sustained-release pessaries). There is also variation in terms of the number of applications and time intervals between repeated doses. Sustained-release vaginal pessaries have been developed to reduce the number of applications and vaginal examinations that are needed during induction of labour. Vaginal and intracervical administration are the most common forms of administration in current practice.

In the meta-analysis we have treated different types of vaginal and intracervical PGE_2 as different interventions as different preparations may vary in terms of rate of absorption, safety and cost. We have therefore included as separate interventions:

- PGE_2 vaginal tablets (lactose based).
- PGE_2 vaginal pessaries normal release (also sometimes referred to as suppositories), manufactured using various base materials, including wax and glycerine. [Note that this intervention includes a heterogeneous group of vaginal PGE_2 preparations of varying composition. The base material used was not always clear, and pessaries were frequently produced in local pharmacies (i.e. not commercially available). We included this group of interventions in the network meta-analysis (NMA) and the cost analysis for completeness, even though they are not generally reproducible or available in the UK NHS.]
- PGE_2 vaginal pessaries sustained release (10- to 12-mg pessaries, single application).
- PGE_2 gel introduced via vaginal applicator.
- PGE_2 for intracervical administration.

Extra-amniotic administration

The administration of extra-amniotic prostaglandin gel was first carried out in the early 1970s. The gel is administered via a Foley catheter inserted through the cervix into the extra-amniotic space. The catheter is frequently left in place with the balloon inflated, and light traction may also be applied by taping the catheter to the woman's leg. Extra-amniotic administration is no longer common in current practice.[17]

Intravenous administration

Intravenous (i.v.) prostaglandins are associated with increased rates of maternal vomiting and diarrhoea and are rarely used in current practice.[18]

Oral administration

Oral PGE_2 and $PGF_2\alpha$ have been available since the early 1970s. Oral administration is associated with gastrointestinal side effects and is seldom used nowadays.[19]

Misoprostol

Misoprostol is a PGE_1 analogue that is known to be effective in stimulating uterine contractions. Misoprostol is inexpensive and requires no special storage facilities. Several routes of administration and regimens of misoprostol have been studied, including oral (swallowed as a tablet or dissolved in a titrated solution), vaginal (inserted into the vagina as a tablet or gel), rectal (inserted into the rectum as a tablet) and buccal or sublingual (the tablet is dissolved in the cheek or under the tongue, respectively).[20–22] Different routes of administration have advantages and disadvantages. Oral misoprostol achieves rapid onset of action, whereas vaginal administration is associated with slower absorption but more prolonged action. Over the past decade, slow-release misoprostol vaginal pessaries have also been tested in trials.

Although misoprostol is widely used in obstetric practice for other indications (e.g. abortion), there have been concerns about its use due to the increased risk of serious adverse effects, such as uterine rupture. Several small studies have reported excessive uterine activity that is associated with the use of misoprostol, such as uterine tachysystole (more than five contractions per 10 minutes for at least 20 minutes), uterine

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hypersystole/hypertonus (a contraction lasting ≥ 2 minutes) and/or uterine hyperstimulation syndrome [uterine tachysystole or hypersystole with fetal heart rate (FHR) changes such as persistent decelerations]. A meta-analysis examining the use of vaginal misoprostol suggested that despite excess uterine activity, misoprostol was not associated with adverse fetal outcomes especially at a lower dose (< 25 µg).[23]

Oxytocin

Oxytocin is a hormone that is produced naturally by the body, and which has a range of functions, including the stimulation of uterine contractions in the second and third stages of labour. Oxytocin analogues, administered intravenously, are the commonest induction agents used worldwide. Oxytocin is frequently administered when the cervix is dilated (or favourable) and may be combined with artificial rupture of the amniotic membranes (amniotomy). Oxytocin may cause excess uterine activity, especially in settings where equipment is not available to titrate doses accurately and monitor contractions.

Current i.v. oxytocin regimens usually involve incremental increases in dosage. Lower-dose regimens typically involve 0.5–2.0 milliunits (mU)/minute starting doses, with incremental increases of 1.0–2.0 mU/minute every 15–60 minutes. Higher-dose regimens have starting doses up to 6.0 mU/minute, with incremental increases of 2.0–6.0 mU/minute every 15–40 minutes. There are advantages and disadvantages of high- or low-dose regimens; higher doses may lead to a shorter period to delivery, but may increase the risk of hyperstimulation, whereas lower doses may increase risk of infection if labour is prolonged.[24–27]

Nitric oxide donors

Nitric oxide (NO) is thought to be involved in cervical ripening, and in recent years NO donors [isosorbide mononitrate (ISMN), isosorbide dinitrate, nitroglycerin and sodium nitroprusside] have been used to promote cervical ripening. NO is administered as a vaginal tablet.[28]

Mifepristone

Mifepristone is a progesterone antagonist that has been used in the past in combination with prostaglandins in first trimester and early second trimester pregnancy terminations. Mifepristone has been proposed as a method to induce labour because it acts to increase uterine contractions. Mifepristone is administered as an oral tablet.[29]

Oestrogens, corticosteroids, relaxin and hyaluronidase

Oestrogens have a role in promoting cervical ripening and, historically, have been administered intravenously or into the extra-amniotic space. There are no commercially available preparations for use in cervical ripening or induction of labour, and the two included trials of this agent date back to 1967[30] and 1981.[31]

The role of corticosteroids in the process of labour is not well understood, and they are currently not used in clinical practice for the induction of labour.[32]

Relaxin is a hormone that is thought to encourage cervical ripening, which has been tested in a very small number of trials.[33] Similarly, hyaluronidase is also thought to be implicated in cervical ripening.[34] Both agents have been administered in vaginal or intracervical gel, but neither is common in current practice.

Mechanical and physical methods for induction of labour

Mechanical methods to induce labour have been available for many years. Mechanical devices include various types of catheters and laminaria tents, introduced into or through the cervix and into the extra-amniotic space. The introduction of devices into the cervix may cause the cervix to dilate. Their presence may also increase prostaglandin or oxytocin secretion, which, in turn, may increase cervical dilatation and stimulate uterine contractions.[35] Here we also include descriptions of membrane sweep and amniotomy since they may be considered a physical method of inducing labour.

Catheters
Foley urinary catheters have been used for the induction of labour, as have double-balloon and other catheters that are specifically designed for use in induction of labour (e.g. Cook catheter). The catheter is introduced into the extra-amniotic space, and then the balloon(s) is (are) inflated to keep the catheter in place. Traction may be applied by taping the catheter to the woman's leg. Catheters are usually left in situ until they are expelled. In some cases a saline infusion is introduced into the extra-amniotic space via the catheter.

Laminaria tents
Laminaria tents are made from sterile seaweed or synthetic materials. These devices are introduced into the cervical canal and expand to gradually stretch the cervix.

Membrane sweep
Stripping or sweeping of the membranes has been used for many years to induce labour, and continues to be carried out in many clinical settings. Membrane sweeping involves the clinician detaching the membranes from the lower uterine segment by a circular movement of the examining finger. Membrane sweeping is thought to lead to an increased production of prostaglandins. When the cervix is closed, a cervical massage may be carried out instead of a membrane sweep to stimulate the production of prostaglandins.[36]

Amniotomy
During labour the amniotic membranes usually rupture spontaneously as the cervix dilates and stretches in preparation for the descent of the fetus. Amniotomy refers to rupture of the membranes using a plastic hooked instrument or, occasionally, surgical forceps.

Amniotomy may be carried out alone or in combination with oxytocin or prostaglandins to induce labour. It can be carried out only if the amniotic membranes are accessible to the midwife or doctor, and this may not happen until the cervix has started to dilate.

Amniotomy may cause some potentially serious adverse effects, including cord prolapse. The procedure may introduce infection. For women known to be human immunodeficiency virus (HIV) positive the procedure is avoided because it may increase the risk of mother-to-child transmission of HIV.[25]

Breast stimulation
Manual breast stimulation has been used in the past to stimulate uterine contractions.[37] It is thought that it may trigger the release of oxytocin.

Sexual intercourse
Sexual intercourse at term has been thought to lead to the onset of labour.[38] The hypothesised mechanism of action here is the prostaglandin contained within semen.

Complementary and alternative methods for induction of labour

Castor oil
Castor oil is derived from the bean of the castor plant, and has been used in oral form as a method of stimulating labour.[39] Castor oil has laxative properties, stimulating the intestines and bowel. It is this stimulation that is hypothesised to initiate uterine contractions and labour as a secondary effect.

Acupuncture
Acupuncture involves the insertion of fine needles by trained staff into the skin at specified points on the body. Stimulation of particular acupuncture points is intended to initiate uterine contractions and labour.[40]

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Homeopathy

Homoeopathy involves the use of highly diluted solutions that contain tiny amounts of the original substance. Homeopathic preparations are popular and are available over the counter in pharmacies and health food shops. Some homeopathic preparations have been recommended to promote the onset of labour.[41]

Overall aims and objectives of assessment

Given the broad range of methods used to induce labour, the main research question addressed by this review is 'what is the best method for induction of labour?'. The specific objectives were to:

1. assess the effectiveness and safety of a range of induction methods to determine which method or methods achieves the best outcomes
2. provide a quantitative summary of the evidence on the relative effects of a broad range of induction methods to identify which method works best
3. develop a decision model to evaluate the cost-effectiveness of the different methods for induction
4. explore, if sufficient evidence is available, the effect of different clinical subgroups [with intact or ruptured membranes, at different gestational ages, in women following a previous CS and with low (< 6) or higher Bishop scores] on effectiveness and cost-effectiveness.

Specification of the PICO research question

Population Pregnant women carrying a viable fetus and who are eligible for any method of third-trimester cervical ripening or labour induction.

Intervention and relevant comparators No treatment, placebo, all pharmacological (all routes and doses), mechanical and complementary methods used for the induction of labour.

Outcomes Our primary effectiveness outcome was (1) vaginal delivery (VD) not achieved within 24 hours, and our primary measures of safety were (2) uterine hyperstimulation with FHR changes and (3) CS. Our secondary outcomes for serious adverse events were (4) serious neonatal morbidity or perinatal death and (5) serious maternal morbidity or death. Other outcomes included were (6) maternal satisfaction with the induction method used, and, for use in the economic model, (7) cost, resource use and utilities.

Definition of the decision problem for the economic evaluation

Our aim was to answer the following question: what is the most cost-effective method (from the interventions described above), for third-trimester cervical ripening or labour induction? Outputs from the economic evaluation include expected costs, expected benefits, incremental cost-effectiveness ratios (ICERs), expected net benefit and cost-effectiveness acceptability curves (CEACs).

Stakeholder involvement in project

The steering group (listed in *Appendix 1*) and project team included a consumer representative, a health economist, a midwife and an obstetrician engaged in clinical practice.

A consumer representative was included as a collaborator on the project, and she contributed to the early discussions on this project and drafting the application. Induction of labour is known to be of great interest to pregnant women. In particular, women are interested in self-administered ways of initiating labour and for this reason these methods were examined in the proposed work. The consumer

representative co-ordinated the involvement of members of the CPCG (Cochrane Pregnancy and Childbirth Group) consumer panel, National Childbirth Trust and the Association for Improvements in Maternity Services (AIMS) who expressed an interest in participating. Members of these groups were asked for comments to inform steering group meetings, to determine the final outcomes, to aid in the interpretation of the findings and to shape the papers to be published. The authors of this report include a consumer representative (GG).

The steering group commented on the study design, selection of outcomes, methods for the cost-effectiveness analysis and dissemination strategies.

Overview of report

In *Chapter 2* we describe the methods used for the assessment of clinical effectiveness, including the methods for the systematic review to identify relevant evidence on clinical effectiveness, and the methods for the NMA. In *Chapter 3* we present the results from the systematic review and NMA, including the relative effectiveness of interventions that have been used to induce labour in women at or near term. In *Chapter 4* we describe methods and present results of the cost-effectiveness analysis, taking a UK NHS perspective. In *Chapter 5* we summarise findings, set out the strengths and limitations of our approach, consider the implications of our results on recommended practice, and indicate areas for which future research would be beneficial.

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Chapter 2 Methods for assessment of clinical effectiveness

Methods for reviewing clinical effectiveness

Identification of studies

We worked with an Information Specialist to identify trials for inclusion in the NMA. We searched the CPCG's Specialist Register [which incorporates pregnancy and postpartum searches of the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, the NHS Economic Evaluation Database (NHS EED), relevant journals and conference proceedings]. The search strategy was finalised as part of the early consultative stages of the project, and the final search on which this report is based was carried out at the end of March 2014. The search strategy is set out in *Appendix 2*. A full-text copy of every relevant trial report was obtained and assigned to a topic, depending on the intervention before adding to the database. We then screened all reports that were assigned to the induction of labour topic. Many of the trials identified by the search have already been included in published Cochrane reviews, but further searches identified more recent trials which, when eligible, have been included in the analysis.

Inclusion and exclusion criteria

Interventions

All randomised controlled trials (RCTs) of induction interventions as identified in *Chapter 1* of this report were evaluated. Eligible trials compared any method of third-trimester cervical ripening or labour induction with an alternative intervention, placebo or no treatment. For prespecified treatments we also included trials that compared different means of administration (e.g. vaginal misoprostol vs. oral misoprostol) or different doses [e.g. low-dose misoprostol (< 50 µg) vs. high-dose (≥ 50 µg) misoprostol]. We included studies recruiting women with a viable fetus, but had no other restrictions relating to the indication for labour induction, language or date of publication.

Trials in which women were randomised to receive a combination of interventions were not eligible, except for a small number of prespecified combinations in common use (e.g. amniotomy with oxytocin). We made the decision to exclude lesser-used combinations as the network was already large, and such combinations are rarely used clinically and mainly reported in single trials.

We included all interventions for the induction of labour examined in trials even if such treatments are not used in the NHS. Treatments no longer used may not have been abandoned for evidence-based reasons, and their inclusion adds statistical power to the entire network.

We planned to include multiarm trials and cluster randomised trials with any necessary adjustments to account for cluster design effect (if triallists had not already carried out appropriate adjustment).

Participants

We included trials that recruited pregnant women for third-trimester induction of labour, carrying a viable fetus, with a range of obstetric characteristics, undergoing labour induction for varied reasons.

Outcomes

In consultation with the patient representative from the CPCG we defined seven key outcomes for the clinical evaluation of induction interventions. The first five outcomes are common to all CPCG reviews on induction of labour and have been set out in a generic protocol.[42] Outcomes 6 and 7 were proposed by the consumer representative as of importance to women. Outcomes 8 and 9 were not prespecified;

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however, in consultation with the steering group we extracted data on neonatal intensive care unit (NICU) admission and Apgar score, as proxies for serious neonatal morbidity (as serious neonatal morbidity was poorly reported and inconsistently defined in trials) (*Box 1*).

Exclusions

We excluded trials that did not report *any* of our key outcomes or evaluated combined interventions. The full list of references for excluded studies and the reasons for exclusion are documented in *Appendices 3* and *4*, *Table 37*.

Data extraction and risk-of-bias assessment

We obtained full-text copies of all reports identified by the search. A minimum of two investigators independently assessed all reports to determine whether or not trials used random allocation to groups, included one or more of the selected interventions and comparisons, recruited women undergoing third-trimester induction of labour, and included data on at least one of our primary outcomes. Trials meeting all of the eligibility criteria were included in the systematic review.

Data extraction was carried out by one investigator and checked by a second. Preliminary statistical analyses also highlighted some discrepancies in the extracted data, which were then doubled checked by the reviewers, and corrected if appropriate. For all included trials, we extracted data on trial and patient characteristics, and this is summarised in tables of included studies (see *Appendix 5*, *Reference list for included studies*, and *Appendix 6*, *Table of included studies characteristics*, *Table 38*).[11,14,30,31,43–936]

Study quality was assessed using the methods described in the Cochrane Handbook.[937] For use in a prespecified sensitivity analysis, we assigned a judgement relating to risk of bias (low, high, unclear), based on the allocation concealment domain. We based this decision on meta-epidemiological evidence indicating the importance of this domain as a source of bias[938] and on the design of obstetric trials, which often precludes blinding of participants and personnel (although not, of course, of outcome assessors).

Information on study setting (country and whether or not the study was carried out in an inpatient or outpatient setting), method and the type of intervention(s) (dose, mode of administration, type of preparation, e.g. slow-release pessary vs. gel, regimen and any cointerventions) was extracted. We extracted details on comparison arms (e.g. another active treatment, placebo or 'usual care/no treatment'). Treatment arms were categorised according to the initial randomised allocation, although subsequent

BOX 1 List of outcomes

Prespecified outcomes

1. VD not achieved within 24 hours (or period specified by trial authors).
2. Uterine hyperstimulation with FHR changes.
3. CS.
4. Serious neonatal morbidity or death.
5. Serious maternal morbidity or death.
6. Instrumental delivery.
7. Maternal satisfaction with the method used.

Post hoc defined outcomes

8. NICU admission (proxy outcome for serious neonatal morbidity).
9. Apgar score < 7 at 5 minutes (proxy outcome for serious neonatal morbidity).

clinical management may have included further doses or an alternative treatment. For participants, we recorded important obstetric characteristics, including parity, previous CS, state of cervix and whether or not amniotic membranes were intact. These factors were a priori expected to be possible intervention effect modifiers. There was an additional concern that patient characteristics may be linked to the interventions that have been included in the studies. For example, if it were the case that all of the studies comparing NO with placebo predominantly included women with a previous CS, whereas the studies comparing misoprostol with placebo predominantly excluded women with a previous CS, then the indirect comparison of NO with misoprostol may not be a fair reflection of the true underlying effect in either subgroup of women. For NMA to be valid the different study populations are required to be 'similar' in any effect modifying covariate (see *Network meta-analysis* for a description of the key assumption of transitivity/consistency in NMA). It is therefore important to inspect tables of patient characteristics according to intervention comparison to assess whether or not there is an a priori reason to suspect that the transitivity/consistency assumption may not hold.

In summary, for each trial, information was extracted on:

- The interventions compared in trials (with details of dosage and regimen for pharmacological interventions).
- Number of participants in trials.
- Parity of women recruited to trials (all nulliparous, all multiparous or mixed parity).
- Whether women had ruptured or intact membranes at recruitment (all ruptured, all intact or the sample included women with both intact or ruptured membranes).
- Whether or not women had favourable or unfavourable cervical scores at recruitment (Bishop score all < 6, ≥ 6 or included women with either favourable or unfavourable scores).
- Whether or not trials included women with multiple pregnancies.
- Gestational age at recruitment (all post dates, all > 37 weeks, or the sample included women at < 37 weeks' gestation).
- Treatment setting (women treated as inpatients or outpatients).
- Risk of bias (high, low or unclear risk of bias, based on allocation concealment).
- We also recorded whether or not the study had been funded or partly funded by pharmaceutical sponsors.

We compared the distribution of these characteristics in tabular form before we conducted the NMA (see *Appendix 7*, *Table 39*). Sensitivity analyses were planned to exclude studies that were assessed as being of unclear or high risk of bias.

Methods of evidence synthesis

Network meta-analysis

A NMA was conducted to simultaneously compare the induction interventions, placebo or no treatment for each outcome. In its simplest form, a NMA is the combination of direct and indirect estimates of relative intervention effect in a single analysis. An indirect estimate of the relative intervention effect B compared with C (d^{I}_{BC}) can be formed by comparing direct trials of A compared with C with trials of A compared with B, such that $d^{I}_{BC} = d^{D}_{AC} - d^{D}_{AB}$. A simple approach to combining the indirect and direct estimates of B compared with C would be to take a weighted average, for example using an inverse variance weighting.[939] NMA extends the idea of an indirect comparison to simultaneously combine all evidence in a connected network of intervention comparisons.[940] For random-effects (REs) models, we assume that the between studies variance is the same across all of the pairs of intervention comparisons (known as the homogeneous variance assumption). In a NMA we assume that intervention A is similar (in dose, administration, etc.) when it appears in the A versus B and A versus C studies, and also that every patient included in the network has an equal probability of being assigned to any of the interventions:[940] a concept called 'joint randomisability'.[941] A first step to assess this assumption is by comparing the

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distribution of potential effect modifiers across the different[942] comparisons,[942,943] as if there is an imbalance in the presence of effect modifiers across the A versus B and A versus C comparisons, the conclusions about B compared with C may be in doubt. A second step is to use statistical measures of model fit to see if the direct estimate for a particular intervention comparison is discrepant with the NMA estimate[944] (see below). When direct data were available, pairwise meta-analyses were also performed for all comparisons, and compared with the NMA treatment effect estimates to informally assess agreement.

All of the analyses were conducted within a Bayesian framework utilising OpenBUGS version 3.2.3 (www.openbugs.net; Medical Research Council Biostatistics Unit, Cambridge), using the NMA code given by Dias *et al.*[945–948] for binomial data. We provide example code in *Appendix 8*. A key feature of a Bayesian analysis is that a joint distribution (called the 'posterior' distribution) of all model parameters (intervention effect estimates and heterogeneity) is estimated, and results are reported as summaries from this posterior distribution. For example, it is common to report the posterior median and 95% credible intervals (CrIs, which are interpreted upon there being a 95% probability that the parameter lies within this range of values, where 95% of the marginal distribution lies).

Studies with 0% or 100% events in all arms were excluded from the analysis because these studies provide no evidence on relative effects.[946] For studies with 0% or 100% events in one arm only, we planned to analyse the data without continuity corrections when computationally possible. Where this was not possible, we used a continuity correction where we added 0.5 to both the number of events and the number of non-events, which has shown to perform well when there is an approximate 1 : 1 randomisation ratio across intervention arms.[949] In *Chapter 3*, we report any adjustments made.

Both fixed-effects and REs (when sufficient data were available) models were considered on the basis of model fit. Goodness of fit was measured using the posterior mean of the residual deviance, which is a measure of the magnitude of the difference between the observed data and the model predictions for those data.[950] Smaller values are preferred, and in a well-fitting model the posterior mean residual deviance should be close to the number of data points.[950] Of course, improvements in model fit can always be achieved by making the model more and more complex, but at the risk of losing generalisability and interpretability. To account for this we report the deviance information criterion (DIC), which penalises model fit with model complexity.[950] Finally, we report the between-studies standard deviation (SD) (heterogeneity parameter) to assess the degree of statistical heterogeneity. Model selection was based on all of these statistics: posterior mean residual deviance, posterior median between-study heterogeneity, and DIC. In comparing models, differences of ≥ 5 points for posterior mean residual deviance and DIC were considered meaningful,[950] with lower values being favoured. Heterogeneity was reported as the posterior median between trial SD (τ) with its 95% CrI.

We planned to conduct sensitivity analyses excluding studies at high risk of bias for allocation concealment, for all analyses. Consistency between the different sources of indirect and direct evidence was explored statistically by comparing the fit of a model assuming consistency with a model that allowed for inconsistency (also known as an unrelated treatment-effect model). If the inconsistency model had the smallest posterior mean residual deviance, heterogeneity, or DIC value then this indicates potential inconsistency in the data. When model fit was suggestive of inconsistency our first step was to restrict trials to those at low risk of bias. If model fit was not improved, we planned further subgroup analyses using the potential treatment effect modifiers identified above (see *Data extraction and risk-of-bias assessment*).

A Bayesian analysis requires prior distributions to be specified on all model parameters that are being estimated. A prior distribution reflects our belief about the values that a parameter can take in advance of observing the data. Vague (flat) prior distributions were specified for treatment effect and heterogeneity parameters, so that our results are driven by the observed data (see *Appendix 9* for full details of the prior distributions assumed). Convergence was assessed using the Brooks–Gelman–Rubin diagnostic[951] and was satisfactory by 68,000 simulations for all outcomes.[952] A further simulation sample of at least 58,000 iterations post convergence was obtained, on which all reported results were based.

Relative intervention effects are reported as posterior median odds ratios (ORs) and 95% CrI. All reported outcomes are negative events and so an OR < 1 is interpreted as the active intervention reducing the odds of the event. We calculated the probability of each treatment being first, second, third, etc. most effective for each outcome and report the results using 'rankograms'. Peaks in the rankogram graph indicate the most likely rank for each intervention type. Flat lines indicate a high degree of uncertainty for the ranking of that intervention type. As this metric can be unstable and difficult to interpret (e.g. when there is a high probability of being both 'best' and 'worst' on an outcome), we also report posterior mean rank of each treatment (and 95% CrI), with the convention that the lower the rank the better the treatment. We also report the absolute probability of an event for each intervention. To estimate the absolute probability, we selected vaginal PGE_2 (tablet) as the baseline intervention and conducted a fixed-effects meta-analysis on vaginal PGE_2 arms to produce only an 'average' intervention effect to which the relative treatment effects (as estimated from the NMA) were added. Note that this is modelled externally to the NMA. We note that this may not generalise to any one setting, as it is based on all of the trials in the NMA, and refer the reader to *Chapter 4*, *Assessment of cost-effectiveness* for UK-specific absolute estimates.

Pairwise meta-analyses

For completeness, and to informally assess the consistency assumption of NMA, we conducted pairwise meta-analyses for all intervention comparisons for which direct head-to-head evidence was available. The method of estimation was identical to that described above for the NMA, except that we did not apply the consistency assumption, so that we obtained separate intervention effect estimates for each pairwise comparison. For the REs models, we assumed that the heterogeneity parameter was common across intervention comparisons, to reflect the assumption made in the NMA and allow a fair comparison of the intervention effect estimates.

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Chapter 3 Results for assessment of clinical effectiveness

Results of the systematic review

The results of the search and the eligibility assessment are summarised in the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram, which indicates the number of included and excluded trials (*Figure 1*). We identified 1508 reports corresponding to 1190 separate studies. A total of 611 trials that fulfilled our prespecified inclusion criteria were included in the review. Details of the 579 excluded studies (references and reasons for exclusion) are set out in *Appendices 3* and *4*, *Table 37*.

There were a total of 103,041 women studied in the 611 trials included in this review. Several multiarm trials were identified: one five-arm trial, four four-arm trials and 42 three-arm trials (see *Appendix 6*, *Table 38*). The total number of arms in trials relating to different interventions for the induction of labour is set out in *Appendix 10*.

It is important to bear in mind that trials may not have reported findings for all of the seven prespecified outcomes. We have indicated, in *Table 1*, the number of studies reporting each of our prespecified outcomes. Trials that did not report *any* prespecified outcomes were not included in the review, as they did not contribute data to the pairwise analysis or the NMA (see *Appendix 4*, *Table 37,* for reasons for exclusion from the review).

More than 95% of trials reported CS, and data were available for almost 100,000 women for this outcome. However, the proportions of trials reporting our other key outcomes were considerably lower: instrumental delivery was reported in approximately half of trials (49%) and infant Apgar score < 7 at 5 minutes was reported in a similar number of studies (47%). Mean Apgar score at 5 minutes was occasionally reported, but there were insufficient studies reporting this outcome for us to be able to use these data.

Uterine hyperstimulation with FHR changes was reported in 41% of trials. A larger number of trials reported outcomes relating to abnormal uterine activity (tachysystole or hypertonus), but we have included data only for those that were clearly associated with changes in FHR and, therefore, matched our outcome definition for inclusion.

FIGURE 1 A PRISMA study flow diagram for the systematic review.

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TABLE 1 Outcome data reported

Outcome	Number of trials reporting this outcome	% included trials (613)[a]	Number of women/infants	Number of events	Events as %
Serious maternal morbidity or death[b]	77	12	19,112	5 deaths 14 uterine rupture 1 ICU admission	0.1
Neonatal death	131	21	32,248	94	0.3
VD not achieved within 24 hours	142	23	28,845	11,885	41.2
Uterine hyperstimulation with (FHR) changes	251	41	43,612	1594	3.6
CS	587	96	99,821	19,297	19.3
Instrumental delivery	302	49	54,511	8020	14.7
NICU admission	226	37	52,931	4224	8.0
Apgar score < 7 at 5 minutes	289	47	58,367	1244	2.1
Maternal satisfaction[c]	29	5	11,901	NA	NA

ICU, intensive care unit; NA, not applicable.
a Of our trials, 2 out of 611 were split and data were entered separately for all outcomes because they reported data separately for two different clinical subgroups. This is why we have 613 as the total number of trials here.
b Serious maternal morbidity has been defined as uterine rupture or infection requiring ICU admission.
c Maternal satisfaction was measured in such a number of different ways that meaningful analysis was not possible.

Less than one-quarter of trials reported the number of women achieving VD within 24 hours. Neonatal death was reported in 21% of trials (with data for 32,248 babies) and a composite outcome of maternal death or serious morbidity in 12.6%. As expected, event rates were very low for both of these outcomes and most trials reported no events for either outcome.

Infant admission to NICU was reported for trials that, together, included > 50,000 babies, but findings related to this outcome need to be interpreted with some caution. Results demonstrate that there was considerable variation between trials in terms of rates of admission, and it is possible that this variation may relate to definitions of neonatal intensive care and other types of special care units, rather than being a true reflection of variation in serious infant morbidity in different trial settings. There was very rarely clear information on the level of care provided in facilities described as NICU or special care baby unit or on criteria for admission.

Only 29 trials reported any outcomes relating to satisfaction, and the way satisfaction outcomes were defined and operationalised in questionnaires meant that we were unable to carry out any quantitative analysis. We have, therefore, set out findings in tabular and narrative form.

Although *Box 2* sets out the number of trials reporting specific outcomes, we were not able to use all of the reported outcome data in the NMA. Studies that reported no events in either arm were excluded from the NMA. In a small number of cases outcome data were excluded from the analysis for other reasons (see *Box 2*).

BOX 2 Studies included and excluded from the NMA analysis for each outcome

No vaginal delivery within 24 hours (141 studies included)

Removed because no data reported (471).

Removed because of 100% cells in both arms (1).

Hyperstimulation (180 studies included)

Removed because no data were reported (362).

Removed because of zeros in both arms (71).

Caesarean section (307 studies included)

Removed because no data were reported (26).

Removed because of zero cells in both arms (2).

Removed because of high risk of bias (276).

Removed because of automatic CS after 24 hours (2).

Neonatal death (42 studies included)

Removed because no data were reported (482).

Removed because of zero events in both arms (89).

Maternal serious morbidity or death (16 studies included)

Removed because no data were reported (536).

Removed because of zero cells in both arms (61).

Instrumental delivery (299 studies included)

Removed because no data were reported (311).

Removed because of zero cells in both arms (2).

Removed because of serious protocol deviation (1).

Apgar score < 7 at 5 minutes (200 studies included)

Removed because no data were reported (324).

Removed because of zero cells in both arms (81).

Removed because of inconsistency in reporting (8).

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BOX 2 Studies included and excluded from the NMA analysis for each outcome (*continued*)

Neonatal intensive care unit admission (204 studies included)

Removed because no data were reported (387).

Removed because of zero cells in both arms (21).

Characteristics of women participating in included trials

Summary characteristics of participants and intervention setting across the 611 included studies are reported in *Table 2*.

Trials varied considerably in terms of inclusion/exclusion criteria. For those trials that reported parity as an inclusion criterion, most (83%) recruited both women expecting their first baby and those who had given birth before. More than two-thirds of trials explicitly excluded women who had experienced a previous CS (64.6%). However, 175 trials did not specifically mention excluding these women but may have reported excluding women at 'high risk', which may have included women with complications during a previous birth. Women with multiple pregnancies were generally excluded. The majority of trials (73%) that specified inclusion criteria relating to gestational age specifically excluded women at < 37 completed weeks' gestation. Of these 405 trials, 72 recruited women with post-term pregnancies only, usually defined as gestational age of > 41 weeks. Other trials included a small number of women with preterm pregnancies, although we specifically excluded trials including women with extremely preterm pregnancies as our focus was on third-trimester induction of labour.

TABLE 2 Number of included clinical trials reporting participant characteristics

Effect modifier	Number of trials			
Parity	Mixed	Multiparous only	Nulliparous only	NR
	456	15	79	63
Previous CS	None with CS	All with CS	Some with CS	NR
	396	5	37	175
Cervix	Unfavourable	Favourable	Mixed	NR
	399	28	111	75
Membranes	All intact	All ruptured	Mixed	NR
	296	98	68	151
Gestational age	All post term	All > 37 weeks	Mixed (some pre term)	NR
	72	333	149	59
Multiple pregnancy	All singleton	All multiple	Mixed	NR
	453	1	13	146
Setting	Inpatient	Some/all arms outpatient	NR	
	524	79	10	
Pharmaceutical company funding	No funding	Some funding	NR	
	109	55	449	

NR, not reported.

Most studies recruited women with intact membranes (64% of those trials specifying inclusion criteria relating to membrane status), although some trials specifically focused on induction of labour for women with premature rupture of the amniotic membranes (21% of trials specifying membrane status).

Finally, the induction process was mainly commenced in those women with a Bishop score < 6 (unfavourable cervix); 28 trials (4.6%) recruited only women with a favourable cervix, although approximately 20% of trials that described membrane status at recruitment included women with a range of Bishop scores.

Other trial characteristics

The vast majority of trials were carried out in hospital settings and women remained inpatients throughout the induction process. For many pharmacological agents constant maternal and fetal monitoring was considered mandatory, and facilities for CS and newborn specialist care were close by in case of complications. Trials looking at non-pharmacological methods of inducing labour (e.g. membrane sweeping) were more likely to take place in outpatient settings.

Trials were assessed for risk of bias relating to the method used to conceal allocation. There was a fairly even balance between those trials assessed as being at low risk of bias and those assessed as being at high or unclear risk of bias (both of these categories were treated as high risk of bias in the sensitivity analysis). There were 300 trials that were judged to be at high risk of bias for allocation concealment compared with 313 trials that were judged to be at low risk of bias.

Finally, we also extracted information from trial reports regarding whether or not the trial was funded by a pharmaceutical company. Unfortunately, the source of funding for most trials was not reported. Of the 164 trials that did report source of funding, one-third were funded by a drug company, although this funding may have been partial (provision of study medication and placebo preparations only).

Results: network and pairwise meta-analysis

The outcome-specific network diagrams are presented in *Figure 2* for failure to achieve VD in 24 hours, *Figure 3* for CS, *Figure 4* for instrumental delivery, *Figure 5* for uterine hyperstimulation, *Figure 6* for NICU admission and *Figure 7* for Apgar score < 7 at 5 minutes. Studies were excluded when there were 0% or 100% events in every arm, for that outcome only. Network diagrams are presented within each relevant section and by outcome. The edges (lines) connecting each pair of interventions represent a direct comparison and are drawn proportional to the number of trials making each direct comparison.[953] However, this weighting is relative *within* each graph, and edge thickness should not be compared across graphs. For information on the number of trials in each analysis please see *Appendix 14*. As noted above (see *Results of the systematic review*), there were insufficient data on serious maternal morbidity or death (20 events) to be used in a NMA. Therefore, these data are summarised narratively below (see *Neonatal and maternal mortality and severe morbidity*). In addition, only a small proportion of trials reported outcomes relating to women's perceptions of their care during childbirth and their satisfaction with the induction of labour process. Furthermore, when these outcomes were reported they were defined and measured in different ways across trials. For these reasons we were not able to analyse maternal satisfaction outcomes in a NMA, but we have included a narrative description in the text (see *Maternal satisfaction with care and induction of labour method*).

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FIGURE 2 Failure to achieve VD in 24 hours. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials comparing directly each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). Interventions are numbered as follows: 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose $< 50\,\mu g$); 9, vaginal misoprostol (dose $\geq 50\,\mu g$); 10, oral misoprostol tablet (dose $< 50\,\mu g$); 11, oral misoprostol tablet (dose $\geq 50\,\mu g$); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, i.v. oxytocin with amniotomy; 16, NO; 17, mifepristone; 18, mechanical methods – Foley catheter; 19, mechanical methods – double-balloon or Cook's catheter; 20, extra-amniotic PGE_2; 21, buccal/sublingual misoprostol.

FIGURE 3 Caesarean section. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). Interventions are numbered as follows: 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol ($< 50\,\mu g$); 10, vaginal misoprostol ($\geq 50\,\mu g$); 11, oral misoprostol tablet ($< 50\,\mu g$); 12, oral misoprostol tablet ($\geq 50\,\mu g$); 13, titrated (low-dose) oral misoprostol solution; 14, sustained-release misoprostol insert, 15, i.v. oxytocin, 16, amniotomy; 17, i.v. oxytocin with amniotomy; 18, NO; 19, mifepristone; 20, oestrogens; 21, corticosteroids; 22, relaxin; 23, hyaluronidase; 24, Foley catheter; 25, laminaria; 26, double-balloon or Cook's catheter; 27, membrane sweeping; 28, extra-amniotic PGE_2; 29, i.v. prostaglandin; 30, sexual intercourse; 31, acupuncture; 32, oral prostaglandins; 33, buccal/sublingual misoprostol.

FIGURE 4 Instrumental delivery. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). Interventions are numbered as follows: 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (< 50 µg); 10, vaginal misoprostol (≥ 50 µg); 11, oral misoprostol tablet (< 50 µg); 12, oral misoprostol tablet (≥ 50 µg); 13, titrated (low-dose) oral misoprostol solution; 14, sustained-release misoprostol insert; 15, i.v. oxytocin; 16, amniotomy; 17, i.v. oxytocin with amniotomy; 18, NO; 19, mifepristone; 20, oestrogens; 21, relaxin; 22, Foley catheter; 23, laminaria; 24, double-balloon or Cook's catheter; 25, membrane sweeping; 26, extra-amniotic PGE_2; 27, i.v. prostaglandin; 28, sexual intercourse; 29, acupuncture; 30, homeopathy; 31, oral prostaglandins; 32, buccal/sublingual misoprostol.

FIGURE 5 Hyperstimulation with FHR changes. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (< 50 µg); 9, vaginal misoprostol (≥ 50 µg); 10, oral misoprostol tablet (< 50 µg); 11, oral misoprostol tablet (≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, i.v. oxytocin with amniotomy; 16, NO; 17, mifepristone; 18, Foley catheter; 19, laminaria; 20, double-balloon or Cook's catheter; 21, buccal/sublingual misoprostol.

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FIGURE 6 Neonatal intensive care unit admission. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (dose <50 µg); 10, vaginal misoprostol (dose ≥ 50 µg); 11, oral misoprostol tablet (dose <50 µg); 12, oral misoprostol tablet (dose ≥ 50 µg); 13, titrated (low-dose) oral misoprostol solution; 14, sustained-release misoprostol insert; 15, i.v. oxytocin; 16, amniotomy; 17, i.v. oxytocin with amniotomy; 18, NO; 19, mifepristone; 20, oestrogens; 21, Foley catheter; 22, laminaria; 23, double-balloon or Cook's catheter; 24, membrane sweeping; 25, extra-amniotic PGE_2; 26, sexual intercourse; 27, acupuncture; 28, oral prostaglandins; 29, buccal/sublingual misoprostol.

FIGURE 7 Apgar score <7 at 5 minutes. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose <50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose <50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, amniotomy; 16, i.v. oxytocin with amniotomy; 17, NO; 18, mifepristone; 19, Foley catheter; 20, laminaria; 21, double-balloon or Cook's catheter; 22, membrane sweeping; 23, extra-amniotic PGE_2; 24, i.v. prostaglandin; 25, sexual intercourse; 26, acupuncture; 27, oral prostaglandins; 28, buccal/sublingual misoprostol.

Vaginal delivery not achieved within 24 hours

After excluding trials with zero events in all arms, 141 trials of 19 active interventions were included for the outcome VD not achieved within 24 hours. Placebo and no intervention comparisons were also included. No trials comparing PGF_2, amniotomy, oestrogens, corticosteroids, relaxin, hyaluronidase, laminaria, membrane sweeping, i.v. prostaglandin, sexual intercourse, acupuncture, breast stimulation, homeopathy, castor oil or oral prostaglandins reported this outcome. No meaningful differences were observed in posterior mean residual deviance or DIC values, suggesting that there was no evidence of inconsistency (see *Appendix 11*, *Table 44*). Reported results are therefore based on the REs NMA model assuming consistency (*Table 3* and *Figure 8*).

TABLE 3 Odds ratios and 95% CrI for failure to achieve VD within 24 hours for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention vs. placebo	OR	95% CrI	OR	95% CrI	Direct trials
i.v. oxytocin with amniotomy	0.05	0.07 to 0.32	–	–	0
Vaginal misoprostol ≥ 50 µg	0.09	0.06 to 0.24	–	–	0
Titrated (low-dose) oral misoprostol solution	0.10	0.07 to 0.29	–	–	0
Vaginal misoprostol < 50 µg	0.11	0.09 to 0.32	–	–	0
Sustained-release misoprostol vaginal pessary	0.11	0.05 to 0.22	–	–	0
Buccal/sublingual misoprostol	0.11	0.05 to 0.19	–	–	0
Vaginal PGE_2 pessary (normal release)	0.11	0.04 to 0.16	0.67	0.06 to 2.76	1
Vaginal PGE_2 (gel)	0.13	0.08 to 0.50	–	–	0
Vaginal PGE_2 pessary (slow release)	0.15	0.08 to 0.29	–	–	0
Oral misoprostol tablet ≥ 50 µg	0.16	0.05 to 0.20	0.12	0.03 to 0.31	2
Vaginal PGE_2 (tablet)	0.16	0.03 to 0.26	–	–	0
Intracervical PGE_2	0.18	0.09 to 0.38	0.09	0.03 to 0.19	5
Double-balloon or Cook's catheter	0.18	0.01 to 0.16	–	–	0
Foley catheter	0.19	0.09 to 0.46	–	–	0
i.v. oxytocin	0.20	0.21 to 1.97	–	–	0
NO	0.22	0.08 to 0.36	1.07	0.30 to 2.78	1
Oral misoprostol tablet < 50 µg	0.22	0.07 to 0.39	–	–	0
Extra-amniotic PGE_2	0.41	0.07 to 1.33	–	–	0
Mifepristone	0.76	0.05 to 0.20	0.81	0.16 to 2.52	1

Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention, i.e. fewer undesirable events occurred on the active intervention. Empty cells indicate that direct evidence was not available for that comparison. The column 'Direct trials' reports the number of trials available for the direct comparisons vs. placebo only.

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FIGURE 8 Rankograms for each of the 20 induction interventions for hyperstimulation and VD not achieved within 24 hours. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) intracervical PGE_2; (g) vaginal PGE_2 pessary (normal release); (h) vaginal misoprostol (dose < 50 µg); (i) vaginal misoprostol (dose ≥50 µg); (j) oral misoprostol tablet (dose < 50 µg); (k) oral misoprostol tablet (dose ≥ 50 µg); (l) titrated (low-dose) misoprostol; (m) sustained-release misoprostol insert; (n) i.v. oxytocin; (o) NO; (p) i.v. oxytocin with amniotomy; (q) mifepristone; (r) Foley catheter; (s) laminaria including dilapan; (t) double balloon or Cook's catheter; and (u) extra-amniotic PGE_2. (*continued*)

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FIGURE 8 Rankograms for each of the 20 induction interventions for hyperstimulation and VD not achieved within 24 hours. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) intracervical PGE_2; (g) vaginal PGE_2 pessary (normal release); (h) vaginal misoprostol (dose < 50 µg); (i) vaginal misoprostol (dose ≥50 µg); (j) oral misoprostol tablet (dose < 50 µg); (k) oral misoprostol tablet (dose ≥ 50 µg); (l) titrated (low-dose) misoprostol; (m) sustained-release misoprostol insert; (n) i.v. oxytocin; (o) NO; (p) i.v. oxytocin with amniotomy; (q) mifepristone; (r) Foley catheter; (s) laminaria including dilapan; (t) double balloon or Cook's catheter; and (u) extra-amniotic PGE_2. (*continued*)

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FIGURE 8 Rankograms for each of the 20 induction interventions for hyperstimulation and VD not achieved within 24 hours. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) intracervical PGE_2; (g) vaginal PGE_2 pessary (normal release); (h) vaginal misoprostol (dose < 50 µg); (i) vaginal misoprostol (dose ≥50 µg); (j) oral misoprostol tablet (dose < 50 µg); (k) oral misoprostol tablet (dose ≥ 50 µg); (l) titrated (low-dose) misoprostol; (m) sustained-release misoprostol insert; (n) i.v. oxytocin; (o) NO; (p) i.v. oxytocin with amniotomy; (q) mifepristone; (r) Foley catheter; (s) laminaria including dilapan; (t) double balloon or Cook's catheter; and (u) extra-amniotic PGE_2.

Despite the observation of high between-trials heterogeneity, relative to the size of the intervention effect estimates, [$\tau = 0.54$ (95% CrI 0.44 to 0.65)] there was strong evidence that all interventions, except for mifepristone and extra-amniotic PGE_2, increased the probability of vaginal birth within 24 hours (see *Table 3*). We note that there was some indication that the direct and NMA results were inconsistent for NO, as the point estimate from the NMA (OR 0.21) lies outside the CrI from the direct evidence (95% CrI 0.30 to 2.78). However, the CrIs for both the NMA and direct evidence were overlapping. The full results of each intervention compared with every other have been reported in *Appendix 12* (see *Table 50*) and compared with the direct evidence when it is available.

Figure 8 shows the distribution of the ranks for each of the 20 interventions. The *x*-axis reports each of the possible ranks, for which position 1 means that the intervention is ranked the highest and position 21 the lowest. Note the number of interventions varies across outcomes because of trial design and reporting. The *y*-axis shows the probability with which each intervention has been ranked at each of the 21 possible positions and therefore fully encapsulates the uncertainty in the intervention rankings. The peaks in the rankogram plots show the most likely rank for a given intervention. Flat lines indicate a high degree of uncertainty for the ranking of that intervention type.

The highest ranked intervention was i.v. oxytocin with amniotomy, with a probability of being best of 75%, a posterior mean rank of '2' (95% CrI 1 to 10) and an OR of 0.05 (95% CrI 0.01 to 0.14). Intravenous oxytocin with amniotomy had the lowest absolute probability of not achieving VD within 24 hours at 17% (95% CrI 3% to 44%) (*Table 4*). The probability of being ranked in the top three interventions was 88% for i.v. oxytocin with amniotomy, 51% for vaginal misoprostol (≥ 50 µg) (posterior mean rank 4 (95% CrI 2 to 7), and 50% for vaginal PGE_2 pessary (normal release) (posterior mean rank 4 (95% CrI 1 to 11). The probability of being ranked in the bottom three interventions (i.e. poorest in terms of achieving a vaginal birth within 24 hours) was 80% for mifepristone with a posterior mean rank of 19 (95% CrI 17 to 21). We note from *Table 3* that for mifepristone the OR is 0.72 and the 95% CrIs are consistent with both harm and benefit (0.20 to 1.85).

Results were largely robust to a preplanned sensitivity analysis excluding studies at high risk of bias for allocation concealment. The posterior mean ranks were altered for two interventions. A posterior mean rank for vaginal PGE_2 pessary (normal release) changed from 4 to 10, although the 95% CrIs were still overlapping. Sustained-release misoprostol insert changed from 5 to 10. Again 95% CrIs were consistent between the two analyses. Results for the sensitivity analysis are reported in *Appendix 13* (see *Table 56*).

TABLE 4 Absolute probability of VD not occurring within 24 hours of induction for all 19 interventions and placebo/no intervention included in the NMA. Posterior mean rank and 95% CrIs

Intervention	Absolute probability of VD not in 24 hours		Posterior mean rank	95% CrI
	Posterior mean	95% CrI		
i.v. oxytocin with amniotomy	0.33	0.11 to 0.61	2	1 to 9
Vaginal misoprostol ≥ 50 µg	0.48	0.34 to 0.61	3	1 to 6
Sustained-release misoprostol vaginal pessary	0.50	0.27 to 0.73	5	1 to 16
Titrated (low) oral misoprostol solution	0.50	0.34 to 0.67	5	1 to 10
Vaginal misoprostol < 50 µg	0.51	0.37 to 0.65	5	2 to 8
Buccal/sublingual misoprostol	0.51	0.35 to 0.67	5	2 to 11
Vaginal PGE_2 pessary (normal release)	0.52	0.34 to 0.70	6	1 to 13
Vaginal PGE_2 (gel)	0.57	0.42 to 0.70	8	5 to 12
Vaginal PGE_2 pessary (slow release)	0.60	0.45 to 0.74	11	6 to 16
Vaginal PGE_2 (tablet)	0.62	0.53 to 0.70	11	5 to 17
Oral misoprostol tablet ≥ 50 µg	0.62	0.48 to 0.75	12	7 to 16
Double-balloon or Cook's catheter	0.63	0.44 to 0.80	12	4 to 18
Foley catheter	0.65	0.48 to 0.79	13	7 to 18
Intracervical PGE_2	0.65	0.51 to 0.77	14	10 to 17
i.v. oxytocin	0.66	0.51 to 0.80	14	9 to 18
Oral misoprostol tablet < 50 µg	0.67	0.46 to 0.84	14	5 to 18
NO	0.68	0.46 to 0.84	14	5 to 18
Extra-amniotic PGE_2	0.75	0.44 to 0.93	16	3 to 20
Mifepristone	0.86	0.66 to 0.96	19	16 to 21
No intervention	0.91	0.83 to 0.96	20	19 to 21
Placebo	0.94	0.86 to 0.98	21	19 to 21

Caesarean section

After the exclusion of trials with 0% or 100% events in all arms, 586 trials with 96,771 women were eligible for inclusion in the NMA. This included 33 active interventions in addition to placebo and no intervention.

Important differences were observed in posterior mean residual deviance and DIC values suggesting that, for the full network, there was evidence of inconsistency (see *Appendix 11*, *Table 45*). The addition of a continuity correction of 0.5 for studies with zero events (on either arm) did not improve model fit. We conducted a prespecified sensitivity analysis examining the effect of removing trials at high risk of bias. The REs model, continuity corrected and excluding trials at high risk of bias, provided an adequate fit to the data (see *Appendix 11*, *Table 45*). Therefore, reported results are based on this model, with 307 trials and 57,370 women (see *Tables 5* and *6*, and *Figure 3*). Thirty-one interventions, in addition to placebo and no intervention are included in the analysis. No trials comparing breast stimulation, homeopathy or castor oil were included in this analysis because of a high risk of bias.

Table 5 reports the posterior median ORs (95% CrI) for each intervention relative to placebo (the full results for all comparisons are reported in *Appendix 12*, *Table 51*). As an informal check of consistency, we note that for all interventions, the direct and NMA results are similar. Moderate to low between-trial heterogeneity was observed for this outcome [$\tau = 0.16$ (95% CrI 0.03 to 0.25)]. Using placebo as the

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TABLE 5 Odds ratios and 95% CrI for CS for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention vs. placebo	OR	95% CrI	OR	95% CrI	Trials
Corticosteroids	0.53	0.20 to 1.12	0.72	0.25 to 1.65	1
Hyaluronidase	0.61	0.34 to 1.00	0.24	0.10 to 0.46	1
Titrated (low-dose) oral misoprostol solution	0.62	0.47 to 0.80	–	–	0
Buccal/sublingual misoprostol	0.68	0.51 to 0.89	–	–	0
PGF_2 gel	0.70	0.40 to 1.16	0.65	0.27 to 1.30	3
Vaginal misoprostol < 50 µg	0.70	0.57 to 0.85	1.14	0.58 to 2.05	3
Mifepristone	0.71	0.45 to 1.08	0.63	0.39 to 0.95	5
Oral misoprostol tablet ≥ 50 µg	0.72	0.58 to 0.88	0.60	0.35 to 0.96	6
Oral prostaglandins	0.72	0.08 to 2.59	–	–	0
Vaginal misoprostol ≥ 50 µg	0.73	0.59 to 0.88	1.32	0.17 to 4.64	2
Membrane sweeping	0.74	0.53 to 0.99	1.78	0.22 to 6.41	1
Foley catheter	0.76	0.61 to 0.95	–	–	0
Vaginal PGE_2 (gel)	0.79	0.65 to 0.94	0.95	0.63 to 1.37	10
Laminaria	0.80	0.43 to 1.38	–	–	0
Acupuncture	0.81	0.52 to 1.20	0.76	0.46 to 1.16	4
NO	0.82	0.62 to 1.06	1.05	0.70 to 1.49	4
Vaginal PGE_2 pessary (normal release)	0.82	0.62 to 1.09	0.76	0.41 to 1.29	3
Intracervical PGE_2	0.83	0.69 to 0.98	0.85	0.66 to 1.09	17
Sexual intercourse	0.85	0.54 to 1.29	–	–	0
Relaxin	0.88	0.33 to 1.98	0.90	0.32 to 2.03	3
i.v. oxytocin with amniotomy	0.89	0.57 to 1.34	–	–	0
i.v. oxytocin	0.93	0.75 to 1.14	1.74	0.53 to 4.29	1
Vaginal PGE_2 pessary (slow release)	0.89	0.69 to 1.12	0.62	0.26 to 1.21	2
Sustained-release misoprostol vaginal pessary	0.98	0.59 to 1.55	–	–	0
Extra-amniotic PGE_2	0.98	0.57 to 1.57	0.47	0.16 to 1.03	3
Vaginal PGE_2 (tablet)	1.04	0.78 to 1.35	0.91	0.00 to 5.74	1
Amniotomy	1.06	0.51 to 2.02	–	–	0
Double-balloon or Cook's catheter	1.11	0.73 to 1.63	–	–	0
Oral misoprostol tablet < 50 µg	1.11	0.64 to 1.81	–	–	0
Oestrogens	1.27	0.62 to 2.32	1.97	0.66 to 4.49	1
i.v. prostaglandin	19.94	1.61 to 120.5	–	–	0

Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer CSs occur on a placebo than active intervention). An OR of < 1 favours the active intervention, i.e. fewer CSs occurred on the active intervention. Empty cells indicate that direct evidence was not available for that comparison. The column 'trials' reports the number of trials available for the direct comparisons vs. placebo only.

TABLE 6 Absolute probability of CS all 31 interventions and placebo/no intervention included in the NMA

Intervention	Absolute probability of CS		Posterior mean rank and 95% CrI	
	Posterior mean	95% CrI		
Corticosteroids	0.15	0.02 to 0.48	6	1 to 29
Titrated (low-dose) oral misoprostol solution	0.17	0.03 to 0.49	6	2 to 13
Hyaluronidase	0.17	0.02 to 0.50	7	1 to 26
Oral prostaglandins	0.17	0.01 to 0.61	10	1 to 32
Buccal/sublingual misoprostol	0.19	0.03 to 0.52	9	2 to 19
Vaginal misoprostol < 50 µg	0.19	0.03 to 0.52	9	4 to 16
Oral misoprostol tablet ≥ 50 µg	0.19	0.03 to 0.53	10	4 to 18
Mifepristone	0.19	0.03 to 0.54	11	2 to 28
Vaginal misoprostol ≥ 50 µg	0.19	0.03 to 0.53	11	5 to 18
PGF_2 gel	0.19	0.03 to 0.54	11	1 to 29
Membrane sweeping	0.20	0.03 to 0.54	12	3 to 24
Foley catheter	0.20	0.03 to 0.55	14	6 to 22
Vaginal PGE_2 (gel)	0.21	0.03 to 0.55	15	9 to 21
Laminaria	0.21	0.03 to 0.57	15	2 to 31
Acupuncture	0.21	0.03 to 0.57	16	2 to 30
NO	0.21	0.03 to 0.57	17	5 to 28
Sexual intercourse	0.21	0.03 to 0.58	17	3 to 31
Intracervical PGE_2	0.21	0.04 to 0.57	18	11 to 24
Vaginal PGE_2 pessary (normal release)	0.21	0.03 to 0.57	17	6 to 28
Relaxin	0.22	0.03 to 0.61	16	1 to 32
i.v. oxytocin with amniotomy	0.22	0.04 to 0.59	20	4 to 31
Vaginal PGE_2 pessary (slow release)	0.22	0.04 to 0.58	21	12 to 28
No intervention	0.22	0.04 to 0.58	21	13 to 27
i.v. oxytocin	0.23	0.04 to 0.59	23	16 to 29
Placebo	0.24	0.04 to 0.61	26	19 to 31
Sustained-release misoprostol vaginal pessary	0.24	0.04 to 0.61	22	5 to 32
Extra-amniotic PGE_2	0.24	0.04 to 0.62	22	4 to 32
Amniotomy	0.25	0.04 to 0.64	22	3 to 32
Vaginal PGE_2 (tablet)	0.25	0.05 to 0.62	26	17 to 31
Oral misoprostol tablet < 50 µg	0.26	0.04 to 0.64	25	7 to 32
Double-balloon or Cook's catheter	0.26	0.05 to 0.64	27	14 to 32
Oestrogens	0.28	0.05 to 0.68	27	5 to 32
i.v. prostaglandin	0.66	0.16 to 0.98	33	32 to 33

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reference, nine interventions resulted in significant reduction in CS, namely vaginal PGE_2 (gel), intracervical PGE_2, vaginal misoprostol tablet < 50 µg, vaginal misoprostol tablet ≥ 50 µg, oral misoprostol tablet ≥ 50 µg, titrated (low-dose) oral misoprostol solution, Foley catheter, membrane sweeping and buccal/sublingual misoprostol.

Corticosteroids, titrated (low-dose) oral misoprostol solution and hyaluronidase have the largest reduction in odds of CS, but only misoprostol oral solution reached a conventional level of statistical significance. Conversely, i.v. prostaglandin appears to increase odds of CS, although this does not reach statistical significance.

Table 6 reports the posterior mean ranks and absolute probabilities for CS. The interventions with the lowest posterior mean rank (6) were titrated (low-dose) oral misoprostol solution and corticosteroids, with the lowest absolute probability of all interventions at 17% and 15%, respectively. However, the wide CrIs around summary estimates suggest considerable uncertainty. The intervention with the worst posterior mean rank is i.v. prostaglandin ranked 33 (95% CrI 32 to 33) and an absolute probability of CS of 66%, albeit with wide CrIs (95% CrI 16% to 98%).

Figure 9 reports the rankograms for this outcome. We note that for all of the interventions the rankograms are flat, with relatively low peaks – indicative of considerable uncertainty around the probability any intervention is the 'best'. We do not therefore include an assessment of which probability is best in our summary for CS.

FIGURE 9 Rankograms for each of the 33 induction interventions for CS and instrumental delivery. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal PGE_2 pessary (normal release); (i) vaginal misoprostol (dose < 50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol tablet (dose < 50 µg); (l) oral misoprostol tablet (dose ≥ 50 µg); (m) titrated (low-dose) misoprostol; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin with amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) corticosteroids; (v) relaxin; (w) hyaluronidase; (x) Foley catheter; (y) laminaria including dilapan; (z) double balloon or Cook's catheter; (aa) membrane sweeping; (ab) extra-amniotic PGE_2; (ac) i.v. prostaglandin; (ad) sexual intercourse; (ae) oral prostaglandins; (af) buccal/sublingual misoprostol; and (ag) acupuncture. (*continued*)

FIGURE 9 Rankograms for each of the 33 induction interventions for CS and instrumental delivery. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal PGE_2 pessary (normal release); (i) vaginal misoprostol (dose <50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol tablet (dose <50 µg); (l) oral misoprostol tablet (dose ≥ 50 µg); (m) titrated (low-dose) misoprostol; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin with amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) corticosteroids; (v) relaxin; (w) hyaluronidase; (x) Foley catheter; (y) laminaria including dilapan; (z) double balloon or Cook's catheter; (aa) membrane sweeping; (ab) extra-amniotic PGE_2; (ac) i.v. prostaglandin; (ad) sexual intercourse; (ae) oral prostaglandins; (af) buccal/sublingual misoprostol; and (ag) acupuncture. (*continued*)

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Instrumental delivery

After the exclusion of trials with 0% or 100% events in all arms, 299 trials were included in the NMA for the instrumental delivery outcome (see *Figure 4*). There were no trials remaining that compared corticosteroids, hyaluronidase, breast stimulation or castor oil. Model fit statistics for the model assuming consistency were indicative of a lack of fit, but this was judged to be borderline. The residual deviance indicated a slight improvement in fit for the model assuming inconsistency. This was accompanied by an increase in heterogeneity and a higher DIC. On balance, therefore, a REs NMA model assuming consistency was still preferred (see *Appendix 11*, *Table 46*). Reported results are based on this model, with 299 trials and 32 interventions (see *Table 7* and *Figure 4*).

Table 7 reports the posterior median ORs (95% CrI) for each intervention relative to placebo (the full results are reported in *Appendix 12*, *Table 52*). As a further check of consistency, we note that for all of the interventions the direct and NMA results are similar. Using placebo as the reference intervention two interventions resulted in significant reduction in instrumental delivery, namely vaginal PGE_2 pessary (slow release) and Foley catheter.

Table 8 reports the posterior mean ranks and absolute probabilities for instrumental delivery. The intervention with the lowest mean rank (6) was Foley catheter, with a 95% CrI ranging from 2 to 12 (of 30 interventions). This intervention had lowest absolute probability of 13% (95% CrI 5% to 28%) jointly with oestrogen (95% CrI 4% to 31%) and buccal/sublingual misoprostol (95% CrI 5% to 29%). However, we note that although the posterior mean rank was '8' for oestrogen and '7' for buccal/sublingual misoprostol, respective 95% CrI were wide (oestrogen: 1 to 28 and buccal misoprostol: 1 to 20). This uncertainty is also reflected in the CrIs around the ORs for these interventions in *Table 7*. The intervention with the highest absolute probability of instrumental delivery (i.e. worst) was i.v. prostaglandin at 30% (95% CrI 10% to 58%).

Figure 9 reports the rankograms for instrumental delivery. We note that for all of the interventions the rankograms are flat, with relatively low peaks – indicative of considerable uncertainty around the probability any intervention is the 'best'. We do not therefore include an assessment of which probability is best in our summary for instrumental delivery.

See *Appendix 13* (*Table 59*) for the results for the sensitivity analysis, excluding trials at high risk of bias. Removing these trials also removed five interventions from the analysis. Consequently, posterior mean ranks appear to have changed (although 95% CrI are overlapping between the two analyses).

Uterine hyperstimulation with fetal heart rate changes

After excluding trials with 0% or 100% events in all arms, 180 trials assessed the outcome of uterine hyperstimulation. The analysis includes 19 interventions, in addition to placebo and no intervention. There were no trials remaining that compared PGF_2, amniotomy, oestrogens, corticosteroids, relaxin, hyaluronidase, membrane sweeping, extra-amniotic PGE_2, i.v. prostaglandin, sexual intercourse, acupuncture, breast stimulation, homeopathy, castor oil or oral prostaglandins (see *Figure 5*). Model fit statistics were suggestive of inconsistency for this network (see *Appendix 11*, *Table 47*). In the first instance, a continuity correction of 0.5 was added to each cell for those studies with zero events in either arm, allowing the log OR to be estimated. This improved the model fit, and the results presented below are based on the continuity corrected REs NMA model assuming consistency.

Table 9 reports the posterior median ORs (95% CrI) for each intervention relative to placebo (the full results for each intervention compared with every other are reported in *Appendix 12*, *Table 53*). We note that for all of the interventions the direct and NMA results are similar. Relative to the size of the intervention effect estimates, high to moderate between-trial heterogeneity was observed for this outcome [$\tau = 0.54$ (95% CrI 0.38 to 0.72)]. *Figure 8* reports the rankograms for uterine hyperstimulation. The safest intervention in terms of risk of uterine hyperstimulation was double-balloon or Cook's catheter, with a 47% probability of being the best and a 91% probability of being in the top three interventions.

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TABLE 7 Odds ratios and 95% CrI for instrumental delivery for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention vs. placebo	OR	95% CrI	OR	95% CrI	Direct trials
Oestrogens	0.68	0.32 to 1.28	0.75	0.25 to 1.71	1
Mechanical methods – Foley catheter	0.68	0.50 to 0.91	–	–	0
Buccal/sublingual misoprostol	0.69	0.44 to 1.03	–	–	0
Vaginal PGE_2 pessary (slow release)	0.72	0.50 to 0.99	1.05	0.40 to 2.26	2
Oral misoprostol tablet < 50 µg	0.74	0.34 to 1.38	–	–	0
Oral prostaglandins	0.74	0.45 to 1.16	–	–	0
Double-balloon or Cook's catheter	0.75	0.47 to 1.14	–	–	0
Vaginal misoprostol < 50 µg	0.80	0.59 to 1.05	0.64	0.09 to 2.23	1
Mechanical methods – laminaria	0.83	0.47 to 1.38	–	–	0
Acupuncture	0.83	0.51 to 1.26	1.08	0.57 to 1.85	3
Oral misoprostol tablet ≥ 50 µg	0.84	0.63 to 1.09	0.54	0.25 to 1.00	5
PGF_2 gel	0.86	0.58 to 1.25	0.74	0.43 to 1.20	3
Amniotomy	0.86	0.50 to 1.38	–	–	0
Intracervical PGE_2	0.89	0.68 to 1.14	1.09	0.61 to 1.79	6
Vaginal PGE_2 (tablet)	0.91	0.67 to 1.22	–	–	0
Extra-amniotic PGE_2	0.91	0.49 to 1.52	0.88	0.32 to 1.91	3
Vaginal misoprostol ≥ 50 µg	0.92	0.70 to 1.18	1.21	0.35 to 3.12	2
NO	0.92	0.69 to 1.21	0.91	0.61 to 1.28	2
Vaginal PGE_2 (gel)	0.93	0.72 to 1.18	1.18	0.38 to 2.85	3
Sustained-release misoprostol vaginal pessary	0.93	0.46 to 1.71	–	–	0
i.v. oxytocin with amniotomy	0.93	0.64 to 1.31	–	–	0
Titrated (low-dose) oral misoprostol solution	1.00	0.62 to 1.52	–	–	0
Vaginal PGE_2 pessary (normal release)	1.08	0.79 to 1.45	0.98	0.50 to 1.75	3
i.v. oxytocin	1.08	0.83 to 1.39	–	–	0
Membrane sweeping	1.20	0.84 to 1.66	15.45	1.56 to 71.26	1
Sexual intercourse	1.29	0.68 to 2.24	–	–	0
Relaxin	1.44	0.66 to 2.78	1.45	0.65 to 2.87	3
Mifepristone	1.68	1.05 to 2.59	1.84	1.08 to 2.98	5
i.v. prostaglandin	2.04	0.85 to 4.12	–	–	0
Homeopathy	2.13	0.11 to 10.24	2.18	0.09 to 11.64	1

Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention, i.e. fewer events occurred on the active intervention. Empty cells indicate that direct evidence was not available for that comparison. The column 'Direct trials' reports the number of trials available for the direct comparisons vs. placebo only.

TABLE 8 Absolute probability of instrumental delivery across all 30 interventions and placebo/no intervention included in the NMA. Posterior mean rank and 95% CrIs

Intervention	Absolute probability of instrumental delivery		Posterior mean rank and 95% CrI	
	Posterior mean	95% CrI		
Oestrogens	0.13	0.04 to 0.31	8	1 to 28
Foley catheter	0.13	0.05 to 0.28	6	2 to 12
Buccal/sublingual misoprostol	0.13	0.05 to 0.29	7	1 to 20
Vaginal PGE_2 pessary (slow release)	0.14	0.05 to 0.29	7	2 to 17
Oral misoprostol tablet < 50 µg	0.14	0.04 to 0.32	9	1 to 29
Oral prostaglandins	0.14	0.05 to 0.31	9	1 to 25
Vaginal misoprostol < 50 µg	0.15	0.06 to 0.31	11	4 to 20
Double-balloon or Cook's catheter	0.15	0.05 to 0.31	9	1 to 24
PGF_2 gel	0.16	0.06 to 0.34	14	2 to 28
Oral misoprostol tablet ≥ 50 µg	0.16	0.06 to 0.32	13	6 to 21
Amniotomy	0.16	0.06 to 0.34	13	2 to 29
Laminaria	0.16	0.05 to 0.34	12	1 to 29
Acupuncture	0.16	0.05 to 0.34	13	1 to 28
Vaginal PGE_2 (tablet)	0.17	0.07 to 0.33	17	8 to 26
Vaginal PGE_2 (gel)	0.17	0.07 to 0.35	18	11 to 24
Intracervical PGE_2	0.17	0.06 to 0.34	15	8 to 23
Vaginal misoprostol ≥ 50 µg	0.17	0.07 to 0.34	17	10 to 24
Sustained-release misoprostol vaginal pessary	0.17	0.05 to 0.37	16	1 to 31
i.v. oxytocin with amniotomy	0.17	0.06 to 0.35	17	6 to 28
NO	0.17	0.06 to 0.36	17	5 to 28
Extra-amniotic PGE_2	0.17	0.06 to 0.36	15	1 to 30
Titrated (low) oral misoprostol solution	0.18	0.07 to 0.37	19	5 to 30
No intervention	0.19	0.07 to 0.37	21	12 to 28
Vaginal PGE_2 pessary (normal release)	0.19	0.07 to 0.38	23	13 to 30
Placebo	0.2	0.08 to 0.38	24	17 to 29
i.v. oxytocin	0.2	0.08 to 0.38	24	18 to 29
Membrane sweeping	0.21	0.08 to 0.41	26	16 to 31
Sexual intercourse	0.22	0.08 to 0.45	25	7 to 32
Relaxin	0.24	0.07 to 0.5	25	4 to 32
Homeopathy	0.24	0.01 to 0.77	18	1 to 32
Mifepristone	0.27	0.1 to 0.52	30	22 to 32
i.v. prostaglandin	0.3	0.1 to 0.58	30	15 to 32

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TABLE 9 Odds ratios and 95% CrI for uterine hyperstimulation for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention	OR	95% CrI	OR	95% CrI	Direct trials
Double-balloon or Cook's catheter	0.26	0.00 to 1.18	–	–	0
NO	0.38	0.02 to 1.54	–	–	0
Laminaria	0.52	0.01 to 2.62	–	–	0
Foley catheter	0.92	0.37 to 1.93	–	–	0
Oral misoprostol tablet < 50 µg	1.13	0.28 to 3.15	–	–	0
Vaginal PGE_2 pessary (normal release)	1.40	0.37 to 3.68	0.46	0.00 to 3.00	1
Intracervical PGE_2	1.70	0.87 to 3.05	1.65	0.57 to 3.88	8
Titrated (low-dose) oral misoprostol solution	1.93	0.73 to 4.19	–	–	0
Vaginal PGE_2 (tablet)	1.99	0.78 to 4.25	0.78	0.00 to 5.12	1
i.v. oxytocin	2.12	0.97 to 4.10	0.34	0.00 to 2.19	1
Vaginal PGE_2 (gel)	2.33	1.10 to 4.40	5.81	0.32 to 29.93	3
Vaginal misoprostol < 50 µg	2.75	1.36 to 5.04	2.46	0.25 to 10.23	2
Oral misoprostol tablet ≥ 50 µg	2.85	1.41 to 5.20	7.75	1.22 to 30.55	5
Vaginal PGE_2 pessary (slow release)	2.97	1.36 to 5.73	27.00	2.01 to 131.2	3
Buccal/sublingual misoprostol	4.25	1.71 to 9.02	–	–	0
Vaginal misoprostol tablet ≥ 50 µg	4.40	2.22 to 7.94	28.54	0.53 to 159.4	2
Sustained-release misoprostol vaginal pessary	5.58	1.58 to 14.57	–	–	0
i.v. oxytocin with amniotomy	7.44	0.27 to 40.66	–	–	0
Mifepristone[a]	Not estimable		Not estimable		1

a Results were from a single trial with zero events in one arm.
Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention (i.e. fewer undesirable events occurred on the active intervention). Empty cells indicate that direct evidence was not available for that comparison. The column 'Direct trials' reports the number of trials available for the direct comparisons vs. placebo only.

Table 10 reports the posterior mean ranks and absolute probabilities for this outcome. The mean rank for double-balloon or Cook's catheter was '2', with a 95% CrI ranging from 1 to 7 (of 19 interventions). Double-balloon or Cook's catheter also had the lowest absolute probability of hyperstimulation at 1% (95% CrI 0% to 3%). The probability of being ranked in the bottom three (i.e. intervention with highest risk of uterine hyperstimulation) was 64% for sustained-release misoprostol insert and 59% for vaginal misoprostol (≥ 50 µg). The intervention with the worst mean rank was vaginal misoprostol ≥ 50 µg: mean rank 19 (95% CrI 17 to 21). The absolute probability of uterine hyperstimulation for vaginal misoprostol ≥ 50 µg was 9% (95% CrI 2% to 25%).

Results were largely robust to the pre-planned sensitivity analysis based on allocation concealment bias. The posterior mean rank for sustained-release misoprostol insert changed from 18 (95% CrI 11 to 21) to 11 (95% CrI 3 to 19). Full sensitivity analysis results are reported in *Appendix 13*, *Table 57*.

TABLE 10 Absolute probability of uterine hyperstimulation across all 19 interventions and placebo/no intervention included in the NMA. Posterior mean rank and 95% CrIs

Intervention	Absolute probability of hyperstimulation		Posterior mean rank and 95% CrI	
	Posterior mean	95% CrI		
Double-balloon or Cook's catheter	0.01	0.00 to 0.03	2	1 to 6
NO	0.01	0.00 to 0.04	3	1 to 8
Laminaria	0.01	0.00 to 0.06	3	1 to 13
Foley catheter	0.02	0.00 to 0.07	5	3 to 9
Placebo	0.02	0.00 to 0.08	6	3 to 10
Oral misoprostol tablet < 50 µg	0.03	0.00 to 0.09	6	2 to 15
Vaginal PGE_2 pessary (normal release)	0.03	0.00 to 0.11	8	3 to 16
No treatment	0.03	0.00 to 0.12	8	3 to 17
Intracervical PGE_2	0.04	0.01 to 0.12	10	6 to 13
Vaginal PGE_2 (tablet)	0.04	0.01 to 0.11	11	6 to 17
Titrated (low-dose) oral misoprostol solution	0.04	0.01 to 0.14	11	5 to 17
i.v. oxytocin	0.05	0.01 to 0.14	12	7 to 17
Vaginal PGE_2 (gel)	0.05	0.01 to 0.15	13	9 to 17
Vaginal misoprostol < 50 µg	0.06	0.01 to 0.18	15	11 to 18
Oral misoprostol tablet ≥ 50 µg	0.06	0.01 to 0.18	15	11 to 18
Vaginal PGE_2 pessary (slow release)	0.06	0.01 to 0.19	15	10 to 19
Buccal/sublingual misoprostol	0.09	0.02 to 0.26	19	13 to 21
Vaginal misoprostol ≥ 50 µg	0.09	0.02 to 0.25	19	17 to 21
Sustained-release misoprostol vaginal pessary	0.11	0.02 to 0.34	18	10 to 21
i.v. oxytocin with amniotomy	0.11	0.00 to 0.52	14	3 to 21
Mifepristone	0.26	0.01 to 0.89	19	7 to 21

Neonatal and maternal mortality and severe morbidity

It was not possible to conduct a NMA for composite outcomes of neonatal mortality and serious morbidity or maternal mortality and serious morbidity, as these were too rare or poorly reported to carry out meaningful analysis. The full data sets for these outcomes are reported in *Appendix 14* (*Tables 64* and *65*). In addition, there is a lack of a universally accepted definition for serious infant or maternal morbidity. Although we planned to include *any* such reported outcome by individual trials, the outcomes were still rarely reported. Only 21.3% of included trials (131/611) reported perinatal deaths with an incidence of 0.3% (94/32,248). A total of 77 out of 611 trials (12.6%) reported a total of 20 maternal deaths or serious morbidity [five deaths, 14 uterine ruptures and one intensive care unit (ICU) admission for infection], that is, an incidence of 0.1%. For completeness, we included the network diagrams for both outcomes (*Figures 10* and *11*). The network diagram includes those trials reporting at least one event (42 of the included trials reported at least one perinatal death and 16 trials reported at least one case of maternal death or severe morbidity).

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FIGURE 10 Neonatal mortality. Network diagram of studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (dose < 50 µg); 10, vaginal misoprostol (dose ≥ 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, i.v. oxytocin; 14, i.v. oxytocin with amniotomy; 15, NO; 16, Foley catheter; 17, laminaria; 18, membrane sweeping; 19, extra-amniotic PGE_2; 20, i.v. prostaglandin; 21, sexual intercourse; 22, breast stimulation; 23, oral prostaglandins; 24, buccal/sublingual misoprostol.

FIGURE 11 Maternal mortality and serious morbidity. Network diagram of studies included in analysis. The width of the lines is proportional to the number of trials directly comparing each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose ≥ 50 µg); 11, i.v. oxytocin; 12, i.v. oxytocin with amniotomy; 13, mifepristone; 14, mechanical methods – Foley catheter; 15, mechanical methods – laminaria; 16, buccal/sublingual misoprostol.

Neonatal intensive care unit admission

After the exclusion of trials with 0% or 100% events in all arms, 205 trials assessed the outcome of admission to the NICU and the network is shown in *Figure 6*. There were no trials remaining that compared corticosteroids, relaxin, hyaluronidase, i.v. prostaglandin, breast stimulation, homeopathy or castor oil. Model fit statistics indicated evidence of inconsistency for this network, with the inconsistency model resulting in a considerable decrease in between-trial heterogeneity (see *Appendix 11*, *Table 49*). Comparing the NMA estimates with those from the pairwise analysis identified 23 intervention comparisons for which the NMA and direct evidence were in disagreement. A further investigation of this apparent inconsistency was conducted using a 'node-splitting' approach.[942] Node splitting separates evidence on a particular comparison (node) into direct and indirect to identify how the indirect evidence was combining with, or adding to, the direct evidence to form the NMA estimates. Using this approach, 3 out of 23 comparisons were highlighted as having significant differences in the contribution of the direct and indirect evidence to the NMA estimate. The three comparisons were vaginal misoprostol ($\geq$ 50 µg) against NO, vaginal PGE_2 pessary (slow release) against titrated (low-dose) oral misoprostol solution, and no treatment against oral misoprostol tablet ($\geq$ 50 µg). The first two of these were identified as being a consequence of zero cells in the direct evidence estimating a very extreme treatment effect. However, the remaining comparison between no treatment and oral misoprostol tablet ($\geq$ 50 µg) had statistically significant differences in the direct and indirect evidence (Bayesian *p*-value = 2.98401E-05), even when trials with zero cells were removed.

Within the no treatment against oral misoprostol tablet ($\geq$ 50 µg) comparison, one trial in particular, Rath and Manus,[701] was identified as deviant from the rest of the evidence and was therefore re-examined. The criteria for admission to the NICU in this study were unclear, and the description of the facility was given simply as 'nursery'. A post hoc decision to remove this trial for this outcome was taken and a further analysis was subsequently carried out. The REs model, excluding the Rath and Manus trial[701] and assuming consistency, was a good fit to the data, and the results presented here are therefore from this analysis.

Table 11 reports the posterior median ORs (95% CrI) for each intervention relative to placebo (full results are reported in *Appendix 12*, *Table 55*). Relative to the size of the intervention effect estimates, moderate between-trial heterogeneity was observed for this outcome [$\tau = 0.17$ (95% CrI 0.04 to 0.30)]. Using placebo as the reference only, extra-amniotic PGE_2 resulted in significant reduction in NICU admission. *Table 12* reports the posterior mean ranks for NICU admission. Extra-amniotic PGE_2 had the best mean rank of all interventions (4), with a 95% CrI ranging from 1 to 15. This intervention also had the lowest absolute probability of NICU admission at 4% (95% CrI 0.6% to 12%) and a 59% chance of being in the top three interventions.

Figure 12 reports the rankograms for NICU admission. For all interventions the rankograms are flat and indicative of considerable uncertainty around the probability any intervention is the 'best'. We do not therefore include an assessment of which probability is 'best' in our summary for this outcome as it would be misleading.

All results were robust to the preplanned sensitivity analysis excluding studies at high risk of bias for allocation concealment and are reported in *Appendix 13, Table 58*.

Apgar score < 7 at 5 minutes

After the exclusion of trials with 0% or 100% events in all arms, 200 trials of 28 interventions assessed the outcome of Apgar score < 7 at 5 minutes (see *Figure 7*). There were no trials remaining that compared PGF_2 gel, oestrogens, corticosteroids, relaxin, hyaluronidase, breast stimulation, homeopathy or castor oil. Residual deviance statistics, for the model assuming consistency, suggested a lack of fit, with the model assuming inconsistency also having slightly lower heterogeneity. Further investigation indicated that this was due to the number of zero events in trial arms rather than heterogeneity in study design. The REs NMA model assuming consistency was therefore the preferred model and reported results are based on this.

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TABLE 11 Odds ratios and 95% CrI for NICU admission for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention vs. placebo	OR	95% CrI	OR	95% CrI	Trials
Extra-amniotic PGE_2	0.40	0.16 to 0.82	–	–	0
Sexual intercourse	0.48	0.14 to 1.17	–	–	0
PGF_2 gel	0.56	0.18 to 1.36	–	–	0
Sustained-release misoprostol vaginal pessary	0.59	0.31 to 1.03	–	–	0
Double-balloon or Cook's catheter	0.60	0.26 to 1.15	–	–	0
Foley catheter	0.66	0.41 to 1.00	–	–	0
Titrated (low-dose) oral misoprostol solution	0.67	0.39 to 1.07	–	–	0
Oral prostaglandins	0.68	0.09 to 2.40	–	–	0
Vaginal PGE_2 pessary (slow release)	0.73	0.44 to 1.11	29.03	0.45 to 156.3	1
Buccal/sublingual misoprostol	0.73	0.42 to 1.19	–	–	0
Vaginal misoprostol < 50 µg	0.74	0.49 to 1.06	0.95	0.38 to 1.94	2
Intracervical PGE_2	0.76	0.48 to 1.12	1.06	0.08 to 4.41	2
i.v. oxytocin	0.76	0.50 to 1.12	0.78	0.06 to 3.02	1
Oral misoprostol tablet < 50 µg	0.79	0.31 to 1.63	–	–	0
NO	0.82	0.54 to 1.20	0.92	0.56 to 1.43	5
Vaginal PGE_2 (tablet)	0.83	0.42 to 1.44	–	–	0
Oral misoprostol tablet ≥ 50 µg	0.83	0.55 to 1.20	0.75	0.28 to 1.61	3
Membrane sweeping	0.83	0.43 to 1.46	1.14	0.01 to 6.19	1
Amniotomy	0.84	0.22 to 2.26	–	–	0
Vaginal misoprostol ≥ 50 µg	0.85	0.57 to 1.23	–	–	0
Vaginal PGE_2 (gel)	0.88	0.59 to 1.26	0.71	0.26 to 1.58	4
Vaginal PGE_2 pessary (normal release)	0.88	0.51 to 1.40	0.86	0.30 to 1.94	3
Acupuncture	0.94	0.11 to 3.36	1.43	0.13 to 5.95	2
Oestrogens	1.43	0.01 to 7.80	2.29	0.02 to 12.21	1
Laminaria	1.54	0.40 to 4.31	–	–	0
i.v. oxytocin with amniotomy	1.60	0.71 to 3.06	–	–	0
Mifepristone[a]	1.71	0.73 to 3.55	1.15	0.38 to 2.75	1

a Data from a single trial with zero events in one arm.
Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention (i.e. fewer undesirable events occurred on the active intervention). Empty cells indicate that direct evidence was not available for that comparison. The column 'trials' reports the number of trials available for the direct comparisons vs. placebo only.

TABLE 12 Absolute probability of NICU admission across all 27 interventions and placebo/no intervention included in the NMA

Intervention	Absolute probability of NICU admission		Posterior mean rank and 95% CrI	
	Posterior mean	95% CrI		
Extra-amniotic PGE_2	0.04	0.01 to 0.12	4	1 to 15
Sexual intercourse	0.04	0.01 to 0.14	6	1 to 25
PGF_2 gel	0.05	0.01 to 0.16	8	1 to 26
Sustained-release misoprostol vaginal pessary	0.05	0.01 to 0.15	8	2 to 22
Double-balloon or Cook's catheter	0.05	0.01 to 0.16	9	2 to 25
Vaginal PGE_2 pessary (slow release)	0.06	0.01 to 0.18	13	6 to 23
Intracervical PGE_2	0.06	0.01 to 0.18	14	7 to 23
Vaginal misoprostol < 50 µg	0.06	0.01 to 0.18	13	7 to 20
Titrated (low-dose) oral misoprostol solution	0.06	0.01 to 0.17	11	4 to 22
i.v. oxytocin	0.06	0.01 to 0.18	15	8 to 22
Foley catheter	0.06	0.01 to 0.16	10	5 to 19
Oral prostaglandins	0.06	0.00 to 0.23	10	1 to 29
Buccal/sublingual misoprostol	0.06	0.01 to 0.18	13	4 to 25
Vaginal PGE_2 (tablet)	0.07	0.02 to 0.17	16	4 to 27
Vaginal PGE_2 (gel)	0.07	0.02 to 0.20	20	13 to 25
Vaginal PGE_2 pessary (normal release)	0.07	0.02 to 0.21	18	6 to 27
Vaginal misoprostol ≥ 50 µg	0.07	0.02 to 0.20	19	12 to 25
Oral misoprostol tablet < 50 µg	0.07	0.01 to 0.20	14	2 to 28
Oral misoprostol tablet ≥ 50 µg	0.07	0.02 to 0.19	18	10 to 24
Amniotomy	0.07	0.01 to 0.23	14	1 to 29
NO	0.07	0.01 to 0.20	17	5 to 26
Membrane sweeping	0.07	0.01 to 0.20	16	5 to 27
Placebo	0.08	0.02 to 0.23	23	16 to 27
No intervention	0.08	0.02 to 0.22	23	13 to 28
Acupuncture	0.08	0.00 to 0.32	14	1 to 29
Oestrogens	0.10	0.00 to 0.53	14	1 to 29
i.v. oxytocin with amniotomy	0.12	0.02 to 0.33	27	17 to 29
Laminaria	0.12	0.02 to 0.37	23	4 to 29
Mifepristone	0.13	0.02 to 0.37	26	13 to 29

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FIGURE 12 Rankograms for each of the 29 induction interventions for Apgar score < 7 at 5 minutes and NICU admission. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal pessary (normal release); (i) vaginal misoprostol (dose < 50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol (dose < 50 µg); (l) oral misoprostol (dose ≥ 50 µg); (m) titrated (low-dose) oral misoprostol solution; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin plus amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) Foley catheter; (v) laminaria including dilapan; (w) double balloon or Cook's catheter; (x) membrane sweeping; (y) extra-amniotic PGE_2; (z) sexual intercourse; (aa) acupuncture; (ab) oral prostaglandins; and (ac) buccal/sublingual misoprostol. (*continued*)

FIGURE 12 Rankograms for each of the 29 induction interventions for Apgar score < 7 at 5 minutes and NICU admission. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal pessary (normal release); (i) vaginal misoprostol (dose < 50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol (dose < 50 µg); (l) oral misoprostol (dose ≥ 50 µg); (m) titrated (low-dose) oral misoprostol solution; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin plus amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) Foley catheter; (v) laminaria including dilapan; (w) double balloon or Cook's catheter; (x) membrane sweeping; (y) extra-amniotic PGE_2; (z) sexual intercourse; (aa) acupuncture; (ab) oral prostaglandins; and (ac) buccal/sublingual misoprostol. (*continued*)

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FIGURE 12 Rankograms for each of the 29 induction interventions for Apgar score < 7 at 5 minutes and NICU admission. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal pessary (normal release); (i) vaginal misoprostol (dose < 50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol (dose < 50 µg); (l) oral misoprostol (dose ≥ 50 µg); (m) titrated (low-dose) oral misoprostol solution; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin plus amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) Foley catheter; (v) laminaria including dilapan; (w) double balloon or Cook's catheter; (x) membrane sweeping; (y) extra-amniotic PGE_2; (z) sexual intercourse; (aa) acupuncture; (ab) oral prostaglandins; and (ac) buccal/sublingual misoprostol. (*continued*)

FIGURE 12 Rankograms for each of the 29 induction interventions for Apgar score < 7 at 5 minutes and NICU admission. Ranking indicates the probability of being the best intervention, the second best, the third best, etc. The *x*-axis shows the relative ranking and the *y*-axis the probability of each ranking. (a) No treatment; (b) placebo; (c) vaginal PGE_2 (tablet); (d) vaginal PGE_2 (gel); (e) vaginal PGE_2 pessary (slow release); (f) PGF_2 gel; (g) intracervical PGE_2; (h) vaginal pessary (normal release); (i) vaginal misoprostol (dose < 50 µg); (j) vaginal misoprostol (dose ≥ 50 µg); (k) oral misoprostol (dose < 50 µg); (l) oral misoprostol (dose ≥ 50 µg); (m) titrated (low-dose) oral misoprostol solution; (n) sustained-release misoprostol insert; (o) i.v. oxytocin; (p) amniotomy; (q) i.v. oxytocin plus amniotomy; (r) NO; (s) mifepristone; (t) oestrogens; (u) Foley catheter; (v) laminaria including dilapan; (w) double balloon or Cook's catheter; (x) membrane sweeping; (y) extra-amniotic PGE_2; (z) sexual intercourse; (aa) acupuncture; (ab) oral prostaglandins; and (ac) buccal/sublingual misoprostol. (*continued*)

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Table 13 reports posterior mean ORs (95% CrI) for each intervention relative to placebo (full results are reported in *Appendix 12*, *Table 54*). Relative to the size of the intervention effect estimates, moderate to small between-trial heterogeneity was observed for this outcome [$\tau = 0.19$ (95% CrI 0.01 to 0.46)]. Using placebo as the reference intervention, only two interventions resulted in significant reduction in Apgar score < 7 at 5 minutes: NO and buccal/sublingual misoprostol.

Table 14 reports the absolute probabilities and posterior mean ranks for each intervention. The safest intervention in terms of risk of Apgar score < 7 at 5 minutes was double-balloon or Cook's catheter, with a mean rank of '4'; however, the 95% CrI ranged from '1' to '22' out of 28 interventions, reflecting the considerable uncertainty in this estimate. Double-balloon or Cook's catheter also had the lowest absolute probability of an event at 1.1% (CrI 0.02% to 6.5%). Buccal/sublingual misoprostol had a posterior mean rank of '5' (95% CrI 1 to 15) and an absolute probability of Apgar score < 7 at 5 minutes of 1.4% (95% CrI 0.2% to 5%).

Table 14 also reports that three further interventions had a posterior mean rank of '7': titrated (low-dose) oral misoprostol solution, NO and oral prostaglandins. However, the uncertainty around these rankings is considerable. Low ranking interventions include i.v. oxytocin with amniotomy, misoprostol vaginal pessary (sustained release) and membrane sweeping. Note that the ORs relative to placebo did not achieve statistical significance for any of these interventions (see *Table 13*).

Figure 12 reports the rankograms for Apgar score < 7 at 5 minutes. For all of the interventions the rankograms are flat and indicative of considerable uncertainty around the probability that any intervention is the 'best'. Therefore, we did not include an assessment of probability for being the 'best' in our summary for this outcome.

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TABLE 13 Odds ratios and 95% CrI for Apgar score < 7 at 5 minutes for every intervention compared with placebo

	NMA		Pairwise meta-analysis		
Active intervention vs. placebo	OR	95% CrI	OR	95% CrI	Trials
Extra-amniotic PGE_2	Not estimable[a]		–	–	0
Double-balloon or Cook's catheter	0.17	0.01 to 1.67	–	–	0
Oral prostaglandins	0.35	0.06 to 1.68	–	–	0
Buccal/sublingual misoprostol	0.41	0.15 to 0.99	–	–	0
Titrated (low) oral misoprostol solution	0.46	0.19 to 1.09	–	–	0
NO	0.49	0.20 to 0.95	0.94	0.39 to 1.88	5
Oral misoprostol tablet < 50 µg	0.53	0.13 to 2.08	–	–	0
Acupuncture	0.54	0.14 to 1.87	0.82	0.15 to 2.49	3
Oral misoprostol tablet ≥ 50 µg	0.57	0.30 to 1.13	0.85	0.18 to 2.41	3
Intracervical PGE_2	0.67	0.38 to 1.20	0.46	0.14 to 1.11	4
Vaginal PGE_2 (tablet)	0.75	0.34 to 1.62	0.57	0.04 to 2.04	1
Mifepristone	0.77	0.23 to 3.37	0.78	0.16 to 2.59	2
Vaginal PGE_2 pessary (normal release)	0.80	0.35 to 1.84	1.79	0.11 to 8.27	4
Foley catheter	0.82	0.41 to 1.65	–	–	0
i.v. oxytocin	0.85	0.45 to 1.62	Not estimable		
Vaginal misoprostol < 50 µg	0.92	0.49 to 1.69	0.04	0 to 0.32	1
Laminaria	0.92	0.25 to 3.41	–	–	0
Sexual intercourse	0.97	0.02 to 37.3	–	–	0
Vaginal misoprostol ≥ 50 µg	1.01	0.56 to 1.81	–	–	0
Vaginal PGE_2 (gel)	1.03	0.58 to 1.85	0.70	0.12 to 2.21	5
Vaginal PGE_2 pessary (slow release)	1.06	0.43 to 2.60	–	–	0
i.v. prostaglandin	1.12	0.29 to 4.25	–	–	0
Amniotomy	1.30	0.37 to 4.61	–	–	0
Membrane sweeping	1.85	0.63 to 5.40	–	–	0
Sustained-release misoprostol vaginal pessary	1.91	0.57 to 6.35	–	–	0
i.v. oxytocin with amniotomy	2.39	0.62 to 9.58	–	–	0

a Not estimable because of comparison being based on a single trial with zero cells and connected to the network on a spur.

Results from NMA and pairwise meta-analysis (when possible). An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention (i.e. fewer undesirable events occurred on the active intervention). Empty cells indicate that direct evidence was not available for that comparison.

TABLE 14 Absolute probability of Apgar score < 7 at 5 minutes across all 26 interventions and placebo/no intervention included in the NMA

Intervention	Absolute probability of Apgar score < 7 at 5 minutes admission		Posterior mean rank and 95% CrI	
	Posterior mean	95% CrI		
Double-balloon or Cook's catheter	0.01	0.00 to 0.06	4	1 to 22
Oral prostaglandins	0.01	0.00 to 0.07	7	1 to 24
Buccal/sublingual misoprostol	0.01	0.00 to 0.05	5	1 to 15
Vaginal PGE_2 (tablet)	0.02	0.00 to 0.07	12	3 to 23
Intracervical PGE_2	0.02	0.00 to 0.07	10	5 to 16
Oral misoprostol tablet < 50 µg	0.02	0.00 to 0.08	9	1 to 24
Oral misoprostol tablet ≥ 50 µg	0.02	0.00 to 0.06	8	3 to 15
Titrated (low) oral misoprostol solution	0.02	0.00 to 0.06	7	2 to 17
NO	0.02	0.00 to 0.06	7	2 to 17
Acupuncture	0.02	0.00 to 0.09	9	1 to 25
Placebo	0.03	0.01 to 0.1	17	10 to 23
No intervention	0.03	0.00 to 0.11	17	7 to 25
Vaginal PGE_2 (gel)	0.03	0.01 to 0.1	19	12 to 23
Vaginal PGE_2 pessary (normal release)	0.03	0.00 to 0.10	13	4 to 24
Vaginal misoprostol < 50 µg	0.03	0.00 to 0.10	16	9 to 23
Vaginal misoprostol ≥ 50 µg	0.03	0.01 to 0.10	18	11 to 23
i.v. oxytocin	0.03	0.00 to 0.09	15	8 to 21
Mifepristone	0.03	0.00 to 0.13	14	2 to 27
Foley catheter	0.03	0.00 to 0.09	14	7 to 22
Laminaria	0.03	0.00 to 0.13	16	2 to 27
Vaginal PGE_2 pessary (slow release)	0.04	0.01 to 0.12	18	7 to 25
i.v. prostaglandin	0.04	0.00 to 0.16	18	3 to 27
Amniotomy	0.05	0.00 to 0.18	20	4 to 27
Membrane sweeping	0.06	0.01 to 0.21	23	12 to 27
Sustained-release misoprostol vaginal pessary	0.07	0.01 to 0.24	24	10 to 27
i.v. oxytocin with amniotomy	0.08	0.01 to 0.29	24	12 to 27
Sexual intercourse	0.08	0.00 to 0.59	15	1 to 27
Extra-amniotic PGE_2[a]	Not estimable			

a Single trial with zero events in one arm.

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Maternal satisfaction with care and induction of labour method

Less than 5% of the studies included in the review reported data relating to maternal satisfaction with the induction process. In *Table 15* we set out findings from these trials. We were unable to pool any results from trials in either pairwise or NMA. The trials focused on a broad range of interventions (10/29 examined oxytocin) and comparators. Furthermore, outcome definitions varied considerably. For mechanical methods, the questions related to discomfort during the initial procedure (e.g. insertion of catheter or membrane sweeping). For other methods there were more global assessments of the process. There were no preferred methods and, in general, women were satisfied with (or at least accepted) the induction process.

Complementary methods

Unfortunately, it was not possible to assess the efficacy (VD within 24 hours) of trials of complementary interventions or membrane sweeping. Relative to placebo, membrane sweeping performed marginally better than acupuncture or sexual intercourse, with an OR of 0.74 (95% CrI 0.53 to 0.99) for CS and an absolute probability of CS of 20% (95% CrI 3% to 54%) compared with 21% for both sexual intercourse (95% CrI 3% to 58%) and acupuncture (95% CrI 3% to 57%). For instrumental delivery, membrane sweeping was consistent, with both an increased and decreased odds of assisted birth, and was ranked '26' (95% CrI 16 to 31) out of 32 interventions. For both 'NICU admission' and 'Apgar score < 7 at 5 minutes' outcomes, membrane sweeping was associated with a low absolute probability of either event.

Subgroup analyses

We planned to conduct subgroup analyses to explore the effect of different clinical subgroups on effectiveness data. Here we present subgroup analyses for three outcomes: (1) failure to achieve VD within 24 hours of induction; (2) CS; and (3) Apgar score < 7 at 5 minutes. The prespecified confounders were (1) women with intact or ruptured membranes; (2) different gestational ages; (3) women with or without a previous CS; and (4) women with low (< 6) or higher (≥ 6) Bishop scores. *Table 16* reports the breakdown of trials for each of these possible subgroups.

Subgroup analysis for intact membranes compared with ruptured membranes

When the analysis was limited to only those trials in which all women had *intact membranes,* 56 trials of 15 treatments formed a connected network for the outcome of no VD within 24 hours (see *Appendix 15*). When restricted to those trials that included only women with *ruptured membranes*, a connected network of 17 trials of 12 treatments was possible. Note that studies including women with both intact or ruptured membranes, which did not report results for each subgroup separately, are not included here. Reported results are based on the REs NMA model, assuming consistency (see *Appendix 15*). All active interventions are compared with vaginal PGE_2 gel, as placebo is no longer available in the restricted networks.

TABLE 15 Maternal satisfaction with the method of induction

Study ID	Intervention	Comparison	Satisfaction outcomes	Results	Notes
Adeniji 2005[51]	Vaginal misoprostol 50 µg ($n = 50$)	Foley catheter ($n = 46$)	Maternal discomfort (NC). Maternal questionnaires	*Intravaginal Misoprostol was well received by the patients . . . showing 85% acceptance of Misoprostol with average expression of minimal discomfort at insertion, in contrast to 35% acceptance, moderate discomfort and resentment of 'something between thighs' in the Foley catheters group* ($p < 0.05$)	Study in Nigeria, 2003. It was not clear when women completed questionnaires or how outcomes were measured. The number of women responding to questionnaires was not stated
Ashrafunnessa 1997[73]	Intracervical PGE_2 gel 500 µg ($n = 49$)	i.v. oxytocin ($n = 49$)	Women's opinions regarding acceptability of methods (rated recommendable, acceptable, unsatisfactory or no answer)	1. Intracervical PGE_2: 16/49 rated as recommendable, 17/49 acceptable, 11/49 unsatisfactory and 5/49 no answer 2. i.v. oxytocin: 22/49 rated as recommendable, 19/49 acceptable, 4/49 unsatisfactory and 4/49 no answer	Study in India; not clear when the study was carried out. It was not clear when women were asked about their opinions. It was stated that there was no significant difference between groups for rating of labour induction method
Bollapragada 2009[107]	Self-administered at home NO donor (ISMN) ($n = 177$)	Placebo ($n = 173$)	Women's experience of induction of labour; pain and anxiety Outcomes measured on admission to hospital Discomfort and anxiety measured on a 10-point scale General satisfaction measured post delivery; six questions Likert scale 1–10 (1 best)	Maternal satisfaction outcomes mean scores and SD: 1. Labour [from very easy (1) to very difficult (10)]. ISMN 6.18 (2.46) vs. placebo 6.52 (2.16) ($p = 0.26$) 2. Experience of taking tablets (1 extremely good, 10 not at all good). ISMN 3.84 (2.3) vs. placebo 3.23 (2.15) ($p = 0.043$) 3. Pain (1 not at all painful, 10 very painful). ISMN 2.76 (2.3) vs. placebo 2.18 (2.18) ($p = 0.056$) 4. Anxiety (1 not at all anxious, 10 very anxious). ISMN 2.5 (1.96) vs. placebo 2.39 (1.88) ($p = 0.67$) 5. Same treatment again (1 definitely, 10 definitely not). ISMN 3.39 (2.74) vs. placebo 2.77 (2.19) ($p = 0.063$) 6. Advise friend to have same (1 definitely, 10 definitely not). ISMN 3.1 (2.38) vs. placebo 2.69 (2.07) ($p = 0.17$)	Study in UK. Response rates for satisfaction outcomes approximately 63%. Overall, most women expressed positive views about home treatment. Women in the placebo group had slightly more positive views, and women in the ISMN group who suffered headache had significantly fewer positive views (data not shown)

continued

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TABLE 15 Maternal satisfaction with the method of induction (*continued*)

Study ID	Intervention	Comparison	Satisfaction outcomes	Results	Notes
Boulvain 1998[110]	Membrane sweep ($n = 99$)	No treatment (vaginal examination only) ($n = 99$)	Pain following first visit and 24 hours later VAS Women who had membrane sweep were asked for views postpartum	Mean pain score during initial vaginal examination/ membrane sweep: sweep group 2.4 (1.3–4.3), control 1.5 (0.4–3.4) ($p = 0.001$) Postpartum women who had had membrane sweep: 86.7% said they would recommend the intervention; some women described the procedure as unpleasant 31%	Study in Canada 1995–6; response rates to pain questionnaire 87%
Bullarbo 2007[122]	NO donor (ISMN) ($n = 100$)	Placebo ($n = 100$)	Opinion of outpatient procedure and whether or not women would recommend this treatment	*Most women in both groups were either positive or very positive to the treatment. Eighty-nine of the women (94.7%) in the isosorbide mononitrate group and 93 of the women (93.9%) in the placebo group reported that they would recommend the procedure*	Study in Sweden; 94% of women in intervention group and 99% controls responded
De Miranda 2006[201]	Membrane sweep ($n = 375$)	No intervention ($n = 367$)	Pain and whether or not women would choose the same procedure again	Women who had undergone membrane sweep – report: 51% thought membrane sweep was somewhat painful and 17% painful or very painful; after delivery 88% said that they would choose a membrane sweep in a subsequent pregnancy	The Netherlands, 2000–3; 94% in the intervention group responded to the postpartum survey of views
Gribel 2011[314]	Acupuncture ($n = 35$)	Vaginal misoprostol 25 µg ($n = 32$)	Satisfaction with the labour induction technique. It was not clear how satisfaction outcomes were measured	*Satisfaction with the technique was informed by patients in group (acupuncture) 89% and M (misoprostol) 69% with significant difference between groups*	Study in Brazil 2007–9
Güngördük 2012[319]	i.v. oxytocin ($n = 221$)	Sustained-release PGE_2 (0.3 mg/ hour) (n = 223)	Maternal satisfaction with childbirth experience and pain VAS scale 0–10, higher scores greater satisfaction, and worse pain. Reported within 24 hours of the birth	VAS for satisfaction with birth process (higher scores = better) i.v. oxytocin 8.1 (1.14) vs. PGE_2 8.08 (0.6) ($p = 0.88$) Pain (higher scores = worse) oxytocin 5.16 (2.4) vs. PGE_2 4.07 (1.68) ($p < 0.001$) (oxytocin more painful)	Study in Turkey 2009–10

Study ID	Intervention	Comparison	Satisfaction outcomes	Results	Notes
Hannah 1996[335]	Immediate induction of labour with i.v. oxytocin ($n = 1258$) or PGE_2 vaginal gel ($n = 1259$)	Expectant management ($n = 2524$)	Women's evaluations of care	Compared with expectant management, fewer women in the oxytocin reported that there was nothing that they liked about their treatment (13.7% vs. 5.9%) and more women in the oxytocin group said they would participate in the study again (59.9% vs. 67.3%) Compared with expectant management, fewer women in the PGE_2 group reported that there was nothing that they liked about their treatment (11.7% vs. 5.1%) and more women in the PGE_2 group said that they would participate in the study again (59.2% vs. 66.5%) It was reported that there were no significant differences between groups for other measures of maternal satisfaction	Multicentre study in Canada, UK, Australia, Israel, Sweden and Denmark Women recruited between 1992 and 1995
Kennedy 1978[419]	i.v. oxytocin with amniotomy ($n = 27$)	Intracervical PGE_2 ($n = 28$)	Maternal reactions to method (favourable vs. unfavourable) and whether labour was better or worse than previous labours (for multiparous women only)	Reaction unfavourable: 1/27 oxytocin, 1/27 cervical PGE_2 gel Labour worse than previous ones: 2/11 oxytocin, 2/14 cervical PGE_2	UK study. Brief report. Most women 55/60 responded to survey but data on experience of labour for multiparous women only
Kennedy 1982[420]	Vaginal PGE_2 tablet ($n = 50$)	i.v. oxytocin with amniotomy ($n = 50$)	Maternal reactions to method (favourable vs. unfavourable)	Reaction unfavourable: PGE_2 0/50, oxytocin with amniotomy 26/50	Study carried out in the UK
Legarth 1987[460]	Vaginal PGE_2 pessary 2.5 mg ($n = 49$)	i.v. oxytocin ($n = 49$)	Women's perceptions of pain and view of method of induction used	In the PGE_2 group, 19/47 reported intense pain vs. 11/45 in the oxytocin group The method was reported as unsatisfactory by 1/47 in the PGE_2 group and 7/45 in the oxytocin group	Study in Denmark
Lo 1994[480]	Vaginal PGE_2 tablet ($n = 101$)	i.v. oxytocin ($n = 99$)	Maternal acceptance of method It was not clear what women were asked	Method rated positively by 77/99 in the oxytocin group and 63/101 in the PGE_2 group	Study in Hong Kong 1991–2; results stratified by parity

continued

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TABLE 15 Maternal satisfaction with the method of induction (*continued*)

Study ID	Intervention	Comparison	Satisfaction outcomes	Results	Notes
Lyndrup 1990[494]	Vaginal PGE_2 pessary 2.5 mg ($n = 43$)	i.v. oxytocin ($n = 48$)	Women's comments (method recommendable, acceptable or unsatisfactory)	In the PGE_2 group, 3/29 described the method as unsatisfactory compared with 8/32 in the oxytocin group ($p = 0.001$)	Study in Denmark over 3 years
Mei-Dan 2012[553]	Foley catheter ($n = 88$)	Double-balloon catheter (Cook) ($n = 100$)	Pain perception during insertion rated on a 1–10 scale (higher score worse)	Mean pain score Foley catheter group 3.3 (2.3) vs. double-balloon catheter 3.4 (2.3) $p = 0.77$	Study in Israel
Nassar 2006[595]	Vaginal misoprostol 50 µg ($n = 85$)	Sublingual misoprostol 50 µg ($n = 85$)	Questionnaire completed following the birth including questions on induction method	In the vaginal misoprostol group, 18/72 said that they would opt for the same route in any subsequent induction vs. 59/76 in the sublingual route In the vaginal misoprostol group, 27/72 reported that they would have a favourable view of induction in a future pregnancy compared with 46/76 in the sublingual group	Study in Beirut 2004–6
Paul 1992[652]	i.v. oxytocin ($n = 20$)	Oral PGE_2 ($n = 15$)	Women's view of method (favourable, non-committal, unfavourable)	In the oxytocin group, 13/20 had an unfavourable opinion compared with none in the PGE_2 group	
Shetty 2002[780]	Oral misoprostol 50 µg ($n = 50$)	Sublingual misoprostol 5 µg ($n = 50$)	Not clear how satisfaction was measured	It was reported that satisfaction rates were 82.5% and 85.7% in the oral and sublingual groups, respectively	UK study 2000; 82% returned postnatal questionnaires
Shetty 2002[784]	Oral misoprostol 50 µg ($n = 124$)	Sublingual misoprostol 5 µg ($n = 125$)	Brief satisfaction questionnaire about satisfaction and preferences for the future	High levels of satisfaction with induction method in both groups (87–88%)	UK study 2000–1; 78% of women responded to satisfaction questionnaire
Surita 2005[826]	Foley catheter ($n = 70$)	Hyaluronidase ($n = 70$)	Women reported satisfaction with and discomfort associated with each method	In the Foley catheter group, 56/70 were satisfied, and 12/70 reported that the method was very or relatively uncomfortable In the hyaluronidase group, 49/70 were satisfied and 10/70 were very or relatively uncomfortable	Study in Brazil 2000–2
Tan 2013[837]	i.v. oxytocin (105)	Placebo (101)	Satisfaction with the birth process on a 1–10 scale (lower score better) 24 hours after the birth	i.v. oxytocin mean score 3 (3–4), placebo 3 (3–5) $p = 0.36$	Study in Malaysia 2010–12

Study ID	Intervention	Comparison	Satisfaction outcomes	Results	Notes
Cardozo 1986[137]	PGE_2 vaginal pessary 3 mg ($n = 195$)	Expectant management ($n = 207$)	Satisfaction with management (pleased, no comment, disappointed)	In the PGE_2 group, 97/195 reported that they were pleased with their management compared with 110/207 in the expectant management group	Study in UK
Colon 2005[173]	Vaginal misoprostol 25 µg ($n = 111$)	Oral misoprostol 50 µg ($n = 93$)	Not clear how satisfaction was measured post delivery	Ninety-eight per cent of women in both groups expressed satisfaction with their overall experience in hospital; 14% of vaginal group vs. 7.5% in oral group were dissatisfied with the use of misoprostol	Study in USA; 153/204 responded to survey
Dodd 2006[214]	Oral misoprostol solution 20 µg ($n = 365$)	Vaginal PGE_2 gel ($n = 376$)	Women's preferences	Overall 58.5% said that that they would prefer an oral induction agent *Women in the misoprostol group were more likely to say they 'liked everything' with their labour and birth*	Study in Australia
Ferraiolo 2010[258]	PGE_2 vaginal gel 1 mg ($n = 72$)	PGE_2 vaginal pessary (sustained release) 10 mg ($n = 79$)	Pre and post delivery maternal questionnaires	It was reported that in the post-induction questionnaires there was no significant difference in anxiety ($p = 0.073$) or discomfort (0.073). A burning sensation on application was experienced by 31.9% of women in the vaginal gel group and 26.6% in the sustained-release pessary group	Study in Italy 2007–8; 173 recruited but 22 excluded as they did not complete questionnaires or did not complete them correctly
Girija 2009[293]	Vaginal misoprostol 25 µg ($n = 50$)	Vaginal misoprostol 50 µg ($n = 50$)	Not clear when or how satisfaction was measured	*Eighty percent (22/25) women in the 25 µg group and 100% 23/23 of women in the 50 µg group had a satisfaction level of more than 50% (p = 0.23)*	Study in India 2004–5; data on satisfaction available for only 48/100 randomised
Girija 2011[294]	Vaginal misoprostol 25 µg ($n = 159$)	PGE_2 gel 0.5 mg, intracervical ($n = 161$)	Not clear how or when satisfaction was measured	*More than 50% satisfaction of (sic) was observed in 107 (89.2%) mothers in misoprostol group and 109 (91.6%) which was not statistically significant p = 0.6762*	Study in India 2006–8; 239/320 responded to satisfaction questionnaire
Tomlinson 2001[856]	PGE_2 vaginal gel 1–2 mg ($n = 34$)	PGE_2 vaginal pessary (sustained release) ($n = 35$)	Outcomes measured on a Likert scale	Pain on insertion: 2.7 (0–8) in the PGE_2 gel group compared with 3.0 (0–10) in the sustained-release pessary group (difference not significant) Satisfaction with induction score: 3.9 (1–6) in the PGE_2 gel group and 4.3 (1–6) in the sustained-release pessary group (not significant)	Study in UK
Van Gemund 2004[879]	1 mg of vaginal PGE_2 gel ($n = 340$)	25 µg of misoprostol vaginal ($n = 341$)	Preference for subsequent labour	In the PGE_2 gel group, 164/286 would choose the same method again compared with 179/291 in the misoprostol group	Study in the Netherlands

ID, identification; NC, not clear.

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TABLE 16 Subgroups by outcome

Trials included	VD not achieved 141 studies, 21 treatments	CS 307 studies, 33 treatments	Apgar 200 studies, 28 treatments
All women with a previous CS	0 studies	Not connected	0 studies
No women with a previous CS	115 studies	215 studies	153 studies
All women with intact membranes	58 studies	161 studies	98 studies
	19 treatments	29 treatments	28 treatments
All women with ruptured membranes	17 studies	49 studies	37 studies
	12 treatments	17 treatments	18 treatments
All women with Bishop scores of ≥ 6	5 studies	13 studies	6 studies
	5 treatments	8 treatments	7 treatments
All women with Bishop scores of < 6	106 studies	202 studies	128 studies
	19 treatments	18 treatments	25 treatments

Apgar, Apgar score < 7 at 5 minutes.
Breakdown of number of trials and interventions included in each network, which are available to contribute to a subgroup analyses.

Outcome: vaginal delivery not achieved within 24 hours

Results are reasonably robust across the analyses: *Table 17* compares all treatments with vaginal PGE_2 (gel) for all studies and the two subgroups: (1) intact and (2) ruptured membranes. For the subgroup including only *women with intact membranes*, i.v. oxytocin with amniotomy and vaginal misoprostol (≥ 50 µg) are still ranked 'best' for achieving VD within 24 hours.

Amniotomy is clearly not a feasible option for women with ruptured membranes, and this is reflected in the subgroup analysis for *ruptured membranes*, in which it does not feature in any of the trials. For this subgroup the CrIs are extremely wide, reflecting extreme uncertainty in which treatment is best for women with ruptured membranes.

Outcome: caesarean section

A total of 160 trials of 31 treatments were available for analysis when restricted to trials in which all women had intact membranes. The subgroup for trials that included only women with ruptured membranes formed a connected network of 47 trials of 17 treatments (see *Appendix 15*). As before, studies reporting pooled data for women with both intact or ruptured membranes, or those who did not report details for this characteristic, are not included here. Reported results are therefore based on the REs NMA model, assuming consistency (see *Appendix 15*).

For the subgroup of women with *intact membranes* we note that the posterior mean rank for titrated (low-dose) oral misoprostol solution has changed from '6' to '14', albeit with considerable uncertainty in the relative ranking (95% CrI 3 to 28) (*Table 18*). Similarly, the mean rank for PGF_2 gel has decreased from 11 to 21, with very wide CrIs (95% CrI 3 to 30), showing that there is considerable uncertainty in the relative rankings. The mean rank for extra-amniotic PGE_2 has improved from '22' to '4', although, again, the CrIs indicate considerable uncertainty, which should be taken into consideration in any conclusions (95% CrI 1 to 26).

TABLE 17 Odds ratios and 95% CrI for failure to achieve VD within 24 hours for every intervention compared with vaginal PGE_2 (1) in all studies; (2) for women with intact membranes only; and (3) for women with ruptured membranes only

	All studies				Intact membranes only				Ruptured membranes only			
Active intervention vs. vaginal PGE_2 gel	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Vaginal PGE_2 (gel)	Reference treatment		8	5 to 12	Reference treatment		9	5 to 13	Reference treatment		3	1 to 9
i.v. oxytocin with amniotomy	0.42	0.1 to 1.15	2	1 to 9	0.16	0.02 to 0.96	2	1 to 8	Not in network			
Vaginal misoprostol (dose ≥ 50 µg)	0.69	0.51 to 0.93	3	1 to 6	0.57	0.38 to 0.84	4	2 to 6	2.61	0.11 to 137.2	6	1 to 12
Titrated (low-dose) oral misoprostol solution	0.79	0.5 to 1.2	5	1 to 10	1.49	0.71 to 3.26	12	5 to 14	1.42	0.11 to 34.13	5	1 to 10
Vaginal misoprostol (dose < 50 µg)	0.82	0.59 to 1.1	5	2 to 8	0.56	0.35 to 0.89	4	2 to 6	1.67	0.16 to 37.5	5	1 to 10
Sustained-release misoprostol insert	0.82	0.31 to 1.78	5	1 to 16	Not in network				Not in network			
Buccal/sublingual misoprostol	0.82	0.5 to 1.27	5	2 to 11	0.60	0.25 to 1.42	5	2 to 12	Not in network			
Vaginal PGE_2 pessary (normal release)	0.87	0.46 to 1.5	6	1 to 13	0.49	0.2 to 1.2	4	1 to 10	Not in network			
Vaginal PGE_2 pessary (slow release)	1.20	0.79 to 1.75	11	6 to 16	0.82	0.48 to 1.37	7	4 to 12	0.92	0.06 to 35.39	3	1 to 10
Oral misoprostol tablet (dose ≥ 50 µg)	1.27	0.89 to 1.75	12	7 to 16	1.05	0.66 to 1.66	10	6 to 13	1.33	0.19 to 17.99	4	1 to 8
Intracervical PGE_2	1.43	1.03 to 1.92	14	10 to 17	1.11	0.74 to 1.65	11	7 to 13	3.50	0.16 to 150.2	7	1 to 12
Mechanical methods – double-balloon or Cook's catheter	1.43	0.71 to 2.58	12	4 to 18	0.92	0.5 to 1.73	8	3 to 13	Not in network			

continued

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TABLE 17 Odds ratios and 95% CrI for failure to achieve VD within 24 hours for every intervention compared with vaginal PGE_2 (1) in all studies; (2) for women with intact membranes only; and (3) for women with ruptured membranes only (*continued*)

	All studies				Intact membranes only				Ruptured membranes only			
Active intervention vs. vaginal PGE_2 gel	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Mechanical methods – Foley catheter	1.45	0.89 to 2.24	13	7 to 18	0.85	0.49 to 1.45	7	4 to 12	Not in network			
i.v. oxytocin	1.57	1 to 2.35	14	9 to 18	1.63	0.67 to 3.93	13	6 to 14	6.98	0.3 to 29.88	6	3 to 9
Oral misoprostol tablet (dose < 50 µg)	1.71	0.77 to 3.33	14	5 to 18	Not in network				5.89	0.26 to 312.7	9	2 to 12
NO	1.76	0.77 to 3.49	14	5 to 18	Not in network				Not in network			
Extra-amniotic PGE_2	3.18	0.66 to 9.62	16	3 to 20	Not in network				Not in network			
Mifepristone	6.25	1.67 to 16.71	19	16 to 21	Not in network				6.98	0.38 to 305.5	9	2 to 12

An OR of > 1 favours vaginal PGE_2. An OR of < 1 favours the active intervention.

TABLE 18 Odds ratios and 95% CrI for CS for every intervention compared with placebo (1) in all studies; (2) for women with intact membranes only; and (3) for women with ruptured membranes only

	All studies				Intact membranes only				Ruptured membranes only			
Active intervention vs. placebo	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Corticosteroids	0.5	0.2 to 1.12	6	1 to 29	0.56	0.21 to 1.23	5	1 to 26	Not in network			
Titrated (low-dose) oral misoprostol solution	0.6	0.47 to 0.8	6	2 to 13	0.91	0.53 to 1.53	14	3 to 28	0.62	0.22 to 1.35	6	1 to 14
Hyaluronidase	0.6	0.34 to 1	7	1 to 26	0.69	0.37 to 1.15	7	1 to 24	Not in network			
PGF_2 gel	0.7	0.4 to 1.16	11	1 to 29	1.28	0.52 to 2.7	21	3 to 30	Not estimable			
Vaginal misoprostol (dose < 50 µg)	0.7	0.57 to 0.85	9	4 to 16	0.82	0.62 to 1.08	10	5 to 18	0.47	0.21 to 0.89	3	1 to 7
Vaginal misoprostol (dose ≥ 50 µg)	0.7	0.59 to 0.88	11	5 to 18	0.92	0.69 to 1.21	15	8 to 24	0.52	0.23 to 1.01	4	1 to 11
Oral misoprostol tablet (dose ≥ 50 µg)	0.7	0.58 to 0.88	10	4 to 18	0.80	0.58 to 1.08	10	4 to 19	0.84	0.49 to 1.32	10	4 to 14
Mifepristone	0.7	0.45 to 1.08	11	2 to 28	0.58	0.29 to 1.02	5	1 to 20	3.40	0.48 to 16.01	14	5 to 17
Membrane sweeping	0.7	0.53 to 0.99	12	3 to 24	0.93	0.59 to 1.43	14	4 to 26	Not in network			
Oral prostaglandins	0.7	0.08 to 2.59	10	1 to 32	Not in network				Not in network			
Buccal/sublingual misoprostol	0.7	0.51 to 0.89	9	2 to 19	0.86	0.54 to 1.3	12	3 to 26	Not in network			
Vaginal PGE_2 (gel)	0.8	0.65 to 0.94	15	9 to 21	1.00	0.77 to 1.3	19	11 to 26	0.72	0.38 to 1.29	8	4 to 12
Intracervical PGE_2	0.8	0.69 to 0.98	18	11 to 24	1.02	0.8 to 1.3	19	11 to 26	0.58	0.25 to 1.18	5	1 to 13
Vaginal PGE_2 pessary (normal release)	0.8	0.62 to 1.09	17	6 to 28	0.88	0.52 to 1.4	13	3 to 27	0.89	0.46 to 1.61	10	3 to 15
NO	0.8	0.62 to 1.06	17	5 to 28	0.91	0.64 to 1.25	14	5 to 26	Not in network			
Mechanical methods – Foley catheter	0.8	0.61 to 0.95	14	6 to 22	0.94	0.69 to 1.25	16	7 to 25	0.86	0.38 to 1.7	10	4 to 15
Mechanical methods – laminaria	0.8	0.43 to 1.38	15	2 to 31	1.02	0.49 to 1.89	17	3 to 30	Not in network			

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TABLE 18 Odds ratios and 95% CrI for CS for every intervention compared with placebo (1) in all studies; (2) for women with intact membranes only; and (3) for women with ruptured membranes only (*continued*)

	All studies				Intact membranes only				Ruptured membranes only			
Active intervention vs. placebo	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Sexual intercourse	0.8	0.54 to 1.29	17	3 to 31	1.11	0.61 to 1.95	19	4 to 30	Not in network			
Acupuncture	0.8	0.52 to 1.2	16	2 to 30	0.89	0.54 to 1.38	13	3 to 28	4.22	0.27 to 23.7	13	2 to 17
Vaginal PGE_2 pessary (slow release)	0.9	0.69 to 1.12	21	12 to 28	1.14	0.82 to 1.55	23	13 to 29	0.49	0.21 to 0.96	4	1 to 9
i.v. oxytocin	0.9	0.75 to 1.14	23	16 to 29	0.94	0.65 to 1.34	16	6 to 26	0.83	0.46 to 1.43	10	6 to 13
i.v. oxytocin with amniotomy	0.9	0.57 to 1.34	20	4 to 31	0.99	0.6 to 1.59	17	4 to 28	Not in network			
Relaxin	0.9	0.33 to 1.98	16	1 to 32	0.86	0.3 to 1.99	12	1 to 30	Not in network			
Vaginal PGE_2 (tablet)	1.0	0.78 to 1.35	26	17 to 31	1.15	0.76 to 1.68	22	9 to 30	2.36	0.65 to 6.12	15	10 to 17
Sustained-release misoprostol vaginal pessary	1.0	0.59 to 1.55	22	5 to 32	Not in network				Not in network			
Extra-amniotic PGE_2	1.0	0.57 to 1.57	22	4 to 32	0.51	0.16 to 1.2	4	1 to 26	Not in network			
Oral misoprostol tablet (dose $\geq 50\,\mu g$)	1.1	0.64 to 1.81	25	7 to 32	1.08	0.18 to 3.5	14	1 to 30	1.15	0.38 to 2.73	12	4 to 16
Amniotomy	1.1	0.51 to 2.02	22	3 to 32	1.22	0.56 to 2.48	21	4 to 30	Not in network			
Mechanical methods – double-balloon or Cook's catheter	1.1	0.73 to 1.63	27	14 to 32	1.38	0.88 to 2.11	26	15 to 30	Not in network			
Oestrogens	1.3	0.62 to 2.32	27	5 to 32	1.42	0.68 to 2.63	25	6 to 30	Not in network			
i.v. prostaglandin	19.9	1.61 to 120.5	33	32 to 33	47.75	1.88 to 253.7	31	30 to 31	Not in network			

VAS, visual analogue scale.
An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention (i.e. fewer undesirable events occurred on the active intervention).

When limiting the network to trials that included only women with ruptured membranes, we observe that vaginal misoprostol (both doses), intracervical PGE_2, vaginal slow-release PGE_2 pessary and titrated low-dose oral misoprostol solution have the highest rankings, with 95% CrI including the best ranking. As with other subgroup analyses the CrIs are very wide, making clinical interpretation quite difficult.

Outcome: Apgar score < 7 at 5 minutes

For the outcome of Apgar score < 7 at 5 minutes, the subgroup in which all women had intact membranes was a connected network of 98 trials of 26 treatments. When the analysis was limited to only those trials in which all women had ruptured membranes, 37 trials of 16 treatments assessed the outcome of Apgar score < 7 at 5 minutes (see *Appendix 15*). However, we observed meaningful differences in the posterior mean residual deviance, suggesting that there was evidence of unresolved inconsistency (see *Appendix 15*). As such we do not report the findings for these subgroups.

Subgroup analysis for women with low Bishop score (< 6) or higher Bishop score (≥ 6)

Outcome: vaginal delivery not achieved within 24 hours

For the outcome of no VD within 24 hours when the analysis was limited to only those trials in which all women had a Bishop score < 6, 106 trials of 17 treatments assessed the outcome of no VD within 24 hours. However, we observed meaningful differences in the posterior mean residual deviance, the DIC values and the SDs, suggesting that there is evidence of inconsistency. Consequently, we do not report results for this subgroup here. No meaningful analysis could be carried out on women with a Bishop score ≥ 6, as the network only included five studies comparing seven treatments and was not connected (see *Appendix 15*).

Outcome: caesarean section

For the CS outcome, restricting to trials in which all women had a Bishop score < 6 allowed a connected network of 203 trials comparing 28 treatments. When the analysis was limited to only those trials that included women with a Bishop score ≥ 6, a connected network of 10 trials of 10 treatments assessed the outcome of CS (see *Appendix 15*). Full results are shown in *Table 19*. Results are largely robust to the analysis, only including studies with women with a Bishop score < 6. A posterior mean rank for extra-amniotic PGE_2 changed from '22' to '4' and this treatment became significantly better than placebo for preventing a CS. Similarly, acupuncture changed from having a mean rank of '16' to '3' and became significantly better than placebo.

Outcome: Apgar score < 7 at 5 minutes

For the outcome of Apgar score < 7 at 5 minutes, restricting the analysis to only those trials in which all women had Bishop scores of < 6 produced a connected network of 128 trials comparing 24 treatments. However, because of the number of zero events, the NMA model would not converge and therefore we cannot report results. Similarly, we do not report results for women with a Bishop score ≥ 6 due to zero events, as the network included only six studies and seven treatments.

Formal subgroup analysis either was not possible or did not show clear subgroup differences in terms of cervical status. It is noteworthy that far fewer trials tested i.v. oxytocin with amniotomy in women with unfavourable cervix than other interventions, such as PGE_2, misoprostol and mechanical methods (see *Table 19*). This is hardly surprising, given that amniotomy is very difficult or even impossible in women with very unfavourable cervix. Overall, women with favourable cervix are more likely to achieve VD within 24 hours, but this should not produce biased results in our NMA as this would apply to both the experimental group (e.g. oxytocin with amniotomy) and the control group (e.g. any prostaglandin) as well (i.e. the relative effect between two treatments is not affected). Nevertheless, as oxytocin with amniotomy has been predominantly tested in women with favourable cervix, our recommendations relating to this intervention are restricted to this subgroup.

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TABLE 19 Trials recruiting women with unfavourable and favourable cervix for selected interventions

Interventions	Number of trials reporting cervical status	Number of trials recruiting women with different cervical status	Percentage of trials including *only* women unfavourable cervix
Oxytocin with amniotomy	22	**1 unfavourable**	4.5
		11 mixed	
		10 favourable	
		3 not reported	
Vaginal and intracervical PGE_2	284	**233 unfavourable**	82
		43 mixed	
		8 favourable	
		11 not reported	
Misoprostol	209	**168 unfavourable**	80
		33 mixed	
		8 favourable	
		37 not reported	
Mechanical methods	69	**66 unfavourable**	96
		2 mixed	
		1 favourable	
		3 not reported	

Gestational age and previous caesarean section subgroups

The reporting of *gestational age* by trial authors made it difficult to define mutually exclusive subgroups and so we do not report analyses for this characteristic.

For women with a *previous CS* there were no trials remaining which would allow an analysis based on failure to achieve VD within 24 hours, or Apgar score < 7 at 5 minutes (*Table 20*). There were only four trials remaining for the outcome of CS; however, the network was not connected and so an analysis was not possible.

Summary

We presented the impact of 31 interventions (excluding no treatment and placebo) on failure to achieve VD within 24 hours, CS, instrumental delivery, uterine hyperstimulation, Apgar score < 7 at 5 minutes and NICU admission. For a total of 17 methods (11 prostaglandins, two mechanical methods, oxytocin with or without amniotomy, NO and mifepristone) we were able to produce rankings for all six outcomes (*Table 21*). The data were incomplete for other methods and other key safety outcomes, namely neonatal mortality/morbidity, maternal mortality/morbidity and maternal satisfaction, which we have described narratively. *Table 21* is intended to provide a broad summary of findings across outcomes; however, it does *not* report CrIs. Therefore, it is important that this table is interpreted in the context of relevant tables for each outcome, which set out the uncertainty around rankings.

TABLE 20 Odds ratios and 95% CrI for CS. All treatments vs. placebo (1) in all studies and (2) for women with a Bishop score < 6

	All studies				Bishop score < 6				Bishop score ≥ 6 [vs. vaginal PGE_2 (tablet)]			
Active intervention vs. placebo	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Vaginal PGE_2 (tablet)	1.0	0.78 to 1.35	26	17 to 31	1.03	0.74 to 1.41	22	13 to 27	Reference treatment			
Vaginal PGE_2 (gel)	0.8	0.65 to 0.94	15	9 to 21	0.78	0.63 to 0.97	13	7 to 19	0.72	0.02 to 24.86	5	1 to 9
Vaginal PGE_2 pessary (slow release)	0.9	0.69 to 1.12	21	12 to 28	0.92	0.68 to 1.2	19	11 to 25	Not in network			
PGF_2 gel	0.7	0.4 to 1.16	11	1 to 29	1.04	0.42 to 2.2	18	2 to 28	Not in network			
Intracervical PGE_2	0.8	0.69 to 0.98	18	11 to 24	0.83	0.68 to 1.01	15	9 to 21	Not in network			
Vaginal PGE_2 pessary (normal release)	0.8	0.62 to 1.09	17	6 to 28	0.88	0.62 to 1.23	17	6 to 25	0.10	0 to 219.8	1	1 to 9
Vaginal misoprostol < 50 µg	0.7	0.57 to 0.85	9	4 to 16	0.71	0.56 to 0.88	9	4 to 15	Not in network			
Vaginal misoprostol ≥ 50 µg	0.7	0.59 to 0.88	11	5 to 18	0.72	0.57 to 0.9	10	5 to 16	Not in network			
Oral misoprostol tablet< 50 µg	1.1	0.64 to 1.81	25	7 to 32	1.11	0.61 to 1.87	21	6 to 28	Not in network			
Oral misoprostol tablet ≥ 50 µg	0.7	0.58 to 0.88	10	4 to 18	0.70	0.54 to 0.91	9	4 to 17	0.56	0 to 1041	5	1 to 9
Titrated (low-dose) oral misoprostol solution	0.6	0.47 to 0.8	6	2 to 13	0.62	0.43 to 0.87	6	2 to 15	0.49	0 to 824.8	4	1 to 9
Sustained-release misoprostol vaginal pessary	1.0	0.59 to 1.55	22	5 to 32	1.02	0.56 to 1.73	19	4 to 28	Not in network			
i.v. oxytocin	0.9	0.75 to 1.14	23	16 to 29	0.94	0.72 to 1.21	20	13 to 25	0.62	0 to 447.7	5	2 to 9
Amniotomy	1.1	0.51 to 2.02	22	3 to 32	Not in network				0.86	0 to 127.9	6	2 to 9
i.v. oxytocin with amniotomy	0.9	0.57 to 1.34	20	4 to 31	1.83	0.44 to 5.11	23	2 to 28	0.78	0 to 190.8	6	2 to 9
NO	0.8	0.62 to 1.06	17	5 to 28	0.81	0.6 to 1.06	14	5 to 23	Not in network			
Mifepristone	0.7	0.45 to 1.08	11	2 to 28	0.72	0.45 to 1.1	10	2 to 24	Not in network			

continued

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TABLE 20 Odds ratios and 95% CrI for CS. All treatments vs. placebo (1) in all studies and (2) for women with a Bishop score < 6 (*continued*)

Active intervention vs. placebo	All studies				Bishop score < 6				Bishop score ≥ 6 [vs. vaginal PGE_2 (tablet)]			
	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI	OR	95% CrI	Mean rank	95% CrI
Oestrogens	1.3	0.62 to 2.32	27	5 to 32	1.28	0.61 to 2.38	23	5 to 28	Not in network			
Corticosteroids	0.5	0.2 to 1.12	6	1 to 29	Not in network				Not in network			
Relaxin	0.9	0.33 to 1.98	16	1 to 32	1.67	0.36 to 5.23	21	2 to 28	Not in network			
Hyaluronidase	0.6	0.34 to 1	7	1 to 26	0.61	0.33 to 1.04	7	1 to 23	Not in network			
Foley catheter	0.8	0.61 to 0.95	14	6 to 22	0.77	0.59 to 0.98	12	6 to 19	Not in network			
Laminaria	0.8	0.43 to 1.38	15	2 to 31	0.81	0.4 to 1.45	13	2 to 27	Not in network			
Double balloon/Cook's catheter	1.1	0.73 to 1.63	27	14 to 32	1.14	0.72 to 1.72	23	12 to 28	Not in network			
Membrane sweeping	0.7	0.53 to 0.99	12	3 to 24	0.77	0.47 to 1.19	12	3 to 25	Not in network			
Extra-amniotic PGE_2	1.0	0.57 to 1.57	22	4 to 32	0.46	0.17 to 0.99	4	1 to 22	Not in network			
i.v. prostaglandin	19.9	1.61 to 120.5	33	32 to 33	Not in network				Not in network			
Sexual intercourse	0.8	0.54 to 1.29	17	3 to 31	Not in network				Not in network			
Acupuncture	0.8	0.52 to 1.2	16	2 to 30	0.38	0.13 to 0.86	3	1 to 16	Not in network			
Oral prostaglandins	0.7	0.08 to 2.59	10	1 to 32	Not in network				Not in network			
Buccal/sublingual misoprostol	0.7	0.51 to 0.89	9	2 to 19	0.62	0.42 to 0.89	6	2 to 16	0.53	0 to 413.6	5	1 to 9

An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active intervention). An OR of < 1 favours the active intervention.

TABLE 21 Summary of rankings (point estimates only)[a]

Induction method	Posterior mean rank					
	VD within 24 hours	CS	Ins del	HS	NICU	Apgar score < 7 at 5 minutes
Complete rankings						
Prostaglandins						
Titrated (low) oral misoprostol solution	5	6	19	10	11	7
Buccal/sublingual misoprostol	6	9	7	18	13	5
Vaginal misoprostol < 50 µg	6	9	11	14	14	16
Oral misoprostol tablet ≥ 50 µg	12	10	13	15	18	8
Oral misoprostol tablet < 50 µg	14	25	9	7	14	9
Vaginal PGE_2 pessary (normal release)	4	17	23	8	18	13
Vaginal PGE_2 pessary (slow release)	11	21	7	15	13	18
Vaginal PGE_2 (tablet)	12	26	17	11	16	12
Vaginal misoprostol ≥ 50 µg	4	11	17	19	19	18
Sustained-release misoprostol pessary	5	22	16	18	8	24
Vaginal PGE_2 (gel)	8	15	18	13	20	19
Other methods						
Double-balloon or Cook's catheter	10	27	9	2	9	4
Foley catheter	13	14	6	5	10	14
NO	15	17	17	3	17	7
i.v. oxytocin	14	23	24	12	15	15
i.v. oxytocin with amniotomy	2	20	17	16	27	24
Mifepristone	19	11	30	18	26	14
Incomplete rankings						
Intracervical PGE_2	14	18	15	9	–	10
Extra-amniotic PGE_2	16	22	15	–	4	27
Laminaria	–	15	12	3	23	16
Membrane sweeping	–	12	26	–	16	23
Acupuncture	–	16	13	–	14	9
Sexual intercourse	–	17	25	–	6	15
Oral prostaglandins	–	10	9	–	10	7
Amniotomy	–	22	13	–	14	20
PGF_2 gel	–	11	14	–	8	–
Oestrogens	–	27	8	–	14	–
i.v. prostaglandin	–	33	30	–	–	18
Relaxin	–	16	25	–	–	–
Corticosteroids	–	6	–	–	–	–
Hyaluronidase	–	7	–	–	–	–

HS, hyperstimulation; Ins del, instrumental delivery.
Please see relevant tables for CrIs for rankings.

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We observed moderate heterogeneity across all of the analyses, with a considerable uncertainty in the rankings of interventions across all outcomes.

Our analysis shows that i.v. oxytocin combined with amniotomy has the best chance of achieving VD within 24 hours of induction, but this intervention is restricted to women with intact membranes. Misoprostol (vaginal route, titrated oral solution, buccal/sublingual) and vaginal PGE_2 normal-release pessaries also performed well.

Compared with placebo, corticosteroids and titrated (low-dose) oral misoprostol achieved the lowest odds of an eventual CS; however, there was considerable uncertainty in these findings.

For instrumental delivery, Foley catheter performed well taking into account the OR, posterior mean ranks and absolute probabilities. However, we again note the uncertainty which surrounds these estimates and the moderate degree of observed heterogeneity.

The safest intervention in terms of risk for uterine hyperstimulation was double-balloon or Cook's catheter. The intervention with the worst mean rank was vaginal misoprostol ≥ 50 µg, with a 9% absolute probability of uterine hyperstimulation.

Neonatal intensive care unit admission and an Apgar score < 7 at 5 minutes were used as proxies for neonatal safety outcomes in the absence of consistent definitions of neonatal mortality and morbidity across the trials. The safest intervention in terms of risk of Apgar score < 7 at 5 minutes was double-balloon or Cook's catheter, with a mean rank of '4'; however, the 95% CrI ranged from 1 to 22 out of 26 interventions, reflecting the considerable uncertainty in this estimate.

Unfortunately, it was not possible to assess the efficacy (VD within 24 hours) of trials of complementary interventions or membrane sweeping. Relative to placebo, membrane sweeping performed marginally better than acupuncture or sexual intercourse for CS. For both NICU admission and Apgar score < 7 at 5 minutes outcomes, membrane sweeping was associated with a low absolute probability of either event.

In broad terms, our subgroup analyses, when available, were consistent with overall results.

Chapter 4 Assessment of cost-effectiveness

Introduction

In this chapter we compare the cost-effectiveness of different methods of induction of labour. We begin by setting out our decision question. We then describe previous studies that have addressed this question; however, we found that none of these provided a model that we could apply to compare the cost-effectiveness of the different methods of induction identified in our review. We then describe our de novo decision model, which we developed to answer our decision question, followed by a description of the evidence sources that were used to provide inputs to the model effectiveness, treatment costs, other resource-use (hospital) costs and utilities. We used the results of the NMA presented in *Chapter 3* when possible. Because modes of delivery are not independent (a woman must deliver one of three ways: CS, VD within 24 hours or VD after 24 hours of induction), we need to estimate these outcomes jointly. In order to include as many studies as possible in our analysis, we condition on CS. This means we use the NMA for the CS outcome as presented in *Chapter 3*, but conduct a new NMA for the 'failure to achieve vaginal delivery within 24 hours' outcome, conditional on not having had a CS, using the subset of studies which reported both outcomes. We then present results and end with a discussion.

Decision question

Population

The population of interest was defined in accordance with the inclusion criteria for the systematic review and NMA (i.e. pregnant women carrying a viable fetus and who are eligible for any method of third trimester labour induction).

Interventions

We included all of the interventions that were identified in the systematic review (see *Chapter 3*) for which we had sufficient information to evaluate the model. This meant that 19 interventions out of a total of 34 (*Box 3*) were included in the cost-effectiveness analysis, and the remaining 15 were excluded ($PGF_2\alpha$ gel, amniotomy, oestrogens, corticosteroids, relaxin, hyaluronidase, laminaria, membrane sweeping, i.v. prostaglandin, sexual intercourse, acupuncture, breast stimulation, homeopathy, castor oil and oral prostaglandins). Note that this does not mean that the excluded interventions were not cost-effective – simply that we did not have enough information to assess their cost-effectiveness. The included interventions were a variety of pharmacological and mechanical interventions. A further issue arose with the vaginal PGE_2 pessary (normal release) intervention which, as described in *Chapter 3*, was a heterogeneous mix of interventions in which PGE_2 was administered vaginally using a range of 'pessaries' (frequently produced in trial hospital pharmacies) that are either not readily reproducible or not currently available to the NHS. It is important that this group is distinguished from PGE_2 slow-release pessaries that are used in current NHS practice. We included placebo in the results but interpret this as 'no intervention', as it would be delivered on the NHS.

Outcomes

Obstetrics is different from most other medical specialties in that decision problems involve the health of two patients (mother and child) and an intervention or treatment can affect the health of both. Often, an intervention that is beneficial to the mother can carry a higher risk for the child and vice versa. The birth of a child also has a major impact on the new mother, and the health of the child in the time immediately following birth can have a significant impact on the mother's own health. Our model includes both maternal and neonatal outcomes, and we attempted to capture the costs and utilities of both mother and

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BOX 3 List of interventions included in base-case cost-effectiveness analysis

1. Vaginal PGE_2 tablet.
2. Vaginal PGE_2 gel.
3. Vaginal PGE_2 pessary (slow release).
4. Intracervical PGE_2.
5. Vaginal PGE_2 pessary (normal release).
6. Vaginal misoprostol – dose < 50 µg.
7. Vaginal misoprostol – dose ≥ 50 µg.
8. Oral misoprostol – dose < 50 µg.
9. Oral misoprostol – dose ≥ 50 µg.
10. Titrated (low-dose) oral misoprostol solution.
11. Sustained-release misoprostol insert.
12. i.v. oxytocin.
13. i.v. oxytocin with amniotomy.
14. NO.
15. Mifepristone.
16. Mechanical methods – Foley catheter.
17. Mechanical methods – double-balloon or Cook's catheter.
18. Extra-amniotic PGE_2.
19. Buccal/sublingual misoprostol.
20. Placebo.

baby, giving equal weight to both individuals. We report expected total costs (treatment costs plus other resource costs), expected utility (for mother and baby combined) and incremental cost-effectiveness ratios (ICERs), which measure the additional expected cost per 1 unit of additional utility for one intervention compared with another. We conducted a fully incremental analysis. We report a probabilistic sensitivity analysis, which reflects uncertainty in model inputs. The probabilistic sensitivity analysis is summarised with expected total costs, expected total benefits, ICER, an incremental cost-effectiveness plane and a cost-effectiveness acceptability curve (CEAC), which plots the probability of each intervention being the most cost-effective, based on expected net benefit for a given willingness-to-pay per unit increase in utility.

The National Institute for Health and Care Excellence (NICE) methods of technology appraisal guide[954] suggests that the time horizon of the model applied should be long enough to capture all relevant costs and benefit differences between the interventions. We acknowledge that there are some potential long-term adverse events that are associated with the process of labour and that some outcomes, such as CS and serious birth canal injuries, can have a life-long impact on health-related quality of life (e.g. urinary incontinence) and costs. However, we assumed that most cost differences that are related to methods of induction are likely to be realised during and immediately after the birth. The evidence sources that were used to inform utilities did not explicitly state a time frame; however, they are unlikely to reflect many consequences that occur post discharge. The time frame of the analysis was, therefore, taken to be from induction to hospital discharge. We acknowledge that this is a limitation that ignores cost and utility consequences in the longer term. Discounting was deemed unnecessary because of this short time frame. We take a UK NHS perspective.

Previous economic evaluations

We performed a review of the literature (details in *Appendix 17*) to identify previous studies that have attempted to address our decision question. We identified two RCTs[14,955] in which an economic evaluation was also conducted. In both of these trials,[14,955] only two methods of induction were compared using costs and efficacy data that were collected alongside the trials; however, neither of them attempted to quantify quality of life. Petrou *et al.*[14] compared PGE_2 gel to PGE_2 tablets in a cost-effectiveness analysis with the main outcome measure being incremental cost per hour prevented between induction and delivery. Van Baaren *et al.*[955] assessed the economic consequences of labour induction with Foley catheter compared with PGE_2 gel, in an economic evaluation conducted alongside the PROBAAT (prostaglandin or balloon catheter for induction of labour at term) RCT. This study calculated the cost to prevent one CS, or maternal/neonatal morbidity.

The latest clinical guideline on induction of labour produced by NICE in 2008 included a cost-effectiveness analysis of the timing of the first offer of induction of labour.[9] This analysis used a state-transition (Markov) model to simulate the cost-effectiveness of the different timing strategies, with benefits measured in quality-adjusted life-years (QALYs). The primary source of clinical data was the systematic review undertaken as part of the guideline. The QALY estimation took into account only the health of the infant and not the health of the mother, as no studies could be identified in the literature that estimated the utility gain or loss to women as a result of induction. The assumption made was that a baby who survived with a serious morbidity gained only 0.75 QALYs for each 1 QALY gained by a healthy baby.

Despite the large number of RCTs that were identified in our systematic review (see *Chapter 3*), there has been no attempt to examine all induction methods together within an economic model. We have, therefore, developed a de novo model (described below) to estimate the cost-effectiveness of various methods for the induction of labour using the data obtained from the systematic review and NMA of RCTs, along with hospital costs and utilities.

Health-economic model

A decision-analytic model[956] was constructed to compare the costs and effects of the different methods of induction of labour. Because we consider only short-term consequences, we chose to use a decision tree to represent the costs and consequences of different methods of induction. A decision tree is a graphical representation of different possible outcomes following a decision, in which probabilities are given to different paths along the branches of the tree, and costs and utilities attached to each branch. This enables us to compute probability-weighted costs and outcomes to arrive at an expected cost and utility value for each alternative treatment option.

The outcomes included were rate of VD within 24 hours, CS rate and frequency of admission to the NICU, as well as resource use and utilities. This structure was informed by the literature and expert opinion, and was finalised through discussions with the steering group. An illustration of the model structure is provided in *Figure 13*. Squares represent decision nodes for the method of delivery chosen, whereas circles represent chance nodes at which different possible outcomes are assigned a probability, and triangles represent outcomes.

The model starts by dividing the population into those who deliver vaginally within the first 24 hours; have an emergency CS; and deliver vaginally after 24 hours.

Under each model of delivery, babies can either be born with no complications or be admitted to the NICU, which, in the context of randomised trials, we assumed relates to intervention and/or mode of delivery (CS or VD), but is less likely to relate to length of labour (i.e. whether a VD was within 24 hours of induction or not). NICU admission is divided into transitional care for those babies who need some medical treatment

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FIGURE 13 Decision tree for comparison of different methods of induction.

but are well enough to be cared for at the mother's bedside, high-dependency care for babies who are recovering from critical illness and need a great deal of observation and support, and intensive care for babies who have serious potential health problems and need constant care to be kept alive. Utility scores and resource use were thought to vary depending on these levels of care.

Inputs to economic model

Effectiveness inputs

We required *absolute* probabilities for each of the paths in the branches of the tree shown in *Figure 13*, for each intervention. The NMA presented in *Chapter 3* provided information on *relative* effects on these probabilities (in the form of ORs). In order to obtain *absolute* probabilities on all interventions we needed to apply these relative effects to absolute probabilities on a reference intervention. The choice of reference intervention is not important; however, it needs to be an intervention for which there is evidence available on absolute probabilities for all paths in our decision tree, and that evidence is relevant to the decision population under consideration. We chose vaginal PGE_2 (tablet) as the reference intervention, as there were several UK-based RCTs including this intervention for each of the probabilities that were required in the model.

The NMA presented in *Chapter 3* analyses each of the outcomes independently. However, as can be seen from *Figure 13*, these outcomes are not independent. For example, a failure to achieve a VD in 24 hours includes both women who deliver by CS and those who deliver vaginally but not within 24 hours. A woman has to deliver in one of three ways: a VD within 24 hours (VD24), a CS or a VD after 24 hours (VD > 24). We therefore re-analysed the data, as described in *Appendix 16*, to estimate these three probabilities allowing for the dependence in the data. We assumed that the relative effects for NICU admission are independent of timing of delivery but dependent on mode of delivery. We also assumed that the probability of NICU admission is 1.5 times higher for a CS delivery (according to data on 2837 inductions of labour for live births in Liverpool Women's NHS Foundation Trust in 2014). Under this assumption it can be verified that the probability of NICU admission for VD, p(NICUvd), and the probability of NICU admission for CS, p(NICUcs), can be obtained from the overall probability of NICU admission, p(NICU) using the following formulae: $p(NICUvd) = p(NICU) \times 2/(2 + p(CS))$ and $p(NICUcs) = p(NICU) \times 3/(2 + p(CS))$.

The proportion of CS births, p(CS), is based on the NMA presented in *Chapter 3* being applied to the proportion estimated on the reference intervention, as described below and in *Appendix 16*. The relative effects for NICU admission from the NMA in *Chapter 3* are applied to the probability of NICU admission on the reference intervention (*Table 22*) to obtain the absolute probability of NICU admission, p(NICU) for each intervention. The formulae above are then used to obtain p(NICUvd) and p(NICUcs).

Note that all of these quantities are estimated using Bayesian Markov chain Monte Carlo (MCMC) simulation, which samples directly from the joint posterior distribution. The decision tree is evaluated for each of these simulated samples so that we have a simulation of utility and cost estimates for each intervention. These simulations ensure that the uncertainty in the model inputs are fully reflected in the estimation of costs and utilities.

There were five UK studies[315,549,834,957] in our review that provided information on the probability of a CS on the reference intervention. There was one UK study in our review that provided information on the probability of VD within 24 hours, given no CS, on the reference intervention. There were two UK studies[834] providing information on the probability of NICU admission on the reference intervention. These studies were chosen as they were the only UK-based studies that evaluated the reference treatment and were therefore thought to be most representative of the target population. Where there was more than one study, the reference intervention arms were pooled using single-arm meta-analysis (results shown in *Table 22*). A REs model was used for both the probability of CS and the probability of NICU admission as a result of the heterogeneity between the included studies. This is reflected in the wide CrIs for these probabilities (see *Table 22*).

TABLE 22 Probabilities of events on reference treatment (PGE_2 tablet)

Probability of	Posterior mean estimate (%)	95% CrI
VD within 24 hours	46	30 to 69
VD after 24 hours	30	15 to 49
CS	24	8 to 36
NICU admission	14	0 to 71

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We applied the ORs from the NMAs (see *Chapter 3* and *Appendix 16*) to the *absolute* probabilities for the reference intervention (see *Table 22*), to obtain absolute probabilities for all interventions. Note that this was done within the Bayesian MCMC simulation, which samples from the joint posterior distribution so that all correlations and uncertainties are fully reflected in the estimates. The resulting estimates are given in *Tables 23–26*. Note that these results differ from those presented in *Chapter 3*. First, we are using a different reference intervention on which to apply relative effects. Second, because we are modelling the mode of delivery jointly (so probabilities sum to 1), the number of studies from which the VD within 24 hours is estimated is reduced (as we require studies to report all delivery outcomes fully). One point to note is that the estimate of the probability of a VD after 24 hours with i.v. oxytocin plus amniotomy is '0', based on a single small study (25 women in this arm) with no women delivering vaginally after 24 hours.

Cost inputs

The perspective adopted for the economic evaluation was that of the service provider (UK NHS). In accordance with this perspective, the costs included in the economic analysis were the direct costs incurred as a result of the interventions. These included the intervention costs, costs of method of delivery and length of neonatal stay in level I, II or III units. The price year was 2012–13.

TABLE 23 Absolute probabilities of achieving VD within 24 hours

Treatment	Probability of achieving VD within 24 hours	95% CrI
i.v. oxytocin with amniotomy	0.78	0.6 to 0.91
Buccal/sublingual misoprostol	0.64	0.43 to 0.81
Vaginal misoprostol: dose ≥ 50 µg	0.62	0.43 to 0.77
Titrated (low-dose) oral misoprostol solution	0.55	0.31 to 0.74
Vaginal misoprostol: dose < 50 µg	0.52	0.33 to 0.71
Vaginal PGE_2 gel	0.51	0.3 to 0.69
Oral misoprostol tablet: dose ≥ 50 µg	0.48	0.28 to 0.66
i.v. oxytocin	0.47	0.24 to 0.69
Vaginal PGE_2 tablet	0.46	0.3 to 0.69
Sustained-release misoprostol insert	0.44	0.14 to 0.74
Double-balloon or Cook's catheter	0.42	0.2 to 0.65
Vaginal PGE_2 pessary (normal release)	0.42	0.19 to 0.66
Vaginal PGE_2 pessary (slow release)	0.41	0.21 to 0.62
Foley catheter	0.41	0.19 to 0.63
Intracervical PGE_2	0.40	0.2 to 0.59
Extra-amniotic PGE_2	0.36	0.09 to 0.7
Oral misoprostol tablet: dose < 50 µg	0.33	0.1 to 0.61
NO	0.27	0.06 to 0.57
Mifepristone	0.16	0.16 to 0.16
Placebo	0.14	0.03 to 0.32

Posterior mean and 95% CrI are reported.

TABLE 24 Absolute probabilities of achieving VD after 24 hours

Treatment	Probability of achieving VD after 24 hours	95% CrI
i.v. oxytocin with amniotomy	0	0 to 0
Buccal/sublingual misoprostol	0.19	0.06 to 0.39
Vaginal misoprostol: dose ≥ 50 µg	0.20	0.09 to 0.36
Titrated (low-dose) oral misoprostol solution	0.29	0.12 to 0.51
Vaginal PGE_2 gel	0.30	0.15 to 0.49
Vaginal misoprostol: dose < 50 µg	0.30	0.14 to 0.49
Vaginal PGE_2 tablet	0.30	0.15 to 0.49
i.v. oxytocin	0.31	0.12 to 0.54
Double-balloon or Cook's catheter	0.33	0.13 to 0.56
Sustained-release misoprostol insert	0.33	0.07 to 0.65
Oral misoprostol tablet: dose ≥ 50 µg	0.34	0.16 to 0.53
Vaginal PGE_2 pessary (slow release)	0.37	0.18 to 0.59
Vaginal PGE_2 pessary (normal release)	0.38	0.15 to 0.63
Foley catheter	0.40	0.19 to 0.62
Intracervical PGE_2	0.40	0.21 to 0.6
Extra-amniotic PGE_2	0.41	0.1 to 0.73
Oral misoprostol tablet: dose < 50 µg	0.43	0.16 to 0.7
NO	0.53	0.21 to 0.77
Mifepristone	0.60	0.28 to 0.83
Placebo	0.63	0.41 to 0.8

Posterior mean and 95% CrI are reported.

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TABLE 25 Absolute probabilities of CS

Treatment	Probability of CS	95% CrI
Titrated (low-dose) oral misoprostol solution	0.16	0.06 to 0.31
Buccal/sublingual misoprostol	0.17	0.07 to 0.33
Vaginal misoprostol: dose < 50 µg	0.18	0.07 to 0.34
Mifepristone	0.18	0.06 to 0.36
Oral misoprostol tablet: dose ≥ 50 µg	0.18	0.07 to 0.34
Vaginal misoprostol: dose ≥ 50 µg	0.18	0.07 to 0.35
Foley catheter	0.19	0.07 to 0.36
Vaginal PGE_2 gel	0.19	0.08 to 0.36
NO	0.20	0.08 to 0.37
Vaginal PGE_2 pessary (normal release)	0.20	0.08 to 0.38
Intracervical PGE_2	0.20	0.08 to 0.38
Vaginal PGE_2 pessary (slow release)	0.21	0.08 to 0.39
i.v. oxytocin with amniotomy	0.21	0.08 to 0.41
i.v. oxytocin	0.22	0.09 to 0.41
Extra-amniotic PGE_2	0.23	0.08 to 0.44
Sustained-release misoprostol insert	0.23	0.09 to 0.43
Placebo	0.23	0.09 to 0.42
Vaginal PGE_2 tablet	0.24	0.08 to 0.3
Oral misoprostol tablet: dose < 50 µg	0.25	0.09 to 0.46
Double-balloon or Cook's catheter	0.25	0.1 to 0.46

Posterior mean and 95% CrI are reported.

TABLE 26 Absolute probabilities of NICU admission

Treatment	Probability of NICU admission	95% CrI
Extra-amniotic PGE_2	0.09	0 to 0.57
Double-balloon or Cook's catheter	0.11	0 to 0.66
Sustained-release misoprostol insert	0.11	0 to 0.66
Titrated (low-dose) oral misoprostol solution	0.12	0 to 0.69
Foley catheter	0.12	0 to 0.68
Vaginal PGE_2 (tablet)	0.13	0 to 0.71
Vaginal PGE_2 pessary (slow release)	0.13	0 to 0.7
Intracervical PGE_2	0.13	0 to 0.71
Vaginal misoprostol: dose < 50 µg	0.13	0 to 0.7
Oral misoprostol tablet: dose < 50 µg	0.13	0 to 0.72
i.v. oxytocin	0.13	0 to 0.71
Buccal/sublingual misoprostol	0.13	0 to 0.7
Vaginal PGE_2 (gel)	0.14	0 to 0.74
Vaginal PGE_2 pessary (normal release)	0.14	0 to 0.74
Vaginal misoprostol: dose ≥ 50 µg	0.14	0 to 0.73
Oral misoprostol tablet: dose ≥ 50 µg	0.14	0 to 0.73
NO	0.14	0 to 0.73
i.v. oxytocin with amniotomy	0.19	0 to 0.84
Mifepristone	0.2	0 to 0.85
Placebo (no intervention)	0.16	0 to 0.77

Posterior mean and 95% CrI are reported.

The costs of each method of delivery are given in *Table 27*, along with the minimum and maximum estimates. These were taken from the NHS reference costs 2012/13,[958] which are the average unit cost to the NHS of providing secondary health care to NHS patients. These are calculated on a full absorption basis to identify the full cost of delivering the service. It was assumed that a VD within 24 hours would constitute a short stay under the costing code, whereas a VD after 24 hours would be coded as long stay and therefore incur higher costs. The cost of a long-stay emergency CS was also used as most emergency CSs result in a stay of > 24 hours. A uniform distribution for these costs was assumed in the model.

TABLE 27 The NHS reference costs 2012–13[958] for method of delivery and neonatal critical care admission

Outcome	Cost (£)	Lower (£)	Upper (£)	Currency code	Distribution
VD within 24 hours	1110	815	1345	NZ30C NEI-S	Uniform
VD after 24 hours	1919	1547	2344	NZ30C NEI-L	Uniform
Emergency CS	3727	2926	4289	NEI-L	Uniform
Neonatal critical care, transitional care (per day)	382	306	473	XA04Z	Uniform
Neonatal critical care, intensive care (per day)	1118	819	1301	XA01Z	Uniform
Neonatal critical care, high-dependency care (per day)	791	685	902	XA02Z	Uniform

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Supporting documents for the NHS Reference Costs[958] indicate that all activity relating to healthy babies is reported as part of the total costs of the maternity delivery episode, whereas babies who are unwell generate their own admission record. All hospitalised infants incur per-patient/day costs. The unit cost for an inpatient day is also given in *Table 27*.

Probability of admission to each level of neonatal care, and average length of stay in each level, was taken from data on term admissions at Liverpool Women's NHS Foundation Trust. The data from 100 at-term NICU admissions between July and October 2014 showed that 19% of admissions were to intensive care, 7% were to high-dependency care and 74% were to transitional care. Median length of stay was 2 days for intensive care, 1.5 days for high-dependency care and 2 days for transitional care.

The other costs included in the analysis were the costs that were associated with the different methods of induction. These were taken from the *British National Formulary* (BNF)[959] for the pharmacological interventions and from the published literature or manufacturer costs for the mechanical interventions.

Vaginal PGE_2 pessary (normal release) preparation varied considerably across trials and is not currently available on the NHS (see *Chapter 3*). In order to include this method, we assumed that the cost is equal to that for vaginal PGE_2 tablet and gel. Given these uncertainties, we have presented results excluding this intervention. The intervention costs are shown in *Table 28*.

TABLE 28 Costs of methods of induction

Induction method	Cost (£)	Source
NO	0.16	BNF[959]
Vaginal misoprostol: dose ≥ 50 µg	0.67	BNF[959]
Vaginal misoprostol: dose < 50 µg	1.02	BNF[959]
Oral misoprostol tablet: dose ≥ 50 µg	1.02	BNF[959]
i.v. oxytocin	1.71	BNF[959]
Oral misoprostol tablet: dose < 50 µg	2.04	BNF[959]
Titrated (low-dose) oral misoprostol solution	2.04	BNF[959]
Buccal sublingual misoprostol	2.04	BNF[959]
i.v. oxytocin with amniotomy	2.67	BNF[959]
Mechanical methods: Foley catheter	4.00	Van Baaren 2013[955]
Mifepristone	17.50	BNF[959]
Vaginal PGE_2 (tablet)	26.56	BNF[959]
Vaginal PGE_2 (gel)	26.56	BNF[959]
Intracervical PGE_2	26.56	BNF[959]
Vaginal PGE_2 pessary (normal release)	26.56	Estimated
Vaginal PGE_2 pessary (slow release)	30.00	BNF[959]
Sustained-release misoprostol insert	30.00	BNF[959]
Mechanical methods: double-balloon or Cook's catheter	47.90	Manufacturer cost
Extra-amniotic PGE_2	47.90	BNF[959]

Utility inputs

Ideally, we would capture health-related outcomes using QALYs measured using the European Quality of Life-5 Dimensions (EQ-5D™) instrument. However, our literature review did not identify any evidence on the EQ-5D for the outcomes in our model. Furthermore, because of the short time-horizon of our model, the EQ-5D is unlikely to be very sensitive to changes in outcomes in our model. Instead, we attributed a utility score to each of the outcomes in our model, which represents the strength of preferences for a set of health-related outcomes, where utility scores take values of between '0' and '1', with '1' representing perfect health.

It was necessary to identify the best available utility estimates for health states that were associated with the consequences of induction of labour for use in the model. The health states used in the model included emergency CS and VD for the mother, and transitional care, high-dependency care and intensive care for the child.

A literature search was undertaken to identify evidence on these utility values within published literature. A search was carried out in PubMed, The Cochrane Library [including Cochrane Database of Systematic Reviews (CDSR), CENTRAL, Database of Abstracts of Reviews of Effects (DARE) and Economic Evaluations Databases], NHS EED and the Health Technology Assessment (HTA) database. Details of the search strategy are presented in *Appendix 17*. The number of studies retrieved in each search is shown in *Table 29*.

Studies were also identified through searching specialist health economics resources, such as the Cost-effectiveness Analysis Registry and reference list checking. After examining titles and abstracts to identify those that were likely to be relevant, 12 studies were found and full papers were obtained. The full-text papers were then screened by two reviewers (EK and NJW) to identify four relevant studies (*Figure 14*). The list of excluded full articles and reasons for their exclusion can be found in *Appendix 17*.

Many of the studies that were deemed inappropriate to inform the model relied on the use of assumptions or judgements obtained from expert panels to assign a utility value to the health states of emergency CS, VD and NICU admission, rather than using empirical evidence. Three of the studies[960–962] identified that were deemed relevant elicited health-state valuations for these states using the standard gamble technique, which is a recognised preference-based measures of health-related quality of life. The other study[963] elicited utilities using the prospective measure of preference method, which is a prospective modification of the time trade-off method and standard gamble tools that have been previously described and validated in other settings.[964]

TABLE 29 Number of studies retrieved in each search

Database	Number retrieved
HTA database	199
NHS EED	2247
The Cochrane Library	8908
PubMed	30,029

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FIGURE 14 Flow chart summarising the review process.

Table 30 lists the four studies,[960–963] the utility values that the studies use and how they were derived. Three of the studies used appropriate respondents (patients) of a sufficient sample size to give robust estimates. The exception was the study by Plunkett and Grobman,[962] which used a panel of five experts to assign utilities.

None of the studies gives utility values for intensive, high dependency and transitional neonatal care, as required in our model. Vandenbussche *et al.*[960] gives utilities for 'transient neurological symptoms', and Pham and Crowther[961] give utilities for admission to 'neonatal nursery'. It was not clear in either of these studies if the utilities relate to the mother, baby, or both. In the absence of utilities specifically for the health states in our model, we used the lower interval reported in these two studies (0.7 from *Table 30*) to represent intensive care, the higher interval (0.99 from *Table 30*) to represent transitional care and the midpoint (0.845) to represent high-dependency care. There is clearly a high degree of uncertainty in these values, and so we conducted a sensitivity analysis as detailed in *Table 31*.

In sensitivity analyses 1 and 2 we vary the utility for high-dependency care to 0.7 (equal to intensive care), and 0.7725 [midpoint between 0.7 and 0.845 (base case)]. In sensitivity analyses 3 and 4 we assume a lower utility score for intensive care (0.57 based on our own small survey described below). In sensitivity analysis 3 we use the midpoint between 0.57 and 0.99 (0.78) for high-dependency care, and in sensitivity analysis 4 we use a quarter of the way between the 0.57 and 0.99 (0.675) for high-dependency care.

Both the Turner *et al.* study[963] and the Plunkett and Grobman study[962] provide estimates of utilities relating to mode of delivery; however, we use only the values from Turner *et al.*,[963] as it is based on 102 pregnant women, rather than five experts. We therefore used the utility values of 0.92 and 0.59 for VD and emergency CS, respectively, as reported in Turner *et al.*[963] (see *Table 30*). However, no confidence intervals are reported for these figures, so we cannot reflect the uncertainty in the estimates.

TABLE 30 Included studies

Study	Utility value given for: NICU	VD	Emergency CS	How derived
Turner *et al.*[963] Vaginal delivery compared with elective CS: the views of pregnant women and clinicians. *BJOG* 2008;**115**:1494–502		Pain during labour: 0.92	0.59	Prospective Measure of Preference method Participant's responses indicating the maximum level of risk (0–100%) that they would accept before opting for an elective CS were converted into utility scores, which ranged from 0 to 1 ($n = 102$ pregnant women)
Vandenbussche *et al.*[960] Differences in the valuation of birth outcomes among pregnant women, mothers, and obstetricians. *Birth* 1999;**26**:178–83	Transient neurological symptoms: median 0.99; range 0.72–0.99			VAS and standard reference gamble given to 12 obstetricians, 15 pregnant women and 15 mothers (Used utilities elicited from mothers.)
Pham and Crowther[961] Birth outcomes: utility values that postnatal women, midwives and medical staff express. *BJOG* 2003;**110**:121–7	Admission to neonatal nursery: median: 0.99, range: 0.70–0.99			VAS and standard gamble administered to 90 women in postnatal ward: 59 midwives and 31 medical staff (Used utilities elicited from postnatal women.)
Plunkett and Grobman[962] Routine hepatitis C virus screening in pregnancy: a cost-effectiveness analysis. *Am J Obstet Gynecol* 2005;**192**:1153–61		Disutility of 0.0027, range 0.0037–0.0017	Disutility of 0.0046, range 0.0056–0.0036	Panel of five experts assigned utility values using time trade-off technique

VAS, visual analogue scale.

TABLE 31 Sets of utility estimates varied in sensitivity analysis

Model run	Intensive care	High-dependency care	Transitional care
Base case	0.7	0.845	0.99
Sensitivity analysis 1	0.7	0.7	0.99
Sensitivity analysis 2	0.7	0.7725	0.99
Sensitivity analysis 3	0.57	0.78	0.99
Sensitivity analysis 4	0.57	0.675	0.99

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Because of the limited evidence in the literature on utilities, we conducted our own small survey to help us reflect uncertainty in the utilities and obtain limits for sensitivity analysis. We administered a questionnaire asking respondents to rate different health states. The full questionnaire and results are given in *Appendix 18*. An example question is given in *Figure 15*.

This type of rating scale is called a visual analogue scale (VAS) and is commonly used as a method of measuring preferences for health outcomes.[965]

Ten respondents completed this questionnaire. This group included all members of the project steering group including clinicians, health economists, systematic reviewers and a patient representative. The health states evaluated were the health of the mother following normal VD and CS, and the health of the mother and child following the child's admission to the ICU, high dependency unit or transitional care unit. The data were analysed using a model that accounted for the between-respondent variability in overall level of the utility scores, and assumed common mean differences in utility scores for the different outcomes. Details of the statistical model are given in *Appendix 18*.

The estimated scores from this questionnaire were 0.65 (CrI 0.51 to 0.79) for a VD and 0.42 (CrI 0.17 to 0.67) for CS. Interestingly, although the absolute values of the scores differ, the *ratio* of the utilities for VD and CS taken from Turner *et al.*[963] agrees almost exactly with those arising from our own questionnaire. We therefore felt it appropriate to calibrate the scores from our questionnaire to those obtained in Turner *et al.*[963] to obtain uncertainty limits to put around the estimates from Turner *et al.*[963] for use in the economic model.

Our questionnaire obtained scores for intensive care, high-dependency care and transitional care from both the mother's and baby's perspective. Summing these scores for mother and baby for transitional care gave a value of '1', very similar to the 0.99 obtained from the literature review. On this basis, summing the values for mother and baby from our questionnaire for intensive care gives a value of 0.57, which we use as a lower limit in our sensitivity analysis (detailed in *Table 31*).

The final utility values that went into the model are shown in *Table 32*.

The continuous scale below goes from the worst health state you can imagine to the best.
Please place a mark on the scale to indicate how you would rate your health if you had:

- restricted mobility
- pain requiring painkillers
- a urinary catheter
- inability to drive, carry heavy things
- a wound that required cleaning and drying daily.

Worst imaginable health state | | | | | | | | | | | Best imaginable health state

FIGURE 15 Example question from questionnaire on different health states.

TABLE 32 Utility estimates used in model

Delivery mode: utility (95% CrI)	NICU admission (base-case utility, see *Table 27*)	Delivery mode and NICU admission: product of utilities (95% CrI)
VD 0.92 (0.72 to 1)	None (1)	0.92 (0.72 to 1)
	Transitional care (0.99)	0.91 (0.71 to 0.99)
	High-dependency care (0.845)	0.78 (0.61 to 0.85)
	Intensive care (0.7)	0.64 (0.50 to 0.7)
Emergency CS 0.59 (0.25 to 0.95)	None (1)	0.59 (0.25 to 0.95)
	Transitional care (0.99)	0.58 (0.25 to 0.94)
	High-dependency care (0.845)	0.50 (0.21 to 0.80)
	Intensive care (0.7)	0.41 (0.18 to 0.67)

The first column shows the utilities used for mode of delivery; the second column shows the utilities used for NICU admission type of care; and the third column is the product of the first two columns, corresponding to branches of the decision tree (see *Figure 13*).

Methods of economic evaluation

We present a probabilistic cost-effectiveness analysis, which reflects the joint uncertainties in model inputs. This can be conceptualised as a hypothetical cohort of patients who vary in their probabilities, utilities and costs, as described by our joint uncertainty in the parameter estimates, and who experience the consequences of each induction strategy. Total utilities and costs are then averaged over this cohort to obtain the expected total utility and expected total cost for each induction strategy. This allows the assessment of multiple clinical outcomes as well as costs and cost-effectiveness and ensures that full joint uncertainty and correlations between parameters are taken into account.

The cost-effectiveness model was evaluated using Microsoft Excel® version 2013 (Microsoft Corporation, Redmond, WA, USA). The analysis requires simulated samples from the joint distributions of all model inputs. For the cost parameters, Monte Carlo simulation was performed within Excel to obtain the simulated samples. The absolute probabilities and utility inputs were estimated using Bayesian inference, computed using MCMC simulation in OpenBUGS. A total of 60,000 MCMC samples from the posterior distributions were taken from OpenBUGS and read into Excel, from which the simulated samples were drawn for the model, taking care to preserve correlations from the MCMC.

For each intervention we present the expected total utility and expected total cost, averaged over the simulation sample, together with 95% CrIs. We present an incremental analysis in which (1) interventions are ordered by increasing expected cost; (2) interventions that are dominated (have a higher expected cost and lower expected utility than another intervention) are identified; and (3) ICERs are computed for each non-dominated intervention relative to the previous (lower expected cost) non-dominated intervention, for which the ICER is:

$$ICER = \frac{\text{additional expected cost}}{\text{additional expected utility}}. \quad (1)$$

The reported ICERs can be interpreted as the additional expected cost per additional unit gain in utility for an intervention compared with the previous non-dominated intervention in the table.

We also report cost-efficiency frontiers, which plots expected cost against expected utility for each intervention. The frontier line indicates the intervention with the lowest expected cost for a given expected utility, so that interventions above the line are not cost-effective compared with interventions lower down

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for a given expected utility. The choice between interventions on the frontier line will depend on willingness-to-pay per additional unit of utility.

For each intervention we computed net benefit for given willingness-to-pay per additional unit of utility, λ, (ceiling ratio) where net benefit is defined as:

$$\text{Net benefit} = \text{utility} * \lambda - \text{cost}. \quad (2)$$

'Net benefit' converts utilities to a monetary scale, so that the costs and utilities can be compared directly. Expected net benefit is the average net benefit over the simulation samples. For a given willingness-to-pay threshold λ, the optimal intervention is that with the highest expected net benefit. We present expected net benefit for $\lambda = £20{,}000$.

We present the uncertainty in the optimal intervention by plotting the probability that each intervention is the most cost-effective (has highest net benefit) against willingness-to-pay per unit of utility (CEACs). Probabilities that are close to 1 indicate that the optimal intervention is very certain, whereas probabilities that are much lower indicate that there is uncertainty as to which intervention is best. Because CEACs can be misleading when there are interventions with a very high degree of uncertainty,[966] we exclude interventions from the plot that have both a high probability of being most cost-effective and a high probability of being least cost-effective.

We also present uncertainty using the incremental cost-effectiveness plane, which displays the incremental cost of each treatment compared with vaginal PGE_2 tablet from each simulated sample against the incremental utility of each treatment compared with vaginal PGE_2 tablet. Owing to the large numbers of interventions being compared, and the high degree of overlap of some of these, we include only the top three or four interventions (according to probability of being the most cost-effective) in the incremental cost-effectiveness planes.

We use value of information methods[967] to explore how sensitive the optimal intervention is to uncertainty in the model inputs, and to guide research recommendations. If there was no uncertainty in the model inputs then we would know the optimal intervention perfectly. The expected value of perfect information (EVPI) measures the value (in terms of net benefit) resulting from elimination of uncertainty in all model inputs. The expected value of partial perfect information (EVPPI) measures the value (in terms of net benefit) from elimination of uncertainty in a some of the model inputs, and can be used to explore which model inputs are the key drivers of decision uncertainty, and may be most beneficial for further research efforts. We compute EVPI and EVPPI per person for a willingness-to-pay per unit of utility threshold of £20,000. We also present population-level EVPI and EVPPI, given an annual incidence of labour inductions in England and Wales of 150,000,[2,3] and assuming a lifetime of the intervention of $T = 1$ year and 5 years, respectively, discounted at 3.5%. The lifetime of the intervention represents the time until the intervention becomes obsolete, for example by being superseded by a new intervention. EVPPI for subsets of parameters were computed using a Gaussian process emulator[968] using the Sheffield Accelerated Value of Information web application.[969]

Results

Base-case results

Table 33 shows the expected total cost and expected total utility for each treatment, averaged over the simulation sample along with their CrIs. Interventions are ordered by increasing expected total cost (treatment costs plus resource costs), with buccal/sublingual misoprostol and i.v. oxytocin with amniotomy having the lowest expected total cost, and placebo (no intervention) having the highest expected total cost. Note that all methods of induction have lower expected total costs than placebo (no intervention) because they reduce costly outcomes (VD in > 24 hours, CS and NICU admission). Titrated (low-dose) oral

TABLE 33 Base case: expected total costs, expected total utilities, ICERs and expected net benefit at a £20,000 willingness-to-pay threshold

Treatment	Expected total cost, £ (95% CI)	Expected total utility (95% CI)	Expected net benefit (£)	ICER (£)
Buccal/sublingual misoprostol	1747.18 (1341.57 to 1472.34)	0.821 (0.68 to 0.95)	14,668.72	
i.v. oxytocin with amniotomy	1747.80 (1275.41 to 2370.82)	0.82 (0.67 to 0.95)	14,652.13	Dominated
Vaginal misoprostol: dose ≥ 50 µg	1789.56 (1386.41 to 2270.74)	0.82 (0.68 to 0.95)	14,603.51	Dominated
Titrated (low-dose) oral misoprostol solution	1799.55 (1403.44 to 2262.1)	0.823 (0.68 to 0.96)	14,658.28	**21,190**
Vaginal misoprostol: dose < 50 µg	1852.56 (1456.01 to 2325.54)	0.819 (0.68 to 0.95)	14,533.98	Dominated
Oral misoprostol tablet: dose ≥ 50 µg	1906.19 (1499.21 to 2384.89)	0.819 (0.68 to 0.95)	14,467.15	Dominated
Vaginal PGE_2 gel	1935.79 (1517.97 to 2429.53)	0.817 (0.67 to 0.95)	14,402.37	Dominated
Foley catheter	1968.64 (1550.28 to 2463.38)	0.815 (0.67 to 0.95)	14,328.52	Dominated
i.v. oxytocin	1977.39 (1536.48 to 2518.6)	0.809 (0.66 to 0.95)	14,195.63	Dominated
Sustained-release misoprostol insert	1997.08 (1480.46 to 2597.86)	0.805 (0.65 to 0.95)	14,108.39	Dominated
Vaginal PGE_2 pessary (normal release)	2015.76 (1569.43 to 2533.94)	0.811 (0.66 to 0.95)	14,210.27	Dominated
Intracervical PGE_2	2033.03 (1614.6 to 2532.76)	0.633 (0.53 to 0.74)	10,617.17	Dominated
Vaginal PGE_2 pessary (slow release)	2036.15 (1602.91 to 2551.89)	0.81 (0.66 to 0.95)	14,162.42	Dominated
Vaginal PGE_2 tablet	2042.64 (1638.01 to 2565.19)	0.805 (0.65 to 0.95)	14,054.25	Dominated
Extra-amniotic PGE_2	2093.96 (1567.05 to 2684.18)	0.804 (0.65 to 0.95)	13,982.18	Dominated
Double-balloon or Cook's catheter	2097.74 (1618.43 to 2682.1)	0.8 (0.64 to 0.95)	13,906.29	Dominated
Oral misoprostol tablet: dose < 50 µg	2140.28 (1644.79 to 2738.28)	0.802 (0.64 to 0.94)	13,898.03	Dominated
NO	2141.74 (1662.1 to 2676.64)	0.816 (0.67 to 0.94)	14,179.69	Dominated
Mifepristone	2202.28 (1709.58 to 2742.8)	0.821 (0.69 to 0.95)	14,210.41	Dominated
Placebo ('no intervention')	2304.82 (1847.79 to 2822.48)	0.805 (0.65 to 0.94)	13,788.52	Dominated

CI, confidence interval.

Note

£21,190 is the additional expected cost per additional unit gain in utility required for titrated (low-dose) oral misoprostol solution compared with buccal/sublingual misoprostol.

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misoprostol solution has the highest expected utility, very closely followed by buccal/sublingual misoprostol, mifepristone, i.v. oxytocin with amniotomy and vaginal misoprostol (dose ≥ 50 µg). Intracervical PGE_2 has the lowest expected utility. As the majority of interventions (all except intracervical PGE_2) have no more than a 0.02 difference in expected utility between them, they could be assumed to be clinically equivalent, so that a decision between them is effectively based on minimising total costs. Note that the confidence intervals show that there is a high degree of uncertainty in these estimates.

Any intervention that has a higher expected cost and lower expected utility than another intervention is said to be dominated by that intervention. As can be seen from *Table 33*, all treatments apart from titrated low-dose oral misoprostol solution are dominated by buccal/sublingual misoprostol, which is more effective, in terms of increased utility, and less expensive than the other interventions.

As titrated (low-dose) oral misoprostol solution is non-dominated relative to buccal/sublingual misoprostol, an ICER is computed:

$$ICER = \frac{\text{additional expected cost}}{\text{additional expected utility}} = \frac{£42.38}{0.002} = £21{,}190. \quad (3)$$

Therefore, £21,190 is the additional expected cost per additional unit gain in utility required for titrated (low-dose) oral misoprostol solution compared with buccal/sublingual misoprostol.

The expected total costs and expected utilities are displayed graphically in a cost-efficiency frontier (*Figure 16*). Any intervention above the line is not cost-effective compared with interventions lower down for a given expected utility. The graph shows that all of the other interventions apart from buccal/sublingual misoprostol and titrated (low-dose) oral misoprostol are above the line and are therefore dominated, as they are more expensive and less effective. i.v. oxytocin lies very close to the line. Intracervical PGE_2 is removed from the graph for visualisation purposes, as it is considerably less effective than the rest of the treatments and also relatively expensive, placing it far from the line. Placebo is the treatment that has the highest expected total cost and is therefore far from the line.

The expected net benefit at a £20,000 willingness-to-pay threshold (see *Table 33*) is highest for buccal/sublingual misoprostol (£14,669), closely followed by titrated (low-dose) oral misoprostol solution (£14,658) and i.v. oxytocin with amniotomy (£14,652) and lowest for intracervical PGE_2 (£10,617).

FIGURE 16 Base case: cost-effectiveness efficiency frontier.

We present the uncertainty surrounding the cost-effectiveness of the various interventions, using a CEAC (*Figure 17*) and the cost-effectiveness plane (*Figure 18*).

The CEACs (see *Figure 17*) plot the probability that each of the interventions is the most cost-effective by computing the proportion of simulations for which that intervention had the highest net benefit for a given willingness-to-pay per unit increase in utility. Out of the 19 interventions evaluated, only three had a probability of > 10% of being cost-effective at any willingness-to-pay value: titrated (low-dose) oral misoprostol solution, buccal/sublingual misoprostol and i.v. oxytocin with amniotomy. However, the results for i.v. oxytocin with amniotomy were very uncertain, and i.v. oxytocin also had a high probability of being the least cost-effective. To avoid misleading conclusions, we have removed i.v. oxytocin with amniotomy from *Figure 17*, and, for clarity, give labels only for interventions for which it was clear that the probability of being cost-effective is > 10%. *Figure 17* shows that at any willingness-to-pay value up until around £23,000, buccal/sublingual misoprostol has the highest probability of being cost-effective. Above this threshold, titrated low-dose oral misoprostol solution has the highest probability of being cost-effective. This probability is never > 35%, indicating a large degree of uncertainty in the optimal intervention.

FIGURE 17 Base-case CEAC. Plotted against different willingness-to-pay per unit increase in utility (ceiling ratio). Note the curves are unchanged for ceiling ratios of > £50,000. Note: The non-labelled interventions have not been specified because of their close proximity to each other.

FIGURE 18 Base case: incremental cost-effectiveness plane.

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The high degree of uncertainty between these interventions is seen clearly in the cost-effectiveness plane (see *Figure 18*), which plots the simulated pairs of incremental utility and incremental cost values for each intervention (compared with vaginal PGE_2 tablet). As there are a large number of interventions to display, and the majority of interventions were very similar in terms of costs and utilities, the plot is unreadable if all interventions are included. For visual clarity, we plot only the interventions that were found to have had a > 10% probability of being cost-effective of at any willingness-to-pay value, along with intracervical PGE_2, the intervention with the lowest average utility.

As can be seen from the graph, the majority of the points for buccal/sublingual misoprostol, titrated (low-dose) oral misoprostol solution and i.v. oxytocin with amniotomy are plotted in the bottom right-hand corner, indicating that these interventions are more effective and less expensive than vaginal PGE_2 tablet. However, the location of some of the points in the other quadrants indicates that this is not certain. All of the points for intracervical PGE_2, for example, are plotted in the top- and bottom-left quadrants, showing that although there is uncertainty in the cost, intracervical PGE_2 never has a utility score higher than vaginal PGE_2 tablet.

Sensitivity analysis to assumed utilities

Varying the utility estimates, as detailed in *Table 31*, had a very minor effect on the results. The interventions were ranked from lowest to highest expected cost in the same order and the expected utilities varied only on the second or third decimal point.

Subgroup analysis (i): women with intact membranes only

To examine the effect that membrane status had on the results, a scenario analysis was carried out restricting to mothers with intact membranes only. When we included all interventions for which we had sufficient information to evaluate the model, only 13 out of a total of 34 interventions (see *Table 34* and see *Appendix 16*) were included in analysis, and the remaining interventions were excluded. Note that placebo (no intervention) was not included in this analysis, so comparisons with no intervention cannot be made.

Table 34 shows the expected total utility and expected total cost for each treatment when the analysis is limited to women with intact membranes. Interventions are again ordered in order of increasing expected cost (treatment costs plus resource costs) with titrated (low-dose) oral misoprostol solution now having the highest expected total cost and vaginal misoprostol (dose < 50 µg) and i.v. oxytocin with amniotomy having the lowest expected cost. Titrated (low-dose) oral misoprostol solution still has the highest expected utility, and intracervical PGE_2 still has the lowest expected utility. The confidence intervals again show that there is a high degree of uncertainty in these estimates.

As can be seen from *Table 34*, all interventions apart from titrated (low-dose) oral misoprostol solution and i.v. oxytocin with amniotomy are dominated by vaginal misoprostol (dose < 50 µg), which is more effective in terms of increased utility, and less expensive.

As i.v. oxytocin with amniotomy is non-dominated relative to vaginal misoprostol (dose < 50 µg), an ICER is computed:

$$ICER = \frac{\text{additional expected cost}}{\text{additional expected utility}} = \frac{£0.94}{0.006} = £156.66. \quad (4)$$

Therefore, £156.66 is the additional expected cost per additional unit gain in utility required for i.v. oxytocin with amniotomy compared with vaginal misoprostol in women with intact membranes only.

TABLE 34 Subgroup analysis: women with intact membranes only, excluding vaginal PGE_2 pessary (normal release)[a]

Treatment	Expected total cost, £ (95% CI)	Expected total utility (95% CI)	Expected net benefit (£)	ICER (£)
Vaginal misoprostol: dose < 50 µg	1928.96 (1571.86 to 2338.89)	0.82 (0.69 to 0.94)	14,464.22	
i.v. oxytocin with amniotomy	1929.9 (1487.64 to 2439.18)	0.826 (0.7 to 0.94)	14,586.48	**156.66**
Buccal/sublingual misoprostol	1936.01 (1516.6 to 1816.31)	0.817 (0.68 to 0.94)	14,400.68	Dominated
Vaginal misoprostol: dose ≥ 50 µg	2000.32 (1634.83 to 2416.3)	0.815 (0.69 to 0.94)	14,287.56	Dominated
Vaginal PGE_2 pessary (normal release)	2018.92 (1612.79 to 2494.27)	0.814 (0.68 to 0.94)	14,252.13	Dominated
Oral misoprostol tablet: dose ≥ 50 µg	2028.67 (1662.47 to 2439.99)	0.82 (0.7 to 0.94)	14,362.26	Dominated
Foley catheter	2065.24 (1691.42 to 2497.22)	0.813 (0.68 to 0.94)	14,185.49	Dominated
Vaginal PGE_2 gel	2165.47 (1777.15 to 2608.8)	0.813 (0.68 to 0.94)	14,096.27	Dominated
Vaginal PGE_2 tablet	2193.74 (1809.57 to 2617.3)	0.803 (0.67 to 0.93)	13,861.77	Dominated
Intracervical PGE_2	2195.47 (1809.48 to 2640.88)	0.638 (0.54 to 0.74)	10,563.31	Dominated
Vaginal PGE_2 pessary (slow release)	2219.12 (1851.24 to 2668.99)	0.807 (0.68 to 0.93)	13,924.89	Dominated
Double-balloon or Cook's catheter	2249.43 (1824.03 to 2759.69)	0.793 (0.65 to 0.93)	13,607.27	Dominated
Titrated (low-dose) oral misoprostol solution	2403.92 (1841.58 to 3084.74)	0.832 (0.71 to 0.93)	14,224.30	**39,501.66**

CI, confidence interval.
a Expected total costs, expected total utilities, ICER and expected net benefit at a £20,000 willingness-to-pay value.
Note
£156.66 is the additional expected cost per additional unit gain in utility required for i.v. oxytocin with amniotomy compared with vaginal misoprostol in women with intact membranes only.
£39,501 is the additional expected cost per additional unit gain in utility required for titrated (low-dose) oral misoprostol solution compared with i.v. oxytocin with amniotomy in women with intact membranes only.

As titrated (low-dose) oral misoprostol solution is non-dominated relative to i.v. oxytocin with amniotomy, an ICER is also computed:

$$ICER = \frac{\text{additional expected cost}}{\text{additional expected utility}} = \frac{£474.02}{0.012} = £39,501.66. \quad (5)$$

Therefore, £39,501.66 is the additional expected cost per additional unit gain in utility required for titrated (low-dose) oral misoprostol solution compared with i.v. oxytocin with amniotomy in women with intact membranes only.

The intervention with the highest expected net benefit at £20,000 threshold is i.v. oxytocin with amniotomy (£14,586), followed by vaginal misoprostol (dose < 50 µg) (£14,464), and the intervention with the lowest expected net benefit is intracervical PGE_2 at £10,563.

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The CEAC for women with intact membranes only is presented in *Figure 19*. i.v. oxytocin with amniotomy, titrated (low-dose) oral misoprostol solution, buccal/sublingual misoprostol and vaginal misoprostol (dose < 50 µg) were the only four treatments with a probability of being cost-effective of > 10% of any willingness-to-pay value (ceiling ratio). i.v. oxytocin with amniotomy has the highest probability of being cost-effective at any value of the ceiling ratio with a probability of around 45%.

The incremental cost-effectiveness plane for the four interventions with probability of being cost-effective of > 10% is presented in *Figure 20*, showing the high degree of uncertainty in the costs and effects of these interventions.

Subgroup analysis (ii): women with an unfavourable cervix only

To examine the effect that Bishop score had on the results, a scenario analysis was carried out restricting to mothers with an unfavourable cervix (Bishop score < 6). When we included all of the interventions for which we had sufficient information to evaluate the model, 19 interventions out of a total of 34 interventions (see *Table 35* and *Appendix 16*) were included in the analysis, and the remaining were excluded.

FIGURE 19 Cost-effectiveness acceptability curve for subgroup analysis (i): women with intact membranes only. Note: The non-labelled interventions have not been specified because of their close proximity to each other.

FIGURE 20 Incremental cost-effectiveness plane for subgroup analysis (i): women with intact membranes only.

Table 35 shows the expected total utility and expected total cost for each intervention when the analysis is limited to women with an unfavourable cervix. Interventions are again ordered by increasing expected total cost with buccal/sublingual misoprostol having the lowest expected total cost and placebo having the highest expected total cost, as in the base case. Titrated (low-dose) oral misoprostol solution and buccal/sublingual misoprostol have the highest expected utility, and intracervical PGE_2 still has the lowest expected utility. The confidence intervals again show that there is a high degree of uncertainty in these estimates.

TABLE 35 Subgroup analysis: women with an unfavourable cervix only[a]

Treatment	Expected total cost, £ (95% CI)	Expected total utility (95% CI)	ICER	Expected net benefit (£)
Buccal/sublingual misoprostol	1803.03 (1209.38 to 2293.03)	0.805 (0.62 to 0.96)		14,296.29
Titrated (low-dose) oral misoprostol solution	1833.93 (1228.19 to 2681.17)	0.805 (0.62 to 0.95)	Dominated	14,268.94
Vaginal misoprostol: dose ≥ 50 µg	1860.48 (1237.3 to 2736.31)	0.799 (0.61 to 0.95)	Dominated	14,125.24
Vaginal misoprostol: dose < 50 µg	1900.34 (1269.91 to 2767.69)	0.8 (0.61 to 0.95)	Dominated	14,096.55
Oral misoprostol tablet: dose ≥ 50 µg	1922.13 (1281.71 to 2778.67)	0.8 (0.61 to 0.95)	Dominated	14,083.50
Vaginal PGE_2 gel	1966.08 (1316.53 to 2849.77)	0.796 (0.6 to 0.95)	Dominated	13,958.18
Foley catheter	1984.89 (1332.08 to 2845.84)	0.796 (0.6 to 0.95)	Dominated	13,937.91
Intracervical PGE_2	2033.89 (1370.72 to 2917.34)	0.642 (0.5 to 0.8)	Dominated	10,797.93
Vaginal PGE_2 pessary (normal release)	2047.53 (1367.65 to 2942.25)	0.79 (0.58 to 0.95)	Dominated	13,750.04
Sustained-release misoprostol insert	2082.66 (1352.56 to 3024.87)	0.784 (0.57 to 0.95)	Dominated	13,594.43
Vaginal PGE_2 pessary (slow release)	2102.42 (1412.2 to 2993.83)	0.788 (0.58 to 0.95)	Dominated	13,666.30
Vaginal PGE_2 tablet	2106.02 (1418.6 to 3012.11)	0.783 (0.57 to 0.94)	Dominated	13,562.65
NO	2115.85 (1424.43 to 2958.84)	0.795 (0.59 to 0.94)	Dominated	13,792.94
i.v. oxytocin	2137.78 (1433.27 to 3017.3)	0.787 (0.58 to 0.95)	Dominated	13,604.63
Double-balloon or Cook's catheter	2159.86 (1422.1 to 3114.44)	0.778 (0.55 to 0.94)	Dominated	13,397.99
Oral misoprostol tablet: dose < 50 µg	2166.04 (1420.9 to 3096.83)	0.78 (0.56 to 0.95)	Dominated	13,434.70
Mifepristone	2182.01 (1516.15 to 2987.41)	0.801 (0.61 to 0.95)	Dominated	13,831.39
Placebo	2276.45 (1599 to 3112.04)	0.784 (0.57 to 0.94)	Dominated	13,407.56

CI, confidence interval.
a Expected total costs, expected total utilities, and expected net benefit at a £20,000 willingness-to-pay value.

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As can be seen from *Table 35*, all other interventions are dominated by buccal/sublingual misoprostol, which is more effective in terms of increased utility (or equivalent in the case of titrated (low-dose) oral misoprostol) and less expensive than all other treatments. However, as in the other analyses, there is little difference between the utility scores.

The intervention with the highest expected net benefit is buccal/sublingual misoprostol (£14,296) followed by titrated (low-dose) oral misoprostol solution (£14,269) then vaginal misoprostol (dose ≥ 50 µg) (£14,125), and the intervention with the lowest expected net benefit is intracervical PGE_2 at £10,798.

The CEAC for women with an unfavourable cervix subgroup is presented in *Figure 21*. Buccal/sublingual misoprostol has the highest probability of being most cost-effective, followed by titrated (low-dose) oral misoprostol solution, but there is a high degree of uncertainty in these results, with the probability being around 50%.

The incremental cost-effectiveness plane for the subgroup analysis (*Figure 22*) shows incremental costs and utilities (compared with vaginal PGE_2 tablet) for the two interventions that had a probability of being cost-effective of > 10%. The majority of the points are located in the bottom right-hand quadrant, indicating that they are likely to be less expensive and more effective than vaginal PGE_2 tablet.

FIGURE 21 Cost-effectiveness acceptability curve for subgroup analysis (ii): women with an unfavourable cervix only. Note: The non-labelled interventions have not been specified because of their close proximity to each other.

FIGURE 22 Incremental cost-effectiveness plane for subgroup analysis (ii): women with an unfavourable cervix only.

Value-of-information analysis

Table 36 shows the results of the value-of-information analyses for the base-case model at a willingness-to-pay per unit utility threshold of £20,000. The per-woman EVPI is £187, which corresponds to a population EVPI of £28M for all of the inductions in England and Wales over a 1-year time horizon, increasing to £131M over a 5-year time horizon. This large value suggests that the decision is sensitive to uncertainty in the model inputs, and so it is potentially of value to reduce this uncertainty through future research studies. Comparing EVPPI for different subsets of model inputs indicates to which model inputs the decision is most sensitive and where future research efforts may be best invested. EVPPI is higher for cost parameters (£19) than for utility parameters (£0); however, EVPPI for both cost and utility parameters together (£102) is higher than for cost parameters alone. This suggests that there is no value in reducing uncertainty in either costs or utilities without also reducing uncertainty in the other. There is a high value in reducing uncertainty in all of the transition parameters for mode of delivery (£114). We explored the potential value of a new trial comparing the two interventions with the highest expected net benefit in the base case [buccal/sublingual misoprostol vs. titrated (low-dose) oral misoprostol] providing information on all transitions for those interventions, costs and utilities. This gives an EVPPI of £110, which corresponds to a population EVPPI of £16.5M over a 1-year time horizon, increasing to £77M over a 5-year time horizon. However, if costs and utilities are not collected then this value disappears (EVPPI of £2). This suggests that a large well-conducted trial may be a worthwhile use of resources, but it is essential to collect information on costs and utilities as well as transition probabilities for mode of delivery and NICU admission.

TABLE 36 Expected value of perfect information and EVPPI for various subsets of model parameters, at a £20,000 willingness-to-pay value per unit of utility

Model parameter subsets	EVPPI per woman induced (£)	1-year population EVPPI (£)	5-year population EVPPI (£)
All (EVPI)	186.71	28,006,500	130,876,593
All costs	19.31	2,896,500	13,535,574
All utilities	0.09	13,500	63,087
All costs and utilities	101.71	15,256,500	71,294,833
All NICU transition probabilities	12.47	1,870,500	8,740,995
All mode of delivery transition probabilities	113.81	17,071,500	79,776,472
Buccal/sublingual misoprostol vs. titrated (low-dose) oral misoprostol (transition probabilities, costs, utilities)	110.08	16,512,000	77,161,884
Buccal/sublingual misoprostol vs. titrated (low-dose) oral misoprostol (transition probabilities only)	2.11	316,500	1,479,030

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Limitations

The model made a number of assumptions that need to be kept in mind when interpreting the results.

1. We were able to perform the analysis only for the interventions for which we had sufficient information on all outcomes required in the model. This does not mean the excluded interventions are not cost-effective, just that we have no evidence. Therefore, our conclusions on the cost-effectiveness of the included interventions needs to be interpreted within the set of interventions that we were able to include. However there were no interventions that were identified by the NMA as being effective that were not included in the cost-effectiveness analysis. Furthermore, only a subset (86) of the studies provided information on both VD within 24 hours and CS for the joint modelling required in the economic model. Therefore, the economic evaluation is based on fewer studies than the NMA presented in *Chapter 3* for VD within 24 hours.
2. It is assumed that the proportion of babies who are admitted to NICU depends on mode of delivery (CS or VD), but not on whether a VD was within 24 hours of induction or not. Of those admitted to NICU, we assumed that the proportion of babies cared for in intensive (19%), high dependency (7%) or transitional care (74%) would not vary depending on method (vaginal vs. CS) or timing of delivery (< 24 hours; > 24 hours), or intervention.
3. It was also assumed that the length of stay in intensive, high dependency and transitional care was fixed at 2, 1.5 and 2 days, respectively, based on the data from the Liverpool Women's Hospital.
4. It was assumed that long-term costs and benefits would be equal across induction methods, and that any variation would be captured in the time between induction and discharge.
5. The NMA gave estimates on the rate of instrumental delivery, Apgar score < 7 at 5 minutes and uterine hyperstimulation, but these were assumed to be unnecessary in the model, as the differences in costs and benefits would be captured in the other outcomes included.
6. Some important outcomes, such as post-partum haemorrhage, were not reported as an outcome in trials and therefore could not be included in the economic model.
7. Although we would have liked to, we did not have enough evidence on parity to explore cost-effectiveness in primiparous and multiparous women separately.

Conclusions

In summary, the base-case analysis found that all of the methods of induction were cost-saving compared with no treatment. It is noteworthy that there is considerable uncertainty in our cost-effectiveness estimates, with the majority of the interventions having very similar utility values, and mainly differing in total costs.

With this caveat, buccal/sublingual misoprostol and titrated oral misoprostol were identified as being the interventions with the highest expected net benefit and the highest probability of being cost-effective. At any willingness-to-pay value of > £23,000 per unit increase in utility, titrated low-dose oral misoprostol solution seems to be the intervention that is most likely to be the most cost-effective for use on the UK NHS. Given that we were able to analyse only two subgroups (intact membranes and unfavourable cervix), and the number of interventions compared – and studies included – were lower than in the base case, the results of subgroup analyses should be interpreted cautiously (i.e. as hypothesis generating).

In the subgroup of women with intact membranes, and limiting to interventions feasible on the NHS, i.v. oxytocin with amniotomy was identified as being the intervention with the highest expected net benefit and the optimal intervention at any willingness-to-pay value. However, there was again a lot of uncertainty in this estimate, with buccal/sublingual misoprostol and titrated (low-dose) oral misoprostol also with a moderate probability of being most cost-effective.

Buccal/sublingual misoprostol and titrated low-dose oral misoprostol solution were found to be the interventions that were most likely to be cost-effective in women with an unfavourable cervix.

The majority of the interventions, with a few notable exceptions, such as intracervical PGE_2, result in similar expected utility and vary mainly in terms of cost. There is a considerable degree of uncertainty in these estimates, demonstrated by the wide confidence intervals around the values.

There is a need to study further utilities on both mother and baby outcomes from both mother and baby perspectives. This research should be conducted using preference-based measures on large samples and with uncertainties fully reported. We would urge future trials in this area to present results according to mutually exclusive clinically relevant subgroups (e.g. parity, membrane and cervical status, previous CS) to allow more evidence to inform subgroup analyses. We would also urge trialists to report results in a format that allows the construction of the number of vaginal deliveries within 24 hours, the number CSs and the number of vaginal deliveries after 24 hours. It would also be useful to report the NICU admissions according to mode of delivery. Haemorrhage and sepsis (antibiotic usage) are also important adverse outcomes that have consequences for the economic evaluation but which are inconsistently reported. The value-of-information analysis suggests that the decision is very sensitive to uncertainty in the model inputs, and there is potential value in reducing this uncertainty through future research studies. Further large well-conducted trials may be a worthwhile use of resources, but it is essential to collect information on costs and utilities, as well as transition probabilities for mode of delivery and NICU admission.

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Chapter 5 Discussion

Statement of overall/principal findings

In this final chapter, we begin with a summary of the systematic review, NMA and the cost-effectiveness analysis. We then set out the strengths and limitations of analyses before considering the clinical implication of findings. Finally, we offer recommendations for future research.

Key findings of the systematic review and network meta-analysis

Thirty-four active treatment types/regimens were included in our review, including different dose regimes and routes of administration. Overall, the search identified > 1000 studies and, after eligibility assessment using our PICO (population, intervention and relevant comparators, outcomes) criteria, 611 trials were included in the review. Together, these trials reported findings for > 100,000 women who were randomised to different methods for third-trimester induction of labour.

The active interventions most likely to achieve VD within 24 hours were i.v. oxytocin with amniotomy, misoprosotol (vaginal tablets – high and low dose; pessary – sustained release; low-dose oral solution; and buccal/sublingual misoprotol) closely followed by vaginal administration of PGE_2 (pessary – normal release). It should be stressed that the rankings have wide CrIs for all of the above methods, indicating considerable uncertainty. The rankings range from 1st to 6th and 1st to 9th for vaginal misoprostol (≥ 50 µg) and i.v. oxytocin with amniotomy, respectively, to 1st to 13th for PGE_2 pessary.

Compared with placebo, several treatments showed a statistically significant reduction in the odds of CS: titrated low-dose misoprostol, vaginal misoprostol at both ≥ 50 µg and < 50 µg, vaginal PGE_2 gel, intracervical PGE_2, oral misoprostol tablet (≥ 50 µg), Foley catheter, membrane sweeping and buccal/sublingual misoprostol. In this group, titrated oral misoprostol achieved the lowest odds of an eventual CS but there was still considerable uncertainty in this finding, as observed by the posterior mean rank of 6th (out of 33) and 95% CrI from 2nd to 13th (out of 33) for oral misoprostol solution. There was little to distinguish between the other interventions with considerable uncertainty in treatment rankings. i.v. prostaglandins performed worse than placebo and significantly increased the odds of CS. Other poorly performing interventions included vaginal PGE_2 tablet, oral misoprostol tablet < 50 µg, double-balloon catheters and oestrogens.

Uterine hyperstimulation with FHR changes was one of the key safety outcomes. Here double-balloon catheter, NO and laminaria had the highest probability of being among the best three treatments, whereas i.v. oxytocin with amniotomy, slow-release misoprostol pessary and high-dose vaginal misoprostol tablets (which was among the best treatments for efficacy) were most likely to increase the odds of excessive uterine activity. For other safety outcomes there were insufficient data or too much uncertainty around estimates to identify which treatments performed 'best'.

Few studies collected information on women's views. On the whole, women tended to have positive views, or at least accepted the induction process, but there was insufficient information to determine whether or not some methods were preferred over others.

Our findings also suggest that of the seemingly less 'medicalised' induction methods, there is little to choose among them in terms of safety. Of interest is that none of the included studies examining these methods (membrane sweeping, acupuncture and sexual intercourse) reported our effectiveness outcome – failure to achieve VD within 24 hours – suggesting that when it comes to the urgency of delivery, the expectations from these methods is very different.

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We planned to carry out subgroup analyses to check that our findings were robust in different groups of women: women with intact amniotic membranes compared with ruptured amniotic membranes; women with unfavourable Bishop scores compared with favourable Bishop scores; women who had had a previous CS and women undergoing induction of labour at different gestational ages. Unfortunately, it was possible to carry out only two of these analyses (membrane status and Bishop scores) owing to lack of data or inconsistency in the results for other subgroups.

Our two subgroup analyses were restricted to only a fraction of 611 included trials and three outcomes (VD within 24 hours, CS and low Apgar score). The results were broadly in agreement with overall results. i.v. oxytocin with amniotomy and high-dose vaginal misoprostol tablets remained the most effective interventions for achieving VD within 24 hours in women with intact membranes.

Key findings of the cost-effectiveness analysis

All methods of induction were cost-saving compared with no treatment, although there is considerable uncertainty in our cost-effectiveness estimates. It is important to stress that the interventions have very similar expected utility values, and differ mainly in expected total costs. Titrated (low-dose) oral misoprostol and buccal/sublingual misoprostol had the highest probability of being the most cost-effective intervention at any willingness-to-pay value. Given that we were able to analyse only two subgroups (intact membranes and unfavourable cervix), and the number of interventions compared and studies included were lower than in the base case, the results of subgroup analyses should be interpreted cautiously (i.e. as hypothesis generating). In the subgroup of women with intact membranes, and limiting to interventions that were feasible through the NHS, i.v. oxytocin with amniotomy was identified as the intervention that was most likely to be most cost-effective. In the subgroup of women with an unfavourable cervix, buccal/sublingual misoprostol and titrated low-dose oral misoprostol solution were found to be the interventions that were most likely to be most cost-effective.

Strengths

In our systematic review we made considerable effort to include all RCTs with no language restrictions, which led to the inclusion of > 600 trials, with data for > 100,000 women and babies. The NMA provided an opportunity to examine the relative effectiveness of all treatments used for the induction of labour in a coherent and methodologically robust way across important clinical outcomes. Although there are now increasing numbers of NMAs reported in the literature, and some relate to competing treatments in obstetrics,[970] as far as we are aware this NMA includes more trials and participants than any other in this topic area.

Network meta-analysis is only valid on the assumption that all of the treatments in the network would be suitable for all included women. We were thorough in our evaluation of six important potential treatment effect modifiers (previous CS, parity, membrane status, Bishop score, gestational age and single/multiple pregnancy) and found no clinically important differences in the distribution of these potential effect modifiers across the interventions. We also conducted informal and formal statistical checks of model fit and inconsistency. When lack of fit and/or inconsistency between evidence sources was observed, it was resolved by excluding studies that were assessed as being at high risk of bias.

To our knowledge this is the first attempt to simultaneously compare more than two treatments for the induction of labour in a cost-effectiveness analysis. A study by Petrou *et al.*[14] suggested that PGE_2 gel was more cost-effective than PGE_2 tablets, and Van Baaren *et al.*'s study[955] concluded that Foley catheter induction was more cost-effective than PGE_2 gel. These results are not directly comparable with the results from this study, as they use different measures of benefit, but it is still worth mentioning that in our cost-effectiveness analysis these interventions were found to be less effective and more expensive than titrated (low-dose) oral misoprostol solution, vaginal PGE_2 pessary (normal release) and vaginal misoprostol (dose < 50 μg).

Limitations

Systematic review and network meta-analysis

Broadly, the aim of induction of labour is to achieve early delivery of the baby with the minimum harm to women and babies, and we selected outcomes to reflect these aims. However, not all of the included trials provided data on all of our key outcomes. The number of women undergoing CS was generally well reported. However, in view of high heterogeneity and apparent inconsistency it was necessary to restrict our analysis to RCTs at low risk of bias for the allocation concealment domain.

The number of women who did not give birth vaginally within 24 hours (our main efficacy outcome) was reported in less than one-quarter of trials.

Key safety outcomes were also reported relatively infrequently. Approximately one-third of trials were included in the NMA for infant admission to NICU (205) and there was considerable heterogeneity between trials (possibly as a result of inconsistent definitions of this outcome). Similarly, uterine hyperstimulation and low infant Apgar score were reported in fewer than one-third of trials.

Overall, maternal mortality and severe morbidity and infant mortality event rates, when reported, were very low. Unfortunately, these outcomes were too infrequently reported to make the pooled analysis possible. We had also intended to report serious infant morbidity but this outcome was poorly reported and inconsistently defined in trials. Consequently, we used admission to NICU as a proxy outcome for infant morbidity. Neonatal mortality was reported in only 21.3% of these trials and the incidence was low at 0.3%. Of course, it should not be assumed that if infant mortality was not reported then it did not occur, but it is probable that death rates were also low in those trials failing to report this important outcome.

Very few trials collected data and reported findings relating to women's views about the induction process. This was surprising, as some methods of induction are likely to be both painful and unpleasant. Again, because of the dearth of data and inconsistency in the way outcomes were measured and reported across trials, we were unable to include findings on maternal preferences and satisfaction in our formal quantitative analysis. There was also insufficient information from trials evaluating alternative and complementary methods to include them in the analysis of our main efficacy outcome. None of the trials included for the analysis of number of women failing to deliver within 24 hours included an alternative method of induction. For safety outcomes, alternative and complementary methods of induction did not appear to be safer than pharmacological and mechanical methods.

The trials included in the review recruited women with varied clinical characteristics, and it is important to bear this in mind when interpreting results. The indications for induction were not always reported and, when they were, these varied across trials. Many trials excluded women with a history of CS or multiple pregnancies. Predominantly, women recruited to trials were at > 37 weeks' gestation, including post-term pregnancies and term PROM. Most of the trials were carried out in hospital settings because most methods of labour induction require constant attendance and monitoring by skilled clinical staff. However, we did include 79 trials examining interventions that were carried out in outpatient, community or home settings.

For all outcomes we observed moderate heterogeneity between study effects. This is not surprising, given the clinical heterogeneity described above in settings and women who present for induction of labour. Heterogeneity may also be attributable to the varied quality of included studies. Overall, approximately half of the studies were assessed as being at high or unclear risk of bias. Consequently, we conducted REs NMA for all outcomes to allow for this heterogeneity. We report the mean from the REs distribution of study effects, although this assumes that our focus is on the effects observed in an 'average study', whereas other summaries might be more appropriate, such as the shrunken estimate for the UK trials[971] or a prediction for a new study population.

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Although NMA offers the opportunity to rank treatments in terms of relative effects for each outcome, for many results there was considerable uncertainty around effect estimates. Particularly for the analysis of safety outcomes, the findings were not clear-cut (i.e. there were no clear 'best' or 'worst' treatments for most of these outcomes). This uncertainty did not apply just to results for CS. This uncertainty is not necessarily surprising, as a large number of interventions were examined in the network. Although some interventions were examined in a large number of trials, data for other interventions were sparse, event rates for some outcomes were very low, and some outcomes were also inconsistently defined (e.g. hyperstimulation syndrome). This means that we were not able to use all of the available data in our analysis. In particular, the low event rates for NICU admission meant that in some arms of trials no events were reported, which led to problems in estimation of relative effects and also increased uncertainty in the economic analyses.

Heterogeneity in the analyses may also have been caused by the fact that trials were carried out over a long time period during which induction and CS rates in particular have increased steadily. These temporal changes could have contributed to heterogeneity and increased uncertainty of findings. More intensive surveillance may also have led to apparent increases in some outcomes (e.g. hyperstimulation).

Cost-effectiveness analysis

Our cost-effectiveness analysis was confined to short-term outcomes up until discharge from hospital, although we are aware that some outcomes may have a longer-term impact on women and their families, and also on NHS resources. The analysis was complicated by the fact that outcomes related to both women and their babies, and the two are interlinked. Women may be profoundly affected by any adverse outcomes in their newborn and, conversely, the baby may be affected by adverse outcomes for the mother. In our analysis the well-being of women and babies were combined in a single utility value for each outcome. The evidence sources informing utilities for method of delivery were assumed to represent the mothers' well-being. However it was not clear whether the utilities for NICU admission and intensity of care required represented utility for the mother, baby or both (and, if so, the relative weight given to mother and baby: women (and even society) may value the health of the baby above their own).

We needed to distinguish those women who had a CS, those who had a VD within 24 hours, and those who had a VD after 24 hours. We found that results from trials were not always reported in a way that allowed us to estimate the outcomes together in this way. There was sufficient information to estimate effects for only 18 interventions and our conclusions on cost-effectiveness are therefore limited to this data subset.

The RCTs identified in the systematic review did not provide any evidence on the proportion of NICU admissions following births by CSs, nor on the proportion of babies admitted to different intensities of NICU care (intensive care, high-dependency care and transitional care). We have, therefore, used routinely collected hospital activity data from Liverpool Women's Hospital to inform these inputs to our model.

We identified only four studies[960–963] reporting preference-based measures of utility relevant to the outcomes in our model, none of which reported EQ-5D, our preferred measure. The health states did not correspond directly with those in our model, and so assumptions were necessary. It was also not clear in these studies[960–963] whether or not the utility was for the mother, baby or both (and if so the relative weight given to mother and baby). Furthermore, measures of uncertainty were not reported alongside the utility estimates. In an attempt to address these limitations, we used our own small-scale survey to put uncertainty limits on the literature-based utilities and to define sensitivity analyses. However, note that our survey is severely limited due to being restricted to the project steering group and also limitations with the VAS instrument that it used.[972] Although the scores are bias prone and may not be comparable to utilities elicited through other measures, the resulting ordinal preferences we obtained were found to have some face validity (the patterns seen across respondents were broadly comparable and in line with intuition) and can be considered as a first step towards defining utilities for mother/baby pairs. A large-scale study measuring utilities (preferably using EQ-5D) on antenatal and postnatal women, reporting results (together with uncertainty estimates) from both the mother and baby perspective, including time post discharge, would be of great value in addressing the limitations described above.

Discussion of the clinical implications of findings

Our NMA suggests that oxytocin with amniotomy and misoprostol are the most effective in achieving vaginal births relatively quickly. Interestingly, there was little difference between different misoprostol regimens, with the exception of oral tablets. Both high- and low-dose oral tablets, appear to be inferior to low-dose oral solution, buccal/sublingual and all vaginal regimens. Vaginal PGE_2 also performed well, although our results favoured pessary (normal release) over methods currently available in the NHS (gel, tablet and slow-release pessary). We have already mentioned that in our NMA the term 'PGE_2 pessary' captures vaginal administration that could not be classified as tablets, gel or slow-release pessaries which are currently commercially available. Consequently, this is a rather heterogeneous mix of study-specific dinoprostone preparations, often produced by local pharmacies.

Intravenous oxytocin with amniotomy performed well, but this method was used only with intact membranes and therefore can be recommended only in this subgroup. Furthermore, the majority of the trials evaluating this method included women with more favourable cervix for whom delivery within 24 hours is more likely. However, just because the absolute rate of VD in 24 hours is higher when the cervix is favourable does not necessarily mean that the *relative* effects between tested interventions would differ. It is important to stress again that oxytocin with amniotomy has been mainly tested, and has been shown to perform well, in women with a favourable cervix, and the intervention is therefore recommended only for this group.

The safety profile of different methods was less clear. For example, misoprostol (low-dose vaginal tablets and buccal/sublingual) was associated with relatively high hyperstimulation; however, this finding was not borne out in increased rates of CS. One would expect that the two are related with persistent and clinically important uterine hyperstimulation eventually resulting in CS.

The cost-effectiveness analysis suggested that titrated (low-dose) oral misoprostol solution had the highest utility for mothers and babies, and buccal/sublingual misoprostol had the lowest cost to the NHS. Notwithstanding the considerable uncertainty of cost-effectiveness results, it is still surprising that treatments in common use in the NHS (e.g. PGE_2 vaginal gel) did not appear to be the most effective, most cost-effective or safest. Therefore, our findings may have important implications for clinical practice in the UK.

The current recommendation of the World Health Organization[973] is for low-dose oral misoprostol tablets rather than titrated oral solution and, therefore, not in line with the findings from this analysis.

Our main measure of efficacy was whether or not treatments resulted in VD within 24 hours. This definition of efficacy may be controversial given that cervical ripening has often been regarded as a distinctly different process from induction of labour. This view is reflected in the fact that changes in Bishop scores were often the main measure of efficacy in many of the included randomised trials. We argue that women and clinicians view cervical ripening and labour induction as part of the same seamless process, with the main aim to achieve a safe vaginal birth of a healthy baby in the shortest time possible.

The outcomes we used in the cost-effectiveness analysis were VD within 24 hours, CS and NICU admission; these outcomes were reported reasonably frequently and we thought that these outcomes provided a reasonable balance of efficacy (benefit) and harm. At the same time, as we have seen from the results of the NMA, there may be a trade-off in terms of harms and benefits of different treatments: those agents that stimulate contractions and thereby achieve faster delivery may cause excessive uterine activity that may lead to problems for women and babies.

We had expected that serious maternal and neonatal adverse events would be rare in the cohorts of women recruited to RCTs of induction of labour. Nevertheless, it was disappointing how infrequently mortality and serious morbidity were reported. Our assessment of safety was therefore limited to CS, hyperstimulation with fetal heart changes, NICU admission and infant Apgar score, at best proxies for serious adverse events.

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Observational data suggest that all prostaglandins (especially misoprostol) and oxytocin can cause uterine rupture, with possible catastrophic consequences, particularly in women with previous CS. It was not surprising to us that many trials included in the review excluded women with previous CS or uterine scar for other reasons. The efficacy of induction agents that may cause excessive uterine activity must be seen in this context.

We took the view that country of setting was not likely to be a critical treatment effect modifier, because in all included RCTs intrapartum fetal monitoring and early access to CS were available to most women. Even in those trials for which the induction agent was administered outside a hospital setting, arrangements were in place for monitoring and emergency admission in case of complications. Given these circumstances, the findings from our analysis are more likely to be applicable in high-resource settings, such as the NHS.

Very few trials considered women's views. Our own small-scale utility elicitation exercise showed that respondents set great store by the health of babies and women may therefore would be likely to accept induction if a clinician considered that this would potentially improve neonatal outcomes. At the same time, given the similar utility values for a broad range of induction agents, there is surely scope for taking women's views into account. Women need to be informed of the advantages and drawbacks of different methods of induction and to be aware that there is a choice of interventions available.

Recommendations for future research

The considerable uncertainty in our findings points the way for further research. In terms of populations, it is striking how little randomised evidence relates to important subgroups, such as women with previous CSs. Future studies should, at the very least, make available the results by subgroups when they are included.

When induction of labour is clinically indicated, a placebo or no-intervention arm in a trial may not be feasible or even ethical (our study shows that placebo is neither effective nor cost-effective). We suggest that titrated oral misoprostol solution should be used as a comparator, particularly in the NHS setting, and future RCTs should be powered to detect a method that is more cost-effective than misoprostol solution. Clearly, the fact that this method is currently unlicensed with virtually no pharmacokinetic data poses a considerable challenge.

We are conscious that, at present there are no internationally agreed core outcome sets for labour induction studies. Until such time, we urge all triallists to report 11 outcomes included in this NMA in all future RCTs:

- failure to achieve VD within 24 hours
- CS
- instrumental delivery
- uterine hyperstimulation resulting in FHR changes
- NICU admissions (by level of care and mode of delivery)
- Apgar score < 7 at 5 minutes
- neonatal deaths
- serious neonatal morbidity
- maternal deaths
- maternal serious morbidity
- maternal satisfaction.

It is also important to report results separately for all clinically important subgroups (e.g. parity, membrane and cervical status and previous CS) to allow individual patient data meta-analysis and network analysis.

There is also an urgent need to explore women's views of the process as part of any future trial.

Finally, there is a need for well-conducted studies to measure utilities from the perspective of the mother and baby, preferably using the EQ-5D instrument.

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Contributions of authors

Zarko Alfirevic (Professor, Head of Department of Women's and Children's Health) conceived the project and contributed to protocol development, management of the project, planning of the systematic review and NMA, clinical interpretation of findings and writing of the report.

Edna Keeney (Research Associate) conducted statistical analyses, economic analysis and modelling, and drafted and edited report.

Therese Dowswell (Research Associate) contributed to planning the systematic review, data collection and quality assessment, and drafted and edited report.

Nicky J Welton (Reader in Statistical and Health Economic Modelling) contributed to the protocol development, managed the project in Bristol, provided advice on the statistical analyses, supervised the economic modelling, wrote code to provide inputs to the economic model, and drafted and edited the report.

Nancy Medley (Research Associate) contributed to data collection, data set management and quality assessment, and commented on drafts of the report.

Sofia Dias (Research Fellow) contributed to protocol development, provided advice on statistical analyses and economic modelling, and commented and edited report.

Leanne V Jones (Research Associate) contributed to data collection, quality assessment, and commented and edited the report.

Gillian Gyte (Consumer Representative) contributed to protocol development, commented on drafts of all project documentation, and commented on drafts of the report.

Deborah M Caldwell (Lecturer in Public Health Research) conceived the project, contributed to protocol development, supervised statistical analyses for the NMA, and drafted and edited the report.

Publications

Alfirevic Z, Keeney E, Dowswell T, Welton NJ, Dias S, Jones LV. Labour induction with prostaglandins: a systematic review and network meta-analysis. *BMJ* 2015;**350**:h217.

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Data sharing statement

Data files for all outcomes considered in the NMA are provided in *Appendix 14* of the report.

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Appendix 1 Project steering group

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Appendix 2 Search strategy: Cochrane Pregnancy and Childbirth Group

Detailed search methods used to maintain and update the Group's database of trials

The Group's information specialist:

- Runs a very broad generic preconception, pregnancy, childbirth and immediate postpartum/breastfeeding search that aims to encompass our whole scope. See below for searches run and strategies used.
- Screens the results, gets hard copies of all relevant papers.
- Assigns each paper reporting a RCT/clinical controlled trial (CCT) (by Cochrane definition) to a review topic or topics, depending on the intervention, and adds it to the database with a topic classification number to aid retrieval. The Group has a very detailed topic list.

For this project, all of the papers assigned to the 'Induction of labour' topic were identified using the broad classification number for this topic.

Search strategies for the identification of studies

Electronic searches

MEDLINE

This current search strategy is run weekly via OVID MEDLINE and uses the Highly Sensitive Search Strategy for identifying randomised trials in MEDLINE: sensitivity-maximising version (2008 revision) published in chapter 6, section 6.4.11, of the *Cochrane Handbook for Systematic Reviews of Interventions* (Version 5.0.2).

1. randomized controlled trial.pt.
2. controlled clinical trial.pt.
3. randomized.ab.
4. placebo.ab.
5. drug therapy.fs.
6. randomly.ab.
7. trial.ab.
8. groups.ab.
9. or/1-8
10. exp Pregnancy/
11. exp Pregnancy Complications/
12. exp Maternal Health Services/
13. exp Fetus/
14. exp Fetal Therapies/
15. exp Fetal Monitoring/
16. exp Prenatal Diagnosis/
17. Perinatal Care/
18. Labor pain/

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19. Analgesia, Obstetric/
20. exp Obstetric Surgical Procedures/
21. Infant, Newborn/
22. exp Postpartum Period/
23. Breastfeeding/
24. or/10-23
25. 9 and 24
26. exp animals/ not humans.sh.
27. 25 not 26

EMBASE

The following search strategy is run weekly via NHS Evidence: Health Information Resources.

1. CROSSOVER PROCEDURE/
2. allocat$.ti,ab
3. (cross ADJ over$).ti,ab
4. trial$.ti
5. placebo$.ti,ab
6. (doubl$ ADJ blind$).ti,ab
7. DOUBLE BLIND PROCEDURE/
8. crossover$.ti,ab
9. SINGLE BLIND PROCEDURE/
10. RANDOMIZED CONTROLLED TRIAL/
11. random$.ti,ab
12. 1 OR 3 OR 2 OR 6 OR 4 OR 5 OR 11 OR 7 OR 8 OR 9 OR 10
13. exp PREGNANCY/
14. exp PREGNANCY DISORDER/
15. exp OBSTETRIC PROCEDURE/
16. exp BREAST FEEDING/ OR exp BREAST FEEDING EDUCATION/
17. exp CHILDBIRTH/
18. CHILDBIRTH EDUCATION/
19. (antenatal* OR prenatal* OR puerper* OR postnatal* OR postpartum OR post ADJ partum OR post ADJ natal* OR peripartum).ti,ab
20. (prepregnancy OR pre-pregnancy OR "pre pregnancy" OR preconception* OR "pre conception" OR pre-conception* OR "pre conceptionally" OR periconceptional*).ti,ab
21. ((preterm OR premature) AND (labor OR labour)).ti,ab
22. (eclamp* OR preeclamp* OR pre-eclamp*).ti,ab
23. amniocentes*.ti,ab
24. (chorion* ADJ vill*).ti,ab
25. (breastfe* OR breast-fe* OR breast ADJ fe* OR lactation*).ti,ab
26. (cesarean OR caesarean OR cesarian OR caesarian OR cesarien OR caesarien).ti,ab
27. (newborn OR new ADJ born OR newborn).ti,ab
28. (pregnant OR pregnancy OR pregnancies).ti
29. (tocolysis OR tocolytic*).ti,ab
30. (fetal OR foetal OR fetus OR foetus).ti,ab
31. miscarriage*.ti,ab
32. LABOR PAIN/
33. OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32
34. 12 AND 33

The Cochrane Library [includes Cochrane Database of Systematic Reviews (CDSR), Cochrane Central Register of Controlled Trials (CENTRAL), Database of Abstracts of Reviews of Effects (DARE) and Economic Evaluations Databases]

This search is run monthly with each new issue of *The Cochrane Library:*

#1 MeSH descriptor Pregnancy explode all trees

#2 MeSH descriptor Pregnancy Complications explode all trees

#3 MeSH descriptor Fetal Therapies explode all trees

#4 MeSH descriptor Labor Pain explode all trees

#5 MeSH descriptor Infant, Newborn explode all trees

#6 MeSH descriptor Fetus explode all trees

#7 MeSH descriptor Fetal Development explode all trees

#8 MeSH descriptor Extraembryonic Membranes explode all trees

#9 MeSH descriptor Heart Rate, Fetal explode all trees

#10 MeSH descriptor Placenta explode all trees

#11 MeSH descriptor Placental Function Tests explode all trees

#12 MeSH descriptor Umbilical Cord explode all trees

#13 MeSH descriptor Prenatal Diagnosis explode all trees

#14 MeSH descriptor Uterine Monitoring explode all trees

#15 MeSH descriptor Pelvimetry explode all trees

#16 MeSH descriptor Fetal Monitoring explode all trees

#17 MeSH descriptor Obstetrical Nursing explode all trees

#18 MeSH descriptor Oxytocics explode all trees

#19 MeSH descriptor Tocolytic Agents explode all trees

#20 MeSH descriptor Tocolysis explode all trees

#21 MeSH descriptor Anesthesia, Obstetrical explode all trees

#22 MeSH descriptor Obstetric Surgical Procedures explode all trees

#23 MeSH descriptor Maternal Health Services explode all trees

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#24 MeSH descriptor Maternal-Child Nursing explode all trees

#25 MeSH descriptor Analgesia, Obstetrical explode all trees

#26 MeSH descriptor Midwifery explode all trees

#27 MeSH descriptor Perinatal Care explode all trees

#28 MeSH descriptor Parity explode all trees

#29 MeSH descriptor Apgar Score explode all trees

#30 MeSH descriptor Postpartum Period explode all trees

#31 MeSH descriptor Breast Feeding explode all trees

#32 MeSH descriptor Milk, Human explode all trees

#33 pregnan* in All Fields in all products

#34 fetus in All Fields in all products

#35 foetus in All Fields in all products

#36 fetal in All Fields in all products

#37 foetal in All Fields in all products

#38 newborn in All Fields in all products

#39 "new born"

#40 birth or childbirth in All Fields in all products

#41 labor or laboring in All Fields in all products

#42 labour* in All Fields in all products

#43 antepart* in All Fields in all products

#44 prenatal* in All Fields in all products

#45 antenatal* in All Fields in all products

#46 perinatal* in All Fields in all products

#47 postnatal* in All Fields in all products

#48 postpart* in All Fields in all products

#49 caesar* in All Fields in all products

#50 cesar* in All Fields in all products

#51 obstetric* in All Fields in all products

#52 oxytoci* in All Fields in all products

#53 tocoly* in All Fields in all products

#54 placenta* in All Fields in all products

#55 prostaglandin in All Fields in all products

#56 parturi* in All Fields in all products

#57 preeclamp* in All Fields in all products

#58 pre next eclamp* in All Fields in all products

#59 eclamp* in All Fields in all products

#60 intrapart* in All Fields in all products

#61 puerper* in All Fields in all products

#62 episiotom* in All Fields in all products

#63 amnio* in All Fields in all products

#64 matern* in All Fields in all products

#65 gestation* in All Fields in all products

#66 lactati* in All Fields in all products

#67 breastfe* in All Fields in all products

#68 breast next fe* in All Fields in all products

#69 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68)

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Cumulative Index to Nursing and Allied Health Literature

The following search strategy is run weekly via NHS Evidence: Health Information Resources.

1. exp CLINICAL TRIALS/
2. (clinic* ADJ trial*).ti,ab
3. (trebl* ADJ mask*).ti,ab
4. (tripl* ADJ blind*).ti,ab
5. (tripl* ADJ mask*).ti,ab
6. (doubl* ADJ blind*).ti,ab
7. (doubl* ADJ mask*).ti,ab
8. (singl* ADJ blind*).ti,ab
9. (singl* ADJ mask*).ti,ab
10. (randomi* ADJ control* ADJ trial*).ti,ab
11. RANDOM ASSIGNMENT/
12. (random* ADJ allocat*).ti,ab
13. placebo*.ti,ab
14. PLACEBOS/
15. QUANTITATIVE STUDIES/
16. (allocat* ADJ random*).ti,ab
17. breastfeeding.ti,ab
18. breastfed.ti,ab
19. exp BREAST FEEDING/
20. breast-fe*.ti,ab
21. exp PREGNANCY/
22. exp PREGNANCY COMPLICATIONS/
23. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16
24. (prenatal OR antenatal OR antepartum OR postpartum OR postnatal).ti,ab
25. (pregnant OR pregnancy).ti
26. ((preterm OR premature) AND (labor OR labour)).ti,ab
27. (midwife OR midwifery).ti,ab
28. CHILDBIRTH EDUCATION/
29. 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 24 OR 25 OR 26 OR 27 OR 28 123752.
30. 23 AND 29

ClinicalTrials.gov and World Health Organization International Clinical Trials Registry Portal

preconception* or antenatal or prenatal or perinatal or puerperal or puerperium or postnatal or postpartum or peripartum or post-natal or post-partum or ante-natal or ante-partum or obstetric*

Journal and conference proceedings screening and trial identification (hand-searching)

Journals

Acta Anaethesiologica Scandinavica (and supplements)	1950 and continuing
Acta Obstetricia et Gynecologica Scandinavica (and supplements)	1950 and continuing
Acta Paediatrica Scandinavica	First issue to 1993
American Journal of Clinical Nutrition	First issue and continuing
American Journal of Diseases of the Child	1950 to 1993
American Journal of Obstetrics and Gynecology	1950 and continuing
Anaesthesia and Intensive Care	First issue and continuing
Anaesthesia	1950 and continuing
Anesthesia and Analgesia	First issue and continuing
Anesthesiology	1950 and continuing
Archives of Diseases of the Child	1950–93
Australian and New Zealand Journal of Obstetrics and Gynaecology	First issue and continuing
Birth	First issue and continuing
British Medical Journal	1950–96
British Journal of Anaesthesia	1950 and continuing
British Journal of Obstetrics and Gynaecology	First issue and continuing
Canadian Journal of Anaesthesia	First issue and continuing
Canadian Medical Association Journal	1950–96
Clinical Pharmacology and Therapeutics	First issue to 1998
Current Medical Research and Opinion	First issue to 1993
Developmental Medicine and Child Neurology	First issue to 1993
Early Human Development	First issue to 1993
European Journal of Obstetrics & Gynaecology and Reproductive Biology	First issue and continuing
Geburtshilfe und Frauenheilkunde	1950 and continuing
Gynecologic and Obstetric Investigation	First issue to 1996, 2005 and continuing
Hypertension in Pregnancy	2006 and continuing
Indian Journal of Anaesthesia	2002 issue 3 to 2005 issue 5
Infectious Diseases in Obstetrics and Gynecology	First issue and continuing
International Journal of Gynecology & Obstetrics	First issue and continuing
International Journal of Obstetric Anaesthesia	October 1994 to Oct 1995, January 2003 and continuing
Journal of the American Medical Association	First issue to 1996
Journal of the American College of Surgeons	1950–03
Journal de Gynecologie, Obstetrique et Biologie de la Reproduction	First issue to 1998
Journal of Human Lactation	2001 and continuing

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Journal of International Medical Research	First issue to 1993
Journal of Midwifery and Women's Health	First issue and continuing
Journal of Obstetrics and Gynaecology	First issue and continuing
Journal of Obstetrics and Gynaecology Research	2003 and continuing
Journal of Obstetric Gynecologic and Neonatal Nursing	First issue to 1993, 2001–06
Journal of Pediatrics	1950–93
Journal of Pediatric Gastroenterology and Nutrition	First issue to 1993
Journal of Perinatal Medicine	First issue to 1998
Journal of Reproductive Medicine	First issue to 2003
Lancet	1950–96
Medical Journal of Australia	1950–96
Midwifery	First issue and continuing
New England Journal of Medicine	1950–96
Nurse Research	First issue to 1993
New Zealand Medical Journal	1950–96
Obstetrics & Gynecology	First issue and continuing
Pediatric Research	First issue to 93
Pediatrics	1950–93
Practitioner	1950–96
Prostaglandins	First issue to 1993
Regional Anesthesia and Pain Medicine	First issue and continuing
Revista Brasileira de Anestesiologia	2003–06
Revista Brasileira de Ginecologia e Obstetricia	2001–05
South African Journal of Obstetrics and Gynaecology	First issue to 1993
South African Medical Journal	1950–93
Surgery Gynecology and Obstetrics	1950–93
Ugeskrift for Laeger	1950–93
Ultrasound in Obstetrics and Gynecology	2002 and continuing
Zeitschrift fur Geburtshilfe und Perinatologie	First issue to 1997
Zentrablatt fur Gynakologie	First issue to 1997

Conference proceedings

All India Congress of Obstetrics and Gynaecology	49th, 54th
American College of Obstetricians and Gynecologists' Annual Meeting	36th, 37th, 39th, 40th, 41st, 55th, 58th
American Society of Anaesthesiologists Annual Meeting	2008, 2009
American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting	26th to 28th
American Society of Regional Anesthesia and Pain Medicine Annual Fall Meeting	2002, 2003, 2007
Argentinean Congress of Perinatology	3rd
Australian Perinatal Society	14th
Australian Society of Anaesthetists National Scientific Congress	58th, 61st
Birth Conference	1st to 9th
British Congress of Obstetrics and Gynaecology	23rd, 25th, 26th, 27th, 28th
British Maternal and Fetal Medicine Society	6th, 10th
British Paediatric Association Annual Meeting	14th, 15th, 27th, 60th, 61st, 62nd, 63rd, 65th
Congress of Nordic Federation of Societies of Obstetrics and Gynecology	34th
European Congress of Allied Specialists in Maternal and Neonatal Care	4th
European Congress of Obstetrical Anaesthesia and Analgesia	1st
European Congress of Obstetrics and Gynaecology	18th
European Congress of Perinatal Medicine	5th, 6th, 8th, 10th, 11th, 12th, 14th, 15th, 16th, 21st
European Congress on Prostaglandins in Reproduction	1st, 2nd
European Congress on Ultrasound in Medicine and Biology	6th
European Society of Regional Anesthesia and Pain Medicine	26th, 29th, 32nd
Federation of the Asia–Oceania Perinatal Societies' Congress	6th, 9th
International Anesthesia Research Society Clinical and Scientific Congress	76th, 78th, 80th
International Confederation of Midwives Triennial Congress	24th
International Conference of Maternity Care Researchers	10th
International Congress on Psychosomatic Medicine in Obstetrics and Gynaecology	3rd, 5th
International Scientific Meeting of the Royal College of Obstetricians and Gynaecologists	4th
International Society for the Study of Hypertension in Pregnancy (ISSHP) European Branch	1st
International Society for the Study of Hypertension in Pregnancy (ISSHP) World Branch	1st, 2nd, 4th to 16th, 18th
Japanese Society of Obstetrics and Gynecology	54th, 56th
Maternity Care Researchers International Conference	10th
Nordic Federation of Societies of Obstetrics and Gynecology Congress	34th, 35th, 38th
Obstetric Anaesthetists Association	2005, 2009
Pediatric Academic Society Annual Meeting	2004–13
Perinatal Society of Australia and New Zealand Annual Congress	4th, 7th
Priorities in Perinatal Care in South Africa	2nd, 4th, 7th, 9th, 10th, 11th, 12th, 14th, 15th, 16th, 17th

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Royal College of Obstetricians and Gynaecologists International Meeting	7th, 10th
Society of Obstetricians and Gynaecologists of Canada Annual Meeting	49th, 54th, 63rd
Society of Perinatal Obstetricians' (USA) Annual Meeting	3rd, 6th to 10th, 14th, 17th, 18th
Society for Gynecologic Investigation (USA) Annual Program	31st, 34th, 37th, 39th, 40th
Society for Maternal–Fetal Medicine	19th to 22nd, 25th to 32nd, 33rd, 34th
Society for Obstetric Anesthesia and Perinatology Annual Meeting	30th, 31st, 33rd, 34th, 37th
Swiss Society of Gynecology and Obstetrics	19th to 22nd
World Congress of Perinatal Medicine	1st, 2nd, 5th, 10th, 11th
World Congress of Gynecology and Obstetrics	11th to 16th,19th, 20th
World Congress on Controversies in Obstetrics, Gynecology & Infertility	4th
World Congress on Twin Pregnancy	1st
World Congress on Ultrasound in Obstetrics and Gynecology	13th, 15th 16th, 17th, 18th, 19th, 20th, 21st

Other strategies

Current awareness

(a) ZETOC,The British Library's Electronic Table of Contents service sends the contents tables, via e-mail, of the journals listed below. The contents are reviewed by the Trials Search Co-ordinator. Hard copies of all possible reports of RCTs/CCTs that are relevant to the scope of the group are obtained, reviewed and added to the register by the Trials Search Co-ordinator if they meet the inclusion criteria.

- *African Journal of Reproductive Health*
- *American Journal of Perinatology*
- *Archives of Disease in Childhood*
- *Archives of Disease in Childhood Fetal and Neonatal Edition*
- *Archives of Gynecology and Obstetrics*
- *Archives of Pediatrics and Adolescent Medicine*
- *British Journal of Midwifery*
- *Chinese Journal of Obstetrics and Gynecology*
- *Clinica e Investigacion en Ginecologia y Obstetricia*
- *Clinical and Experimental Obstetrics and Gynecology*
- *Clinical Obstetrics and Gynecology*
- *Current Obstetrics and Gynecology*
- *Current Opinion in Obstetrics and Gynaecology*
- *Fetal and Maternal Medicine Review*
- *Fetal Diagnosis and Therapy*
- *Ginecologia y Obstetricia de Mexico*
- *Giornale Italiano di Ostetricia e Ginecologia*
- *Gynakologisch Geburtshilfliche Rundschau*
- *Human Reproduction*
- *Hypertension in Pregnancy*
- *International Journal of Childbirth Education*
- *Italian Journal of Gynaecology and Obstetrics*
- *JOGC: Journal of Obstetrics and Gynecology Canada*
- *Journal de Gynecologie, Obstetrique et Biologie de la Reproduction (Paris)*
- *Journal of Maternal Fetal and Neonatal Medicine*

- *Journal of Paediatrics Obstetrics and Gynaecology*
- *Journal of Perinatology*
- *Journal of Prenatal and Perinatal Psychology and Health*
- *Journal of Psychosomatic Obstetrics and Gynaecology*
- *Journal of Reproductive Medicine*
- *Journal-New Zealand College of Midwives*
- *MCN, The American Journal of Maternal Child Nursing*
- *MIDIRS Midwifery Digest*
- *Obstetrical and Gynecological Survey*
- *Obstetrics, Gynaecology and Reproductive Medicine*
- *Prenatal Diagnosis*
- *Progresos de Obstetricia y Ginecologia*
- *Revista Chilena de Obstetricia y Ginecologia*
- *Taiwanese Journal of Obstetrics and Gynecology*
- *Tokogynecologica Praktica*
- *Women and Birth*
- *Zeitschrift fur Geburtshilfe und Neonatologie.*

(b) BioMed Central (www.biomedcentral.com/home/) sends an e-mail alert every 30 days for anything new published in the following:

- *BMC: Pregnancy and Childbirth*
- *International Breastfeeding*
- Anything related to the subject areas of pregnancy and childbirth, pediatrics or women's health.

Specialised register inclusion criteria

Topic scope Controlled trials comparing alternative forms of care used either during pregnancy (but not to terminate early pregnancy) or within 28 days of delivery.

Study design A controlled trial has been defined as a trial involving humans in which allocation to the intervention has either been at random, or by some quasi-random method, such as by alternation, or on the basis of the case record number or date of birth.

These criteria have been applied fairly liberally to avoid excluding potentially useful studies involving concurrent comparisons of alternative policies. In other words, the register includes reports that, if necessary, can subsequently be rejected as methodologically inadequate by a member of the Group preparing a systematic review.

No language restrictions are applied.

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Appendix 3 Reference list for excluded studies

Abbassi RM, Sirichand P, Rizvi S. Safety and efficacy of oral versus vaginal misoprostol use for induction of labour at term. *J Coll Physicians Surg Pak* 2008;**18**:625–9.

Abdellah MS, Hussien M, AboAlhassan A. Intravaginal administration of isosorbide mononitrate and misoprostol for cervical ripening and induction of labour: a randomized controlled trial. *Arch Gynecol Obstet* 2011;**284**:25–30.

Abramovici D, Goldwasser S, Mabie BC, Mercer BM, Goldwasser R, Sibai BM. A randomized comparison of oral misoprostol versus Foley catheter and oxytocin for induction of labor at term. *Am J Obstet Gynecol* 1999;**181**:1108–12.

Abramovici D, Goldwasser S, Mabie BC, Mercer BM, Sibai BM. Cervical ripening and labor induction, with oral misoprostol vs mechanical methods of cervical ripening and oxytocin. *Am J Obstet Gynecol* 1999;**180**:S126.

Adewole IF, Franklin O, Matiluko AA. Cervical ripening and induction of labour by breast stimulation. *Afr J Med Med Sci* 1993;**22**:81–5.

Afolabi BB, Oyeneyin OL, Ogedengbe OK. Intravaginal misoprostol versus Foley catheter for cervical ripening and induction of labor. *Int J Gynaecol Obstet* 2005;**89**:263–7.

Aggarwal N, Kirthika KS, Suri V, Malhotra S. Comparative Evaluation of Vaginal PGE-1 Analogue (Misoprostol) and Intracervical PGE-2 Gel for Cervical Ripening and Induction of Labor. 49TH All India Congress of Obstetrics and Gynaecology; 6–9 January 2006, Cochin, Kerala State, India, abstract no. 95.

Aghamohammadi A, Behmanesh F, Zafari M, Tofighi M. Effect of using Transcutaneous Electrical Nerve Stimulation (TENS) in acupuncture points [Hegu (Li4) and Sanyinjiao (Sp6)] on duration of the first stage of labor. *J Babol Uni Med Sci* 2011;**13**:19–24.

Akhtar A, Talib W, Shami N, Anwar S. Induction of labour – a comparison between misoprostol and dinoprostone. *Pakistan J Med Health Sci* 2011;**5**:617–19.

Akram H, Khan Z, Rana T. Vaginal prostaglandin e2 pessary versus gel in induction of labor at term. *Ann King Edward Med Coll* 2005;**11**:370–2.

Al-Assadi AF, Al-Waeely FA, Kadhim SS. The use of extraamniotic dexamethasone for ripening the unfavourable cervix. *J Bahrain Med Soc* 2007;**19**:148–53.

Amano K, Saito K, Shoda T, Tani A, Yoshihara H, Nishijima M. Elective induction of labor at 39 weeks of gestation: a prospective randomized trial. *J Obstet Gynaecol Res* 1999;**25**:33–7.

Anderson G, Cordero L, Speroff L, Hobbins J. Clinical use of prostaglandins as oxytocin substances. *Ann N York Acad Sci* 1971;**180**:499–512.

Anderson GG, Hobbins JC, Speroff L. Intravenous prostaglandins E2 and F2alpha for the induction of term labor. *Am J Obstet Gynecol* 1972;**112**:382–6.

Andreasson B, Bock JE, Larsen J. Induction of labour. A double-blind randomized controlled study of prostaglandin E2 vaginal suppositories compared with intranasal oxytocin and with sequential treatment. *Acta Obstet Gynecol Scand* 1985;**64**:157–61.

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Anonymous. *Efficacy & Safety Study Comparing Misoprostol Vaginal Insert (MVI) versus Dinoprostone Vaginal Insert for Reducing Time to Vaginal Delivery (EXPEDITE).* 2010. URL: http://clinicaltrials.gov/ (accessed 21 May 2013).

Arrieta OB, Yances BR, Ciodaro CM, Penaranda WA, Aguilera JB. Induction of labor at term with misoprostol versus oxytocin. *Rev Colomb Obstet Ginecol* 2000;**51**:8–11.

Arsenijevic S, Vukcevic-Globarevic G, Volarevic V, Macuzic I, Todorovic P, Tanaskovic I, *et al.* Continuous controllable balloon dilation: a novel approach for cervix dilation. *Trials* 2012;**13**:196.

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Arulkumaran S, Ingemarsson I, Ratnam SS. Oxytocin titration to achieve preset active contraction area values does not improve the outcome of induced labour. *Br J Obstet Gynaecol* 1987;**94**:242–8.

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Averill KA, Scardo JA, Chauhan SP. Weekly membrane stripping to decrease the incidence of postterm pregnancy: a randomized clinical trial. *Obstet Gynecol* 1999;**93**(Suppl. 4):47.

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Azeem S. Buccal vs. *Intravaginal Misoprostol Administration for Cervical Ripening in Induction of Labor*. 49th All India Congress of Obstetrics and Gynaecology, 6–9 January 2006, Cochin, Kerala State, India, abstract no. 95.

Azhari S, Pirdadeh S, Lotfalizadeh M, Shakeri MT. Evaluation of the effect of castor oil on initiating labor in term pregnancy. *Saudi Med J* 2006;**27**:1011–14.

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Appendix 4 Characteristics of excluded studies

TABLE 37 Characteristics of excluded studies

Author	Year	Reason for exclusion
Abbassi RM	2008	Not a RCT
Abdellah MS	2011	Complex intervention
Abramovici D	1999	Methodological issues – not all women received intervention as protocol stated; unclear. Women received catheter based on Bishop score
Abramovici D	1999	Complex intervention
Adewole IF	1993	No data
Afolabi BB	2005	Outcome data not usable
Aggarwal N	2006	Methodological inconsistencies
Aghamohammadi A	2011	Insufficient information for assessment
Akhtar A	2011	No details of doses or regimens
Akram H	2005	Not a RCT
Al-Assadi AF	2007	Not a relevant comparison
Amano K	1999	No relevant data; induction group received several methods not reported separately
		Method of randomisation unclear
Anderson G	1971	No relevant data. Results not reported by randomised group
Anderson GG	1972	Unclear if RCT
Andreasson B	1985	Not a relevant comparison. Intranasal oxytocin
Anonymous – Ferring Pharmaceuticals	2010	Trial registration. No results reported
Arrieta OB	2000	Not a relevant comparison
Arsenijevic S	2012	Not clear for induction of labour
Arulkumaran S	1987	Not a relevant comparison. Regimen comparison
Arulkumaran S	1985	Not a relevant comparison. Regimen comparison
Ascher-Walsh C	2000	Dose comparison
Ashworth MF	1988	Not a relevant comparison. Pulsatile i.v. oxytocin vs. continuous oxytocin
Atad J	2000	Not a RCT
Atad J	1996	Methodological reasons. Crossover design
Atad J	1991	Complex intervention
Atkinson MW	2000	Dose comparison
Augensen K	1987	Not a relevant comparison
Augensen K	1986	Not a relevant comparison
Auner H	1993	Regimen comparison. Not a relevant comparison
Averill KA	1999	No relevant data
Azarkish F	2008	Insufficient information to assess

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Azeem S	2006	Not a RCT
Azhari S	2006	No relevant outcome data
Babcock RJ	1959	No relevant data
Baev O	2011	No relevant data
Balintona J	2001	No outcome data
Bamford PN	1992	No outcome data
Barkai G	1997	Complex intervention
Barrilleaux PS	2002	Complex intervention
Bates CD	2003	No relevant outcome data
Baxi LV	1980	No data
Beard RJ	1975	Complex intervention
Beazley JM	1971	No data
Bebbington M	2003	Unclear definition of relevant outcomes. No usable data
Beigi A	2010	No data
Belfrage P	2000	Excluded for methodological reasons
Ben-Aroya Z	2001	Not a RCT
Bendvold E	1990	No relevant outcome data
Bergsjo P	1989	Complex intervention
Bergsjo P	1969	Not a relevant comparison. Intranasal oxytocin
Bernstein EP	1986	No relevant outcome data
Bex P	1990	No outcome data
Bi S	2000	Excluded for methodological reasons
Blackburn MG	1973	No relevant outcome data
Blakemore KJ	1990	Regimen comparison. Not a relevant comparison
Bloch B	1975	Not a RCT
Blumenthal PD	1990	Not a relevant comparison. Both interventions same code
Bo QX	2006	This study explored acupuncture for pain relief
Bolnick JM	2004	Complex intervention
Bonebrake R	2001	No data
Borisov I	1985	Insufficient information for assessment
Botero L	1998	Trial registration. No relevant outcome data
Bozhinova S	2007	Not a relevant comparison. Both arms high dose
Brandel E	1998	Excluded from 0317 – possibly allocation bias, primary outcome statistics not adequately reported
Breart G	1991	Not clear that this trial is for induction. Not relevant intervention
Breart G	1982	Not clear that this trial is for induction. Not relevant intervention
Bredow V	1993	Not a RCT
Bredow V	1990	Not a RCT. Allocation by Bishop scores

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Bremme K	1987	Complex intervention
Bremme K	1984	Complex intervention
Bremme K	1980	Complex intervention
Browne MJ	1988	Insufficient information for assessment
Browne PC	2011	Trial registration. No data
Buccellato CA	2000	Complex intervention
Butler B	2004	Oral misoprostol review – no group denominators
Cabrol D	1990	Not a relevant participant group
Cai LL	2010	No relevant data
Calder AA	2008	Misoprostol group included both high- and low-dose regimens. Results were not reported by dose
Calder AA	1975	Complex intervention
Calder AA	1974	No relevant data
Caliskan E	2005	No relevant data
Cameron A	1985	No usable outcome data. Denominators unclear
Cameron AD	1988	No data
Carbone JF	2013	Complex intervention
Carlan SJ	1997	Comparing tablet with gel
Carlan SJ	1995	Dose comparison, both high dose
Casey BM	1995	Complex intervention
Casey C	1993	Not a relevant comparison. Comparison group did not all receive the same protocol
Castle B	1983	No outcome data, looking at absorption
Cecatti JG	2006	Both groups received 25 µg of vaginal misoprostol
Cetin A	1997	No outcome data
Chang YK	2003	Not a relevant comparison
Chen DC	2005	Exclude for methodological reasons
Chen DC	2004	Analysis not by randomisation group
Chestnut DH	1994	Not a relevant intervention
Chia YT	1993	Not a relevant comparison
Chipato T	1997	Not a relevant comparison
Chou MM	1991	No data
Christensen FC	2002	Complex intervention
Chua S	1991	Dose and regimen comparison. Not a relevant comparison
Cole RA	1975	Regiment comparison
Coleman FH	1997	Complex intervention
Collingham JP	2010	Complex intervention
Coltart TH	1974	Not a relevant comparison

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Craft I	1976	Not a RCT
Craft IL	1971	No relevant data
Crane J	1993	Regimen comparison. Not a relevant comparison
Critchley HOD	1994	Dose comparison
Cross WG	1978	Attrition
Culver J	2004	Complex intervention
Cummiskey KC	1990	Not a relevant comparison
D'Aniello G	2003	Not a RCT
D'Souza SW	1986	No relevant data
Damania KR	1988	Not a RCT
Danezis J	1962	Not a relevant comparison
Daniel-Spiegel E	2004	Regimen comparison
Danna P	1995	No outcome data
Dasgupta E	2012	Complex intervention
Davies NJ	1991	Regimen comparison
Day L	2009	No relevant data
De Laat WNGM	1991	No outcome data
De Leon-Casasola OA	1993	Not a relevant comparison
De Oliveira MGM	2003	No data
DebBarma AM	2013	Trial registration
Decker WH	1958	Not a RCT
Delaney S	2010	Not a relevant comparison
Delaney T	2001	Comparison of different dosing regimens
Delaney T	2001	Insufficient information
Deo S	2013	No data for primary outcomes
Di Lieto A	1989	No data
Dietl J	1987	Trial registration
Ding DC	2005	Not a RCT
Dionne MD	2011	Complex intervention
Dogra Y	2012	No data
Dommisse J	1981	No outcome data
Dorfman P	1987	Inadequate details of treatment/intervention
Dorr A	1990	Complex intervention
Du S	2000	Not a relevant comparison
Duhl A	1997	No data
Dundas KC	2000	Insufficient information
Dunn PA	1989	No relevant data
Dunston-Boone G	1991	Includes non-randomised participants

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Duru NK	1997	Not relevant participant group
Echeverria EL	1995	Not a RCT
Edelstein H	1964	Not a relevant comparison
Eftekhavi N	2002	Brief abstract, insufficient information
Ehrenberg-Buchner S	2013	No outcome data
Ekblad U	1994	Not a RCT
Ekerhovd E	2003	Not an induction of labour trial
Elliott CL	1998	No data
Elliott JP	1984	No data
Elliott JP	1983	No relevant data
El Sedeek MSh	2009	No relevant outcome data
El-Torkey M	1995	Not a relevant comparison
Emery S	1988	No relevant data
Engleman SR	1979	Not a RCT
Escalante G	1993	Results not reported by randomisation group
Evans MI	1983	Complex intervention
Ewert K	2006	Dose ranging study, same code
Fekih M	2009	Dose comparison study
Filho FAR	2007	Dose comparison: both low dose
Filshie GM	1992	Trial registration
Fitzpatrick CB	2012	Not a relevant comparison
Foong LC	2000	Not a relevant comparison
Freeman RK	1968	Not a relevant comparison
Friedman EA	1975	Dose comparison
Friedman EA	1975	Dose comparison
Friedman EA	1974	No relevant data
Fuchs AR	1984	Not a RCT
Fuchs K	2006	No outcome data
Fusi L	1989	No outcome data, no denominators
Garcia AA	1988	Not a RCT
Gauger LJ	1991	Data not in form we can use
Gemer O	2001	No data
Ghanaei MM	2013	No data
Ghanaei MM	2009	Complex intervention
Ghidini A	2001	Dose comparison: both high dose
Gibb DMF	1985	Dose comparison
Gibson KS	2013	Not a relevant comparison. Both code 24

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Gilad R	2012	No data
Gillot M	1974	Not a relevant comparison
Girija S	2006	Insufficient information
Glanville T	2002	No denominators and no relevant outcome data
Gloeb DJ	1989	No relevant outcome data
Goedken J	2000	No denominators
Goeree R	1995	Does not compare methods for the induction of labour
Gonen O	1997	Methodological issues. Women in the intervention group received multiple interventions based on Bishop score, and data are not presented by this division
Goni S	1995	Dose comparison
Gonsoulin W	1989	No relevant outcome data
Gordon AJ	1977	No data
Gordon-Wright AP	1979	No outcome data
Gottschall D	1998	Dose comparison: both high dose
Gowenlock AH	1975	No relevant data
Granstrom L	1995	Both arms received the same intervention at different times
Green PS	1967	No data
Greenberg RA	2006	No data. Trial not complete
Greer IA	1988	No relevant data
Greer IA	1988	No outcome data
Griffin C	2003	> 20% attrition
Grudev D	1988	Not a relevant comparison
Grunstein S	1990	Dose comparison, both groups high dose
Guinn DA	2004	Complex intervention
Guinn DA	2000	Complex intervention
Güngördük K	2011	Complex intervention
Haddad N	1987	Trial registration
Haeri AD	1976	Not a RCT
Hage P	1993	No data
Hallak M	2008	Trial registration
Hannah ME	1992	Induction group received multiple methods; data reported represent multiple methods
Harms K	2001	No relevant outcome data
Harrington K	2003	No data. Trial registration
Hassan AA	2005	Not a RCT
He HY	2000	Not a relevant comparison
Helal AMM	2004	Not a RCT
Hendricks CH	1964	Not a relevant comparison
Hennessey MH	1998	Not a relevant comparison

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Henry A	2013	Not a relevant comparison (inpatient vs. outpatient)
Henry A	2011	Complex intervention
Henry GR	1969	Intervention unclear
Henson BV	1987	No outcome data
Hernandez-Castro F	2008	Not clear that this is a trial. Insufficient information
Hibbard JU	1998	Complex intervention
Hill JB	2009	Complex intervention
Hill NCW	1991	Not induction of labour
Ho M	2010	Augmentation of labour
Hoesli I	2003	Insufficient information
Hoppe K	2014	Not a relevant comparison
Hourvitz A	1996	Dose comparison
Hu Y	2013	No data. Trial registration
Hughes L	2002	Complex intervention
Hunter G	1998	Mixed interventions, not possible to separate data
Hunter IWE	1984	Both arms received the same intervention, at different doses and times
Hunter IWE	1982	Both arms received the same intervention, at different doses and times
Hussein M	2012	No relevant data. Data not reported by randomisation group
Ifnan F	2006	Not a relevant comparison
Iftikhar M	1992	No outcome data reported
Imsuwan Y	1999	No relevant outcomes
Ingemarsson I	1991	No outcome data
Ismail AAA	1989	Not a RCT
Jackson NV	2000	Insufficient information
Jalilian N	2011	No relevant data – not reported by randomisation group
Jasper MP	2000	No relevant outcome data
Javaid MK	2008	Dose and frequency not stated. E-mail sent
Jazayeri A	2003	No group denominators
Jenssen H	1977	No usable outcome data
Jiang X	1997	Not a relevant comparison
Jigyasa S	2011	No denominators
Jindal P	2007	Complex intervention
Jonsson M	2011	Not a relevant comparison
Joo SH	2000	No outcome data or primary outcomes
Kadar N	1990	No relevant data
Kamat DS	2002	Not a RCT
Kanade T	2011	No group denominators

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Kanhai HHH	1989	Not a relevant participant group. This is a trial of induction for fetal death
Karjane NW	2006	Not a relevant comparison
Karpovich E	2006	No data. Trial registration
Kasdaglis T	2007	Complex intervention
Kashanian M	2009	Not a relevant comparison
Kashanian M	2008	Not a relevant comparison
Kashanian M	2008	Not a relevant comparison
Kehl S	2011	Complex intervention
Keirse MJNC	1983	No relevant outcome data
Keller JM	2010	No data. Trial registration
Khan ZA	2011	Not a RCT
Kjos SL	1993	Women had variety of induction methods
Klopper AI	1973	Not relevant intervention
Klopper AI	1969	Not a relevant comparison
Klopper AI	1962	No denominators
Knogler W	1988	No outcome data
Knox GE	1979	No outcome data
Krammer J	1995	No outcome data
Kubista E	1974	Not a RCT
Kupietz R	1994	Not a relevant comparison (comparing time of day PGE_2 administered)
Ladfors L	1994	Dose comparison
Lamont RF	1991	No relevant data
Lange AP	1982	No relevant data
Lanka S	2012	No data. Trial registration
Larsen J	1983	Not a relevant comparison
Lass A	1994	No outcome data
Lazor LZ	1993	Dose comparison
Le Maire WJ	1972	No relevant data
Leiberman JR	1977	Not a RCT
Leijon I	1980	No relevant data
Leijon I	1979	No relevant data
Leszczynska-Gorzelak B	2001	Dosage not clear
Leszczynska-Gorzelak B	1999	Not a RCT
Leszczynska-Gorzelak B	1993	No relevant data
Levy R	2004	Not a relevant comparison
Levy R	2000	Not a relevant comparison

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Li FM	2000	No group denominators, no outcome data
Li GQ	1996	No relevant data
Li WJ	1994	No relevant data
Lin A	1995	Complex intervention
Lin MG	2007	Not a relevant comparison
Lindblad A	1985	No outcome data
Lindholm P	1981	No relevant data
Lindmark G	1976	No relevant data
Lipshitz J	1984	Not a relevant comparison
Liu YL	2012	No relevant data reported
Lokugamage AU	2003	Both high dose
Long Z	1994	Not a relevant comparison
Lorentzen IP	2006	Trial not complete
Lorenz RP	1984	Not relevant participants, 25% < 20 weeks
Loria-Casanova ML	1989	Preterm labour only
Lorrain J	1982	Not a relevant comparison
Loto OM	2012	No outcome data or primary outcomes
Lotshaw RR	1994	Comparison of regimen. Both groups received intracervical PGE_2
Lowensohn RI	1990	Regimen comparison
Lunkad A	2011	No denominators, no outcome data
Lutgendorf MA	2012	Not a relevant comparison
Luther ER	1983	Comparing synthetic and natural PGE_2. Same dose
Lykkesfeldt G	1981	Not a relevant comparison
Lyndrup J	1992	This is a secondary analysis of Lyndrup 1991, Legarth 1988 and Legarth 1989. No relevant outcome data
Lyons C	2001	No relevant data
Mackenzie I	2011	Trial for pain relief only
MacKenzie IZ	1997	Dose comparison
MacKenzie IZ	1988	Dose comparison
Mackenzie IZ	1988	No outcome data
MacKenzie IZ	1977	No outcome data
MacLennan AH	1988	No relevant outcome data
MacLennan AH	1981	Complex intervention
Macones GA	2012	Complex intervention
Macpherson M	1983	No relevant outcome data
Madhavi N	2011	No group denominators, no results
Mahendru R	2011	Interventions not clear
Mahomed K	1988	Complex intervention

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Majoko F	2002	Both high dose
Majoko F	2001	Comparison not relevant
Makarem MH	2013	Complex intervention
Makary NA	1990	Trial registration
Mamo J	1994	No relevant data
Manabe Y	1985	No relevant data
Mancuso S	1996	Not a RCT
Manidakis G	1999	No relevant data
Mansouri M	2003	Not a relevant comparison
Manyonda IT	2007	Trial registration
Marconi AM	2008	Control group included two different treatments
Martin DH	1978	> 20% excluded for labour outcomes; unbalanced treatment groups
Martin JN	1989	No relevant data
Martin RH	1955	Not only induction of labour
Martinez AC	2004	No relevant data
Marzouk AF	1975	Complex intervention
Mathews DD	1976	Not a relevant comparison
Mathie JG	1959	Not a relevant comparison
Mati JKG	1973	Not a relevant comparison
Mazhar SB	2003	Complex intervention
McColgin SW	1993	No relevant data
Megalo A	1999	No relevant outcomes
Megalo A	1998	No group denominators
Mercer B	1991	Dose comparison
Merrill DC	1999	Dose comparison
Milasinovic L	1997	Not a relevant comparison
Miller JF	1975	Complex intervention
Milliez JM	1993	Dose comparison study
Minaretzis D	1993	All women received intracervical PGE_2
Mink D	1994	Not a RCT
Moghadam AD	2012	Not a relevant comparison
Moghadem DA	2013	Not a relevant comparison
Moghadem DA	2008	Insufficient information
Moise KJ	1991	No relevant outcome data
Mokgokong E	1976	Dose comparison
Mokgokong ET	1974	No relevant outcome data
Molina M	2000	Insufficient information
Mollo M	1991	No relevant outcome data

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Moran DJ	1994	Not a relevant comparison
Muhammad Ali A	2013	No group denominators
Mukhopadhyay M	2002	No data
Muller PR	1992	Not a relevant comparison. Regimen comparison
Muller T	2000	Very high sample attrition
Muller T	1995	Not a RCT
Mullin PM	2002	Complex intervention
Mundle WR	1996	Comparison not relevant
Murray CP	1975	No denominators
Nabors GC	1958	Complex intervention
Naismith WCMK	1972	Complex intervention
Nasir S	2012	Not a RCT
Nassief SA	1996	Not a relevant comparison
Neri I	2012	No group denominators
Nesbitt REL	1961	No relevant data
Neto CM	1988	No relevant outcome data
Nikolov A	2003	No outcome data
Nilsson B	1984	No relevant data
Niroomanesh S	2011	Insufficient information. No denominators
Noah ML	1985	Dose comparison
Norchi S	1993	No outcome data
Nunes FP	2006	Complex intervention
Nuthalapaty FS	2005	Not relevant participant group
Nuutila M	1997	No relevant outcomes reported
Obel EB	1975	Not a relevant comparison
Odem RR	1988	Not a relevant comparison. Regimen comparison
Odum CU	1993	Not relevant participant group
Ohel G	1996	High risk of bias
Omer H	1987	Not a RCT. A case–control study
Orhue A	1993	Regimen comparison
Orhue AAE	1994	Regimen comparison
Orhue AAE	1993	Dose comparison
Ozgur K	1997	Not a RCT
Ozsoy M	2004	Both high dose
Padayachi T	1988	For intrauterine death
Palermo MSF	1997	No relevant data
Parewijck W	1987	Insufficient information to assess

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Parker M	1990	No outcome data
Parpas G	1995	Not a relevant comparison. Regimen comparison
Patel A	2000	Augmentation not induction
Patnaik P	1995	Not a RCT
Patterson WM	1971	No relevant data
Paul R	1988	No relevant outcome data
Pavlou C	1978	Regimen comparison
Payne E	1993	Not randomised properly
Pearce DJ	1977	No relevant data
Pearson M	2002	No doses for miso stated
Pedersen S	1981	Complex intervention
Peedicayil A	1990	Not a relevant treatment
Peedicayil A	1989	Complex intervention
Penna LK	1991	Varying dosing regimens. Data not reported by dose
Pentecost AF	1973	Buccal oxytocin. Not a relevant comparison
Perales AJ	1994	No relevant outcome data
Perry KG	1998	Complex intervention
Pettker CM	2008	Complex intervention
Picasso DG	2012	Not a relevant comparison
Polvi HJ	1994	No relevant outcomes reported
Pongsatha S	2002	Dose comparison, same codes
Pongsatha S	2001	Dose comparison, same codes
Porat S	2006	No data
Porojanova V	2005	Not a RCT
Pranuthi R	2011	No relevant data
Rangarajan NS	1971	No data
Rasheed R	2007	Included non-randomised participants
Rath W	1985	Dose comparison
Raymond S	1989	Trial registration
Read MD	1974	Complex intervention
Rees AEJ	1992	No outcome data
Reichel R	1985	No relevant outcomes reported
Reid GJ	1995	Regimen comparison
Ridgway L	1991	Complex intervention
Rijnders MEB	2007	Control group received a range of induction methods
Roberts G	1970	Complex intervention
Robinson D	2011	Trial registration
Romer A	2000	No relevant outcome data

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Rosa P	1974	No relevant data
Ross EL	1998	Dose comparison
Rudra T	2012	No relevant data. Unclear
Rust O	2000	Not a relevant comparison
Rust OA	2001	Complex intervention
Saberi F	2008	No relevant data. Unclear
Sabir N	2007	No data
Sabra A	2000	Insufficient information
Sadaty A	1998	No outcome data
Sahin HG	2002	Methodological reasons. Women not in labour after 12 hours were excluded for all outcomes, including 3/50 receiving misoprostol and 10/50 in the oxytocin group
Saito K	1999	Not a relevant comparison
Salamalekis E	2000	Regimen comparison
Saldivar D	2001	No data
Salmanian R	2012	No relevant outcomes
Samal S	2000	Not a RCT
Sanchez-Ramos L	2002	Not a relevant comparison
Sanchez-Ramos L	1995	Both groups received PGE_2
Sanchez-Ramos L	1993	Not a relevant comparison
Sasaki K	1982	Not a relevant comparison
Satin AJ	1994	Not a relevant comparison. Regimen comparison
Satin AJ	1991	Dose comparison
Scher J	1972	Observational study. Not a RCT
Schneider KTM	1994	Not a RCT
Schreyer P	1989	Incomplete reporting of data
Sciscione AC	2001	Not a relevant comparison – setting comparison
Seeras RC	1995	Dose comparison, both arms high dose
Seidl A	1976	No relevant data
Sellers S	1985	No outcome data
Shaala S	1989	Not a relevant intervention
Shanmugham D	2011	Not a RCT
Sharami SH	2010	No data
Sharami SH	2005	Complex intervention
Sharma C	2012	No data, not clear if completed
Sharma K	2014	Not a relevant comparison
Sheela SR	2006	Not a RCT
Shennan A	2006	Trial registration

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Shennan AH	1995	Not a relevant comparison
Shetty A	2002	Dose comparison
Shipman M	2000	Trial registration
Shravage J	2009	Complex intervention
Singh PM	1993	Not a relevant comparison. Dose comparison
Sivasuriya M	1978	> 20% excluded
Sjostedt S	1969	Intranasal oxytocin. Not a relevant comparison
Skajaa K	1991	Both groups received PGE_2, same dose
Skupski D	2006	Complex intervention
Smith CV	1996	Dose comparison, both arms high dose
So LK	1979	No data
Solt I	2009	No denominators
Somell C	1987	Arms received different management protocols
Somell C	1983	One group primed and the other not; those failed at 8 hours excluded
Soni M	2000	Not a RCT
Sorensen MB	2008	No data
Sorensen S	1985	Not a relevant comparison
Sorokin Y	1992	No outcome data
Spellacy WN	1971	No relevant data
Spitzberg E	1991	No outcome data
Srisomboon J	1997	No code for intracervical misoprostol
Srividhya S	2001	Not a RCT
Steer PJ	1992	Trial registration
Steer PJ	1985	Regimen comparison
Steer PJ	1976	No relevant data
Stewart JD	1998	Complex intervention
Stewart P	1981	Not a relevant comparison
Stiver KH	1991	Dose comparison study
Suikkari AM	1983	Induction group received two different methods
Sullivan CA	1996	Complex intervention
Suri V	2000	No data
Swann RO	1958	No relevant data
Tadmor OP	1990	Not a relevant comparison
Tan ASA	1994	No outcome data
Tan LK	1999	Dose comparison, all high dose
Tan PC	2009	Complex intervention
Tan PC	2006	Complex intervention
Tan PC	2007	Complex intervention

TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Tang L	1997	Dose comparison, all high dose
Tanir HM	2008	Complex intervention
Tedesco RP	2002	Both low dose
Thach TS	2000	Insufficient information
Thiery M	1981	Examining combination of methods
Thiery M	1979	Complex intervention. Control group received PGE_2 plus oxytocin at the same time
Thiery M	1977	Not a relevant comparison. Regimen comparison
Thomas G	1974	Not a relevant comparison
Thompson JH	1987	Unclear group denominators
Thomsen AC	1987	Trial registration
Thornton S	1989	No relevant data
Tiwari N	2011	No data
Toplis PJ	1979	Insufficient information
Toppozada M	1992	No outcome data
Torres R	2001	Not a relevant comparison
Tsitsis V	2012	Not a RCT
Tsitsis V	2012	Not a RCT
Tuipae S	1999	No data. for primary outcomes
Turnquest MA	1997	Not a relevant comparison
Ulstein M	1979	Not a relevant comparison
Vaisanen-Tommiska M	2008	No data
Van Dessel T	1991	Women were already in labour
Van Heerden J	1992	Data unclear
Varaklis K	1994	No outcome data
Varma R	1981	Not a RCT
Varma TR	1984	Not a RCT
Veligati P	1998	Insufficient information reported
Vengalil SR	1998	Not a relevant comparison
Vidanagamage RS	2011	No data
Vijitrawiwat A	2003	No data. for primary outcomes
Voss DH	1996	Dose comparison
Vroman S	1972	No relevant data
Walker E	1983	Dose comparison
Wang L	1997	Excluded for methodological reasons
Wang Z	1998	Not a relevant comparison
Ward SJ	1991	No relevant data
Webb GW	1997	No denominator data given

continued

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TABLE 37 Characteristics of excluded studies (*continued*)

Author	Year	Reason for exclusion
Weeks AD	2013	No data. Trial registration
Wei ZT	2000	No relevant data
Weiss G	2009	No data
Weiss RR	1975	Dose comparison
Weissberg SM	1977	No relevant data
Welt SI	1987	Insufficient information reported to assess the trial
Westergaard JG	1983	Not a relevant comparison
Westergaard JG	1983	Not a relevant comparison
Wicker R	1995	Insufficient information
Wildemeersch DA	1976	No data
Wilk M	2001	Excluded for methodological reasons
Willcourt RJ	1994	Not a relevant comparison. Regimen comparison
Williams JK	1988	Not a relevant participant group. Induction for fetal death
Williams JK	1985	Dose comparison
Windrim R	1997	No clear comparison group (control group interventions differed)
Wing DA	2011	Sustained-release misoprostol – three doses
Wing DA	1998	No data. Trial stopped early
Wing DA	1996	Same dose each group
Witter FR	1989	Not a relevant comparison
Wolf SB	2005	Dose comparison
Wolfler MM	2006	Not a relevant comparison
Wyldes MP	1992	Trial never commenced
Yacoob T	1993	Not a relevant comparison
Yang Z	2000	Insufficient information in abstract
Yeung KK	1977	No usable outcome data
Young D	2001	Insufficient information, no group denominators, variable dose of vaginal misoprostol
Zafarghandi A	2004	Not a relevant comparison
Zanini A	1991	Dose comparison, all high dose
Zhen-yun Y	1994	Not a relevant comparison
Zimmer EZ	1996	No relevant outcome data

Appendix 5 Reference list for included studies

Aalami-Harandi R, Karamali M, Moeini A. Induction of labor with titrated oral misoprostol solution versus oxytocin in term pregnancy: randomized controlled trial. *Rev Bras Ginecol Obstet* 2013;**35**:60–5.

Abdul MA, Ibrahim UN, Yusuf MD, Musa H. Efficacy and safety of misoprostol in induction of labour in a Nigerian tertiary hospital. *West Afr J Med* 2007;**26**:213–16.

Abedi-Asl Z, Farrokhi M, Rajaee M. Comparative efficacy of misoprostol and oxytocin as labor preinduction agents: a prospective randomized trial. *Acta Medica Iranica* 2007;**45**:443–8.

Abramovici H, Hallak M, Zarfati D, Packer T, Calderon I, Auslender R, *et al.* Induction of labor in patients with unfavorable cervices: a randomized comparison among intravaginal prostaglandin E2 (PGE_2), intravenous oxytocin, and the double balloon ripener device. *Int J Gynecol Obstet* 1994;**46**:7.

Adair CD, Weeks JW, Barrilleaux PS, Philibert L, Edwards MS, Lewis DF. Labor induction with oral versus vaginal misoprostol: A randomized, double-blind trial. *Am J Obstet Gynecol* 1998;**178**:S93.

Adair CD, Weeks JW, Barrilleaux S, Edwards M, Burlison K, Lewis DF. Oral or vaginal misoprostol administration for induction of labor: a randomized, double-blind trial. *Obstet Gynecol* 1998;**92**:810–13.

Adam I, Hassan OA, Elhassan EM. Oral misoprostol vs. vaginal misoprostol for cervical ripening and labour induction. *Int J Gynecol Obstet* 2005;**89**:142–3.

Adeniji AO, Olayemi O, Odukogbe AA, Aimakhu CO, Oladokun A, Akindele FO, *et al.* Comparison of changes in pre-induction cervical factors' scores following ripening with transcervical foley catheter and intravaginal misoprostol. *Afr J Med Med Sci* 2005;**34**:377–82.

Adeniji AO, Olayemi O, Odukogbe AA, Oladokun A, Adeniji OI, Egbewale BE, *et al.* Cervico-vaginal foetal fibronectin: a predictor of cervical response at pre-induction cervical ripening. *West Afr J Med* 2005;**24**:334–7.

Adeniji AO, Olayemi O, Odukogbe AA. Intravaginal misoprostol versus transcervical foley catheter in pre-induction cervical ripening. *Int J Gynecol Obstet* 2006;**92**:130–2.

Adeniji OA, Oladokun A, Olayemi O, Adeniji OI, Odukogbe AA, Ogunbode O, *et al.* Pre-induction cervical ripening: transcervical foley catheter versus intravaginal misoprostol. *J Obstet Gynaecol* 2005;**25**:134–9.

Agarwal K, Batra A, Dabral A, Aggarwal A. Evaluation of isosorbide mononitrate for cervical ripening prior to induction of labor for postdated pregnancy in an outpatient setting. *Int J Gynecol Obstet* 2012;**118**:205–9.

Agarwal N, Gupta A, Kriplani A, Bhatla N, Parul N. Six hourly vaginal misoprostol versus intracervical dinoprostone for cervical ripening and labor induction. *J Obstet Gynaecol Res* 2003;**29**:147–51.

Ajori L, Nazari L, Eliaspour D. Effects of acupuncture for initiation of labor: a double-blind randomized sham-controlled trial. *Arch Gynecol Obstet* 2013;**287**:887–91.

Akay NO, Hizil D, Ylmaz SS, Yalvac S, Kandemir O. Comparison of low-dose oxytocin and dinoprostone for labor induction in postterm pregnancies: a randomized controlled prospective study. *Gynecol Obstet Invest* 2012;**73**:242–7.

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Akyol D, Mungan T, Unsal A, Yuksel K. Prelabour rupture of the membranes at term: no advantage of delaying induction for 24 hours. *Aus N Z J Obstet Gynaecol* 1999;**39**:291–5.

Al-Hussaini TK, Abdel-Aal SA, Youssef MA. Oral misoprostol vs intravenous oxytocin for labor induction in women with prelabor rupture of membranes at term. *Int J Gynecol Obstet* 2003;**82**:73–5.

Al-Malt A, Ashmead G, Amini S. Cervical ripening: effect of vaginal PGE_2 on bishop score. *Am J Obstet Gynecol* 1995;**172**:297.

Al-Sebai MAH, Manasse PR. Induction of labour in primigravid women with an unfavourable cervix: a prospective comparative study of prostaglandin E2 vaginal tablets and gel. *J Obstet Gynaecol* 1993;**13**:112–13.

Al-Taani MI. Comparison of prostaglandin E2 tablets or foley catheter for labour induction in grand multiparas. *East Med Health J* 2004;**10**:547–53.

Alcalay M, Hourvitz A, Reichman B, Luski A, Quint J, Barkai G, *et al.* Prelabour rupture of membranes at term: early induction of labour versus expectant management. *Eur J Obstet Gynecol Reprod Biol* 1996;**70**:129–33.

Alcoseba-Lim W, Famador-Juario H. Stripping of membranes to induce labor at term. *Philippine J Surg Surg Special* 1992;**47**:139–42.

Allott HA, Palmer CR. Sweeping the membranes: a valid procedure in stimulating the onset of labour? *Br J Obstet Gynaecol* 1993;**100**:898–903.

Allouche C, Dommesent D, Barjot P, Levy G. Cervical ripening: comparison of three methods. Preliminary results of a randomized prospective study. *Rev Fr Gynecol Obstet* 1993;**88**:492–7.

Amador LAV, Carmona JCF, Gallego FG, Texido CS, Esteve JLC. Randomized clinical trial of the safety and efficacy of 50 microg sublingual misoprostol versus 25 microg vaginal misoprostol for labor induction at term in pregnant women with diabetes. *Prog Obstet Ginecol* 2007;**50**:473–83.

Anand AK, Mir S. A randomized comparison between intravaginal misoprostol and intracervical dinoprostone for cervical ripening and labour induction in participants with unfavourable cervices. *JK Sci* 2012;**14**:115–19.

Andersen K, Moller M, Rix P, Larsen KW, Ladehoff P, Zdravkovic M. Induction of labor. Prostaglandin E2 vaginal tablets compared with intravenous oxytocin for induction of labor in premature rupture of the membranes and immature cervix. *Ugeskr Laeger* 1990;**152**:3705–7.

Arias F, Buser D, Mora G. Randomized comparison of misoprostol vs dinoprostone for cervical ripening and labor induction. *Am J Obstet Gynecol* 1997;**176**:S141.

Arias F, Rouben D. Extraamniotic saline infusion with foley catheter is better than 2.9 mg prostaglandin E2 gel in ripening the cervix but does not result in vaginal delivery. *Am J Obstet Gynecol* 1993;**168**:429.

Asher GN, Coeytaux RR, Chen W, Reilly AC, Loh YL, Harper TC. Acupuncture to initiate labor (Acumoms 2): a randomized, sham-controlled clinical trial. *J Matern Fetal Neonatal Med* 2009;**22**:843–8.

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Appendix 6 Characteristics of included studies

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TABLE 38 Characteristics of included studies

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Aalami-Harandi 2013[43]	Titrated (low-dose) oral misoprostol solution vs. i.v. oxytocin	256	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Abdul 2007[44]	Vaginal misoprostol (dose ≥50 µg) vs. i.v. oxytocin	62	None with previous CS	Mixed	Mixed	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Abedi-Asl 2007[45]	Vaginal misoprostol (dose ≥50 µg) vs. i.v. oxytocin	120	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Adair 1998[47]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	178	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Adam 2005[49]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	80	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Adeniji 2005[53]	Vaginal misoprostol (dose ≥50 µg) vs. mechanical methods – Foley catheter	96	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Agarwal 2003[55]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	120	None with previous CS	Mixed	All intact	All favourable (>6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Agarwal 2012[54]	Placebo vs. NO	200	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Ajori 2013[56]	Placebo vs. acupuncture	75	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Akay 2012[57]	Vaginal PGE_2 pessary (slow release) vs. i.v. oxytocin	144	NR/NC	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Akyol 1999[58]	No treatment vs. i.v. oxytocin	126	NR/NC	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Alcalay 1996[59]	No treatment vs. i.v. oxytocin	154	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Alcoseba-Lim 1992[60]	No treatment vs. membrane sweeping	130	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	Some or all funding from pharmaceutical industry
Al-Hussaini 2003[61]	Oral misoprostol tablet (dose ≥ 50 μg) vs. i.v. oxytocin	130	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Allott 1993[62]	No treatment vs. membrane sweeping	195	NR/NC	Mixed	All intact	Mixed	All post term	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Allouche 1993[63]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	119	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Al-Malt 1995[64]	Placebo vs. vaginal PGE_2 (gel)	103	NR/NC	NR/NC	NR/NC	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Al-Sebai 1993[65]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	73	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Al-Taani 2004[66]	Vaginal PGE_2 (tablet) vs. mechanical methods – Foley catheter	147	None with previous CS	Multiparous only	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Amador 2007[67]	Vaginal misoprostol (dose <50 µg) vs. buccal/sublingual misoprostol	300	None with previous CS	Mixed	All intact	Mixed	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Anand 2012[68]	Intracervical PGE_2 vs. vaginal misoprostol (dose <50 µg)	200	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Andersen 1990[69]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin	88	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Asher 2009[72]	No treatment vs. placebo vs. acupuncture	89	None with previous CS	Nulliparous only	All intact	NR/NC	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Ashrafunnessa 1997[73]	Intracervical PGE_2 vs. i.v. oxytocin	98	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Ayad 2002[76]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	238	None with previous CS	Mixed	All ruptured	Mixed	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ayaz 2008[77]	No treatment vs. oral misoprostol tablet (dose ≥50 µg)	84	None with previous CS	Multiparous only	All ruptured	NR/NC	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ayaz 2010[78]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥50 µg)	120	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Bagatree 1990[79]	Vaginal PGE_2 (tablet) vs. mechanical methods – laminaria	80	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Bakos 1987[80]	i.v. oxytocin vs. amniotomy	223	NR/NC	Mixed	All intact	Mixed	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Balci 2010[82]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	100	None with previous CS	Multiparous only	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias.	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Balci 2011[81]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	101	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Bartha 2000[85]	Intracervical PGE_2 vs. oral misoprostol tablet (dose ≥ 50 µg)	200	Some with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Bartusevicius 2006[86]	Vaginal misoprostol (dose < 50 µg) vs. buccal/sublingual misoprostol	140	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Beer 1999[87]	Placebo vs. homeopathy	40	NR/NC	NR/NC	All ruptured	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Beigi 2003[88]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	156	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Bell 1993[89]	Placebo vs. relaxin	40	None with previous CS	Mixed	All intact	All favourable (>6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Benedetto 1987[90]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	50	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Bennett 1998[92]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	206	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Benzineb 1996[93]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	100	NR/NC	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Berghella 1996[95]	No treatment vs. membrane sweeping	142	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Berkane 2005[97]	Placebo vs. mifepristone	346	Some with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Mixed	Report describes allocation concealment. Low risk of bias	NR/NC	NR/NC
Bernstein 1991[98]	Placebo vs. intracervical PGE_2	397	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Berzircioglu 2012[101]	No treatment vs. vaginal PGE_2 pessary (slow release)	100	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Bilgin 1998[103]	Intracervical PGE_2 vs. i.v. oxytocin	45	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Biron-Shental 2004[104]	Vaginal PGE_2 (gel) vs. mechanical methods – double-balloon or Cook's catheter	53	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Bollapragada 2009[107]	Placebo vs. NO	350	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Boulvain 1997[109]	No treatment vs. membrane sweeping	198	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	Some or all funding from pharmaceutical industry

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Bounyasong 2000[111]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	166	None with previous CS	Mixed	All intact	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Brandel 1998[112]	Vaginal PGE_2 (gel) vs. i.v. prostaglandin	79	NR/NC	NR/NC	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Bremme 1984[115]	i.v. oxytocin plus amniotomy vs. oral prostaglandins	83	NR/NC	Mixed	NR/NC	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Brennand 1997[118]	Placebo vs. relaxin	96	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Bricker 2008[119]	Titrated (low-dose) oral misoprostol solution vs. i.v. oxytocin	303	None with previous CS	Mixed	All ruptured	All favourable (> 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Buchanan 1984[121]	Placebo vs. vaginal PGE_2 pessary (normal release)	77	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Bullarbo 2007[123]	Placebo vs. NO	200	NR/NC	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Bung 1986[124]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	80	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Buser 1997[125]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	155	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Butt 1999[126]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	108	None with previous CS	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

continued

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Buttino 1990[127]	Placebo vs. intracervical PGE_2	43	NR/NC	NR/NC	NR/NC	NR/NC	All post term	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Cabrol 1988[129]	Placebo vs. intracervical PGE_2	217	NR/NC	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Cahill 1988[130]	Vaginal PGE_2 (tablet) vs. mechanical methods – laminaria	42	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Cammu 1998[131]	No treatment vs. membrane sweeping	278	None with previous CS	Nulliparous only	All intact	Mixed	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Campbell 1984[132]	Placebo vs. vaginal PGE_2 pessary (normal release)	199	NR/NC	Mixed	Mixed	Mixed	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Campos 1994[133]	Vaginal misoprostol (dose ≥50 µg) vs. i.v. oxytocin	153	NR/NC	Mixed	All intact	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Cararach 1996[136]	No treatment vs. intracervical PGE_2 vs. i.v. oxytocin	341	NR/NC	NR/NC	All ruptured	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Cardozo 1986[137]	No treatment vs. vaginal PGE_2 pessary (normal release)	402	NR/NC	NR/NC	All intact	Mixed	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Carlan 2001[139]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	1004	Some with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Carlan 2002[138]	Vaginal misoprostol (dose ≥50 µg) vs. buccal/sublingual misoprostol	152	Some with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Cecatti 2000[140]	Vaginal misoprostol (dose < 50 µg) vs. i.v. oxytocin	106	NR/NC	NR/NC	All intact	All favourable (> 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chang 1997[142]	No treatment vs. i.v. oxytocin	193	Some with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chang 1997[141]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	60	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chanrachakul 2000[144]	Vaginal PGE_2 (tablet) vs. NO	30	None with previous CS	Nulliparous only	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chanrachakul 2003[143]	No treatment vs. i.v. oxytocin plus amniotomy	249	None with previous CS	Mixed	All intact	All favourable (> 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chanrachakul 2010[148]	Vaginal misoprostol (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	218	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chanrachakul 2000[145]	Vaginal PGE_2 (tablet) vs. NO	110	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chanrachakul 2002[146]	Vaginal misoprostol (dose ≥ 50 µg) vs. NO	107	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Charoenkul 2000[149]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	143	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chatterjee 1990[150]	Placebo vs. vaginal PGE_2 (gel)	33	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Chaudhuri 2011[151]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose < 50 µg)	207	None with previous CS	Mixed	All ruptured	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chayen 1986[152]	i.v. oxytocin vs. breast stimulation	61	NR/NC	Mixed	NR/NC	Mixed	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chen 2000[153]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	239	None with previous CS	Nulliparous only	NR/NC	All favourable (> 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Cheng 2008[154]	Vaginal misoprostol (dose < 50 µg) vs. titrated (low-dose) oral misoprostol solution	207	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Cheung 2006[155]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	98	None with previous CS	Nulliparous only	All ruptured	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chitraker 2012[156]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	200	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chua 1988[162]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin plus amniotomy	80	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Chua 1991[159]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	94	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chua 1995[161]	Placebo vs. vaginal PGE_2 pessary (normal release)	155	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chua 1997[160]	Intracervical PGE_2 vs. mechanical methods – laminaria	185	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Chuck 1995[163]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	99	Some with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chung 1992[166]	Placebo vs. vaginal PGE_2 (gel)	59	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Chung 2003[165]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	103	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Chyu 1997[167]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	73	NR/NC	Mixed	Mixed	Mixed	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Clark 1998[168]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	138	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Colon 2005[173]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	204	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Corrado 2001[175]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	233	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Crane 1997[177]	No treatment vs. membrane sweeping	150	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Crane 2003[179]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	105	None with previous CS	Nulliparous only	All ruptured	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Cromi 2011[180]	Vaginal PGE_2 pessary (slow release) vs. mechanical methods – Foley catheter	397	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Cromi 2012[181]	Vaginal PGE_2 pessary (slow release) vs. mechanical methods – double-balloon or Cook's catheter	208	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Curet 1989[183]	Placebo vs. vaginal PGE_2 (gel)	54	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Da Graça 2005[184]	No treatment vs. vaginal misoprostol (dose <50 µg)	150	None with previous CS	Mixed	All ruptured	NR/NC	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Dällenbach 2003[186]	Vaginal PGE_2 (gel) vs. oral misoprostol tablet (dose <50 µg)	200	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Dalui 2005[187]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	100	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Damania 1992[188]	No treatment vs. i.v. oxytocin vs. breast stimulation	57	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Danielian 1999[189]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥50 µg)	211	Some with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Dare 2002[191]	No treatment vs. membrane sweeping	137	None with previous CS	Mixed	All intact	Mixed	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Darroca 1996[192]	Placebo vs. intracervical PGE_2	118	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Davey 1979[193]	Vaginal PGE_2 (gel) vs. oral prostaglandins	33	NR/NC	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Day 1985[195]	PGF_2 gel vs. i.v. oxytocin	202	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
De 2006[197]	Oral misoprostol tablet (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	200	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
De Aquino 2003[198]	Vaginal misoprostol (dose < 50 µg) vs. i.v. oxytocin	210	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
De la Torre 2001[200]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	360	None with previous CS	Mixed	NR/NC	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
De Miranda 2006[201]	No treatment vs. membrane sweeping	742	NR/NC	Mixed	All intact	NR/NC	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
De Moraes Filho 2005[202]	Vaginal misoprostol (dose < 50 µg) vs. buccal/ sublingual misoprostol	120	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Deng 1999[204]	Placebo vs. vaginal misoprostol (dose ≥ 50 µg)	85	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Denguezli 2007[205]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	130	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Deo 2012[206]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	158	NR/NC	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Deshmukh 2011[207]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	400	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Deshmukh 2013[208]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	200	None with previous CS	Nulliparous only	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Diro 1999[210]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	251	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Doany 1997[212]	Placebo vs. vaginal PGE_2 (gel) vs. membrane sweeping	115	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Dodd 2005[213]	Vaginal PGE_2 (gel) vs. titrated (low-dose) oral misoprostol solution	741	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Dodd 2006[215]	Titrated (low-dose) oral misoprostol solution vs. i.v. oxytocin	30	NR/NC	NR/NC	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Domínguez Salgado 1999[218]	Intracervical PGE_2 vs. i.v. oxytocin	156	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Domisse 1980[219]	Placebo vs. vaginal PGE_2 (tablet)	56	NR/NC	Mixed	All intact	All favourable (> 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Dommisse 1987[220]	Vaginal PGE_2 (gel) vs. i.v. oxytocin plus amniotomy	50	None with previous CS	Mixed	All intact	All favourable (> 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Duff 1984[221]	No treatment vs. i.v. oxytocin	134	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Dyar 2000[222]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	153	None with previous CS	NR/NC	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Edwards 2014[223]	Vaginal PGE_2 pessary (slow release) vs. mechanical methods – Foley catheter	386	NR/NC	NR/NC	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Egarter 1987[228]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	99	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Egarter 1989[227]	No treatment vs. vaginal PGE_2 (tablet)	345	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Ekman 1983[229]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	60	NR/NC	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ekman 1986[230]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	38	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Ekman-Ordeberg 1985[231]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	20	None with previous CS	Nulliparous only	All ruptured	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
El-Torkey 1992[232]	No treatment vs. membrane sweeping	65	NR/NC	Mixed	All intact	Mixed	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
El-Azeem 1997[233]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	29	NR/NC	Mixed	NR/NC	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
El-Din 2000[234]	Vaginal PGE_2 (tablet) vs. intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	149	NR/NC	NR/NC	NR/NC	All unfavourable (<6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Elhassan 2004[238]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	120	None with previous CS	Mixed	NR/NC	NR/NC	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Elhassan 2005[235]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	63	None with previous CS	Mixed	All intact	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Elhassan 2005[236]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	140	None with previous CS	Mixed	All intact	All favourable (> 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Elhassan 2007[237]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	150	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
El-Mardi 1991[240]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 pessary (normal release)	200	NR/NC	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
El-Shawarby 2006[241]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	72	NR/NC	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
El-Sherbiny 2001[243]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	185	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Eroglu 2007[244]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	147	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Escudero 1997[245]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	120	None with previous CS	Mixed	Mixed	NR/NC	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Esteve 2006[246]	Vaginal misoprostol (dose < 50 μg) vs. buccal/sublingual misoprostol	450	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ezechi 2008[247]	Vaginal misoprostol (dose ≥ 50 μg) vs. i.v. oxytocin	339	None with previous CS	Mixed	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Facchinetti 2005[249]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	144	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Facchinetti 2007[248]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	116	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Farah 1997[250]	Vaginal misoprostol (dose < 50 μg) vs. vaginal misoprostol (dose ≥ 50 μg)	399	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Feitosa 2006[255]	Vaginal misoprostol (dose < 50 μg) vs. buccal/sublingual misoprostol	150	None with previous CS	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Fenton 1985[256]	Placebo vs. extra-amniotic PGE_2	30	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ferguson 2002[257]	Vaginal misoprostol (dose ≥ 50 μg) vs. i.v. oxytocin	104	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ferraiolo 2010[258]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	144	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Fisher 2001[260]	Vaginal misoprostol (dose ≥ 50 μg) vs. oral misoprostol tablet (dose ≥ 50 μg)	126	None with previous CS	Mixed	All intact	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Fletcher 1993[263]	Placebo vs. vaginal misoprostol (dose ≥ 50 µg)	45	NR/NC	Mixed	NR/NC	NR/NC	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Fletcher 1994[262]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	63	None with previous CS	Mixed	All intact	Mixed	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Fonseca 2008[265]	Vaginal misoprostol (dose < 50 µg) vs. i.v. oxytocin	327	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Frass 2011[268]	No treatment vs. vaginal misoprostol (dose ≥ 50 µg)	113	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Frohn 2002[269]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	109	Some with previous CS	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Frydman 1992[271]	Placebo vs. mifepristone	120	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Gagnon-Gervais 2012[275]	i.v. oxytocin vs. i.v. oxytocin plus amniotomy	143	None with previous CS	Mixed	All intact	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Garry 2000[277]	No treatment vs. caster oil	100	NR/NC	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Garry 2003[278]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose ≥ 50 µg)	186	Some with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Gaudernack 2006[279]	No treatment vs. acupuncture	100	NR/NC	Mixed	All ruptured	NR/NC	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Gaudet 2008[280]	Placebo vs. acupuncture	16	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Gelisen 2005[281]	No treatment vs. vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin vs. mechanical methods – Foley catheter	600	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Getgan 2003[282]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	72	NR/NC	NR/NC	All intact	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Gherman 2001[284]	Vaginal PGE_2 (gel) vs. oral misoprostol tablet (dose ≥ 50 µg)	58	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Giacalone 1998[285]	Placebo vs. mifepristone	83	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Gihwala 1987[288]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	50	None with previous CS	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Gilson 1993[290]	Placebo vs. intracervical PGE_2	79	Some with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Gilson 1996[291]	No treatment vs. mechanical methods – laminaria	240	Some with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Girija 2009[293]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	100	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Girija 2011[294]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	320	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Gittens 1996[295]	No treatment vs. intracervical PGE_2	32	All with previous CS	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Glagoleva 1999[296]	Intracervical PGE_2 vs. mechanical methods – laminaria	53	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Goel 2011[297]	Vaginal misoprostol (dose < 50 µg) vs. buccal/sublingual misoprostol	200	NR/NC	NR/NC	NR/NC	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Goeschen 1989[298]	Intracervical PGE_2 vs. i.v. oxytocin	60	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Golbus 1977[299]	Placebo vs. oral prostaglandins	50	NR/NC	Mixed	All intact	Mixed	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Goldenberg 1996[300]	No treatment vs. membrane sweeping	293	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Gonen 1994[301]	No treatment vs. intracervical PGE_2	50	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Gottschall 1997[303]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	75	None with previous CS	Mixed	All intact	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Gower 1982[304]	Placebo vs. mechanical methods – laminaria	48	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Grant 1992[306]	No treatment vs. i.v. oxytocin	444	None with previous CS	Nulliparous only	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Graves 1985[307]	Placebo vs. vaginal PGE_2 (gel)	80	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Green 1998[308]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	107	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Greer 1989[309]	Vaginal PGE_2 (tablet) vs. extra-amniotic PGE_2	50	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Greer 1990[310]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	24	NR/NC	Multiparous only	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Gregson 2005[312]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose < 50 µg)	268	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Greybush 2001[313]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	136	Some with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Gribel 2011[314]	Vaginal misoprostol (dose < 50 µg) vs. acupuncture	67	NR/NC	Mixed	Mixed	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Griffith-Jones 1990[315]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin	200	NR/NC	Mixed	All ruptured	Mixed	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Grünnberger 1986[316]	Placebo vs. intracervical PGE_2	30	None with previous CS	NR/NC	NR/NC	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Güngördük 2012[319]	Vaginal PGE_2 pessary (slow release) vs. i.v. oxytocin	444	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Gupta 1998[322]	No treatment vs. membrane sweeping	100	None with previous CS	Nulliparous only	All intact	Mixed	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Gupta 2006[321]	Intracervical PGE_2 vs. vaginal misoprostol (dose <50 µg)	200	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Gupta 2010[320]	Vaginal misoprostol (dose <50 µg) vs. vaginal misoprostol (dose ≥50 µg)	148	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Mixed	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Habib 2008[324]	Placebo vs. NO	102	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Haghighi 2006[325]	Vaginal misoprostol (dose <50 µg) vs. i.v. oxytocin	108	None with previous CS	NR/NC	All ruptured	All unfavourable (<6)	All preterm	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Haghighi 2013[326]	Vaginal misoprostol (dose <50 µg) vs. NO	132	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Hales 1994[329]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	100	NR/NC	NR/NC	All intact	All unfavourable (<6)	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Hall 2002[330]	Vaginal misoprostol (dose <50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	107	None with previous CS	Mixed	Mixed	NR/NC	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Hamdan 2009[332]	No treatment vs. membrane sweeping	214	All with previous CS	Multiparous only	All intact	NR/NC	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Hannah 1996[335]	No treatment vs. vaginal PGE_2 (gel)	2520	Some with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Hannah 1996[335]	No treatment vs. i.v. oxytocin	2521	Some with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Harper 2005[338]	No treatment vs. acupuncture	56	None with previous CS	Nulliparous only	NR/NC	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Has 2002[339]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	114	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Haugland 2012[340]	Mechanical methods – Foley catheter vs. mechanical methods – double-balloon or Cook's catheter	178	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hauth 1977[341]	No treatment vs. oral prostaglandins	100	NR/NC	Mixed	All ruptured	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Hay 1995[342]	Intracervical PGE_2 vs. mechanical methods – laminaria	28	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hayashi 1983[343]	Placebo vs. vaginal PGE_2 (gel)	60	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Heden 1991[344]	No treatment vs. i.v. oxytocin plus amniotomy	238	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Heinzl 1980[345]	Placebo vs. intracervical PGE_2	120	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Hemlin 1998[346]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	85	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Henrich 2008[347]	Vaginal PGE_2 (gel) vs. oral misoprostol tablet (dose ≥50 µg)	224	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Herabutya 1988[349]	Intracervical PGE_2 vs. oral prostaglandins	50	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Herabutya 1991[353]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	47	None with previous CS	Nulliparous only	All ruptured	All unfavourable (<6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Herabutya 1992[352]	No treatment vs. intracervical PGE_2	108	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Herabutya 1993[350]	Vaginal PGE_2 (tablet) vs. intracervical PGE_2	48	NR/NC	Nulliparous only	All intact	All unfavourable (<6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Herabutya 1997[351]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	110	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hidar 2000[354]	No treatment vs. intracervical PGE_2	88	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hill 2008[357]	No treatment vs. membrane sweeping	300	NR/NC	Mixed	All intact	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Hjertberg 1996[359]	No treatment vs. i.v. oxytocin	201	None with previous CS	Nulliparous only	All ruptured	Mixed	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hoffman 2001[361]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	96	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Hofmeyr 2001[363]	Vaginal PGE_2 (gel) vs. titrated (low-dose) oral misoprostol solution vs. mechanical methods – Foley catheter	866	None with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Hosli 2008[364]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	107	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
How 2001[366]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose < 50 µg)	219	Some with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Howarth 1996[368]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	72	None with previous CS	Mixed	All intact	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Hudon 1999[370]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	111	None with previous CS	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Husslein 1986[371]	No treatment vs. vaginal PGE_2 (tablet)	345	None with previous CS	Mixed	All intact	All favourable (> 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Hutchon 1980[372]	Placebo vs. intracervical PGE_2	67	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Incerpi 2001[375]	Placebo vs. vaginal misoprostol (dose < 50 µg)	120	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC

continued

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Irion 1998[376]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	247	Some with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Iskander 1978[377]	Extra-amniotic PGE_2 vs. i.v. prostaglandin	40	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Jackson 1994[378]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	158	Some with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Jagani 1982[382]	No treatment vs. i.v. oxytocin vs. amniotomy vs. mechanical methods – Foley catheter vs. mechanical methods – laminaria	50	NR/NC	Mixed	All intact	All favourable (>6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Jagani 1984[381]	No treatment vs. vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	47	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Janakiraman 2011[383]	No treatment vs. membrane sweeping	123	NR/NC	Mixed	All intact	NR/NC	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Jeeva 1982[384]	Vaginal PGE_2 (tablet) vs. mechanical methods – laminaria	20	NR/NC	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Jindal 2011[385]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	103	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Johnson 1985[386]	Vaginal PGE_2 (gel) vs. mechanical methods – laminaria	80	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Jozwiak 2012[387]	Vaginal PGE_2 (gel) vs. mechanical methods – Foley catheter	819	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Jozwiak 2013[389]	Vaginal PGE_2 pessary (slow release) vs. mechanical methods – Foley catheter	226	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Kadanali 1996[392]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	224	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Kadian 2008[393]	Vaginal PGE_2 (gel) vs. NO	400	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kalkat 2008[394]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	120	None with previous CS	Mixed	NR/NC	Mixed	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Kaminski 1994[396]	PGF_2 gel vs. i.v. oxytocin	296	None with previous CS	Mixed	NR/NC	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kandil 2012[397]	Vaginal misoprostol (dose <50 µg) vs. mechanical methods – Foley catheter	100	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kashanian 2006[402]	Vaginal misoprostol (dose <50 µg) vs. mechanical methods – Foley catheter	200	NR/NC	NR/NC	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kashanian 2006[401]	No treatment vs. membrane sweeping	101	NR/NC	Mixed	All intact	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Kashanian 2008[404]	Placebo vs. corticosteroids	122	None with previous CS	Nulliparous only	All intact	All favourable (>6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Katz 1983[410]	No treatment vs. i.v. oxytocin plus amniotomy	156	None with previous CS	Mixed	NR/NC	NR/NC	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kaul 2004[411]	Intracervical PGE_2 vs. membrane sweeping	60	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Keirse 1995[414]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	282	None with previous CS	Mixed	All intact	Mixed	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Kemp 2000[418]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	470	None with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kennedy 1978[419]	Intracervical PGE_2 vs. i.v. oxytocin plus amniotomy	60	NR/NC	Mixed	All intact	All favourable (>6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kennedy 1982[420]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin plus amniotomy	100	NR/NC	Mixed	All intact	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Khazardoost 2011[421]	Vaginal misoprostol (dose <50 μg) vs. oral misoprostol tablet (dose ≥50 μg)	60	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Khoury 2001[423]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose <50 μg) vs. vaginal misoprostol (dose ≥50 μg)	118	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Kidanto 2007[424]	Vaginal misoprostol (dose <50 μg) vs. i.v. oxytocin	142	None with previous CS	Mixed	NR/NC	NR/NC	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Kim 2000[426]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	113	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kipikasa 2005[428]	Oral misoprostol tablet (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	52	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Koc 2013[429]	Vaginal PGE_2 pessary (slow release) vs. i.v. oxytocin	168	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Kolderup 1999[430]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	159	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Komala 2013[431]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	200	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Kovavisarach 1997[432]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	60	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kovavisarach 1998[433]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	80	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Krammer 1995[438]	Intracervical PGE_2 vs. mechanical methods – laminaria	416	Some with previous CS	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Krithika 2008[440]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	100	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Kulshreshtha 2007[441]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	40	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kumar 2001[442]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	200	None with previous CS	Mixed	NR/NC	Mixed	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kunt 2010[443]	Vaginal PGE_2 pessary (slow release) vs. i.v. oxytocin	240	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Kwon 2001[444]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	160	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lackritz 1979[446]	Placebo vs. mechanical methods – laminaria	12	NR/NC	NR/NC	All intact	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ladfors 1996[447]	No treatment vs. i.v. oxytocin	1012	NR/NC	Mixed	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Lamki 1974[449]	i.v. oxytocin vs. i.v. prostaglandin	48	None with previous CS	Mixed	All ruptured	Mixed	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lange 1981[450]	i.v. oxytocin vs. oral prostaglandins	201	None with previous CS	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Lange 1984[452]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	185	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Langenegger 2005[453]	Intracervical PGE_2 vs. oral misoprostol tablet (dose ≥ 50 µg)	191	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Larmon 2002[454]	Placebo vs. intracervical PGE_2 vs. oestrogens	128	NR/NC	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Laube 1986[455]	Placebo vs. intracervical PGE_2	45	None with previous CS	Mixed	All intact	All unfavourable (< 6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Le Roux 2002[456]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	480	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lee 1997[457]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	50	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Legarth 1987[460]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	98	None with previous CS	Mixed	NR/NC	All favourable (> 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Legarth 1988[458]	Intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release)	113	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lelaidier 1994[461]	Placebo vs. mifepristone	32	All with previous CS	Multiparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Lemancewicz 1999[463]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	131	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lemyre 2006[465]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	62	NR/NC	NR/NC	NR/NC	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Levy 2005[467]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	130	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lewis 1983[468]	No treatment vs. vaginal PGE_2 pessary (normal release) vs. mechanical methods – Foley catheter	66	NR/NC	Mixed	All intact	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lien 1998[470]	Placebo vs. intracervical PGE_2	93	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Liggins 1979[471]	Placebo vs. vaginal PGE_2 pessary (normal release)	84	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Lo 1994[480]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin plus amniotomy	200	None with previous CS	Mixed	NR/NC	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Lo 2003[478]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	102	None with previous CS	Nulliparous only	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lo 2006[481]	i.v. oxytocin plus amniotomy vs. buccal/sublingual misoprostol	50	None with previous CS	Nulliparous only	All intact	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lokugamage 2003[482]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	191	None with previous CS	Nulliparous only	Mixed	All unfavourable (< 6)	All > 37 weeks	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lopes 1991[485]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	50	NR/NC	Mixed	Mixed	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Lopez-Farfan 2010[486]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	50	NR/NC	NR/NC	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lughmani 2009[488]	Vaginal misoprostol (dose <50 µg) vs. i.v. oxytocin	48	NR/NC	Multiparous only	NR/NC	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Luther 1980[489]	Placebo vs. oestrogens	100	NR/NC	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lykkesfeldt 1979[490]	i.v. oxytocin plus amniotomy vs. oral prostaglandins	161	NR/NC	NR/NC	NR/NC	All favourable (>6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Lyndrup 1989[493]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	43	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lyndrup 1990[494]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	91	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Lyndrup 1991[496]	Intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release)	125	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Lyndrup 1994[497]	Vaginal PGE_2 pessary (normal release) vs. mechanical methods – Foley catheter	109	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Macer 1984[498]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	85	None with previous CS	Mixed	NR/NC	All favourable (>6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
MacKenzie 1979[501]	Placebo vs. vaginal PGE_2 (gel) vs. PGF_2 gel	48	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
MacKenzie 1981[500]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin plus amniotomy	526	NR/NC	Mixed	NR/NC	Mixed	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
MacLennan 1979[504]	Placebo vs. PGF_2 gel	80	None with previous CS	Mixed	NR/NC	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
MacLennan 1980[507]	Placebo vs. relaxin	60	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
MacLennan 1980[506]	PGF_2 gel vs. i.v. oxytocin	85	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
MacLennan 1980[505]	Placebo vs. PGF_2 gel	90	None with previous CS	Mixed	NR/NC	NR/NC	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
MacLennan 1986[508]	Placebo vs. relaxin	71	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
MacLennan 1989[503]	Vaginal PGE_2 (gel) vs. i.v. oxytocin plus amniotomy	320	Some with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Mixed	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Magann 1995[516]	Intracervical PGE_2 vs. i.v. oxytocin vs. oestrogens	99	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Magann 1998[515]	No treatment vs. membrane sweeping	65	NR/NC	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Magann 1998[511]	No treatment vs. intracervical PGE_2 vs. membrane sweeping	105	NR/NC	Mixed	All intact	All unfavourable (<6)	All post term	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Magann 1999[512]	Vaginal PGE_2 pessary (slow release) vs. membrane sweeping	182	NR/NC	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Magnani 1986[517]	Placebo vs. oestrogens	29	NR/NC	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Magos 1983[518]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	36	None with previous CS	Mixed	All ruptured	Mixed	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Magtibay 1998[520]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	36	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Mahmood 1989[522]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	80	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Mahmood 1992[526]	No treatment vs. vaginal PGE_2 (gel)	220	None with previous CS	Nulliparous only	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Mahmood 1995[523]	No treatment vs. vaginal PGE_2 (gel)	100	None with previous CS	Multiparous only	All ruptured	All unfavourable (<6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Mahmood 1995[527]	Vaginal PGE_2 (gel) vs. amniotomy	260	None with previous CS	Mixed	All intact	All favourable (>6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Majoko 2002[530]	Vaginal PGE_2 pessary (normal release) vs. vaginal misoprostol (dose ≥50 µg) vs. titrated (low-dose) oral	406	None with previous CS	Mixed	NR/NC	NR/NC	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
	misoprostol solution vs. extra-amniotic PGE_2										
Majoko 2002[529]	Vaginal misoprostol (dose ≥ 50 µg) vs. extra-amniotic PGE_2	152	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Malik 1996[532]	Intracervical PGE_2 vs. i.v. oxytocin	118	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Malik 2010[531]	Oral misoprostol tablet (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	100	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Massil 1988[535]	i.v. oxytocin vs. oral prostaglandins	69	None with previous CS	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Mawire 1999[539]	PGF_2 gel vs. mechanical methods – Foley catheter	162	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
McCaul 1997[541]	No treatment vs. vaginal PGE_2 (gel) vs. i.v. oxytocin	91	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
McColgin 1990[542]	No treatment vs. membrane sweeping	180	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
McColgin 1990[544]	No treatment vs. membrane sweeping	99	Some with previous CS	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
McKenna 1999[545]	Placebo vs. intracervical PGE_2	61	Some with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
McKenna 2004[546]	Placebo vs. vaginal misoprostol (dose < 50 µg)	68	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
McLaren 1987[547]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 pessary (slow release)	24	NR/NC	Multiparous only	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
McQueen 1990[549]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin	50	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
McQueen 1992[548]	No treatment vs. i.v. oxytocin	40	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Megalo 2004[551]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	200	None with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Mehrotra 2010[552]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	128	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Mei-Dan 2012[555]	Mechanical methods – Foley catheter vs. mechanical methods – double-balloon or Cook's catheter	188	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Melchior 1989[976]	Vaginal PGE_2 (gel) vs. i.v. oxytocin plus amniotomy	50	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Mercer 1993[557]	No treatment vs. i.v. oxytocin	93	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All preterm	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Mercer 1995[558]	i.v. oxytocin vs. i.v. oxytocin plus amniotomy	209	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Meydanli 2003[559]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	120	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Meyer 2002[560]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	84	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Milchev 2003[562]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	275	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Miller 1991[563]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	40	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Misra 1994[565]	Intracervical PGE_2 vs. i.v. oxytocin	263	NR/NC	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Modarres 2000[567]	No treatment vs. breast stimulation	100	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Modlock 2010[569]	Placebo vs. acupuncture	118	None with previous CS	Mixed	All intact	NR/NC	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Moini 2003[570]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	70	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Moldin 1996[572]	Amniotomy vs. i.v. oxytocin plus amniotomy	196	NR/NC	Mixed	All intact	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Müller 1987[574]	i.v. oxytocin vs. i.v. prostaglandin	100	NR/NC	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Montealegre 1999[575]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	159	None with previous CS	NR/NC	Mixed	All unfavourable (< 6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Moodley 2003[576]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose < 50 µg) vs. titrated (low-dose) oral misoprostol solution	396	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Moraes Filho 2010[577]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	240	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Morales 1986[578]	No treatment vs. i.v. oxytocin	317	Some with previous CS	Mixed	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Morgan Ortiz 2002[579]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	71	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Mosquera 1999[580]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	89	NR/NC	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Mozurkewich 2003[582]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	305	None with previous CS	Nulliparous only	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Murphy 1980[584]	Placebo vs. PGF_2 gel	265	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Murray 1995[585]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	200	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Murthy 2006[587]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	72	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Naef 1998[588]	No treatment vs. i.v. oxytocin	120	NR/NC	Mixed	All ruptured	NR/NC	All preterm	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nager 1987[590]	No treatment vs. intracervical PGE_2	34	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Nagpal 2009[591]	Intracervical PGE_2 vs. oral misoprostol tablet (dose ≥ 50 µg)	61	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Naismith 1973[592]	i.v. oxytocin vs. i.v. prostaglandin	40	None with previous CS	Nulliparous only	All intact	Mixed	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Nanda 2007[593]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	100	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Nassar 2007[595]	Vaginal misoprostol (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	170	None with previous CS	Mixed	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Natale 1994[596]	No treatment vs. i.v. oxytocin	242	Some with previous CS	Mixed	All ruptured	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Neiger 2001[598]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	61	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient.	NR/NC
Neilson 1983[599]	Vaginal PGE_2 (gel) vs. PGF_2 gel	76	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Netta 2002[600]	No treatment vs. membrane sweeping	98	NR/NC	Mixed	All intact	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Newman 1997[601]	No treatment vs. vaginal PGE_2 (gel)	58	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Ngai 1996[605]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	80	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ngai 2000[604]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	80	None with previous CS	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nguyen 2012[606]	i.v. oxytocin vs. buccal/ sublingual misoprostol	1208	NR/NC	NR/NC	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
NICHHD 1994[171]	No treatment vs. placebo vs. intracervical PGE_2	440	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Nicoll 2001[607]	No treatment vs. NO	36	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nigam 2004[609]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	70	None with previous CS	NR/NC	NR/NC	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Nigam 2010[608]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	120	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Nimrod 1984[610]	Placebo vs. intracervical PGE_2	45	NR/NC	NR/NC	All intact	All unfavourable (<6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Niromanesh 2003[611]	Vaginal PGE_2 (tablet) vs. mechanical methods – Foley catheter	89	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Noah 1987[612]	No treatment vs. intracervical PGE_2	816	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Nopdonrattakoon 2003[614]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	106	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Norzilawati 2010[616]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥50 µg)	130	None with previous CS	Nulliparous only	NR/NC	NR/NC	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ntsaluba 1997[617]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	112	None with previous CS	NR/NC	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nunes 1999[618]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥50 µg)	189	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nuutila 1995[620]	Placebo vs. intracervical PGE_2	45	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Nuutila 1996[621]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	110	NR/NC	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Oboro 2005[622]	No treatment vs. vaginal misoprostol (dose <50 µg)	77	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
O'Brien 1995[624]	Placebo vs. vaginal PGE_2 (gel)	100	Some with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Oliveira 2010[625]	Vaginal misoprostol (dose <50 µg) vs. mechanical methods – Foley catheter	160	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Olmo 2001[626]	Vaginal PGE_2 pessary (slow release) vs. i.v. oxytocin	50	None with previous CS	NR/NC	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Omar 2013[627]	No treatment vs. sexual intercourse	1150	None with previous CS	Mixed	All intact	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Ophir 1992[628]	Vaginal PGE_2 (tablet) vs. mechanical methods – Foley catheter	54	NR/NC	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Orhue 1995[629]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin plus amniotomy vs. mechanical methods – Foley catheter	94	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Osman 2006[632]	Vaginal PGE_2 (gel) vs. NO	395	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Ottervanger 1996[636]	No treatment vs. i.v. oxytocin	123	NR/NC	Mixed	All ruptured	NR/NC	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ottinger 1998[637]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	90	Some with previous CS	Mixed	All intact	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Owen 1991[638]	Placebo vs. intracervical PGE_2	100	NR/NC	Mixed	All intact	All unfavourable (<6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Owolabi 2005[640]	Vaginal misoprostol (dose ≥50 µg) vs. mechanical methods – Foley catheter	120	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ozkan 2009[641]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose ≥50 µg)	112	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Paisarntantiwong 2005[642]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	146	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Pandis 2001[643]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	435	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Papageorgiou 1992[644]	Intracervical PGE_2 vs. i.v. oxytocin	165	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Papanikolaou 2004[645]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	163	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Parazzini 1998[646]	Vaginal PGE_2 (gel) vs. i.v. oxytocin plus amniotomy	320	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Parewijck 1986[647]	Intracervical PGE_2 vs. extra-amniotic PGE_2	196	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Parikh 2001[648]	Intracervical PGE_2 vs. i.v. oxytocin	30	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Parisaei 2008[649]	Vaginal PGE_2 (gel) vs. buccal/sublingual misoprostol	57	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Patil 2005[651]	Intracervical PGE_2 vs. oral misoprostol tablet (dose ≥ 50 µg)	190	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Paul 1992[652]	i.v. oxytocin vs. oral prostaglandins	35	NR/NC	Mixed	Mixed	Mixed	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Paungmora 2004[654]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	151	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Peccerillo 1995[656]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	67	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Pedrazzoli 1997[658]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	247	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Peedicayil 1998[659]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	60	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Pennell 2009[660]	Vaginal PGE_2 (gel) vs. mechanical methods – Foley catheter vs. mechanical methods – double-balloon or Cook's catheter	330	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Perche 2009[662]	Vaginal misoprostol (dose ≥ 50 µg) vs. NO	60	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Perez Picanol 1990[664]	No treatment vs. intracervical PGE_2	71	NR/NC	NR/NC	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Perry 2004[667]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	63	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Perryman 1992[669]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (normal release)	90	NR/NC	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Pi 1999[675]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	60	None with previous CS	NR/NC	Mixed	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Pinto 1967[30]	Placebo vs. oestrogens	100	NR/NC	Mixed	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Pollnow 1996[676]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	200	NR/NC	Mixed	NR/NC	Mixed	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Pongsatha 2005[677]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	166	None with previous CS	NR/NC	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Poornima 2011[678]	No treatment vs. vaginal PGE_2 (gel)	100	NR/NC	Mixed	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Poulsen 1991[679]	Intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release)	226	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Prager 2008[681]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	588	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Prasad 1989[684]	Placebo vs. vaginal PGE_2 pessary (slow release)	69	None with previous CS	Nulliparous only	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Prins 1983[685]	Placebo vs. vaginal PGE_2 (gel)	30	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Puertas 1997[687]	No treatment vs. intracervical PGE_2 vs. i.v. oxytocin	120	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Puga 2001[688]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	270	None with previous CS	NR/NC	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Pulle 1986[689]	Intracervical PGE_2 vs. i.v. oxytocin	50	None with previous CS	Mixed	NR/NC	NR/NC	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Putnam 2011[690]	No treatment vs. membrane sweeping	350	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Quinn 1981[691]	Placebo vs. extra-amniotic PGE_2	25	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	NR/NC	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Rabl 2001[692]	No treatment vs. acupuncture	45	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Rabl 2002[693]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 pessary (slow release)	200	Some with previous CS	Mixed	Mixed	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Rahman 2013[695]	Vaginal misoprostol (dose <50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	220	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias.	Inpatient.	NR/NC
Rameez 2007[696]	Placebo vs. NO	156	NR/NC	Mixed	NR/NC	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ramsey 2003[699]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2 vs. vaginal misoprostol (dose ≥50 µg)	111	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rath 1999[703]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	468	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rath 1999[703]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	328	None with previous CS	Mixed	Mixed	All favourable (>6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Rath 2007[701]	No treatment vs. oral misoprostol tablet (dose ≥ 50 µg)	300	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ratnam 1974[704]	i.v. oxytocin vs. i.v. oxytocin plus amniotomy vs. oral prostaglandins	154	NR/NC	NR/NC	All intact	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Ray 1992[705]	Placebo vs. vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	143	NR/NC	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rayburn 1988[707]	Placebo vs. vaginal PGE_2 (gel)	118	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Rayburn 1992[710]	Placebo vs. vaginal PGE_2 pessary (slow release)	215	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Rayburn 1999[709]	No treatment vs. intracervical PGE_2	294	All with previous CS	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	Some or all funding from pharmaceutical industry
Richardson 1991[711]	Placebo vs. intracervical PGE_2	48	NR/NC	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rix 1996[713]	Vaginal PGE_2 (tablet) vs. intracervical PGE_2	208	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rizvi 2007[714]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	59	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Roach 1997[715]	No treatment vs. vaginal PGE_2 pessary (normal release)	201	NR/NC	Mixed	NR/NC	NR/NC	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Roberts 1986[716]	No treatment vs. vaginal PGE_2 (gel) vs. i.v. oxytocin vs. mechanical methods – laminaria	104	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Romero-Gutiérrez 2011[720]	Vaginal PGE_2 (gel) vs. NO	66	None with previous CS	NR/NC	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC.
Rouben 1993[721]	Vaginal PGE_2 (gel) vs. mechanical methods – Foley catheter	112	NR/NC	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Roudsari 2011[722]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	108	None with previous CS	NR/NC	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Rouzi 2014[725]	Vaginal PGE_2 pessary (slow release) vs. titrated (low-dose) oral misoprostol solution	160	None with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Rowlands 2001[726]	Vaginal PGE_2 pessary (normal release) vs. vaginal misoprostol (dose ≥ 50 µg)	125	None with previous CS	Nulliparous only	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Rozenberg 2001[727]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	369	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Rozenberg 2004[728]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose ≥ 50 µg)	140	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Roztocil 1998[730]	Intracervical PGE_2 vs. oestrogens vs. mechanical methods – laminaria	247	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Roztocil 2013[729]	Vaginal PGE_2 (gel) vs. oestrogens vs. mechanical methods – laminaria	247	NR/NC	NR/NC	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Russell 2007[731]	Vaginal misoprostol (dose < 50 µg) vs. buccal/sublingual misoprostol	738	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Rydhström 1991[733]	No treatment vs. i.v. oxytocin	277	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Rymer 1992[734]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin	106	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	NR/NC	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Saeed 2011[735]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	200	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Saggaf 2001[736]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥ 50 µg)	57	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Sahraoui 2005[737]	No treatment vs. intracervical PGE_2	150	NR/NC	Mixed	All intact	All unfavourable (< 6)	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Sahu 2004[738]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	50	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Salamalekis 2000[739]	No treatment vs. i.v. oxytocin vs. membrane sweeping	104	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Saleem 2006[740]	Vaginal PGE_2 pessary (normal release) vs. vaginal misoprostol (dose ≥ 50 µg) vs. mechanical methods – Foley catheter	226	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Saleh 1975[741]	Amniotomy vs. i.v. oxytocin plus amniotomy	100	None with previous CS	Nulliparous only	All intact	All favourable (>6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Salim 2011[742]	Mechanical methods – Foley catheter vs. mechanical methods – double-balloon or Cook's catheter	293	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Salmon 1986[743]	No treatment vs. breast stimulation	100	None with previous CS	Nulliparous only	NR/NC	NR/NC	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Sanchez-Ramos 1992[748]	Vaginal PGE_2 (gel) vs. mechanical methods – laminaria	74	None with previous CS	Mixed	All intact	All unfavourable (<6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sanchez-Ramos 1997[745]	Vaginal misoprostol (dose ≥50 µg) vs. i.v. oxytocin	141	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Sanchez-Ramos 1998[749]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose ≥50 µg)	223	None with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Sande 1983[750]	No treatment vs. i.v. oxytocin	166	NR/NC	NR/NC	NR/NC	Mixed	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Sawai 1991[754]	Placebo vs. vaginal PGE_2 (gel)	50	None with previous CS	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Sawai 1994[752]	Placebo vs. vaginal PGE_2 pessary (normal release)	80	None with previous CS	Mixed	All intact	Mixed	All post term	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Saxena 2011[755]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	210	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Schmitz 2014[756]	Placebo vs. NO	1363	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Schneider 2004[757]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	296	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sciscione 1999[759]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	149	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Sciscione 2001[760]	Vaginal misoprostol (dose ≥ 50 µg) vs. mechanical methods – Foley catheter	111	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Secher 1981[762]	i.v. oxytocin vs. oral prostaglandins	244	NR/NC	Mixed	All intact	NR/NC	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Seeras 1995[763]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	68	None with previous CS	Mixed	All intact	NR/NC	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Selmer-Olsen 2007[765]	No treatment vs. acupuncture	101	None with previous CS	Nulliparous only	All ruptured	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Selo-Ojeme 2009[767]	Amniotomy vs. i.v. oxytocin plus amniotomy	123	None with previous CS	Nulliparous only	All intact	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Shakya 2010[768]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	66	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sharma 2005[769]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	65	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Shechter-Maor 2013[770]	Vaginal PGE_2 pessary (slow release) vs. mechanical methods – double-balloon or Cook's catheter	50	NR/NC	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sheela 2007[771]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	150	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sheikher 2009[772]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg) vs. mechanical methods – Foley catheter	90	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Shepherd 1976[773]	Placebo vs. extra-amniotic PGE_2	30	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Sherman 2001[774]	Placebo vs. extra-amniotic PGE_2	116	None with previous CS	Mixed	All intact	All unfavourable (< 6)	NR/NC	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shetty 2001[778]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	245	None with previous CS	Mixed	NR/NC	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shetty 2002[780]	Oral misoprostol tablet (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	100	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Shetty 2002[784]	Oral misoprostol tablet (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	249	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shetty 2002[974]	No treatment vs. oral misoprostol tablet (dose ≥ 50 µg)	61	None with previous CS	Mixed	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shetty 2003[781]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	101	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shetty 2004[782]	Vaginal PGE_2 (tablet) vs. oral misoprostol tablet (dose ≥ 50 µg)	200	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Shoaib 1994[785]	No treatment vs. vaginal PGE_2 (tablet)	200	None with previous CS	Nulliparous only	All ruptured	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sifakis 2007[786]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥ 50 µg)	415	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Silva-Cruz 1988[787]	Vaginal PGE_2 (gel) vs. i.v. oxytocin	50	NR/NC	Mixed	All intact	Mixed	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sitthiwattanawong 1999[789]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	131	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Smith 1990[794]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (normal release)	69	NR/NC	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Smith 1994[795]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	121	NR/NC	NR/NC	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Smith 2008[792]	Placebo vs. acupuncture	360	NR/NC	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Souza 2013[796]	Vaginal misoprostol (dose < 50 µg) vs. titrated (low-dose) oral misoprostol solution	200	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Spallicci 2007[797]	Placebo vs. hyaluronidase	168	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Spellacy 1973[801]	i.v. oxytocin vs. i.v. prostaglandin	222	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Sperling 1993[802]	No treatment vs. i.v. oxytocin	124	NR/NC	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Srisomboon 1996[804]	Placebo vs. vaginal misoprostol (dose ≥ 50 µg)	62	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Srisomboon 1998[803]	Vaginal misoprostol (dose < 50 µg) vs. vaginal misoprostol (dose ≥ 50 µg)	50	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
St Onge 1995[805]	Intracervical PGE_2 vs. mechanical methods – Foley catheter	62	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Stampe Sørensen 1992[806]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 pessary (normal release)	267	NR/NC	Mixed	NR/NC	Mixed	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Stempel 1997[809]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	83	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Stenlund 1999[811]	Placebo vs. mifepristone	36	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	Some or all funding from pharmaceutical industry
Stewart 1983[815]	Vaginal PGE_2 (tablet) vs. extra-amniotic PGE_2	62	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Steytler 1995[816]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose ≥50 µg)	30	None with previous CS	NR/NC	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Stitely 2000[817]	Placebo vs. vaginal misoprostol (dose <50 µg)	60	None with previous CS	Mixed	All intact	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Strobelt 2006[818]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	107	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Su 1996[820]	No treatment vs. mifepristone	124	None with previous CS	Nulliparous only	NR/NC	NR/NC	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Sultana 2006[821]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	100	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Surbek 1997[822]	Vaginal PGE_2 (tablet) vs. vaginal misoprostol (dose ≥50 µg)	100	None with previous CS	Mixed	Mixed	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Surita 2005[826]	Hyaluronidase vs. mechanical methods – Foley catheter	140	Some with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Suvobrata 2011[827]	i.v. oxytocin vs. buccal/ sublingual misoprostol	95	NR/NC	Nulliparous only	NR/NC	All favourable (>6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Suzuki 2000[828]	No treatment vs. oral prostaglandins	36	None with previous CS	Mixed	All intact	NR/NC	All > 37 weeks	All multiple	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Tabasi 2007[829]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	110	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tabor 1995[830]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	127	NR/NC	NR/NC	NR/NC	All unfavourable (< 6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tabowei 2003[831]	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	121	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Taechakraichana 1996[832]	Intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release)	19	None with previous CS	Mixed	All intact	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Taher 2011[834]	Vaginal PGE_2 (tablet) vs. vaginal PGE_2 (gel)	165	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	All > 37 weeks	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Tamsen 1990[836]	No treatment vs. i.v. oxytocin	93	NR/NC	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tan 2007[838]	No treatment vs. sexual intercourse	210	None with previous CS	Mixed	All intact	NR/NC	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Tan 2010[840]	Vaginal PGE_2 pessary (normal release) vs. vaginal misoprostol (dose < 50 µg)	169	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tan 2013[837]	Amniotomy vs. i.v. oxytocin plus amniotomy	206	None with previous CS	Multiparous only	All intact	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Tannirandorn 1999[841]	No treatment vs. membrane sweeping	80	None with previous CS	Mixed	All intact	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Taylor 1993[842]	Vaginal PGE_2 pessary (normal release) vs. i.v. oxytocin plus amniotomy	42	All with previous CS	Multiparous only	Mixed	Mixed	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ten Eikelder 2013[843] (Jozwiak 2014[391])	Vaginal misoprostol (dose < 50 µg) vs. mechanical methods – Foley catheter	120	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Tessier 1997[844]	Vaginal PGE_2 (gel) vs. oral misoprostol tablet (dose ≥ 50 µg)	267	Some with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Tey 1995[846]	No treatment vs. intracervical PGE_2	40	NR/NC	NR/NC	NR/NC	Mixed	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Thaisomboon 2012[847]	Oral misoprostol tablet (dose ≥ 50 µg) vs. titrated (low-dose) oral misoprostol solution	64	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Thakur 2005[848]	Placebo vs. mifepristone	50	None with previous CS	Nulliparous only	NR/NC	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Thavarahsah 1990[849]	Vaginal PGE_2 (tablet) vs. intracervical PGE_2	200	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Thiery 1984[851]	Placebo vs. vaginal PGE_2 (tablet) vs. intracervical PGE_2	121	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Thomas 1986[853]	PGF_2 gel vs. mechanical methods – Foley catheter	57	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	NR/NC	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Thomas 2000[854]	Placebo vs. vaginal misoprostol (dose ≥ 50 µg)	52	NR/NC	Mixed	All ruptured	NR/NC	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tomlinson 2000[855]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	69	None with previous CS	Mixed	All intact	Mixed	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Toppozada 1997[857]	Vaginal misoprostol (dose ≥ 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	40	NR/NC	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Trabelsi 2012[858]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	300	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Tremeau 1992[859]	No treatment vs. placebo vs. acupuncture	98	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	One or both arms outpatient	NR/NC
Triglia 2010[860]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	130	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Trofatter 1985[861]	Placebo vs. intracervical PGE_2	59	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Trofatter 1993[863]	No treatment vs. intracervical PGE_2	488	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Tromans 1981[31]	Vaginal PGE_2 (gel) vs. oestrogens	60	NR/NC	Mixed	NR/NC	All favourable (> 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Troostwijk 1992[864]	Placebo vs. intracervical PGE_2	139	None with previous CS	Mixed	All intact	All unfavourable (<6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Tylleskar 1979[866]	No treatment vs. i.v. oxytocin plus amniotomy	84	NR/NC	Mixed	NR/NC	Mixed	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Ugwu 2013[868]	Vaginal misoprostol (dose <50 µg) vs. mechanical methods – Foley catheter	90	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Ugwu 2014[867]	No treatment vs. membrane sweeping	123	NR/NC	Mixed	All intact	Mixed	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Ulmsten 1979[870]	Intracervical PGE_2 vs. i.v. oxytocin	100	NR/NC	Nulliparous only	All intact	Mixed	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Ulmsten 1982[871]	Placebo vs. intracervical PGE_2	50	None with previous CS	Nulliparous only	NR/NC	NR/NC	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ulmsten 1985[869]	Placebo vs. intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release)	58	NR/NC	Nulliparous only	NR/NC	All unfavourable (<6)	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Uludag 2005[872]	Vaginal misoprostol (dose ≥50 µg) vs. oral misoprostol tablet (dose ≥50 µg)	99	None with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Vakhariya 1972[874]	i.v. oxytocin vs. i.v. prostaglandin	150	None with previous CS	Multiparous only	All intact	Mixed	Mixed (includes preterm)	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Valadan 2005[875]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin	91	None with previous CS	NR/NC	All intact	All unfavourable (<6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Valentine 1977[876]	No treatment vs. i.v. oxytocin vs. oral prostaglandins	60	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Van der Walt 1989[878]	No treatment vs. vaginal PGE_2 (tablet) vs. i.v. oxytocin	60	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Van Gemund 2004[879]	Vaginal PGE_2 (gel) vs. vaginal misoprostol (dose <50 µg)	681	Some with previous CS	Mixed	Mixed	All unfavourable (<6)	Mixed (includes preterm)	Mixed	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Varaklis 1995[880]	Intracervical PGE_2 vs. vaginal misoprostol (dose <50 µg)	69	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	All >37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Vernant 1993[881]	Intracervical PGE_2 vs. i.v. oxytocin	80	NR/NC	Mixed	All ruptured	All unfavourable (<6)	Mixed (includes preterm)	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Wagner 1989[882]	No treatment vs. i.v. oxytocin	182	None with previous CS	Mixed	All ruptured	All unfavourable (<6)	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Wang 1998[883]	Vaginal misoprostol (dose <50 µg) vs. vaginal misoprostol (dose ≥50 µg)	48	NR/NC	NR/NC	All intact	NR/NC	All >37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	NR/NC	NR/NC
Wieland 1999[885]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	66	None with previous CS	Mixed	All intact	All unfavourable (<6)	All >37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wielgos 2007[886]	Vaginal PGE_2 pessary (slow release) vs. intracervical PGE_2	128	NR/NC	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Wilson 1978[889]	Vaginal PGE_2 (tablet) vs. i.v. oxytocin vs. extra-amniotic PGE_2 vs. oral prostaglandins	60	NR/NC	Nulliparous only	NR/NC	All unfavourable (<6)	NR/NC	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Wing 1995[900]	Intracervical PGE_2 vs. vaginal misoprostol (dose ≥ 50 µg)	135	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 1995[906]	Intracervical PGE_2 vs. vaginal misoprostol (dose < 50 µg)	275	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 1997[903]	Vaginal PGE_2 pessary (slow release) vs. vaginal misoprostol (dose < 50 µg)	197	None with previous CS	NR/NC	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 1998[905]	Vaginal misoprostol (dose < 50 µg) vs. i.v. oxytocin	197	None with previous CS	NR/NC	All ruptured	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 1999[899]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	220	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 2000[902]	Vaginal misoprostol (dose < 50 µg) vs. oral misoprostol tablet (dose ≥ 50 µg)	234	None with previous CS	Mixed	Mixed	Mixed	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 2000[895]	Placebo vs. mifepristone	180	None with previous CS	Mixed	All intact	All unfavourable (< 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Wing 2004[893]	Oral misoprostol tablet (dose ≥ 50 µg) vs. i.v. oxytocin	198	None with previous CS	Mixed	NR/NC	All favourable (> 6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Wing 2005[897]	i.v. oxytocin vs. mifepristone	65	None with previous CS	Mixed	All ruptured	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Wing 2008[896]	Vaginal PGE_2 pessary (slow release) vs. sustained-release misoprostol insert	1307	None with previous CS	Mixed	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Wing 2013[892]	Vaginal PGE_2 pessary (slow release) vs. sustained-release misoprostol insert	1358	None with previous CS	Mixed	NR/NC	All unfavourable (<6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Wiriyasirivaj 1996[910]	No treatment vs. membrane sweeping	120	None with previous CS	Mixed	All intact	NR/NC	All > 37 weeks	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Witter 1987[915]	No treatment vs. i.v. oxytocin	200	None with previous CS	Mixed	NR/NC	NR/NC	All post term	NR/NC	Report describes allocation concealment. Low risk of bias	NR/NC	NR/NC
Witter 1992[914]	Placebo vs. vaginal PGE_2 pessary (slow release)	72	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Witter 1996[912]	Placebo vs. vaginal PGE_2 pessary (slow release)	193	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Wong 2002[916]	No treatment vs. membrane sweeping	120	None with previous CS	Mixed	All intact	Mixed	All post term	NR/NC	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest
Yang 1994[917]	PGF_2 gel vs. i.v. oxytocin	55	NR/NC	NR/NC	NR/NC	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Yazdani 2012[918]	Placebo vs. oral misoprostol tablet (dose ≥ 50 µg)	99	NR/NC	NR/NC	All ruptured	NR/NC	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Yazdizadeh 2013[919]	Placebo vs. NO	80	None with previous CS	Nulliparous only	NR/NC	All unfavourable (<6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Yildirim 2010[921]	No treatment vs. membrane sweeping	346	None with previous CS	Mixed	All intact	All unfavourable (<6)	All > 37 weeks	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	No pharmaceutical industry funding/ no conflicts of interest

continued

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TABLE 38 Characteristics of included studies (*continued*)

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Yin 2006[922]	Vaginal misoprostol (dose < 50 µg) vs. i.v. oxytocin	71	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All post term	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Yuen 1996[924]	Intracervical PGE_2 vs. vaginal PGE_2 pessary (normal release) vs. mechanical methods – double-balloon or Cook's catheter	119	Some with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Zahradnik 1987[926]	Intracervical PGE_2 vs. i.v. oxytocin	100	None with previous CS	Mixed	NR/NC	All unfavourable (< 6)	All > 37 weeks	NR/NC	No description of allocation concealment or unclear description. High risk of bias	Inpatient	Some or all funding from pharmaceutical industry
Zahran 2009[927]	Vaginal misoprostol (dose ≥ 50 µg) vs. buccal/sublingual misoprostol	480	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Zanconato 2011[928]	Vaginal PGE_2 (gel) vs. vaginal PGE_2 pessary (slow release)	52	None with previous CS	Nulliparous only	All intact	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	No pharmaceutical industry funding/ no conflicts of interest
Zanini 1990[929]	Vaginal PGE_2 (gel) vs. intracervical PGE_2	100	None with previous CS	Mixed	All intact	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Zeteroğlu 2004[933]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	104	None with previous CS	Multiparous only	NR/NC	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Zeteroğlu 2006[931]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	97	None with previous CS	Mixed	All ruptured	NR/NC	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC

Study identifier	Comparison	Sample size	Previous CS	Parity	Membranes	Cervix	Gestational age	Number of fetuses	Risk of bias	Setting	Financial disclosure
Zeteroğlu 2006[932]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	100	None with previous CS	Multiparous only	Mixed	All unfavourable (< 6)	All > 37 weeks	Singleton	No description of allocation concealment or unclear description. High risk of bias	Inpatient	NR/NC
Zeteroğlu 2006[934]	Vaginal misoprostol (dose ≥ 50 µg) vs. i.v. oxytocin	64	None with previous CS	Multiparous only	Mixed	All unfavourable (< 6)	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC
Ziaei 2003[935]	No treatment vs. corticosteroids	65	None with previous CS	Mixed	All intact	All favourable (> 6)	All post term	Singleton	Report describes allocation concealment. Low risk of bias	One or both arms outpatient	NR/NC
Zvandasara 2008[936]	Vaginal misoprostol (dose ≥ 50 µg) vs. titrated (low-dose) oral misoprostol solution	134	None with previous CS	Mixed	Mixed	NR/NC	Mixed (includes preterm)	Singleton	Report describes allocation concealment. Low risk of bias	Inpatient	NR/NC

NC, not clear; NR, not reported.

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Appendix 7 Characteristics of study participants

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TABLE 39 Vaginal delivery (%) not achieved within 24 hours of induction

	Previous CS				Parity				Membranes				Cervix				Gestation				
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav	NR	All post term	All > 37 weeks	Mixed	All preterm
1. No treatment	0	100	0	0	0	0	50	50	0	25	0	75	50	0	0	50	25	0	25	50	0
2. Placebo	20	80	0	0	20	40	40	0	60	20	0	20	30	0	0	70	0	30	70	0	0
3. Vaginal PGE_2 tablet	9	82	9	0	0	27	73	0	36	36	27	0	0	9	27	64	0	18	73	9	0
4. Vaginal PGE_2 gel	4	83	13	0	4	17	75	4	13	33	46	8	0	4	13	83	8	4	54	33	0
5. Vaginal PGE_2 pessary (slow release)	6	78	17	0	11	17	72	0	17	50	28	6	0	0	22	78	0	6	44	50	0
6. Intracervical PGE_2	15	74	10	0	8	10	82	0	31	51	15	3	5	0	15	79	3	10	49	38	0
7. Vaginal PGE_2 pessary (normal release)	43	43	14	0	0	14	86	0	71	29	0	0	0	0	0	100	14	0	43	43	0
8. Vaginal misoprostol < 50 µg	3	90	8	0	10	0	90	0	13	44	36	8	5	0	13	82	0	3	62	36	0
9. Vaginal misoprostol ≥ 50 µg	9	80	11	0	2	4	93	0	13	56	29	2	0	0	18	82	0	4	62	33	0
10. Oral misoprostol tablet < 50 µg	0	67	33	0	0	0	100	0	0	0	67	33	0	0	0	100	0	0	67	33	0
11. Oral misoprostol tablet ≥ 50 µg	0	97	3	0	3	3	90	3	16	39	19	26	13	3	19	65	0	3	65	32	0
12. Titrated (low) oral misoprostol solution	10	90	0	0	10	0	90	0	0	20	60	20	10	10	10	70	0	10	40	50	0
13. Sustained-release misoprostol vaginal pessary	0	100	0	0	0	0	100	0	50	0	50	0	0	0	0	100	0	0	0	100	0
14. i.v. oxytocin	24	71	6	0	18	18	65	0	24	12	12	53	18	18	6	59	0	0	76	24	0
15. i.v. oxytocin plus amniotomy	0	100	0	0	0	50	50	0	50	50	0	0	0	50	50	0	0	0	100	0	0
16. NO	33	67	0	0	0	67	33	0	67	33	0	0	0	0	0	100	0	0	100	0	0
17. Mifepristone	0	100	0	0	0	0	100	0	0	50	0	50	0	0	0	100	0	50	0	50	0
18. Mechanical methods – Foley catheter	10	70	20	0	10	10	80	0	0	80	20	0	0	0	10	90	0	0	60	40	0
19. Mechanical methods – double-balloon or Cook's catheter	0	75	25	0	0	25	75	0	0	100	0	0	0	0	0	100	0	0	25	75	0
20. Extra-amniotic PGE_2	0	100	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0
21. Buccal/sublingual misoprostol	25	67	8	0	25	17	58	0	50	25	25	0	8	17	25	50	0	0	92	8	0

Fav, favourable; Multi, multiple; NR, not reported; Nulli, nulliparous; Unfav, unfavourable.

TABLE 39 Vaginal delivery (%) not achieved within 24 hours of induction (continued)

	Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
1. No treatment	0	100	0	0	50	50	0	100	0	75	25	0
2. Placebo	30	70	0	0	10	90	0	80	20	70	10	20
3. Vaginal PGE_2 tablet	0	100	0	0	45	55	9	91	0	82	9	9
4. Vaginal PGE_2 gel	13	79	8	0	79	21	4	96	0	71	25	4
5. Vaginal PGE_2 pessary (slow release)	0	94	6	0	72	28	0	100	0	50	33	17
6. Intracervical PGE_2	13	87	0	0	54	46	62	36	3	90	10	0
7. Vaginal PGE_2 pessary (normal release)	29	71	0	0	57	43	0	100	0	86	14	0
8. Vaginal misoprostol $< 50\,\mu g$	38	59	3	0	69	31	0	100	0	82	13	5
9. Vaginal misoprostol $\geq 50\,\mu g$	2	96	2	0	67	33	0	100	0	78	20	2
10. Oral misoprostol tablet $< 50\,\mu g$	0	100	0	0	0	100	0	100	0	100	0	0
11. Oral misoprostol tablet $\geq 50\,\mu g$	3	97	0	0	74	26	0	100	0	87	13	0
12. Titrated (low) oral misoprostol solution	0	100	0	0	90	10	0	100	0	40	60	0
13. Sustained-release misoprostol vaginal pessary	0	100	0	0	50	50	0	100	0	0	50	50
14. i.v. oxytocin	18	82	0	0	59	41	0	100	0	65	29	6
15. i.v. oxytocin plus amniotomy	0	100	0	0	50	50	0	100	0	50	0	50
16. NO	0	100	0	0	67	33	0	67	33	33	67	0
17. Mifepristone	0	100	0	0	100	0	0	100	0	0	0	100
18. Mechanical methods – Foley catheter	0	100	0	0	90	10	0	100	0	70	20	10
19. Mechanical methods – double-balloon or Cook's catheter	0	100	0	0	100	0	0	100	0	25	50	25
20. Extra-amniotic PGE_2	0	100	0	0	100	0	0	100	0	100	0	0
21. Buccal/sublingual misoprostol	33	67	0	0	75	25	0	100	0	75	17	8

NC, not clear; NR, not reported.

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TABLE 40 Caearean section (%)

	Previous CS				Parity				Membranes				Cervix				Gestation				
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav	NR	All post term	All > 37 weeks	Mixed	All preterm
1. No treatment	38	53	6	3	7	13	77	3	12	52	0	36	27	4	26	42	2	25	56	16	2
2. Placebo	36	57	6	1	9	16	74	1	29	55	4	12	11	3	15	72	15	24	41	20	0
3. PGE_2 tablet	30	68	2	0	4	28	64	4	36	46	8	10	2	6	20	72	10	10	64	16	0
4. PGE_2 gel	31	60	9	0	10	13	76	1	20	47	19	13	4	4	19	73	8	7	58	27	0
5. PGE_2 pessary (slow release)	28	65	7	0	12	12	74	2	16	58	16	9	0	0	19	81	5	7	58	30	0
6. PGF_2 gel	36	64	0	0	9	9	82	0	64	18	0	18	36	0	36	27	18	0	55	27	0
7. PGE_2 intracervical	34	57	7	1	12	7	81	0	28	54	9	9	3	1	9	87	13	7	50	29	0
8. PGE_2 pessary (normal release)	41	54	3	3	3	14	81	3	43	38	5	14	5	5	22	68	16	8	41	35	0
9. Misoprostol < 50 µg vaginal	9	86	5	0	13	3	85	0	14	50	29	8	9	1	14	76	5	10	58	26	1
10. Misoprostol > 50 µg vaginal	13	80	7	0	10	7	80	3	23	48	22	7	12	2	11	75	11	5	54	30	0
11. Misoprostol < 50 µg oral	0	75	25	0	0	0	100	0	0	25	50	25	0	0	0	100	0	25	50	25	0
12. Misoprostol > 50 µg oral	5	89	6	0	9	11	78	2	20	32	18	29	20	2	17	62	6	5	58	29	0
13. Misoprostol titrated	8	92	0	0	8	0	92	0	8	17	58	17	25	0	17	58	0	8	42	50	0
14. Misoprostol pessary (slow release)	0	100	0	0	0	0	100	0	50	0	50	0	0	0	0	100	0	0	0	100	0
15. Oxytocin i.v.	32	64	4	0	11	13	73	4	18	31	7	44	22	7	21	50	11	8	49	30	2
16. Amniotomy	43	57	0	0	0	29	57	14	0	100	0	0	0	86	14	0	14	0	71	14	0
17. Oxytocin i.v. + amniotomy	42	50	4	4	8	17	67	8	29	67	4	0	13	42	42	4	8	17	71	4	0
18. NO	18	82	0	0	6	47	47	0	35	65	0	0	0	0	0	100	6	41	53	0	0
19. Mifepristone	0	67	22	11	0	22	67	11	22	56	11	11	11	0	0	89	0	44	44	11	0
20. Oestrogens	75	25	0	0	13	0	88	0	63	38	0	0	0	13	13	75	0	0	50	50	0
21. Corticosteroids	0	100	0	0	0	50	50	0	0	100	0	0	0	100	0	0	0	50	50	0	0
22. Relaxin	0	100	0	0	0	0	100	0	25	75	0	0	0	25	25	50	25	25	50	0	0

	Previous CS				Parity				Membranes				Cervix				Gestation				
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav	NR	All post term	All > 37 weeks	Mixed	All preterm
23. Hyaluronidase	0	0	100	0	0	0	100	0	0	100	0	0	0	0	0	100	0	0	100	0	0
24. Foley catheter	23	66	11	0	11	13	74	2	9	81	9	2	2	2	2	94	4	6	60	30	0
25. Laminaria	44	44	13	0	19	13	69	0	63	38	0	0	6	6	6	81	31	0	38	31	0
26. Ballon catheter	25	63	13	0	25	13	63	0	13	88	0	0	0	0	0	100	0	0	50	50	0
27. Membrane sweeping	61	32	4	4	0	11	86	4	4	96	0	0	14	0	61	21	0	32	64	4	0
28. PGE_2 extra-amniotic	27	73	0	0	0	45	55	0	55	36	9	0	9	0	9	82	27	0	64	9	0
29. Prostaglandins i.v.	29	71	0	0	14	14	57	14	0	57	0	43	0	0	71	29	0	14	43	43	0
30. Sexual intercourse	0	100	0	0	0	0	100	0	0	100	0	0	100	0	0	0	0	0	50	50	0
31. Acupuncture	27	73	0	0	0	36	64	0	9	64	9	18	27	0	18	55	0	64	27	9	0
32. Breast stimulation	100	0	0	0	0	0	100	0	100	0	0	0	0	0	50	50	50	50	0	0	0
33. Homeopathy	100	0	0	0	100	0	0	0	0	0	0	100	0	0	0	100	0	0	100	0	0
34. Castor oil	100	0	0	0	0	0	100	0	0	100	0	0	0	0	0	100	0	100	0	0	0
35. Prostaglandins oral	64	36	0	0	14	14	71	0	29	43	7	21	29	7	36	29	21	0	64	14	0
36. Misoprostol buccal	22	72	6	0	22	17	61	0	39	22	22	17	11	11	22	56	6	0	78	17	0

Fav, favourable; Multi, multiple; NR, not reported; Nulli, nulliparous; Unfav, unfavourable.

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TABLE 40 Caesarean section (continued)

	Singleton/multiple pregnancy			Risk level		Setting			Funding		
Treatment	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
1. No treatment	64	2	1	46	54	4	52	44	71	23	7
2. Placebo	66	1	0	73	27	3	68	28	65	15	20
3. PGE_2 tablet	70	2	0	34	66	0	96	4	84	12	4
4. PGE_2 gel	65	7	0	62	38	1	93	6	69	22	9
5. PGE_2 pessary (slow release)	84	2	0	56	44	0	98	2	58	30	12
6. PGF_2 gel	82	0	0	55	45	0	100	0	82	0	18
7. PGE_2 intracervical	66	1	0	44	56	0	90	10	81	12	7
8. PGE_2 pessary (normal release)	65	3	0	49	51	0	92	8	86	8	5
9. Misoprostol < 50 µg vaginal	89	4	0	63	38	1	93	6	78	19	4
10. Misoprostol > 50 µg vaginal	89	2	0	53	47	1	98	1	84	14	2
11. Misoprostol < 50 µg oral	100	0	0	75	25	0	75	25	75	25	0
12. Misoprostol > 50 µg oral	92	2	0	60	40	0	97	3	85	14	2
13. Misoprostol titrated	100	0	0	92	8	0	100	0	50	50	0
14. Misoprostol pessary (slow release)	100	0	0	50	50	0	100	0	0	50	50
15. Oxytocin i.v.	72	3	0	42	58	2	97	2	71	19	10
16. Amniotomy	86	0	0	57	43	0	100	0	57	43	0
17. Oxytocin i.v. + amniotomy	63	4	0	38	63	4	96	0	50	21	29
18. NO	100	0	0	71	29	0	65	35	65	35	0
19. Mifepristone	89	11	0	67	33	22	44	33	67	0	33
20. Oestrogens	75	0	0	25	75	0	88	13	75	25	0
21. Corticosteroids	100	0	0	100	0	0	50	50	100	0	0
22. Relaxin	100	0	0	75	25	0	100	0	0	50	50
23. Hyaluronidase	50	0	0	100	0	0	100	0	50	0	50

	Singleton/multiple pregnancy			Risk level		Setting			Funding		
Treatment	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
24. Foley catheter	89	0	0	57	43	0	100	0	74	21	4
25. Laminaria	44	0	0	13	88	0	100	0	88	13	0
26. Ballon catheter	100	0	0	50	50	0	100	0	38	50	13
27. Membrane sweeping	64	0	0	61	39	0	7	93	61	32	7
28. PGE_2 extra-amniotic	55	0	0	55	45	0	100	0	64	9	27
29. Prostaglandins i.v.	71	0	0	29	71	0	100	0	43	0	57
30. Sexual intercourse	100	0	0	100	0	0	0	100	50	50	0
31. Acupuncture	82	0	0	64	36	0	18	82	36	64	0
32. Breast stimulation	0	0	0	0	100	0	50	50	100	0	0
33. Homeopathy	0	0	0	0	100	0	100	0	100	0	0
34. Castor oil	100	0	0	0	100	0	100	0	100	0	0
35. Prostaglandins oral	29	0	7	7	93	7	93	0	29	7	64
36. Misoprostol buccal	83	0	0	61	39	0	100	0	83	11	6

NC, not clear; NR, not reported.

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TABLE 41 Instrumental delivery (%)

	Previous CS				Parity				Membranes				Cervix			
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
1. No treatment	38	51	6	4	6	17	74	2	9	51	0	40	32	2	43	23
2. Placebo	24	69	5	2	2	19	76	2	26	50	7	17	14	2	21	62
3. Vaginal PGE_2 (tablet)	29	68	3	0	0	35	58	6	32	45	10	13	3	3	29	65
4. Vaginal PGE_2 (gel)	18	68	14	0	0	14	86	0	7	52	27	14	5	2	34	59
5. Vaginal PGE_2 pessary (slow release)	26	68	5	0	5	5	84	5	5	53	26	16	0	0	37	63
6. PGF_2 gel	29	71	0	0	0	0	100	0	57	14	0	29	43	0	29	29
7. Intracervical PGE_2	24	65	9	2	2	11	87	0	20	53	18	9	2	2	11	85
8. Vaginal PGE_2 pessary (normal release)	32	59	5	5	5	18	73	5	41	36	9	14	0	9	27	64
9. Vaginal misoprostol (dose $< 50\,\mu g$)	11	86	3	0	3	3	92	3	8	50	39	3	8	0	19	72
10. Vaginal misoprostol (dose $\geq 50\,\mu g$)	7	87	6	0	6	13	76	6	21	41	31	6	13	1	17	69
11. Oral misoprostol tablet (dose $< 50\,\mu g$)	0	100	0	0	0	0	100	0	0	0	100	0	0	0	0	100
12. Oral misoprostol tablet (dose $\geq 50\,\mu g$)	3	87	11	0	3	16	82	0	26	24	16	34	16	3	26	55
13. Titrated (low-dose) oral misoprostol solution	0	100	0	0	0	0	100	0	0	20	80	0	20	0	20	60
14. Sustained-release misoprostol insert	0	100	0	0	0	0	100	0	100	0	0	0	0	0	0	100
15. i.v. oxytocin	24	73	3	0	4	17	71	7	16	26	11	47	21	7	24	47
16. Amniotomy	20	80	0	0	0	40	40	20	0	100	0	0	0	80	20	0
17. i.v. oxytocin plus amniotomy	39	50	6	6	6	22	61	11	33	61	6	0	0	39	56	6
18. NO	0	100	0	0	0	100	0	0	20	80	0	0	0	0	0	100
19. Mifepristone	0	50	33	17	0	17	67	17	17	67	17	0	17	0	0	83
20. Oestrogens	33	67	0	0	0	0	100	0	33	67	0	0	0	0	0	100
21. Relaxin	0	100	0	0	0	0	100	0	0	100	0	0	0	33	33	33
22. Mechanical methods – Foley catheter	19	78	4	0	4	15	78	4	7	81	7	4	0	0	4	96

Treatment	Previous CS				Parity				Membranes				Cervix			
	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
23. Mechanical methods – laminaria	20	80	0	0	0	40	60	0	80	20	0	0	0	0	0	100
24. Mechanical methods – double-balloon or Cook's catheter	29	57	14	0	29	14	57	0	14	86	0	0	0	0	0	100
25. Membrane sweeping	53	35	6	6	0	12	82	6	0	100	0	0	18	0	71	12
26. Extra-amniotic PGE_2	29	71	0	0	0	57	43	0	57	43	0	0	0	0	0	100
27. i.v. prostaglandin	25	75	0	0	0	25	75	0	0	50	0	50	0	0	75	25
28. Sexual intercourse	0	100	0	0	0	0	100	0	0	100	0	0	100	0	0	0
29. Acupuncture	43	57	0	0	0	29	71	0	0	57	14	29	29	0	29	43
30. Homeopathy	100	0	0	0	100	0	0	0	0	0	0	100	0	0	0	100
31. Oral prostaglandins	50	50	0	0	13	25	63	0	38	38	0	25	13	13	25	50
32. Buccal/sublingual misoprostol	0	89	11	0	0	22	78	0	44	11	33	11	0	11	22	67

Fav, favourable; Multi, multiple; NR, not reported; Nulli, nulliparous; Unfav, unfavourable.

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TABLE 41 Instrumental delivery (continued)

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
1. No treatment	0	26	64	9	2	26	74	0	0	49	51	6	43	51	70	21	9
2. Placebo	7	26	48	19	0	24	74	2	0	81	19	2	74	24	60	12	29
3. Vaginal PGE_2 (tablet)	10	6	74	10	0	23	74	3	0	26	74	90	6	3	84	10	6
4. Vaginal PGE_2 (gel)	7	7	64	23	0	20	68	11	0	68	32	0	93	7	66	25	9
5. Vaginal PGE_2 pessary (slow release)	5	5	58	32	0	21	74	5	0	58	42	0	95	5	42	42	16
6. PGF_2 gel	29	0	43	29	0	14	86	0	0	71	29	0	100	0	71	0	29
7. Intracervical PGE_2	5	5	56	33	0	25	75	0	0	49	51	0	95	5	80	9	11
8. Vaginal PGE_2 pessary (normal release)	18	5	41	36	0	18	77	5	0	55	45	0	95	5	86	5	9
9. Vaginal misoprostol (dose < 50 µg)	6	14	64	17	0	8	92	0	0	67	33	3	92	6	81	17	3
10. Vaginal misoprostol (dose ≥ 50 µg)	11	4	53	31	0	6	93	1	0	50	50	1	97	1	84	14	1
11. Oral misoprostol tablet (dose < 50 µg)	0	0	50	50	0	0	100	0	0	50	50	0	100	0	100	0	0
12. Oral misoprostol tablet (dose ≥ 50 µg)	5	0	66	29	0	3	95	3	0	74	26	0	97	3	87	11	3
13. Titrated (low-dose) oral misoprostol solution	0	0	60	40	0	0	100	0	0	80	20	0	100	0	60	40	0
14. Sustained-release misoprostol insert	0	0	0	100	0	0	100	0	0	0	100	0	100	0	0	0	100

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
15. i.v. oxytocin	14	4	56	24	1	14	84	1	0	40	60	1	97	1	69	20	11
16. Amniotomy	20	0	60	20	0	20	80	0	0	60	40	0	100	0	40	60	0
17. i.v. oxytocin plus amniotomy	6	17	72	6	0	17	78	6	0	39	61	11	89	0	56	17	28
18. NO	0	40	60	0	0	0	100	0	0	60	40	0	60	40	60	40	0
19. Mifepristone	0	33	67	0	0	0	83	17	0	67	33	17	33	50	83	0	17
20. Oestrogens	0	0	33	67	0	33	67	0	0	67	33	0	67	33	67	33	0
21. Relaxin	0	33	67	0	0	0	100	0	0	100	0	0	100	0	0	33	67
22. Foley catheter	4	4	56	37	0	4	96	0	0	63	37	0	100	0	63	30	7
23. Laminaria	20	0	60	20	0	40	60	0	0	0	100	0	100	0	100	0	0
24. Double-balloon or Cook's catheter	0	0	57	43	0	0	100	0	0	57	43	0	100	0	43	43	14
25. Membrane sweeping	0	41	59	0	0	47	53	0	0	65	35	0	6	94	59	29	12
26. Extra-amniotic PGE_2	43	0	43	14	0	43	57	0	0	29	71	0	100	0	57	0	43
27. i.v. prostaglandin	0	25	25	50	0	0	100	0	0	0	100	0	100	0	50	0	50
28. Sexual intercourse	0	0	0	100	0	0	100	0	0	100	0	0	0	100	0	100	0
29. Acupuncture	0	71	29	0	0	14	86	0	0	57	43	0	29	71	29	71	0
30. Homeopathy	0	0	100	0	0	100	0	0	0	0	100	0	100	0	100	0	0
31. Oral prostaglandins	25	0	63	13	0	50	50	0	0	0	100	0	100	0	25	0	75
32. Buccal/sublingual misoprostol	11	0	78	11	0	0	100	0	0	78	22	0	100	0	89	11	0

NC, not clear; NR, not reported.

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TABLE 42 Apgar score < 7 at 5 minutes (%)

	Previous CS				Parity				Membranes				Cervix			
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
1. No treatment	37	54	8	2	4	8	85	4	13	44	0	42	35	6	23	37
2. Placebo	26	64	10	0	5	18	77	0	15	64	8	13	10	0	15	74
3. Vaginal PGE_2 (tablet)	19	77	4	0	4	31	58	8	27	46	15	12	4	8	19	69
4. Vaginal PGE_2 (gel)	21	63	17	0	6	15	77	2	10	46	29	15	6	4	23	67
5. Vaginal PGE_2 pessary (slow release)	23	64	14	0	9	0	91	0	9	55	32	5	0	0	18	82
6. PGF_2 gel	0	100	0	0	0	0	100	0	0	0	0	100	100	0	0	0
7. Intracervical PGE_2	34	56	10	0	5	10	85	0	24	55	15	6	5	2	15	79
8. Vaginal PGE_2 pessary (normal release)	48	48	5	0	5	19	76	0	38	43	0	19	5	10	14	71
9. Vaginal misoprostol (dose < 50 µg)	0	93	7	0	9	0	91	0	7	43	37	13	9	0	17	74
10. Vaginal misoprostol (dose ≥ 50 µg)	7	85	8	0	0	11	89	0	11	56	25	8	3	0	18	79
11. Oral misoprostol tablet (dose < 50 µg)	0	75	25	0	0	0	100	0	0	25	50	25	0	0	0	100
12. Oral misoprostol tablet (dose ≥ 50 µg)	0	94	6	0	0	12	85	3	15	26	29	29	18	3	24	56
13. Titrated (low-dose) oral misoprostol solution	0	100	0	0	0	0	100	0	0	29	71	0	0	0	14	86
14. Sustained-release misoprostol insert	0	100	0	0	0	0	100	0	50	0	50	0	0	0	0	100
15. i.v. oxytocin	28	66	6	0	6	15	78	1	18	24	4	54	21	4	24	51
16. Amniotomy	0	100	0	0	0	33	33	33	0	100	0	0	0	100	0	0
17. i.v. oxytocin plus amniotomy	36	64	0	0	0	18	73	9	36	64	0	0	18	45	36	0
18. NO	20	80	0	0	0	30	70	0	10	90	0	0	0	0	0	100
19. Mifepristone	0	50	50	0	0	0	100	0	0	50	25	25	0	0	0	100
20. Oestrogens	100	0	0	0	0	0	100	0	0	100	0	0	0	0	0	100

	Previous CS				Parity				Membranes				Cervix			
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
21. Corticosteroids	0	100	0	0	0	0	100	0	0	100	0	0	0	100	0	0
22. Relaxin	0	100	0	0	0	0	100	0	100	0	0	0	0	0	0	100
23. Foley catheter	15	80	5	0	5	10	80	5	0	90	10	0	0	5	10	85
24. Laminaria	25	50	25	0	0	25	75	0	50	50	0	0	0	0	0	100
25. Double-balloon or Cook's catheter	0	75	25	0	0	25	75	0	0	100	0	0	0	0	0	100
26. Membrane sweeping	64	27	0	9	0	0	91	9	9	91	0	0	9	0	64	27
27. Extra-amniotic PGE_2	33	67	0	0	0	33	67	0	67	33	0	0	0	0	0	100
28. i.v. prostaglandin	33	67	0	0	0	0	67	33	0	67	0	33	0	0	100	0
29. Sexual intercourse	0	100	0	0	0	0	100	0	0	100	0	0	100	0	0	0
30. Acupuncture	40	60	0	0	0	40	60	0	0	60	0	40	40	0	40	20
31. Breast stimulation	100	0	0	0	0	0	100	0	100	0	0	0	0	0	0	100
32. Castor oil	100	0	0	0	0	0	100	0	0	100	0	0	0	0	0	100
33. Oral prostaglandins	50	50	0	0	0	17	83	0	33	33	17	17	50	0	33	17
34. Buccal/sublingual misoprostol	0	100	0	0	9	9	82	0	18	36	36	9	9	9	36	45

Fav, favourable; Multi, multiple; NR, not reported; Nulli, nulliparous; Unfav, unfavourable.

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TABLE 42 Apgar score < 7 at 5 minutes (continued)

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low	High	NR	Hospital	Outpatient	NR/NC	None	Some
1. No treatment	2	29	48	17	4	29	67	2	2	48	52	8	56	37	65	29	6
2. Placebo	18	33	41	8	0	18	79	3	0	77	23	3	64	33	67	21	13
3. Vaginal PGE_2 (tablet)	8	12	77	4	0	15	81	4	0	31	69	0	96	4	77	15	8
4. Vaginal PGE_2 (gel)	8	8	58	25	0	25	67	8	0	73	27	0	92	8	67	29	4
5. Vaginal PGE_2 pessary (slow release)	5	5	45	45	0	5	95	0	0	68	32	0	95	5	45	45	9
6. PGF_2 gel	0	0	100	0	0	0	100	0	0	0	100	0	100	0	100	0	0
7. Intracervical PGE_2	10	10	50	31	0	31	68	2	0	48	52	0	92	8	82	8	10
8. Vaginal PGE_2 pessary (normal release)	10	14	33	43	0	38	62	0	0	48	52	0	86	14	90	10	0
9. Vaginal misoprostol (dose < 50 µg)	0	7	65	26	2	7	89	4	0	83	17	0	93	7	74	20	7
10. Vaginal misoprostol (dose ≥ 50 µg)	5	7	62	26	0	2	95	3	0	67	33	0	98	2	80	18	2
11. Oral misoprostol tablet (dose < 50 µg)	0	25	50	25	0	0	100	0	0	75	25	0	75	25	75	25	0
12. Oral misoprostol tablet (dose ≥ 50 µg)	3	6	62	29	0	3	94	3	0	76	24	0	94	6	82	18	0
13. Titrated (low-dose) oral misoprostol solution	0	14	43	43	0	0	100	0	0	86	14	0	100	0	29	71	0
14. Sustained-release misoprostol insert	0	0	0	100	0	0	100	0	0	50	50	0	100	0	0	50	50
15. i.v. oxytocin	4	9	53	29	4	22	75	3	0	49	51	3	96	1	68	24	9
16. Amniotomy	0	0	67	33	0	0	100	0	0	100	0	0	100	0	0	100	0
17. i.v. oxytocin plus amniotomy	0	27	73	0	0	27	73	0	0	27	73	9	91	0	45	36	18

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low	High	NR	Hospital	Outpatient	NR/NC	None	Some
18. NO	10	30	60	0	0	0	100	0	0	70	30	0	50	50	40	60	0
19. Mifepristone	0	25	50	25	0	0	75	25	0	75	25	25	75	0	50	0	50
20. Oestrogens	0	0	100	0	0	0	100	0	0	0	100	0	100	0	100	0	0
21. Corticosteroids	0	100	0	0	0	0	100	0	0	100	0	0	0	100	100	0	0
22. Relaxin	100	0	0	0	0	0	100	0	0	0	100	0	100	0	0	100	0
23. Foley catheter	5	5	65	25	0	5	95	0	0	75	25	0	100	0	65	30	5
24. Laminaria	0	0	75	25	0	50	50	0	0	25	75	0	100	0	75	25	0
25. Double-balloon or Cook's catheter	0	0	25	75	0	0	100	0	0	100	0	0	100	0	25	50	25
26. Membrane sweeping	0	45	55	0	0	36	64	0	0	82	18	0	9	91	45	45	9
27. Extra-amniotic PGE_2	33	0	67	0	0	33	67	0	0	33	67	0	100	0	67	0	33
28. i.v. prostaglandin	0	0	67	33	0	33	67	0	0	67	33	0	100	0	33	0	67
29. Sexual intercourse	0	0	50	50	0	0	100	0	0	100	0	0	0	100	50	50	0
30. Acupuncture	0	60	40	0	0	20	80	0	0	80	20	0	20	80	20	80	0
31. Breast stimulation	0	100	0	0	0	100	0	0	0	0	100	0	0	100	100	0	0
32. Castor oil	0	100	0	0	0	0	100	0	0	0	100	0	100	0	100	0	0
33. Oral prostaglandins	17	0	83	0	0	67	17	0	17	17	83	17	83	0	50	17	33
34. Buccal/sublingual misoprostol	0	0	91	9	0	9	91	0	0	91	9	0	100	0	73	18	9

NC, not clear; NR, not reported.

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TABLE 43 Neonatal intensive care unit admission (%)

	Previous CS				Parity				Membranes				Cervix			
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
1. No treatment	43	49	8	0	5	16	78	0	8	54	0	38	38	3	30	30
2. Placebo	21	71	8	0	0	25	75	0	4	71	4	21	13	0	21	67
3. Vaginal PGE_2 tablet	0	100	0	0	0	22	67	11	22	44	22	11	11	0	11	78
4. Vaginal PGE_2 gel	9	74	18	0	0	12	88	0	3	41	35	21	6	3	29	62
5. Vaginal PGE_2 pessary (slow release)	16	79	5	0	11	5	84	0	11	58	21	11	0	0	5	95
6. PGF_2 gel	0	100	0	0	0	0	100	0	0	100	0	0	0	0	0	100
7. Intracervical PGE_2	16	76	8	0	0	4	96	0	12	72	12	4	4	0	20	76
8. Vaginal PGE_2 pessary (normal release)	30	70	0	0	10	30	60	0	30	30	0	40	20	0	30	50
9. Vaginal misoprostol (dose < 50 µg)	0	92	8	0	6	0	94	0	8	45	39	8	6	0	18	76
10. Vaginal misoprostol (dose ≥ 50 µg)	2	87	11	0	0	7	87	5	15	47	31	7	7	0	16	76
11. Oral misoprostol tablet (dose < 50 µg)	0	75	25	0	0	0	100	0	0	25	50	25	0	0	0	100
12. Oral misoprostol tablet (dose ≥ 50 µg)	0	92	8	0	0	10	90	0	13	31	28	28	15	3	23	59
13. Titrated (low-dose) oral misoprostol solution	0	100	0	0	0	0	100	0	11	11	78	0	22	0	11	67
14. Sustained-release misoprostol vaginal pessary	0	100	0	0	0	0	100	0	50	0	50	0	0	0	0	100
15. i.v. oxytocin	23	69	9	0	6	11	74	9	11	20	9	60	29	3	26	43
16. Amniotomy	0	100	0	0	0	33	33	33	0	100	0	0	0	100	0	0
17. i.v. oxytocin plus amniotomy	17	83	0	0	0	17	67	17	17	83	0	0	0	50	50	0
18. NO	22	78	0	0	0	44	56	0	22	78	0	0	0	0	0	100
19. Mifepristone	0	100	0	0	0	0	100	0	0	50	0	50	0	0	0	100

	Previous CS				Parity				Membranes				Cervix			
Treatment	NR	None	Some	All	NR	Nulli only	Mixed	Multi only	NR	Intact	Mixed	Ruptured	NR	Fav	Mixed	Unfav
20. Oestrogens	100	0	0	0	0	0	100	0	0	100	0	0	0	0	0	100
21. Foley catheter	5	84	11	0	5	11	79	5	0	74	21	5	0	0	5	95
22. Laminaria	50	50	0	0	0	0	100	0	50	50	0	0	0	0	0	100
23. Double-balloon or Cook's catheter	0	100	0	0	0	50	50	0	0	100	0	0	0	0	0	100
24. Membrane sweeping	64	36	0	0	0	9	91	0	0	100	0	0	9	0	45	45
25. Extra-amniotic PGE_2	0	100	0	0	0	0	100	0	50	0	50	0	50	0	50	0
26. Sexual intercourse	0	100	0	0	0	0	100	0	0	100	0	0	100	0	0	0
27. Acupuncture	33	67	0	0	0	67	33	0	0	100	0	0	33	0	33	33
28. Oral prostaglandins	0	100	0	0	0	0	100	0	0	0	0	100	0	0	100	0
29. Buccal/sublingual misoprostol	0	90	10	0	10	10	80	0	30	30	30	10	0	0	30	70

Fav, favourable; Multi, multiple; NR, not reported; Nulli, nulliparous; Unfav, unfavourable.

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TABLE 43 Neonatal intensive care unit admission (continued)

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
1. No treatment	0	32	51	14	3	16	84	0	0	57	43	5	46	49	59	38	3
2. Placebo	4	42	50	4	0	17	83	0	0	83	17	0	38	63	63	29	8
3. Vaginal PGE_2 tablet	11	0	89	0	0	11	78	11	0	56	44	0	100	0	78	22	0
4. Vaginal PGE_2 gel	3	9	68	21	0	12	76	12	0	91	9	0	88	12	59	35	6
5. Vaginal PGE_2 pessary (slow release)	5	11	42	42	0	0	100	0	0	74	26	0	95	5	42	47	11
6. PGF_2 gel	0	0	0	100	0	0	100	0	0	100	0	0	100	0	100	0	0
7. Intracervical PGE_2	4	12	56	28	0	16	84	0	0	52	48	0	76	24	84	16	0
8. Vaginal PGE_2 pessary (normal release)	0	30	50	20	0	30	70	0	0	60	40	0	70	30	90	10	0
9. Vaginal misoprostol (dose < 50 µg)	2	8	55	35	0	8	88	4	0	76	24	0	92	8	78	20	2
10. Vaginal misoprostol (dose ≥ 50 µg)	7	4	49	38	0	0	96	4	0	73	27	0	98	2	29	24	47
11. Oral misoprostol tablet (dose < 50 µg)	0	25	50	25	0	0	100	0	0	75	25	0	75	25	75	25	0
12. Oral misoprostol tablet (dose ≥ 50 µg)	0	5	56	36	0	3	95	3	0	69	31	0	95	5	85	13	3
13. Titrated (low-dose) oral misoprostol solution	0	0	44	56	0	0	100	0	0	89	11	0	100	0	56	44	0
14. Sustained-release misoprostol vaginal pessary	0	0	0	100	0	0	100	0	0	50	50	0	100	0	0	50	50

	Gestation					Singleton/multiple pregnancy				Risk level		Setting			Funding		
Treatment	NR	All post term	All > 37 weeks	Mixed	All preterm	NR	Singleton	Mixed	Multiple	Low (1)	High (2)	NR	Hospital	Outpatient	NR/NC	None	Some
15. i.v. oxytocin	3	9	51	34	3	3	91	6	0	63	37	3	94	3	63	31	6
16. Amniotomy	0	0	67	33	0	0	100	0	0	100	0	0	100	0	0	100	0
17. i.v. oxytocin plus amniotomy	0	50	50	0	0	17	83	0	0	50	50	17	83	0	33	50	17
18. NO	11	44	44	0	0	0	100	0	0	67	33	0	44	56	44	56	0
19. Mifepristone	0	50	0	50	0	0	100	0	0	100	0	0	100	0	0	0	100
20. Oestrogens	0	0	100	0	0	100	0	0	0	0	100	0	0	100	100	0	0
21. Foley catheter	0	5	68	26	0	5	95	0	0	74	26	0	100	0	58	37	5
22. Laminaria	50	0	50	0	0	0	100	0	0	0	100	0	100	0	100	0	0
23. Double-balloon or Cook's catheter	0	0	50	50	0	0	100	0	0	100	0	0	100	0	0	50	50
24. Membrane sweeping	0	36	64	0	0	9	91	0	0	73	27	0	9	91	27	64	9
25. Extra-amniotic PGE_2	0	0	100	0	0	0	100	0	0	100	0	0	100	0	100	0	0
26. Sexual intercourse	0	0	50	50	0	0	100	0	0	100	0	0	0	100	50	50	0
27. Acupuncture	0	67	33	0	0	33	67	0	0	100	0	0	0	100	0	100	0
28. Oral prostaglandins	0	0	100	0	0	0	100	0	0	0	100	0	100	0	0	0	100
29. Buccal/sublingual misoprostol	0	0	80	20	0	10	90	0	0	90	10	0	100	0	70	20	10

NC, not clear; NR, not reported.

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Appendix 8 Example OpenBUGS code

```
model{
for(i in 1:ns){
w[i,1] <- 0 # adjustment for multi-arm trials is zero
#for control arm
delta[i,1] <- 0 # treatment effect is zero for control
#arm
mu[i] ~ dnorm(0,.0001) # vague priors for all trial baselines
for (k in 1:na[i]) {
r[i,k] ~ dbin(p[i,k],n[i,k]) # binomial likelihood
logit(p[i,k]) <- mu[i] + delta[i,k] # model for linear predictor
rhat[i,k] <- p[i,k] * n[i,k] # expected value of the numerators
#Deviance contribution
p0[i,k]<-0.5+.999999*(p[i,k]-0.5)
r0[i,k]<-r[i,k]+0.01*equals(r[i,k],0) -0.01*equals(r[i,k],n[i,k])
r.hat[i,k]<- p0[i,k]*n[i,k] # expected value of the numerators
#Deviance calculation for binomial data with adjustments
dev[i,k]<- 2*(r0[i,k]*log(r0[i,k]/r.hat[i,k]) + (n[i,k] - r0[i,k])*log((n[i,k] - r0[i,k])/(n[i,k] - r.hat
[i,k])))
}
#Summed residual deviance contribution for this trial
resdev[i] <- sum(dev[i,1:na[i]])
for (k in 2:na[i]) {
delta[i,k] ~ dnorm(md[i,k],taud[i,k]) # trial-specific LOR distributions
md[i,k] <- d[t[i,k]] - d[t[i,1]] + sw[i,k] # mean of LOR distributions (with multi-
arm trial correction)
taud[i,k] <- tau *2*(k-1)/k # precision of LOR distributions (with
multi-arm trial correction)
w[i,k] <- (delta[i,k] - d[t[i,k]] + d[t[i,1]]) # adjustment for multi-arm RCTs
sw[i,k] <- sum(w[i,1:k-1])/(k-1) # cumulative adjustment for multi-arm
trials
} }
totresdev <- sum(resdev[]) # Total Residual Deviance
d[1]<-0 # treatment effect is zero for reference
treatment
# vague priors for treatment effects
for (k in 2:nt){ d[k] ~ dnorm(0,.0001) }
sd ~ dunif(0,5) # vague prior for between-trial SD
tau <- pow(sd,-2) # between-trial precision = (1/between-trial variance)
# pairwise ORs and LORs for all possible pair-wise comparisons
```

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Appendix 9 Details of priors and convergence checks

Prior distributions used in the network meta-analyses of outcomes reported in the paper

No vaginal delivery within 24 hours

All prior distributions in the VD REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0,5)

Caesarean section

All prior distributions in the CS REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0,5)

Hyperstimulation

All prior distributions in the hyperstimulation REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0,5)

Instrumental delivery

All prior distributions in the hyperstimulation REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0,5)

Neonatal intensive care unit admission

All prior distributions in the hyperstimulation REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0,5)

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Apgar score < 7 at 5 minutes

All prior distributions in the hyperstimulation REs consistency model were vague.

Trial baseline parameter: mu~dnorm(0, 0001)

Treatment effect parameter: d~dnorm(0, 0001)

Heterogeneity parameter: sd~dunif (0, 2)

Details of convergence for all three outcomes reported in the paper for random-effects consistency models

No vaginal delivery within 24 hours

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS, and was achieved by 15,000 simulations for VD (REs consistency model). Estimates are based on a further 100,000 updates.

Caesarean section

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS, and was achieved by 49,000 simulations for CS (REs consistency model – risk of bias – continuity corrected model). Estimates are based on a further 150,000 updates.

Hyperstimulation

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS and was achieved by 26,000 simulations (REs consistency – continuity corrected model). Estimates are based on a further 75,000 updates.

Instrumental delivery

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS, and was achieved by 58,000 simulations (REs consistency model). Estimates are based on a further 58,000 updates.

Neonatal intensive care unit admission

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS, and was achieved by 36,000 simulations (REs consistency model – Rath 2007 removed). Estimates are based on a further 100,000 updates.

Apgar score < 7 at 5 minutes

Convergence was assessed using two chains using the Brooks–Gelman–Rubin tool in OpenBUGS, and was achieved by 68,000 simulations (REs consistency model). Estimates are based on a further 68,000 updates.

Appendix 10 Total number of arms in trials

Treatment	Number of arms
No treatment	108
Placebo	99
Vaginal PGE_2 (tablet)	54
Vaginal PGE_2 (gel)	103
Vaginal PGE_2 pessary (slow release)	46
PGF_2 gel	11
Intracervical PGE_2	140
Vaginal PGE_2 pessary (normal release)	37
Vaginal misoprostol (dose < 50 µg)	86
Vaginal misoprostol (dose ≥ 50 µg)	129
Oral misoprostol tablet (dose < 50 µg)	4
Oral misoprostol tablet (dose ≥ 50 µg)	67
Titrated (low-dose) oral misoprostol solution	12
Sustained-release misoprostol insert	2
i.v. oxytocin	135
Amniotomy	7
i.v. oxytocin plus amniotomy	25
NO	17
Mifepristone	9
Oestrogens	8
Corticosteroids	2
Relaxin	4
Hyaluronidase	2
Mechanical methods – Foley catheter	51
Mechanical methods – laminaria	16
Mechanical methods – double-balloon or Cook's catheter	9
Membrane sweeping	30
Extra-amniotic PGE_2	11
i.v. prostaglandin	7
Sexual intercourse	2
Acupuncture	11
Breast stimulation	4
Homeopathy	1
Castor oil	1
Oral prostaglandins	14
Buccal/sublingual misoprostol	19

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Appendix 11 Model fit and heterogeneity

Model fit and selection statistics by outcomes: fixed- and random-effects models

For REs models we also compared the fit of consistency and inconsistency models.

TABLE 44 Vaginal delivery not achieved within 24 hours

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior median) and 95% CrI	DIC
REs consistency	290	301.1	0.54 (0.44 to 0.65)	1854
REs inconsistency	290	293.2	0.48 (0.37 to 0.62)	1855

Convergence was assessed using two chains and was achieved by 15,000 simulations for VD (REs consistency model). Estimates are based on a further 100,000 updates.

TABLE 45 Caesarean section

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior median) and 95% CrI	DIC
REs consistency	1217	1275	0.25 (0.18 to 0.31)	6668
REs inconsistency	1217	1266	0.22 (0.15 to 0.3)	6729
REs consistency – continuity corrected	1217	1248	0.2463 (0.1824 to 0.3075)	6678
REs inconsistency – continuity corrected	1217	1242	0.2224 (0.1494 to 0.2927)	6741
FEs consistency – ROB	640	696.0		3607
REs consistency – ROB – continuity corrected	640	650.6	0.1558 (0.02545 to 0.2502)	3600
REs inconsistency – ROB – continuity corrected	640	647.7	0.1349 (0.014 to 0.243)	3658

FE, fixed effect; ROB, risk of bias.
Convergence was assessed using two chains and was achieved by 49,000 simulations for CS (REs consistency – ROB – continuity corrected model). Estimates are based on a further 150,000 updates. ROB = assessment of model fit having excluded studies at high risk of bias).

TABLE 46 Instrumental delivery

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior median) and 95% CrI	DIC
REs consistency	616	622.8	0.1506 (0.028 to 0.269)	3198
REs inconsistency	616	617.4	0.1903 (0.047 to 0.325)	3266

Convergence was assessed using two chains and was achieved by 58,000 simulations for instrumental delivery (REs consistency). Estimates are based on a further 58,000 updates.

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TABLE 47 Uterine hyperstimulation with FHR changes

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior median) and 95% CrI	DIC
REs consistency	374	395.7	0.7008 (0.4895 to 0.9465)	1509
REs inconsistency	374	368.7	0.7053 (0.4656 to 0.9909)	1491
REs consistency – zeros in baseline removed	284	283.3	0.5684 (0.3898 to 0.7779)	1226
REs consistency – continuity corrected	374	349	0.54 (0.38 to 0.72)	1590
REs inconsistency – continuity corrected	374	359.7	0.55 (0.36 to 0.77)	1630

Convergence was assessed using two chains and was achieved by 26,000 simulations (REs consistency – continuity corrected). Estimates are based on a further 75,000 updates.

TABLE 48 Apgar score < 7 at 5 minutes

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior mean) and 95% CrI	DIC
REs consistency	413	450	0.1867 (0.011 to 0.458)	1569
REs inconsistency	413	423.2	0.1617 (0.004 to 0.482)	1573
REs consistency – continuity corrected	413	374.9	0.1323 (0.008 to 0.3486)	1626
REs consistency – zeros in baseline removed	335	341.8	0.1547 (0.006 to 0.4242)	1337
REs consistency – no zeros	250	213.5	0.1209 (0.005 to 0.3337)	1059

Convergence was assessed using two chains and was achieved by 68,000 simulations (REs consistency). Estimates are based on a further 68,000 updates.

TABLE 49 Neonatal intensive care unit admission

Model	Number of data points	Residual deviance (posterior mean)	SD (posterior median) and 95% CrI	DIC
REs consistency	428	449.4	0.2843 (0.1801 to 0.3949)	2116
REs inconsistency	428	449.4	0.1983 (0.05142 to 0.3426)	2144
REs consistency – Rath 2007[504] removed	426	454.4	0.1704 (0.044 to 0.293)	2091
REs inconsistency – Rath 2007[504] removed	426	443.8	0.2021 (0.0397 to 0.3479)	2126

Convergence was assessed using two chains and was achieved by 21,000 simulations (REs consistency). Estimates are based on a further 75,000 updates.

Appendix 12 Results of active versus active comparisons from network meta-analysis

Odds ratios and 95% CrIs for failure to achieve VD within 24 hours, CS, instrumental delivery, uterine hyperstimulation, NICU and Apgar score for every intervention compared with every other.

Results from NMA and pairwise meta-analysis (when possible). All are considered undesirable outcomes. An OR of > 1 favours placebo (i.e. fewer events occur on a placebo than active treatment). An OR of < 1 favours the active treatment (i.e. fewer undesirable events occurred on the active treatment). Empty cells indicate that direct evidence was not available for that comparison.

TABLE 50 Vaginal delivery not achieved within 24 hours

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	0.84	0.28 to 1.97		
	Vaginal PGE_2 (tablet)	0.11	0.04 to 0.24		
	Vaginal PGE_2 (gel)	0.09	0.04 to 0.18	0.38	0.08 to 1.14
	Vaginal PGE_2 pessary (slow release)	0.10	0.04 to 0.22		
	Intracervical PGE_2	0.13	0.05 to 0.26		
	Vaginal PGE_2 pessary (normal release)	0.06	0.02 to 0.15		
	Vaginal misoprostol (dose < 50 µg)	0.07	0.03 to 0.14		
	Vaginal misoprostol (dose ≥ 50 µg)	0.06	0.03 to 0.12	0.00	0 to 0
	Oral misoprostol tablet (dose < 50 µg)	0.15	0.05 to 0.37		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.11	0.05 to 0.22	0.13	0.04 to 0.32
	Titrated (low-dose) oral misoprostol solution	0.07	0.03 to 0.15		
	Sustained-release misoprostol vaginal pessary	0.07	0.02 to 0.19		
	i.v. oxytocin	0.14	0.05 to 0.29		
	i.v. oxytocin plus amniotomy	0.04	0.01 to 0.11		
	NO	0.16	0.05 to 0.4		
	Mifepristone	0.58	0.12 to 1.77		
	Mechanical methods – Foley catheter	0.12	0.05 to 0.26		
	Mechanical methods – double-balloon or Cook's catheter	0.11	0.03 to 0.26		
	Extra-amniotic PGE_2	0.28	0.05 to 0.94		
	Buccal/sublingual misoprostol	0.07	0.03 to 0.15		

continued

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TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Placebo	Vaginal PGE_2 (tablet)	0.15	0.06 to 0.29		
	Vaginal PGE_2 (gel)	0.12	0.06 to 0.21		
	Vaginal PGE_2 pessary (slow release)	0.14	0.06 to 0.26		
	Intracervical PGE_2	0.17	0.08 to 0.29	0.09	0.03 to 0.19
	Vaginal PGE_2 pessary (normal release)	0.08	0.03 to 0.18		
	Vaginal misoprostol (dose < 50 µg)	0.09	0.05 to 0.17		
	Vaginal misoprostol (dose ≥ 50 µg)	0.08	0.04 to 0.14		
	Oral misoprostol tablet (dose > 50 µg)	0.20	0.07 to 0.45		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.15	0.07 to 0.26	0.12	0.03 to 0.31
	Titrated (low-dose) oral misoprostol solution	0.09	0.04 to 0.18		
	Sustained-release misoprostol vaginal pessary	0.09	0.03 to 0.23		
	i.v. oxytocin	0.18	0.08 to 0.34		
	i.v. oxytocin plus amniotomy	0.05	0.01 to 0.14		
	NO	0.21	0.08 to 0.42	1.07	0.3 to 2.78
	Mifepristone	0.72	0.2 to 1.85	0.8148	0.16 to 2.52
	Mechanical method – Foley catheter	0.16	0.07 to 0.31		
	Mechanical methods – double-balloon or Cook's catheter	0.14	0.05 to 0.32		
	Extra-amniotic PGE_2	0.37	0.07 to 1.2		
	Buccal/sublingual misoprostol	0.10	0.04 to 0.18		
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	0.83	0.51 to 1.27	0.9212	0.36 to 1.96
	Vaginal PGE_2 pessary (slow release)	0.97	0.57 to 1.55	1.384	0.39 to 3.58
	Intracervical PGE_2	1.19	0.74 to 1.82	1.512	0.42 to 3.93
	Vaginal PGE_2 pessary (normal release)	0.60	0.27 to 1.14		
	Vaginal misoprostol (dose < 50 µg)	0.67	0.41 to 1.03		
	Vaginal misoprostol (dose ≥ 50 µg)	0.57	0.37 to 0.85	0.495	0.27 to 0.84
	Oral misoprostol tablet (dose < 50 µg)	1.41	0.57 to 2.92		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.05	0.64 to 1.62	1.28	0.36 to 3.33
	Titrated (low-dose) oral misoprostol solution	0.65	0.35 to 1.1		
	Sustained-release misoprostol vaginal pessary	0.67	0.24 to 1.49		
	i.v. oxytocin	1.28	0.71 to 2.13		
	i.v. oxytocin plus amniotomy	0.34	0.08 to 0.9	0.5467	0.09 to 1.77
	NO	1.50	0.6 to 3.19		
	Mifepristone	5.39	1.36 to 14.92		
	Mechanical methods – Foley catheter	1.14	0.61 to 1.95		
	Mechanical methods – double-balloon or Cook's catheter	1.01	0.42 to 2.07		
	Extra-amniotic PGE_2	2.62	0.53 to 8.07		
	Buccal/sublingual misoprostol	0.68	0.37 to 1.13		

TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	1.19	0.78 to 1.73	1.415	0.34 to 3.97
	Intracervical PGE_2	1.45	1.05 to 1.96	1.455	0.85 to 2.33
	Vaginal PGE_2 pessary (normal release)	0.73	0.37 to 1.3		
	Vaginal misoprostol (dose < 50 µg)	0.82	0.59 to 1.1	1.346	0.6 to 2.63
	Vaginal misoprostol (dose ≥ 50 µg)	0.70	0.51 to 0.93	0.6249	0.37 to 0.98
	Oral misoprostol tablet (dose < 50 µg)	1.72	0.78 to 3.32	1.508	0.42 to 3.91
	Oral misoprostol tablet (dose ≥ 50 µg)	1.28	0.9 to1.76	1.883	0.81 to 3.76
	Titrated (low-dose) oral misoprostol solution	0.79	0.5 to 1.19	1.15	0.61 to 1.99
	Sustained-release misoprostol vaginal pessary	0.81	0.31 to 1.75		
	i.v. oxytocin	1.56	1 to 2.32	3.315	1.04 to 8.21
	i.v. oxytocin plus amniotomy	0.42	0.1 to 1.15		
	NO	1.83	0.81 to 3.62	0.5922	0.18 to 1.47
	Mifepristone	6.57	1.78 to 17.45		
	Mechanical methods – Foley catheter	1.39	0.85 to 2.13	1.498	0.66 to 2.95
	Mechanical methods – double-balloon or Cook's catheter	1.23	0.56 to 2.35	1.603	0.45 to 4.12
	Extra-amniotic PGE_2	3.20	0.67 to 9.66		
	Buccal/sublingual misoprostol	0.83	0.51 to 1.27		
Vaginal PGE_2 pessary (slow release)	Intracervical PGE_2	1.26	0.85 to 1.79	1.914	0.99 to 3.37
	Vaginal PGE_2 pessary (normal release)	0.63	0.31 to 1.15		
	Vaginal misoprostol (dose < 50 µg)	0.71	0.48 to 1.01	0.8789	0.34 to 1.86
	Vaginal misoprostol (dose ≥ 50 µg)	0.60	0.41 to 0.85	0.5678	0.3 to 0.98
	Oral misoprostol tablet (dose < 50 µg)	1.49	0.63 to 3.02		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.10	0.72 to 1.63		
	Titrated (low-dose) oral misoprostol solution	0.68	0.41 to 1.08	0.617	0.16 to 1.65
	Sustained-release misoprostol vaginal pessary	0.68	0.29 to 1.36	0.674	0.31 to 1.27
	i.v. oxytocin	1.35	0.82 to 2.09	2.448	0.74 to 6.12
	i.v. oxytocin plus amniotomy	0.36	0.09 to 1.01		
	NO	1.59	0.65 to 3.29		
	Mifepristone	5.68	1.49 to 15.4		
	Mechanical methods – Foley catheter	1.20	0.71 to 1.9	0.87	0.27 to 2.15
	Mechanical methods – double-balloon or Cook's catheter	1.06	0.48 to 2.02	0.5246	0.15 to 1.37
	Extra-amniotic PGE_2	2.76	0.57 to 8.46		
	Buccal/sublingual misoprostol	0.71	0.42 to 1.15		

continued

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TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	0.50	0.27 to 0.85	0.7594	0.39 to 1.34
	Vaginal misoprostol (dose < 50 µg)	0.57	0.43 to 0.74	0.5204	0.34 to 0.75
	Vaginal misoprostol (dose ≥ 50 µg)	0.49	0.36 to 0.64	0.4747	0.3 to 0.71
	Oral misoprostol tablet (dose < 50 µg)	1.20	0.53 to 2.34		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.89	0.64 to 1.2	0.955	0.49 to 1.68
	Titrated (low-dose) oral misoprostol solution	0.55	0.34 to 0.84		
	Sustained-release misoprostol vaginal pessary	0.57	0.22 to 1.21		
	i.v. oxytocin	1.09	0.69 to 1.62		
	i.v. oxytocin plus amniotomy	0.29	0.07 to 0.8		
	NO	1.27	0.56 to 2.55		
	Mifepristone	4.57	1.25 to 12.05		
	Mechanical methods – Foley catheter	0.97	0.59 to 1.5		
	Mechanical methods – double-balloon or Cook's catheter	0.86	0.39 to 1.66		
	Extra-amniotic PGE_2	2.23	0.47 to 6.71		
	Buccal/sublingual misoprostol	0.57	0.36 to 0.87		
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	1.23	0.63 to 2.17		
	Vaginal misoprostol (dose ≥ 50 µg)	1.05	0.54 to 1.86		
	Oral misoprostol tablet (dose < 50 µg)	2.60	0.93 to 5.85		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.92	0.97 to 3.46		
	Titrated (low-dose) oral misoprostol solution	1.19	0.55 to 2.27		
	Sustained-release misoprostol vaginal pessary	1.22	0.39 to 2.96		
	i.v. oxytocin	2.34	1.13 to 4.35	37.7	2.63 to 187.2
	i.v. oxytocin plus amniotomy	0.63	0.13 to 1.88		
	NO	2.76	0.96 to 6.37		
	Mifepristone	9.86	2.3 to 28.31		
	Mechanical methods – Foley catheter	2.07	0.99 to 3.85	4.696	1.09 to 13.54
	Mechanical methods – double-balloon or Cook's catheter	1.85	0.68 to 4.09		
	Extra-amniotic PGE_2	4.81	0.89 to 15.63		
	Buccal/sublingual misoprostol	1.24	0.58 to 2.36		

TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	0.86	0.65 to 1.1	1.122	0.68 to 1.76
	Oral misoprostol tablet (dose < 50 µg)	2.12	0.97 to 4.07	4.206	1.18 to 10.86
	Oral misoprostol tablet (dose ≥ 50 µg)	1.57	1.17 to 2.08	1.347	0.84 to 2.07
	Titrated (low-dose) oral misoprostol solution	0.98	0.63 to 1.46	0.3878	0.15 to 0.8
	Sustained-release misoprostol vaginal pessary	1.00	0.39 to 2.15		
	i.v. oxytocin	1.92	1.27 to 2.8	1.843	0.75 to 3.83
	i.v. oxytocin plus amniotomy	0.52	0.13 to 1.41		
	NO	2.26	0.98 to 4.56		
	Mifepristone	8.11	2.21 to 21.51		
	Mechanical methods – Foley catheter	1.71	1.07 to 2.61	2.508	1.17 to 4.81
	Mechanical methods – double-balloon or Cook's catheter	1.52	0.69 to 2.93		
	Extra-amniotic PGE_2	3.95	0.85 to 11.91		
	Buccal/sublingual misoprostol	1.01	0.67 to 1.47	1.045	0.61 to 1.68
	Oral misoprostol tablet (dose < 50 µg)	2.49	1.12 to 4.84		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.84	1.36 to 2.45	1.608	0.9 to 2.67
	Titrated (low-dose) oral misoprostol solution	1.15	0.72 to 1.74		
	Sustained-release misoprostol vaginal pessary	1.17	0.46 to 2.5		
	i.v. oxytocin	2.25	1.47 to 3.32	2.558	0.78 to 6.32
	i.v. oxytocin plus amniotomy	0.61	0.15 to 1.65		
	NO	2.64	1.17 to 5.24	2.17	0.52 to 6.15
	Mifepristone	9.50	2.59 to 25.22		
	Mechanical methods – Foley catheter	2.01	1.24 to 3.08	1.646	0.43 to 4.45
	Mechanical methods – double-balloon or Cook's catheter	1.78	0.81 to 3.43		
	Extra-amniotic PGE_2	4.58	1.02 to 13.56	4.469	1.09 to 12.59
	Buccal/sublingual misoprostol	1.19	0.78 to 1.74	1.01	0.49 to 1.84

continued

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TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	0.84	0.38 to 1.62	1.395	0.37 to 3.72
	Titrated (low-dose) oral misoprostol solution	0.52	0.21 to 1.07		
	Sustained-release misoprostol vaginal pessary	0.54	0.15 to 1.38		
	i.v. oxytocin	1.03	0.43 to 2.1		
	i.v. oxytocin plus amniotomy	0.28	0.05 to 0.85		
	NO	1.21	0.38 to 2.96		
	Mifepristone	4.35	0.93 to 13.12		
	Mechanical methods – Foley catheter	0.92	0.37 to 1.91		
	Mechanical methods – double-balloon or Cook's catheter	0.82	0.27 to 1.94		
	Extra-amniotic PGE_2	2.11	0.36 to 7.05		
	Buccal/sublingual misoprostol	0.54	0.23 to 1.11		
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	0.63	0.39 to 0.96	3.052	0.57 to 9.83
	Sustained-release misoprostol vaginal pessary	0.65	0.25 to 1.4		
	i.v. oxytocin	1.24	0.8 to 1.82	0.8035	0.35 to 1.59
	i.v. oxytocin plus amniotomy	0.33	0.08 to 0.91		
	NO	1.46	0.63 to 2.93		
	Mifepristone	5.21	1.42 to 13.82		
	Mechanical methods – Foley catheter	1.10	0.66 to 1.73		
	Mechanical methods – double-balloon or Cook's catheter	0.98	0.44 to 1.91		
	Extra-amniotic PGE_2	2.54	0.54 to 7.7		
	Buccal/sublingual misoprostol	0.65	0.42 to 0.97	0.6002	0.24 to 1.25
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	1.07	0.38 to 2.37		
	i.v. oxytocin	2.03	1.23 to 3.18	1.868	0.84 to 3.64
	i.v. oxytocin plus amniotomy	0.55	0.13 to 1.56		
	NO	2.41	0.96 to 5.12		
	Mifepristone	8.61	2.23 to 23.54		
	Mechanical methods – Foley catheter	1.82	1.01 to 3.03		
	Mechanical methods – double-balloon or Cook's catheter	1.62	0.68 to 3.27		
	Extra-amniotic PGE_2	4.21	0.85 to 13.02		
	Buccal/sublingual misoprostol	1.08	0.6 to 1.8		

TABLE 50 Vaginal delivery not achieved within 24 hours (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	2.29	0.84 to 5.1		
	i.v. oxytocin plus amniotomy	0.62	0.11 to 1.99		
	NO	2.70	0.76 to 7.03		
	Mifepristone	9.69	1.87 to 30.74		
	Mechanical methods – Foley catheter	2.04	0.73 to 4.57		
	Mechanical methods – double-balloon or Cook's catheter	1.80	0.55 to 4.46		
	Extra-amniotic PGE_2	4.71	0.73 to 16.36		
	Buccal/sublingual misoprostol	1.22	0.43 to 2.74		
i.v. oxytocin	i.v. oxytocin plus amniotomy	0.28	0.06 to 0.78		
	NO	1.22	0.49 to 2.54		
	Mifepristone	4.29	1.19 to 11.25	4.687	0.83 to 15.59
	Mechanical methods – Foley catheter	0.92	0.51 to 1.53		
	Mechanical methods – double-balloon or Cook's catheter	0.82	0.35 to 1.65		
	Extra-amniotic PGE_2	2.12	0.43 to 6.54		
	Buccal/sublingual misoprostol	0.55	0.32 to 0.88	1.464	0.3 to 4.46
i.v. oxytocin plus amniotomy	NO	6.34	1.23 to 20.21		
	Mifepristone	22.76	3.17 to 83.58		
	Mechanical methods – Foley catheter	4.80	1.12 to 14.05		
	Mechanical methods – double-balloon or Cook's catheter	4.27	0.85 to 13.41		
	Extra-amniotic PGE_2	11.04	1.25 to 43.52		
	Buccal/sublingual misoprostol	2.80	0.71 to 7.82	5.601	0.73 to 21.59
NO	Mifepristone	4.06	0.9 to 11.86		
	Mechanical methods – Foley catheter	0.87	0.34 to 1.84		
	Mechanical methods – double-balloon or Cook's catheter	0.77	0.25 to 1.86		
	Extra-amniotic PGE_2	2.00	0.34 to 6.72		
	Buccal/sublingual misoprostol	0.52	0.2 to 1.08		
Mifepristone	Mechanical methods – Foley catheter	0.29	0.07 to 0.8		
	Mechanical methods – double-balloon or Cook's catheter	0.26	0.05 to 0.77		
	Extra-amniotic PGE_2	0.68	0.08 to 2.56		
	Buccal/sublingual misoprostol	0.17	0.04 to 0.47		
Mechanical methods – Foley catheter	Mechanical methods – double-balloon or Cook's catheter	0.91	0.43 to 1.7	1.335	0.39 to 3.41
	Extra-amniotic PGE_2	2.41	0.48 to 7.48		
	Buccal/sublingual misoprostol	0.62	0.34 to 1.05		
Mechanical methods – double-balloon or Cook's catheter	Extra-amniotic PGE_2	2.94	0.51 to 9.76		
	Buccal/sublingual misoprostol	0.76	0.31 to 1.55		
Extra-amniotic PGE_2	Buccal/sublingual misoprostol	0.40	0.08 to 1.22		

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TABLE 51 Caesarean section

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	1.2	0.91 to 1.44	0.53	0.05 to 1.91
	Vaginal PGE_2 (tablet)	1.2	0.9 to 1.57		
	Vaginal PGE_2 (gel)	0.9	0.74 to 1.08	0.86	0.6 to 1.17
	Vaginal PGE_2 pessary (slow release)	1.0	0.8 to 1.28	16.68	0.43 to 105.7
	PGF_2 gel	0.8	0.44 to 1.35		
	Intracervical PGE_2	0.9	0.78 to 1.14	0.92	0.65 to 1.27
	Vaginal PGE_2 pessary (normal release)	0.9	0.7 to 1.24	1.05	0.44 to 2.15
	Vaginal misoprostol (dose < 50 µg)	0.8	0.65 to 0.97	0.55	0.25 to 1.04
	Vaginal misoprostol (dose ≥ 50 µg)	0.8	0.68 to 1.01		
	Oral misoprostol tablet (dose < 50 µg)	1.3	0.73 to 2.08		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.8	0.66 to 1.01	1.39	0.25 to 4.61
	Titrated (low-dose) oral misoprostol solution	0.7	0.53 to 0.92		
	Sustained-release misoprostol vaginal pessary	1.1	0.68 to 1.77		
	i.v. oxytocin	1.1	0.89 to 1.27	1.16	0.93 to 1.44
	Amniotomy	1.2	0.58 to 2.31		
	i.v. oxytocin plus amniotomy	1.0	0.66 to 1.53		
	NO	0.9	0.69 to 1.26	1.41	0.22 to 5.09
	Mifepristone	0.8	0.48 to 1.29		
	Oestrogens	1.5	0.71 to 2.68		
	Corticosteroids	0.6	0.22 to 1.3	0.22	0 to 1.05
	Relaxin	1.0	0.36 to 2.34		
	Hyaluronidase	0.7	0.38 to 1.17		
	Mechanical methods – Foley catheter	0.9	0.69 to 1.09		
	Mechanical methods – laminaria	0.9	0.51 to 1.51	0.92	0.51 to 1.49
	Mechanical methods – double-balloon or Cook's catheter	1.3	0.84 to 1.87		
	Membrane sweeping	0.8	0.66 to 1.05	0.86	0.67 to 1.08
	Extra-amniotic PGE_2	1.1	0.65 to 1.82		
	i.v. prostaglandin	23.2	1.84 to 135.6		
	Sexual intercourse	1.0	0.65 to 1.39	0.95	0.66 to 1.36
	Acupuncture	0.9	0.58 to 1.43	1.04	0.42 to 2.22
	Oral prostaglandins	0.8	0.09 to 2.94		
	Buccal/sublingual misoprostol	0.8	0.58 to 1.02		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Placebo	Vaginal PGE_2 (tablet)	1.0	0.78 to 1.35	0.91	0 to 5.74
	Vaginal PGE_2 (gel)	0.8	0.65 to 0.94	0.95	0.63 to 1.37
	Vaginal PGE_2 pessary (slow release)	0.9	0.69 to 1.12	0.62	0.26 to 1.21
	PGF_2 gel	0.7	0.4 to 1.16	0.65	0.27 to 1.3
	Intracervical PGE_2	0.8	0.69 to 0.98	0.85	0.66 to 1.09
	Vaginal PGE_2 pessary (normal release)	0.8	0.62 to 1.09	0.76	0.41 to 1.29
	Vaginal misoprostol (dose < 50 µg)	0.7	0.57 to 0.85	1.14	0.58 to 2.05
	Vaginal misoprostol (dose ≥ 50 µg)	0.7	0.59 to 0.88	1.32	0.17 to 4.64
	Oral misoprostol tablet (dose < 50 µg)	1.1	0.64 to 1.81		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.7	0.58 to 0.88	0.60	0.35 to 0.96
	Titrated (low-dose) oral misoprostol solution	0.6	0.47 to 0.8		
	Sustained-release misoprostol vaginal pessary	1.0	0.59 to 1.55		
	i.v. oxytocin	0.9	0.75 to 1.14	1.74	0.53 to 4.29
	Amniotomy	1.1	0.51 to 2.02		
	i.v. oxytocin plus amniotomy	0.9	0.57 to 1.34		
	NO	0.8	0.62 to 1.06	1.05	0.7 to 1.49
	Mifepristone	0.7	0.45 to 1.08	0.63	0.39 to 0.95
	Oestrogens	1.3	0.62 to 2.32	1.97	0.66 to 4.49
	Corticosteroids	0.5	0.2 to 1.12	0.72	0.25 to 1.65
	Relaxin	0.9	0.33 to 1.98	0.90	0.32 to 2.03
	Hyaluronidase	0.6	0.34 to 1	0.24	0.1 to 0.46
	Mechanical methods – Foley catheter	0.8	0.61 to 0.95		
	Mechanical methods – laminaria	0.8	0.43 to 1.38		
	Mechanical methods – double-balloon or Cook's catheter	1.1	0.73 to 1.63		
	Membrane sweeping	0.7	0.53 to 0.99	1.78	0.22 to 6.41
	Extra-amniotic PGE_2	1.0	0.57 to 1.57	0.47	0.16 to 1.03
	i.v. prostaglandin	19.9	1.61 to 120.5		
	Sexual intercourse	0.8	0.54 to 1.29		
	Acupuncture	0.8	0.52 to 1.2	0.76	0.46 to 1.16
	Oral prostaglandins	0.7	0.08 to 2.59		
	Buccal/sublingual misoprostol	0.7	0.51 to 0.89		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	0.77	0.6 to 0.96	0.84	0 to 0.83
	Vaginal PGE_2 pessary (slow release)	0.86	0.64 to 1.14		
	PGF_2 gel	0.68	0.37 to 1.17		
	Intracervical PGE_2	0.81	0.62 to 1.03	0.78	0 to 0.74
	Vaginal PGE_2 pessary (normal release)	0.80	0.57 to 1.11		
	Vaginal misoprostol (dose < 50 µg)	0.68	0.52 to 0.87		
	Vaginal misoprostol (dose ≥ 50 µg)	0.71	0.55 to 0.89	0.69	0 to 0.68
	Oral misoprostol tablet (dose < 50 µg)	1.08	0.6 to 1.8		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.70	0.53 to 0.9	0.95	0 to 0.89
	Titrated (low-dose) oral misoprostol solution	0.60	0.43 to 0.81		
	Sustained-release misoprostol vaginal pessary	0.96	0.55 to 1.54		
	i.v. oxytocin	0.91	0.69 to 1.17	0.44	0 to 0.4
	Amniotomy	1.03	0.48 to 1.98		
	i.v. oxytocin plus amniotomy	0.87	0.54 to 1.33		
	NO	0.80	0.57 to 1.09	0.88	0.01 to 0.81
	Mifepristone	0.70	0.4 to 1.12		
	Oestrogens	1.24	0.58 to 2.32		
	Corticosteroids	0.52	0.19 to 1.14		
	Relaxin	0.86	0.3 to 1.98		
	Hyaluronidase	0.59	0.32 to 1.01		
	Mechanical methods – Foley catheter	0.74	0.56 to 0.96	0.99	0.01 to 0.88
	Mechanical methods – laminaria	0.78	0.4 to 1.35		
	Mechanical methods – double-balloon or Cook's catheter	1.08	0.69 to 1.62		
	Membrane sweeping	0.72	0.49 to 1.01		
	Extra-amniotic PGE_2	0.96	0.53 to 1.59		
	i.v. prostaglandin	19.56	1.54 to 118		
	Sexual intercourse	0.82	0.5 to 1.28		
	Acupuncture	0.79	0.47 to 1.25		
	Oral prostaglandins	0.70	0.08 to 2.55		
	Buccal/sublingual misoprostol	0.66	0.48 to 0.9		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	1.13	0.91 to 1.38	1.579	0.72 to 3.03
	PGF_2 gel	0.89	0.5 to 1.48	1.196	0.33 to 3.22
	Intracervical PGE_2	1.06	0.91 to 1.23	1.3	0.94 to 1.76
	Vaginal PGE_2 pessary (normal release)	1.05	0.8 to 1.35	1.753	0.59 to 4.1
	Vaginal misoprostol (dose < 50 µg)	0.89	0.77 to 1.03	0.9487	0.73 to 1.2
	Vaginal misoprostol (dose ≥ 50 µg)	0.93	0.8 to 1.06	0.8462	0.66 to 1.06
	Oral misoprostol tablet (dose < 50 µg)	1.41	0.83 to 2.25	1.005	0.43 to 2.02
	Oral misoprostol tablet (dose ≥ 50 µg)	0.91	0.77 to 1.07	1.107	0.77 to 1.55
	Titrated (low-dose) oral misoprostol solution	0.79	0.63 to 0.97	0.8214	0.61 to 1.08
	Sustained-release misoprostol vaginal pessary	1.25	0.76 to 1.95		
	i.v. oxytocin	1.19	1 to 1.4	1.156	0.47 to 2.4
	Amniotomy	1.35	0.66 to 2.53	1.55	0.35 to 4.78
	i.v. oxytocin plus amniotomy	1.14	0.76 to 1.66	0.7504	0.35 to 1.39
	NO	1.05	0.79 to 1.35	0.9331	0.57 to 1.43
	Mifepristone	0.91	0.55 to 1.41		
	Oestrogens	1.62	0.79 to 2.99		
	Corticosteroids	0.68	0.25 to 1.45		
	Relaxin	1.13	0.41 to 2.58		
	Hyaluronidase	0.78	0.44 to 1.29		
	Mechanical methods – Foley catheter	0.97	0.82 to 1.15	0.9701	0.76 to 1.22
	Mechanical methods – laminaria	1.02	0.55 to 1.72		
	Mechanical methods – double-balloon or Cook's catheter	1.42	0.97 to 2.02	1.338	0.72 to 2.27
	Membrane sweeping	0.94	0.69 to 1.25		
	Extra-amniotic PGE_2	1.26	0.73 to 2		
	i.v. prostaglandin	25.56	2.05 to 155.1		
	Sexual intercourse	1.08	0.7 to 1.61		
	Acupuncture	1.04	0.65 to 1.59		
	Oral prostaglandins	0.92	0.1 to 3.29		
	Buccal/sublingual misoprostol	0.87	0.68 to 1.1		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (slow release)	PGF_2 gel	0.80	0.44 to 1.35		
	Intracervical PGE_2	0.94	0.76 to 1.17	0.9169	0.5 to 1.55
	Vaginal PGE_2 pessary (normal release)	0.94	0.68 to 1.26		
	Vaginal misoprostol (dose < 50 µg)	0.80	0.64 to 0.98	1.155	0.62 to 2
	Vaginal misoprostol (dose ≥ 50 µg)	0.83	0.67 to 1.01	0.9019	0.61 to 1.26
	Oral misoprostol tablet (dose < 50 µg)	1.26	0.72 to 2.06		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.82	0.64 to 1.02		
	Titrated (low-dose) oral misoprostol solution	0.70	0.53 to 0.91	0.4783	0.17 to 1.07
	Sustained-release misoprostol vaginal pessary	1.11	0.71 to 1.65	1.103	0.73 to 1.61
	i.v. oxytocin	1.06	0.85 to 1.3	1.502	0.93 to 2.29
	Amniotomy	1.21	0.58 to 2.3		
	i.v. oxytocin plus amniotomy	1.02	0.65 to 1.53		
	NO	0.93	0.67 to 1.26		
	Mifepristone	0.81	0.48 to 1.29		
	Oestrogens	1.44	0.69 to 2.69		
	Corticosteroids	0.61	0.22 to 1.3		
	Relaxin	1.01	0.36 to 2.33		
	Hyaluronidase	0.69	0.38 to 1.17		
	Mechanical methods – Foley catheter	0.87	0.69 to 1.08	0.7321	0.47 to 1.09
	Mechanical methods – laminaria	0.91	0.48 to 1.57		
	Mechanical methods – double-balloon or Cook's catheter	1.26	0.85 to 1.83	0.9315	0.44 to 1.76
	Membrane sweeping	0.84	0.6 to 1.13	0.6474	0.28 to 1.28
	Extra-amniotic PGE_2	1.12	0.63 to 1.82		
	i.v. prostaglandin	22.76	1.82 to 135.4		
	Sexual intercourse	0.96	0.6 to 1.47		
	Acupuncture	0.93	0.56 to 1.45		
	Oral prostaglandins	0.82	0.09 to 2.94		
	Buccal/sublingual misoprostol	0.78	0.58 to 1.02		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
PGF_2 gel	Intracervical PGE_2	1.28	0.71 to 2.1		
	Vaginal PGE_2 pessary (normal release)	1.27	0.67 to 2.18		
	Vaginal misoprostol (dose < 50 µg)	1.08	0.59 to 1.78		
	Vaginal misoprostol (dose ≥ 50 µg)	1.12	0.62 to 1.85		
	Oral misoprostol tablet (dose < 50 µg)	1.71	0.76 to 3.31		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.10	0.6 to 1.83		
	Titrated (low-dose) oral misoprostol solution	0.95	0.51 to 1.61		
	Sustained-release misoprostol vaginal pessary	1.51	0.7 to 2.89		
	i.v. oxytocin	1.43	0.79 to 2.38	358,300	1.09 to 22,380
	Amniotomy	1.63	0.63 to 3.56		
	i.v. oxytocin plus amniotomy	1.37	0.67 to 2.54		
	NO	1.26	0.67 to 2.16		
	Mifepristone	1.09	0.51 to 2.03		
	Oestrogens	1.95	0.76 to 4.11		
	Corticosteroids	0.82	0.25 to 1.96		
	Relaxin	1.36	0.42 to 3.47		
	Hyaluronidase	0.94	0.41 to 1.82		
	Mechanical methods – Foley catheter	1.17	0.65 to 1.94	0.7658	0.22 to 1.9
	Mechanical methods – laminaria	1.23	0.52 to 2.47		
	Mechanical methods – double-balloon or Cook's catheter	1.71	0.85 to 3.09		
	Membrane sweeping	1.13	0.59 to 1.95		
	Extra-amniotic PGE_2	1.51	0.68 to 2.91		
	i.v. prostaglandin	31.34	2.13 to 191		
	Sexual intercourse	1.30	0.63 to 2.41		
	Acupuncture	1.25	0.6 to 2.29		
	Oral prostaglandins	1.11	0.11 to 4.17		
	Buccal/sublingual misoprostol	1.05	0.55 to 1.79		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	1.00	0.76 to 1.3	1.12	0.57 to 2
	Vaginal misoprostol (dose < 50 µg)	0.85	0.72 to 0.99	0.8757	0.61 to 1.23
	Vaginal misoprostol (dose ≥ 50 µg)	0.88	0.75 to 1.03	1.035	0.74 to 1.4
	Oral misoprostol tablet (dose < 50 µg)	1.34	0.78 to 2.17		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.87	0.72 to 1.03	0.8622	0.54 to 1.3
	Titrated (low-dose) oral misoprostol solution	0.75	0.58 to 0.95		
	Sustained-release misoprostol vaginal pessary	1.19	0.72 to 1.86		
	i.v. oxytocin	1.13	0.94 to 1.34	0.8863	0.46 to 1.56
	Amniotomy	1.29	0.62 to 2.42		
	i.v. oxytocin plus amniotomy	1.08	0.7 to 1.6		
	NO	0.99	0.74 to 1.3		
	Mifepristone	0.86	0.52 to 1.34		
	Oestrogens	1.54	0.75 to 2.81	0.9795	0.33 to 2.32
	Corticosteroids	0.65	0.24 to 1.38		
	Relaxin	1.07	0.39 to 2.46		
	Hyaluronidase	0.74	0.41 to 1.22		
	Mechanical methods – Foley catheter	0.92	0.76 to 1.12	1.085	0.59 to 1.83
	Mechanical methods – laminaria	0.97	0.52 to 1.65		
	Mechanical methods – double-balloon or Cook's catheter	1.35	0.9 to 1.94	2.867	0.83 to 7.15
	Membrane sweeping	0.89	0.66 to 1.18		
	Extra-amniotic PGE_2	1.19	0.69 to 1.91	0.9298	0.01 to 4.69
	i.v. prostaglandin	24.08	1.94 to 145.6		
	Sexual intercourse	1.02	0.66 to 1.54		
	Acupuncture	0.98	0.62 to 1.5		
	Oral prostaglandins	0.87	0.1 to 3.12		
	Buccal/sublingual misoprostol	0.82	0.64 to 1.06		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	0.86	0.65 to 1.12		
	Vaginal misoprostol (dose ≥ 50 µg)	0.90	0.68 to 1.16	0.6225	0.31 to 1.11
	Oral misoprostol tablet (dose < 50 µg)	1.37	0.75 to 2.31		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.88	0.66 to 1.16		
	Titrated (low-dose) oral misoprostol solution	0.76	0.54 to 1.04	0.6755	0.26 to 1.42
	Sustained-release misoprostol vaginal pessary	1.21	0.7 to 1.97		
	i.v. oxytocin	1.15	0.87 to 1.49	0.8613	0.46 to 1.49
	Amniotomy	1.31	0.61 to 2.51		
	i.v. oxytocin plus amniotomy	1.10	0.68 to 1.68	2.528	0.86 to 5.92
	NO	1.01	0.7 to 1.42		
	Mifepristone	0.88	0.5 to 1.43		
	Oestrogens	1.56	0.73 to 2.96		
	Corticosteroids	0.66	0.24 to 1.43		
	Relaxin	1.09	0.38 to 2.55		
	Hyaluronidase	0.75	0.4 to 1.29		
	Mechanical methods – Foley catheter	0.94	0.7 to 1.25	2.107	0.86 to 4.39
	Mechanical methods – laminaria	0.99	0.51 to 1.72		
	Mechanical methods – double-balloon or Cook's catheter	1.37	0.87 to 2.08		
	Membrane sweeping	0.91	0.62 to 1.28		
	Extra-amniotic PGE_2	1.21	0.67 to 2.02	1.343	0.51 to 2.86
	i.v. prostaglandin	24.70	1.95 to 147.7		
	Sexual intercourse	1.04	0.63 to 1.63		
	Acupuncture	1.00	0.59 to 1.6		
	Oral prostaglandins	0.89	0.1 to 3.19		
	Buccal/sublingual misoprostol	0.84	0.59 to 1.16		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	1.04	0.9 to 1.21	1.22	0.86 to 1.69
	Oral misoprostol tablet (dose < 50 µg)	1.59	0.94 to 2.52	2.442	1.11 to 4.72
	Oral misoprostol tablet (dose ≥ 50 µg)	1.03	0.87 to 1.21	0.767	0.57 to 1.02
	Titrated (low-dose) oral misoprostol solution	0.89	0.7 to 1.11	0.7473	0.42 to 1.23
	Sustained-release misoprostol vaginal pessary	1.41	0.86 to 2.2		
	i.v. oxytocin	1.34	1.12 to 1.58	1.599	1.11 to 2.24
	Amniotomy	1.52	0.74 to 2.87		
	i.v. oxytocin plus amniotomy	1.28	0.84 to 1.89		
	NO	1.18	0.88 to 1.54	0.6798	0.24 to 1.51
	Mifepristone	1.02	0.62 to 1.6		
	Oestrogens	1.82	0.89 to 3.37		
	Corticosteroids	0.77	0.28 to 1.63		
	Relaxin	1.27	0.46 to 2.91		
	Hyaluronidase	0.87	0.49 to 1.45		
	Mechanical methods – Foley catheter	1.10	0.92 to 1.31	1.53	1.08 to 2.12
	Mechanical methods – laminaria	1.15	0.62 to 1.95		
	Mechanical methods – double-balloon or Cook's catheter	1.60	1.08 to 2.3		
	Membrane sweeping	1.06	0.77 to 1.41		
	Extra-amniotic PGE_2	1.41	0.81 to 2.26		
	i.v. prostaglandin	28.69	2.31 to 172.9		
	Sexual intercourse	1.21	0.78 to 1.82		
	Acupuncture	1.17	0.73 to 1.79		
	Oral prostaglandins	1.04	0.11 to 3.73		
	Buccal/sublingual misoprostol	0.98	0.78 to 1.21	1.09	0.81 to 1.45
Vaginal misoprostol (dose ≥ 50 µg)	Oral misoprostol tablet (dose < 50 µg)	1.53	0.89 to 2.45		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.99	0.84 to 1.15	1.092	0.83 to 1.39
	Titrated (low-dose) oral misoprostol solution	0.85	0.67 to 1.07	2.558	0.4 to 9.6
	Sustained-release misoprostol vaginal pessary	1.35	0.83 to 2.11		
	i.v. oxytocin	1.28	1.09 to 1.51	1.13	0.82 to 1.52
	Amniotomy	1.46	0.71 to 2.75		
	i.v. oxytocin plus amniotomy	1.23	0.81 to 1.82		
	NO	1.13	0.85 to 1.47	1.055	0.49 to 1.96

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	Mifepristone	0.98	0.59 to 1.53		
	Oestrogens	1.75	0.85 to 3.23		
	Corticosteroids	0.74	0.27 to 1.57		
	Relaxin	1.22	0.44 to 2.8		
	Hyaluronidase	0.84	0.47 to 1.39		
	Mechanical methods – Foley catheter	1.05	0.87 to 1.26	1.05	0.57 to 1.81
	Mechanical methods – laminaria	1.11	0.59 to 1.87		
	Mechanical methods – double-balloon or Cook's catheter	1.53	1.03 to 2.21		
	Membrane sweeping	1.01	0.75 to 1.35		
	Extra-amniotic PGE_2	1.36	0.79 to 2.14	3.248	0.95 to 8.74
	i.v. prostaglandin	27.56	2.24 to 164.1		
	Sexual intercourse	1.17	0.75 to 1.75		
	Acupuncture	1.12	0.7 to 1.72		
	Oral prostaglandins	1.00	0.11 to 3.55		
	Buccal/sublingual misoprostol	0.94	0.74 to 1.17	0.8972	0.62 to 1.25
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	0.69	0.4 to 1.1	1.241	0.22 to 3.93
	Titrated (low-dose) oral misoprostol solution	0.59	0.34 to 0.97		
	Sustained-release misoprostol vaginal pessary	0.94	0.45 to 1.75		
	i.v. oxytocin	0.90	0.51 to 1.44		
	Amniotomy	1.02	0.41 to 2.17		
	i.v. oxytocin plus amniotomy	0.86	0.43 to 1.55		
	NO	0.79	0.43 to 1.32		
	Mifepristone	0.69	0.32 to 1.28		
	Oestrogens	1.22	0.49 to 2.55		
	Corticosteroids	0.51	0.16 to 1.21		
	Relaxin	0.85	0.26 to 2.09		
	Hyaluronidase	0.59	0.26 to 1.13		
	Mechanical methods – Foley catheter	0.73	0.42 to 1.18		
	Mechanical methods – laminaria	0.77	0.34 to 1.51		
	Mechanical methods – double-balloon or Cook's catheter	1.07	0.55 to 1.88		
	Membrane sweeping	0.71	0.39 to 1.19		
	Extra-amniotic PGE_2	0.95	0.44 to 1.77		

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
	i.v. prostaglandin	19.15	1.38 to 114		
	Sexual intercourse	0.81	0.41 to 1.47		
	Acupuncture	0.78	0.38 to 1.44		
	Oral prostaglandins	0.69	0.07 to 2.6		
	Buccal/sublingual misoprostol	0.65	0.37 to 1.07		
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	0.87	0.66 to 1.11	1.942	0.6 to 4.84
	Sustained-release misoprostol vaginal pessary	1.38	0.83 to 2.17		
	i.v. oxytocin	1.31	1.07 to 1.58	1.05	0.54 to 1.83
	Amniotomy	1.49	0.72 to 2.83		
	i.v. oxytocin plus amniotomy	1.25	0.81 to 1.88		
	NO	1.15	0.85 to 1.51		
	Mifepristone	1.00	0.59 to 1.57		
	Oestrogens	1.78	0.86 to 3.3		
	Corticosteroids	0.75	0.27 to 1.6		
	Relaxin	1.24	0.45 to 2.85		
	Hyaluronidase	0.86	0.47 to 1.42		
	Mechanical methods – Foley catheter	1.07	0.87 to 1.32		
	Mechanical methods – laminaria	1.13	0.6 to 1.92		
	Mechanical methods – double-balloon or Cook's catheter	1.56	1.04 to 2.28		
	Membrane sweeping	1.03	0.75 to 1.38		
	Extra-amniotic PGE_2	1.38	0.79 to 2.22		
	i.v. prostaglandin	28.01	2.27 to 168.8		
	Sexual intercourse	1.19	0.76 to 1.8		
	Acupuncture	1.14	0.71 to 1.77		
	Oral prostaglandins	1.01	0.11 to 3.63		
	Buccal/sublingual misoprostol	0.95	0.74 to 1.21	0.7876	0.44 to 1.3

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	1.61	0.94 to 2.58		
	i.v. oxytocin	1.53	1.18 to 1.94	1.57	0.76 to 2.93
	Amniotomy	1.74	0.82 to 3.32		
	i.v. oxytocin plus amniotomy	1.46	0.92 to 2.23		
	NO	1.35	0.95 to 1.85		
	Mifepristone	1.17	0.68 to 1.88		
	Oestrogens	2.08	0.98 to 3.93		
	Corticosteroids	0.88	0.32 to 1.91		
	Relaxin	1.45	0.52 to 3.39		
	Hyaluronidase	1.00	0.54 to 1.7		
	Mechanical methods – Foley catheter	1.25	0.97 to 1.6		
	Mechanical methods – laminaria	1.31	0.69 to 2.28		
	Mechanical methods – double-balloon or Cook's catheter	1.82	1.18 to 2.71		
	Membrane sweeping	1.21	0.84 to 1.68		
	Extra-amniotic PGE_2	1.61	0.91 to 2.62		
	i.v. prostaglandin	32.79	2.59 to 201		
	Sexual intercourse	1.39	0.85 to 2.15		
	Acupuncture	1.34	0.79 to 2.12		
	Oral prostaglandins	1.18	0.13 to 4.26		
	Buccal/sublingual misoprostol	1.12	0.81 to 1.5		
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	1.00	0.6 to 1.56		
	Amniotomy	1.14	0.47 to 2.39		
	i.v. oxytocin plus amniotomy	0.96	0.5 to 1.68		
	NO	0.88	0.5 to 1.43		
	Mifepristone	0.77	0.38 to 1.38		
	Oestrogens	1.37	0.57 to 2.78		
	Corticosteroids	0.57	0.19 to 1.33		
	Relaxin	0.95	0.3 to 2.32		
	Hyaluronidase	0.66	0.31 to 1.24		
	Mechanical methods – Foley catheter	0.82	0.5 to 1.28		
	Mechanical methods – laminaria	0.86	0.39 to 1.65		
	Mechanical methods – double-balloon or Cook's catheter	1.19	0.65 to 2.04		
	Membrane sweeping	0.79	0.45 to 1.28		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
	Extra-amniotic PGE_2	1.06	0.51 to 1.96		
	i.v. prostaglandin	21.53	1.59 to 126.3		
	Sexual intercourse	0.91	0.47 to 1.6		
	Acupuncture	0.88	0.44 to 1.58		
	Oral prostaglandins	0.77	0.08 to 2.85		
	Buccal/sublingual misoprostol	0.73	0.42 to 1.18		
i.v. oxytocin	Amniotomy	1.14	0.56 to 2.15		
	i.v. oxytocin plus amniotomy	0.96	0.63 to 1.41	1.115	0.58 to 1.95
	NO	0.89	0.65 to 1.17		
	Mifepristone	0.77	0.46 to 1.2	3.904	0.58 to 14.91
	Oestrogens	1.37	0.67 to 2.5		
	Corticosteroids	0.58	0.21 to 1.22		
	Relaxin	0.95	0.34 to 2.19		
	Hyaluronidase	0.66	0.36 to 1.1		
	Mechanical methods – Foley catheter	0.82	0.67 to 1.01		
	Mechanical methods – laminaria	0.86	0.47 to 1.45		
	Mechanical methods – double-balloon or Cook's catheter	1.20	0.8 to 1.74		
	Membrane sweeping	0.79	0.59 to 1.04		
	Extra-amniotic PGE_2	1.06	0.61 to 1.71		
	i.v. prostaglandin	21.48	1.76 to 127.4	19.76	1.7 to 87.58
	Sexual intercourse	0.91	0.59 to 1.36		
	Acupuncture	0.88	0.55 to 1.35		
	Oral prostaglandins	0.77	0.09 to 2.74	0.7501	0.07 to 2.74
	Buccal/sublingual misoprostol	0.74	0.56 to 0.95		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Amniotomy	i.v. oxytocin plus amniotomy	0.92	0.48 to 1.59	0.3188	0.45 to 1.67
	NO	0.87	0.39 to 1.64		
	Mifepristone	0.75	0.3 to 1.53		
	Oestrogens	1.34	0.47 to 3.05		
	Corticosteroids	0.56	0.16 to 1.41		
	Relaxin	0.94	0.25 to 2.46		
	Hyaluronidase	0.65	0.25 to 1.38		
	Mechanical methods – Foley catheter	0.81	0.38 to 1.48		
	Mechanical methods – laminaria	0.85	0.31 to 1.82		
	Mechanical methods – double-balloon or Cook's catheter	1.18	0.51 to 2.29		
	Membrane sweeping	0.78	0.35 to 1.48		
	Extra-amniotic PGE_2	1.04	0.41 to 2.18		
	i.v. prostaglandin	20.98	1.35 to 123.2		
	Sexual intercourse	0.89	0.37 to 1.8		
	Acupuncture	0.86	0.35 to 1.75		
	Oral prostaglandins	0.76	0.07 to 2.87		
	Buccal/sublingual misoprostol	0.72	0.33 to 1.36		
i.v. oxytocin plus amniotomy	NO	0.96	0.58 to 1.48		
	Mifepristone	0.83	0.43 to 1.44		
	Oestrogens	1.48	0.64 to 2.95		
	Corticosteroids	0.62	0.21 to 1.39		
	Relaxin	1.03	0.34 to 2.46		
	Hyaluronidase	0.71	0.35 to 1.3		
	Mechanical methods – Foley catheter	0.89	0.57 to 1.31		
	Mechanical methods – laminaria	0.93	0.44 to 1.74		
	Mechanical methods – double-balloon or Cook's catheter	1.30	0.74 to 2.11		
	Membrane sweeping	0.86	0.52 to 1.33		
	Extra-amniotic PGE_2	1.15	0.57 to 2.05		
	i.v. prostaglandin	23.58	1.74 to 143		
	Sexual intercourse	0.98	0.54 to 1.66		
	Acupuncture	0.95	0.51 to 1.63		
	Oral prostaglandins	0.84	0.09 to 3.09		
	Buccal/sublingual misoprostol	0.79	0.49 to 1.21	1.191	0.11 to 4.07

continued

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TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
NO	Mifepristone	0.88	0.51 to 1.43		
	Oestrogens	1.57	0.74 to 2.99		
	Corticosteroids	0.66	0.24 to 1.43		
	Relaxin	1.09	0.39 to 2.56		
	Hyaluronidase	0.75	0.4 to 1.3		
	Mechanical methods – Foley catheter	0.95	0.7 to 1.27		
	Mechanical methods – laminaria	0.99	0.5 to 1.75		
	Mechanical methods – double-balloon or Cook's catheter	1.38	0.86 to 2.11		
	Membrane sweeping	0.91	0.62 to 1.3		
	Extra-amniotic PGE_2	1.22	0.67 to 2.04		
	i.v. prostaglandin	24.59	1.96 to 148.3		
	Sexual intercourse	1.05	0.63 to 1.66		
	Acupuncture	1.01	0.6 to 1.6		
	Oral prostaglandins	0.89	0.1 to 3.22		
	Buccal/sublingual misoprostol	0.84	0.59 to 1.17		
Mifepristone	Oestrogens	1.87	0.8 to 3.77		
	Corticosteroids	0.79	0.26 to 1.8		
	Relaxin	1.31	0.41 to 3.21		
	Hyaluronidase	0.90	0.43 to 1.67		
	Mechanical methods – Foley catheter	1.13	0.68 to 1.79		
	Mechanical methods – laminaria	1.19	0.54 to 2.33		
	Mechanical methods – double-balloon or Cook's catheter	1.65	0.88 to 2.86		
	Membrane sweeping	1.09	0.61 to 1.79		
	Extra-amniotic PGE_2	1.46	0.7 to 2.66		
	i.v. prostaglandin	29.53	2.14 to 184.7		
	Sexual intercourse	1.25	0.65 to 2.22		
	Acupuncture	1.20	0.63 to 2.09		
	Oral prostaglandins	1.07	0.11 to 3.96		
	Buccal/sublingual misoprostol	1.01	0.58 to 1.64		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oestrogens	Corticosteroids	0.47	0.14 to 1.19		
	Relaxin	0.78	0.22 to 2.03		
	Hyaluronidase	0.54	0.21 to 1.13		
	Mechanical methods – Foley catheter	0.67	0.32 to 1.25		
	Mechanical methods – laminaria	0.71	0.27 to 1.5		
	Mechanical methods – double-balloon or Cook's catheter	0.98	0.43 to 1.92		
	Membrane sweeping	0.65	0.3 to 1.22		
	Extra-amniotic PGE_2	0.87	0.35 to 1.8		
	i.v. prostaglandin	17.12	1.16 to 103.7		
	Sexual intercourse	0.74	0.32 to 1.47		
	Acupuncture	0.71	0.3 to 1.42		
	Oral prostaglandins	0.64	0.06 to 2.46		
	Buccal/sublingual misoprostol	0.60	0.28 to 1.12		
Corticosteroids	Relaxin	2.01	0.48 to 5.89		
	Hyaluronidase	1.39	0.45 to 3.38		
	Mechanical methods – Foley catheter	1.74	0.66 to 3.89		
	Mechanical methods – laminaria	1.83	0.57 to 4.58		
	Mechanical methods – double-balloon or Cook's catheter	2.54	0.89 to 5.91		
	Membrane sweeping	1.67	0.62 to 3.79		
	Extra-amniotic PGE_2	2.24	0.74 to 5.43		
	i.v. prostaglandin	44.81	2.65 to 274.6		
	Sexual intercourse	1.92	0.67 to 4.5		
	Acupuncture	1.85	0.64 to 4.31		
	Oral prostaglandins	1.66	0.14 to 6.9		
	Buccal/sublingual misoprostol	1.55	0.58 to 3.5		

continued

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TABLE 51 Caesarean section (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Relaxin	Hyaluronidase	0.85	0.26 to 2.1		
	Mechanical methods – Foley catheter	1.07	0.37 to 2.38		
	Mechanical methods – laminaria	1.13	0.33 to 2.79		
	Mechanical methods – double-balloon or Cook's catheter	1.56	0.51 to 3.66		
	Membrane sweeping	1.03	0.34 to 2.36		
	Extra-amniotic PGE_2	1.38	0.42 to 3.36		
	i.v. prostaglandin	28.53	1.53 to 182.5		
	Sexual intercourse	1.19	0.38 to 2.81		
	Acupuncture	1.14	0.37 to 2.66		
	Oral prostaglandins	1.00	0.08 to 4.01		
	Buccal/sublingual misoprostol	0.95	0.33 to 2.13		
Hyaluronidase	Mechanical methods – Foley catheter	1.35	0.76 to 2.21	0.5359	0.24 to 1.04
	Mechanical methods – laminaria	1.42	0.6 to 2.85		
	Mechanical methods – double-balloon or Cook's catheter	1.96	0.98 to 3.52		
	Membrane sweeping	1.30	0.68 to 2.28		
	Extra-amniotic PGE_2	1.74	0.78 to 3.36		
	i.v. prostaglandin	35.16	2.49 to 212.7		
	Sexual intercourse	1.49	0.72 to 2.77		
	Acupuncture	1.43	0.7 to 2.63		
	Oral prostaglandins	1.27	0.13 to 4.74		
	Buccal/sublingual misoprostol	1.20	0.65 to 2.05		
Mechanical methods – Foley catheter	Mechanical methods – laminaria	1.06	0.56 to 1.81		
	Mechanical methods – double-balloon or Cook's catheter	1.46	1 to 2.08		
	Membrane sweeping	0.97	0.7 to 1.31		
	Extra-amniotic PGE_2	1.30	0.74 to 2.09		
	i.v. prostaglandin	26.39	2.11 to 158.7		
	Sexual intercourse	1.11	0.7 to 1.69		
	Acupuncture	1.07	0.66 to 1.66		
	Oral prostaglandins	0.95	0.11 to 3.4		
	Buccal/sublingual misoprostol	0.90	0.68 to 1.16		

TABLE 51 Caesarean section (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mechanical methods – laminaria	Mechanical methods – double-balloon or Cook's catheter	1.51	0.73 to 2.8		
	Membrane sweeping	0.99	0.53 to 1.71		
	Extra-amniotic PGE_2	1.33	0.58 to 2.59		
	i.v. prostaglandin	27.45	1.9 to 158.3		
	Sexual intercourse	1.14	0.56 to 2.09		
	Acupuncture	1.10	0.51 to 2.08		
	Oral prostaglandins	0.97	0.1 to 3.64		
	Buccal/sublingual misoprostol	0.92	0.48 to 1.63		
Mechanical methods – double-balloon or Cook's catheter	Membrane sweeping	0.68	0.42 to 1.06		
	Extra-amniotic PGE_2	0.92	0.46 to 1.61		
	i.v. prostaglandin	18.82	1.39 to 113.3		
	Sexual intercourse	0.79	0.44 to 1.3		
	Acupuncture	0.76	0.41 to 1.28		
	Oral prostaglandins	0.67	0.07 to 2.46		
	Buccal/sublingual misoprostol	0.63	0.4 to 0.94		
Membrane sweeping	Extra-amniotic PGE_2	1.36	0.74 to 2.29		
	i.v. prostaglandin	27.89	2.19 to 163.7		
	Sexual intercourse	1.17	0.74 to 1.79		
	Acupuncture	1.13	0.67 to 1.81		
	Oral prostaglandins	1.00	0.11 to 3.6		
	Buccal/sublingual misoprostol	0.94	0.65 to 1.33		
Extra-amniotic PGE_2	i.v. prostaglandin	21.62	1.56 to 125.8		
	Sexual intercourse	0.92	0.46 to 1.66		
	Acupuncture	0.88	0.43 to 1.61		
	Oral prostaglandins	0.78	0.08 to 2.87		
	Buccal/sublingual misoprostol	0.74	0.42 to 1.23		
i.v. prostaglandin	Sexual intercourse	0.15	0.01 to 0.54		
	Acupuncture	0.14	0.01 to 0.52		
	Oral prostaglandins	0.12	0 to 0.61		
	Buccal/sublingual misoprostol	0.12	0.01 to 0.42		
Sexual intercourse	Acupuncture	1.00	0.53 to 1.73		
	Oral prostaglandins	0.89	0.09 to 3.25		
	Buccal/sublingual misoprostol	0.84	0.51 to 1.3		
Acupuncture	Oral prostaglandins	0.93	0.1 to 3.47		
	Buccal/sublingual misoprostol	0.88	0.52 to 1.4		
Oral prostaglandins	Buccal/sublingual misoprostol	2.04	0.26 to 8.56		

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TABLE 52 Instrumental delivery

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	0.9	0.71 to 1.21		
	Vaginal PGE_2 (tablet)	0.8	0.66 to 1.08	0.96	0.46 to 1.77
	Vaginal PGE_2 (gel)	0.9	0.7 to 1.04	0.99	0.61 to 1.49
	Vaginal PGE_2 pessary (slow release)	0.7	0.48 to 0.9		
	PGF_2 gel	0.8	0.52 to 1.19		
	Intracervical PGE_2	0.8	0.66 to 1.02	1.05	0.56 to 1.77
	Vaginal PGE_2 pessary (normal release)	1.0	0.76 to 1.29	0.74	0.37 to 1.32
	Vaginal misoprostol (dose <50 µg)	0.7	0.57 to 0.94	1.37	0.41 to 3.43
	Vaginal misoprostol (dose ≥ 50 µg)	0.9	0.68 to 1.05		
	Oral misoprostol tablet (dose <50 µg)	0.7	0.32 to 1.28		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.8	0.61 to 0.97	1.73	0.46 to 4.66
	Titrated (low-dose) oral misoprostol solution	0.9	0.59 to 1.36		
	Sustained-release misoprostol vaginal pessary	0.9	0.43 to 1.56		
	i.v. oxytocin	1.0	0.84 to 1.19	1.09	0.86 to 1.4
	Amniotomy	0.8	0.47 to 1.24		
	i.v. oxytocin plus amniotomy	0.9	0.63 to 1.16	0.20	0.05 to 0.52
	NO	0.9	0.6 to 1.21	2.03	0.27 to 7.93
	Mifepristone	1.6	0.92 to 2.56	1.06	0.12 to 3.85
	Oestrogens	0.6	0.3 to 1.19		
	Relaxin	1.4	0.58 to 2.73		
	Mechanical methods – Foley catheter	0.6	0.48 to 0.82		
	Mechanical methods – laminaria	0.8	0.44 to 1.24		
	Mechanical methods – double-balloon or Cook's catheter	0.7	0.45 to 1.03		
	Membrane sweeping	1.1	0.87 to 1.38	1.07	0.82 to 1.37
	Extra-amniotic PGE_2	0.9	0.45 to 1.44		
	i.v. prostaglandin	1.9	0.81 to 3.8		
	Sexual intercourse	1.2	0.68 to 1.95	1.20	0.64 to 2.06
	Acupuncture	0.8	0.46 to 1.19	0.49	0.2 to 0.98
	Homeopathy	2.0	0.1 to 9.79		
	Oral prostaglandins	0.7	0.44 to 1.04	1.28	0.34 to 3.48
	Buccal/sublingual misoprostol	0.6	0.42 to 0.92		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Placebo	Vaginal PGE_2 (tablet)	0.9	0.67 to 1.22		
	Vaginal PGE_2 (gel)	0.9	0.72 to 1.18	1.18	0.38 to 2.85
	Vaginal PGE_2 pessary (slow release)	0.7	0.5 to 0.99	1.05	0.4 to 2.26
	PGF_2 gel	0.9	0.58 to 1.25	0.74	0.43 to 1.2
	Intracervical PGE_2	0.9	0.68 to 1.14	1.09	0.61 to 1.79
	Vaginal PGE_2 pessary (normal release)	1.1	0.79 to 1.45	0.98	0.5 to 1.75
	Vaginal misoprostol (dose < 50 µg)	0.8	0.59 to 1.05	0.64	0.09 to 2.23
	Vaginal misoprostol (dose ≥ 50 µg)	0.9	0.7 to 1.18	1.21	0.35 to 3.12
	Oral misoprostol tablet (dose < 50 µg)	0.7	0.34 to 1.38		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.8	0.63 to 1.09	0.54	0.25 to 1
	Titrated (low-dose) oral misoprostol solution	1.0	0.62 to 1.52		
	Sustained-release misoprostol vaginal pessary	0.9	0.46 to 1.71		
	i.v. oxytocin	1.1	0.83 to 1.39		
	Amniotomy	0.9	0.5 to 1.38		
	i.v. oxytocin plus amniotomy	0.9	0.64 to 1.31		
	NO	0.9	0.69 to 1.21	0.91	0.61 to 1.28
	Mifepristone	1.7	1.05 to 2.59	1.84	1.08 to 2.98
	Oestrogens	0.7	0.32 to 1.28	0.75	0.25 to 1.71
	Relaxin	1.4	0.66 to 2.78	1.45	0.65 to 2.87
	Mechanical methods – Foley catheter	0.7	0.5 to 0.91		
	Mechanical methods – laminaria	0.8	0.47 to 1.38		
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.47 to 1.14		
	Membrane sweeping	1.2	0.84 to 1.66	15.45	1.56 to 71.26
	Extra-amniotic PGE_2	0.9	0.49 to 1.52	0.88	0.32 to 1.91
	i.v. prostaglandin	2.0	0.85 to 4.12		
	Sexual intercourse	1.3	0.68 to 2.24		
	Acupuncture	0.8	0.51 to 1.26	1.08	0.57 to 1.85
	Homeopathy	2.1	0.11 to 10.24	2.18	0.09 to 11.64
	Oral prostaglandins	0.7	0.45 to 1.16		
	Buccal/sublingual misoprostol	0.7	0.44 to 1.03		

continued

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TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	1.0	0.8 to 1.28	0.74	0.41 to 1.23
	Vaginal PGE_2 pessary (slow release)	0.8	0.56 to 1.08	0.61	0.21 to 1.38
	PGF_2 gel	1.0	0.61 to 1.45		
	Intracervical PGE_2	1.0	0.76 to 1.26		
	Vaginal PGE_2 pessary (normal release)	1.2	0.87 to 1.59	1.02	0.31 to 2.56
	Vaginal misoprostol (dose <50 µg)	0.9	0.66 to 1.15		
	Vaginal misoprostol (dose ≥ 50 µg)	1.0	0.81 to 1.26	1.13	0.76 to 1.61
	Oral misoprostol tablet (dose <50 µg)	0.8	0.38 to 1.55		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.9	0.71 to 1.19	1.25	0.55 to 2.44
	Titrated (low-dose) oral misoprostol solution	1.1	0.7 to 1.67		
	Sustained-release misoprostol vaginal pessary	1.0	0.51 to 1.88		
	i.v. oxytocin	1.2	0.94 to 1.51	1.77	0.92 to 3.12
	Amniotomy	0.9	0.56 to 1.51		
	i.v. oxytocin plus amniotomy	1.0	0.74 to 1.4	0.91	0.46 to 1.6
	NO	1.0	0.7 to 1.48		
	Mifepristone	1.9	1.05 to 3.11		
	Oestrogens	0.8	0.35 to 1.44		
	Relaxin	1.6	0.69 to 3.25		
	Mechanical methods – Foley catheter	0.8	0.56 to 0.99	1.03	0.32 to 2.5
	Mechanical methods – laminaria	0.9	0.53 to 1.49	1.58	0.24 to 5.53
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.52 to 1.25		
	Membrane sweeping	1.3	0.93 to 1.82		
	Extra-amniotic PGE_2	1.0	0.55 to 1.7	1.21	0.52 to 2.41
	i.v. prostaglandin	2.3	0.95 to 4.58		
	Sexual intercourse	1.4	0.76 to 2.45		
	Acupuncture	0.9	0.54 to 1.47		
	Homeopathy	2.4	0.11 to 11.74		
	Oral prostaglandins	0.8	0.5 to 1.26	1.61	0.21 to 5.53
	Buccal/sublingual misoprostol	0.8	0.5 to 1.12		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	0.8	0.57 to 1.03	0.55	0.28 to 0.97
	PGF_2 gel	0.9	0.61 to 1.39		
	Intracervical PGE_2	1.0	0.79 to 1.16	0.91	0.56 to 1.4
	Vaginal PGE_2 pessary (normal release)	1.2	0.89 to 1.51		
	Vaginal misoprostol (dose < 50 µg)	0.9	0.69 to 1.06	1.35	0.87 to 2.05
	Vaginal misoprostol (dose ≥ 50 µg)	1.0	0.83 to 1.19	0.94	0.63 to 1.33
	Oral misoprostol tablet (dose < 50 µg)	0.8	0.39 to 1.46	0.72	0.31 to 1.46
	Oral misoprostol tablet (dose ≥ 50 µg)	0.9	0.73 to 1.12	0.99	0.43 to 1.95
	Titrated (low-dose) oral misoprostol solution	1.1	0.73 to 1.53	1.07	0.67 to 1.61
	Sustained-release misoprostol vaginal pessary	1.0	0.51 to 1.82		
	i.v. oxytocin	1.2	0.97 to 1.42	0.85	0.45 to 1.47
	Amniotomy	0.9	0.56 to 1.43	0.96	0.39 to 1.99
	i.v. oxytocin plus amniotomy	1.0	0.75 to 1.34	1.27	0.68 to 2.12
	NO	1.0	0.72 to 1.38	1.08	0.57 to 1.86
	Mifepristone	1.8	1.07 to 2.99		
	Oestrogens	0.7	0.35 to 1.38		
	Relaxin	1.6	0.69 to 3.17		
	Mechanical methods – Foley catheter	0.7	0.59 to 0.92	0.74	0.51 to 1.03
	Mechanical methods – laminaria	0.9	0.53 to 1.42	0.73	0.32 to 1.41
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.54 to 1.18	0.82	0.38 to 1.56
	Membrane sweeping	1.3	0.95 to 1.72		
	Extra-amniotic PGE_2	1.0	0.53 to 1.68		
	i.v. prostaglandin	2.2	0.94 to 4.43		
	Sexual intercourse	1.4	0.77 to 2.37		
	Acupuncture	0.9	0.54 to 1.41		
	Homeopathy	2.3	0.11 to 11.5		
	Oral prostaglandins	0.8	0.51 to 1.21	2.18	0.1 to 10.86
	Buccal/sublingual misoprostol	0.7	0.5 to 1.07	0.00	0 to 0

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (slow release)	PGF_2 gel	1.2	0.75 to 1.93	0.00	0 to 0
	Intracervical PGE_2	1.3	0.92 to 1.7	1.45	0.57 to 3.08
	Vaginal PGE_2 pessary (normal release)	1.5	1.06 to 2.17		
	Vaginal misoprostol (dose < 50 µg)	1.1	0.8 to 1.56		
	Vaginal misoprostol (dose ≥ 50 µg)	1.3	0.96 to 1.74	1.41	0.58 to 2.91
	Oral misoprostol tablet (dose < 50 µg)	1.1	0.48 to 2.01		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.2	0.86 to 1.62		
	Titrated (low-dose) oral misoprostol solution	1.4	0.87 to 2.19		
	Sustained-release misoprostol vaginal pessary	1.3	0.71 to 2.21	1.31	0.68 to 2.3
	i.v. oxytocin	1.5	1.12 to 2.07	1.18	0.4 to 2.75
	Amniotomy	1.2	0.69 to 2.02		
	i.v. oxytocin plus amniotomy	1.3	0.88 to 1.92		
	NO	1.3	0.86 to 1.96		
	Mifepristone	2.4	1.3 to 4.12		
	Oestrogens	1.0	0.44 to 1.88		
	Relaxin	2.1	0.86 to 4.27		
	Mechanical methods – Foley catheter	1.0	0.7 to 1.32	0.71	0.34 to 1.31
	Mechanical methods – laminaria	1.2	0.65 to 1.97		
	Mechanical methods – double-balloon or Cook's catheter	1.1	0.66 to 1.62	7.10	0.87 to 30.16
	Membrane sweeping	1.7	1.16 to 2.44	1.20	0.3 to 3.24
	Extra-amniotic PGE_2	1.3	0.67 to 2.3		
	i.v. prostaglandin	2.9	1.19 to 6.07		
	Sexual intercourse	1.8	0.95 to 3.24		
	Acupuncture	1.2	0.67 to 1.94		
	Homeopathy	3.1	0.15 to 15.33		
	Oral prostaglandins	1.1	0.62 to 1.67		
	Buccal/sublingual misoprostol	1.0	0.61 to 1.49		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
PGF_2 gel	Intracervical PGE_2	1.1	0.69 to 1.57		
	Vaginal PGE_2 pessary (normal release)	1.3	0.81 to 1.95		
	Vaginal misoprostol (dose < 50 µg)	1.0	0.6 to 1.44		
	Vaginal misoprostol (dose ≥ 50 µg)	1.1	0.72 to 1.62		
	Oral misoprostol tablet (dose < 50 µg)	0.9	0.37 to 1.78		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.0	0.65 to 1.49		
	Titrated (low-dose) oral misoprostol solution	1.2	0.66 to 1.99		
	Sustained-release misoprostol vaginal pessary	1.1	0.49 to 2.17		
	i.v. oxytocin	1.3	0.86 to 1.88	1.01	0.52 to 1.78
	Amniotomy	1.0	0.54 to 1.77		
	i.v. oxytocin plus amniotomy	1.1	0.68 to 1.74		
	NO	1.1	0.68 to 1.71		
	Mifepristone	2.0	1.06 to 3.51		
	Oestrogens	0.8	0.35 to 1.64		
	Relaxin	1.7	0.7 to 3.63		
	Mechanical methods – Foley catheter	0.8	0.52 to 1.23	1.41	0.25 to 4.6
	Mechanical methods – laminaria	1.0	0.51 to 1.76		
	Mechanical methods – double-balloon or Cook's catheter	0.9	0.5 to 1.49		
	Membrane sweeping	1.4	0.87 to 2.23		
	Extra-amniotic PGE_2	1.1	0.53 to 1.97		
	i.v. prostaglandin	2.4	0.94 to 5.19		
	Sexual intercourse	1.5	0.75 to 2.88		
	Acupuncture	1.0	0.54 to 1.68		
	Homeopathy	2.5	0.13 to 12.5		
	Oral prostaglandins	0.9	0.49 to 1.5		
	Buccal/sublingual misoprostol	0.8	0.47 to 1.34		
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	1.2	0.93 to 1.58	1.39	0.69 to 2.53
	Vaginal misoprostol (dose < 50 µg)	0.9	0.71 to 1.13	0.67	0.41 to 1.05
	Vaginal misoprostol (dose ≥ 50 µg)	1.0	0.86 to 1.26	1.09	0.74 to 1.55
	Oral misoprostol tablet (dose < 50 µg)	0.8	0.4 to 1.57		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.0	0.76 to 1.18	0.98	0.51 to 1.72
	Titrated (low-dose) oral misoprostol solution	1.1	0.73 to 1.67		

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
	Sustained-release misoprostol vaginal pessary	1.1	0.53 to 1.9		
	i.v. oxytocin	1.2	1 to 1.5	1.60	0.94 to 2.59
	Amniotomy	1.0	0.58 to 1.54		
	i.v. oxytocin plus amniotomy	1.1	0.76 to 1.43	2.60	0.6 to 7.76
	NO	1.1	0.74 to 1.47	2.27	0.03 to 13.17
	Mifepristone	1.9	1.11 to 3.14		
	Oestrogens	0.8	0.37 to 1.43	1.09	0.29 to 2.78
	Relaxin	1.7	0.71 to 3.35		
	Mechanical methods – Foley catheter	0.8	0.6 to 0.99	0.90	0.45 to 1.62
	Mechanical methods – laminaria	0.9	0.56 to 1.5	1.23	0.53 to 2.42
	Mechanical methods – double-balloon or Cook's catheter	0.9	0.56 to 1.25	0.51	0.08 to 1.58
	Membrane sweeping	1.4	0.98 to 1.82		
	Extra-amniotic PGE_2	1.0	0.56 to 1.77		
	i.v. prostaglandin	2.3	0.97 to 4.64		
	Sexual intercourse	1.5	0.79 to 2.49		
	Acupuncture	0.9	0.56 to 1.49		
	Homeopathy	2.4	0.12 to 11.99		
	Oral prostaglandins	0.8	0.53 to 1.28	1.95	0.29 to 7.01
	Buccal/sublingual misoprostol	0.8	0.52 to 1.13		
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	0.7	0.55 to 1		
	Vaginal misoprostol (dose ≥ 50 µg)	0.9	0.66 to 1.12	0.84	0.33 to 1.79
	Oral misoprostol tablet (dose < 50 µg)	0.7	0.32 to 1.32		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.8	0.58 to 1.04		
	Titrated (low-dose) oral misoprostol solution	0.9	0.58 to 1.43		
	Sustained-release misoprostol vaginal pessary	0.9	0.42 to 1.61		
	i.v. oxytocin	1.0	0.79 to 1.29	0.78	0.51 to 1.14
	Amniotomy	0.8	0.47 to 1.29		
	i.v. oxytocin plus amniotomy	0.9	0.61 to 1.22	1.41	0.55 to 3.04
	NO	0.9	0.59 to 1.26		
	Mifepristone	1.6	0.91 to 2.65		
	Oestrogens	0.6	0.3 to 1.23		
	Relaxin	1.4	0.58 to 2.8		
	Mechanical methods – Foley catheter	0.6	0.47 to 0.85	0.84	0.34 to 1.7
	Mechanical methods – laminaria	0.8	0.44 to 1.31		
	Mechanical methods – double-balloon or Cook's catheter	0.7	0.45 to 1.07		
	Membrane sweeping	1.1	0.78 to 1.55		
	Extra-amniotic PGE_2	0.9	0.45 to 1.49		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	i.v. prostaglandin	1.9	0.8 to 3.96		
	Sexual intercourse	1.2	0.64 to 2.09		
	Acupuncture	0.8	0.45 to 1.26		
	Homeopathy	2.0	0.1 to 9.89		
	Oral prostaglandins	0.7	0.42 to 1.09		
	Buccal/sublingual misoprostol	0.6	0.41 to 0.97		
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	1.2	0.94 to 1.43	1.07	0.71 to 1.54
	Oral misoprostol tablet (dose < 50 µg)	0.9	0.44 to 1.78		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.1	0.83 to 1.34	1.61	0.92 to 2.66
	Titrated (low-dose) oral misoprostol solution	1.3	0.81 to 1.88	2.32	0.09 to 11.01
	Sustained-release misoprostol vaginal pessary	1.2	0.58 to 2.17		
	i.v. oxytocin	1.4	1.07 to 1.74	2.61	0.44 to 9
	Amniotomy	1.1	0.64 to 1.73		
	i.v. oxytocin plus amniotomy	1.2	0.83 to 1.64		
	NO	1.2	0.81 to 1.68		
	Mifepristone	2.2	1.21 to 3.56		
	Oestrogens	0.9	0.4 to 1.64		
	Relaxin	1.8	0.79 to 3.74		
	Mechanical methods – Foley catheter	0.9	0.66 to 1.11	1.03	0.56 to 1.74
	Mechanical methods – laminaria	1.1	0.6 to 1.71		
	Mechanical methods – double-balloon or Cook's catheter	1.0	0.62 to 1.41		
	Membrane sweeping	1.5	1.07 to 2.09		
	Extra-amniotic PGE_2	1.2	0.61 to 2.02		
	i.v. prostaglandin	2.6	1.08 to 5.27		
	Sexual intercourse	1.6	0.88 to 2.83		
	Acupuncture	1.1	0.62 to 1.69	9.47	0.15 to 63.5
	Homeopathy	2.7	0.13 to 13.49		
	Oral prostaglandins	0.9	0.58 to 1.46		
	Buccal/sublingual misoprostol	0.9	0.58 to 1.24	0.89	0.4 to 1.73

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose ≥ 50 µg)	Oral misoprostol tablet (dose < 50 µg)	0.8	0.38 to 1.51		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.9	0.76 to 1.1	0.86	0.65 to 1.11
	Titrated (low-dose) oral misoprostol solution	1.1	0.71 to 1.6	1.49	0.14 to 5.9
	Sustained-release misoprostol vaginal pessary	1.0	0.51 to 1.84		
	i.v. oxytocin	1.2	0.97 to 1.43	1.68	1.1 to 2.51
	Amniotomy	0.9	0.56 to 1.47		
	i.v. oxytocin plus amniotomy	1.0	0.74 to 1.37		
	NO	1.0	0.72 to 1.42		
	Mifepristone	1.9	1.07 to 3.04		
	Oestrogens	0.8	0.35 to 1.4		
	Relaxin	1.6	0.69 to 3.2		
	Mechanical methods – Foley catheter	0.7	0.58 to 0.94	1.02	0.22 to 2.96
	Mechanical methods – laminaria	0.9	0.53 to 1.46		
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.54 to 1.21		
	Membrane sweeping	1.3	0.95 to 1.76		
	Extra-amniotic PGE_2	1.0	0.54 to 1.69		
	i.v. prostaglandin	2.2	0.95 to 4.48		
	Sexual intercourse	1.4	0.77 to 2.41		
	Acupuncture	0.9	0.54 to 1.42		
	Homeopathy	2.4	0.12 to 11.54		
	Oral prostaglandins	0.8	0.51 to 1.23		
	Buccal/sublingual misoprostol	0.8	0.51 to 1.06	0.37	0.18 to 0.65
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	1.3	0.6 to 2.39	1.01	0.12 to 3.64
	Titrated (low-dose) oral misoprostol solution	1.5	0.66 to 3.02		
	Sustained-release misoprostol vaginal pessary	1.4	0.51 to 3.23		
	i.v. oxytocin	1.6	0.78 to 3.11		
	Amniotomy	1.3	0.54 to 2.67		
	i.v. oxytocin plus amniotomy	1.4	0.65 to 2.75		
	NO	1.4	0.64 to 2.77		
	Mifepristone	2.6	1.04 to 5.43		
	Oestrogens	1.0	0.36 to 2.39		
	Relaxin	2.2	0.71 to 5.28		
	Mechanical methods – Foley catheter	1.0	0.48 to 1.97		
	Mechanical methods – laminaria	1.3	0.52 to 2.67		
	Mechanical methods – double-balloon or Cook's catheter	1.1	0.49 to 2.3		
	Membrane sweeping	1.8	0.82 to 3.53		
	Extra-amniotic PGE_2	1.4	0.54 to 3.06		

TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
	i.v. prostaglandin	3.1	0.99 to 7.47		
	Sexual intercourse	2.0	0.75 to 4.28		
	Acupuncture	1.3	0.51 to 2.61		
	Homeopathy	3.3	0.14 to 16.77		
	Oral prostaglandins	1.1	0.47 to 2.3		
	Buccal/sublingual misoprostol	1.0	0.46 to 2.08		
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	1.2	0.76 to 1.79		
	Sustained-release misoprostol vaginal pessary	1.1	0.55 to 2.04		
	i.v. oxytocin	1.3	1.05 to 1.61	1.06	0.65 to 1.63
	Amniotomy	1.0	0.6 to 1.64		
	i.v. oxytocin plus amniotomy	1.1	0.8 to 1.52		
	NO	1.1	0.77 to 1.58		
	Mifepristone	2.0	1.16 to 3.36		
	Oestrogens	0.8	0.39 to 1.54		
	Relaxin	1.8	0.75 to 3.54		
	Mechanical methods – Foley catheter	0.8	0.62 to 1.06		
	Mechanical methods – laminaria	1.0	0.57 to 1.63		
	Mechanical methods – double-balloon or Cook's catheter	0.9	0.58 to 1.35		
	Membrane sweeping	1.4	1.03 to 1.96		
	Extra-amniotic PGE_2	1.1	0.58 to 1.9		
	i.v. prostaglandin	2.5	1.04 to 4.95		
	Sexual intercourse	1.6	0.83 to 2.66		
	Acupuncture	1.0	0.59 to 1.58		
	Homeopathy	2.6	0.13 to 12.62		
	Oral prostaglandins	0.9	0.55 to 1.37		
	Buccal/sublingual misoprostol	0.8	0.57 to 1.15	1.38	0.74 to 2.34

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	1.0	0.44 to 1.91		
	i.v. oxytocin	1.1	0.74 to 1.69		
	Amniotomy	0.9	0.47 to 1.55		
	i.v. oxytocin plus amniotomy	1.0	0.59 to 1.51		
	NO	1.0	0.58 to 1.55		
	Mifepristone	1.8	0.9 to 3.17		
	Oestrogens	0.7	0.3 to 1.44		
	Relaxin	1.5	0.59 to 3.25		
	Mechanical methods – Foley catheter	0.7	0.46 to 1.06		
	Mechanical methods – laminaria	0.9	0.45 to 1.52		
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.45 to 1.29		
	Membrane sweeping	1.3	0.76 to 1.95		
	Extra-amniotic PGE_2	1.0	0.46 to 1.77		
	i.v. prostaglandin	2.1	0.82 to 4.56		
	Sexual intercourse	1.4	0.65 to 2.51		
	Acupuncture	0.9	0.45 to 1.51		
	Homeopathy	2.3	0.1 to 11.24		
	Oral prostaglandins	0.8	0.42 to 1.31		
	Buccal/sublingual misoprostol	0.7	0.41 to 1.17		
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	1.3	0.64 to 2.32		
	Amniotomy	1.0	0.43 to 2.05		
	i.v. oxytocin plus amniotomy	1.1	0.52 to 2.06		
	NO	1.1	0.52 to 2.09		
	Mifepristone	2.0	0.83 to 4.14		
	Oestrogens	0.8	0.29 to 1.83		
	Relaxin	1.7	0.58 to 4.12		
	Mechanical methods – Foley catheter	0.8	0.4 to 1.47		
	Mechanical methods – laminaria	1.0	0.41 to 2		
	Mechanical methods – double-balloon or Cook's catheter	0.9	0.41 to 1.7		
	Membrane sweeping	1.4	0.68 to 2.63		
	Extra-amniotic PGE_2	1.1	0.43 to 2.33		
	i.v. prostaglandin	2.4	0.8 to 5.81		
	Sexual intercourse	1.5	0.61 to 3.25		
	Acupuncture	1.0	0.42 to 1.97		
	Homeopathy	2.6	0.11 to 13.06		
	Oral prostaglandins	0.9	0.38 to 1.74		
	Buccal/sublingual misoprostol	0.8	0.37 to 1.56		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
i.v. oxytocin	Amniotomy	0.8	0.48 to 1.24	0.91	0.24 to 2.37
	i.v. oxytocin plus amniotomy	0.9	0.63 to 1.15	1.19	0.34 to 3.08
	NO	0.9	0.61 to 1.2		
	Mifepristone	1.6	0.91 to 2.56		
	Oestrogens	0.6	0.3 to 1.19		
	Relaxin	1.4	0.59 to 2.71		
	Mechanical methods – Foley catheter	0.6	0.49 to 0.81		
	Mechanical methods – laminaria	0.8	0.45 to 1.24		
	Mechanical methods – double-balloon or Cook's catheter	0.7	0.45 to 1.02		
	Membrane sweeping	1.1	0.82 to 1.45		
	Extra-amniotic PGE_2	0.9	0.46 to 1.43		
	i.v. prostaglandin	1.9	0.82 to 3.72	1.86	0.73 to 3.95
	Sexual intercourse	1.2	0.66 to 2.01		
	Acupuncture	0.8	0.46 to 1.2		
	Homeopathy	2.0	0.1 to 9.73		
	Oral prostaglandins	0.7	0.45 to 1.01	0.64	0.33 to 1.13
	Buccal/sublingual misoprostol	0.6	0.42 to 0.93		
Amniotomy	i.v. oxytocin plus amniotomy	1.1	0.7 to 1.75		
	NO	1.2	0.64 to 1.93		
	Mifepristone	2.1	1.01 to 3.86		
	Oestrogens	0.8	0.34 to 1.76		
	Relaxin	1.8	0.67 to 3.94		
	Mechanical methods – Foley catheter	0.8	0.49 to 1.35		
	Mechanical methods – laminaria	1.0	0.49 to 1.92		
	Mechanical methods – double-balloon or Cook's catheter	0.9	0.49 to 1.61		
	Membrane sweeping	1.5	0.84 to 2.42		
	Extra-amniotic PGE_2	1.1	0.51 to 2.13		
	i.v. prostaglandin	2.5	0.94 to 5.49		
	Sexual intercourse	1.6	0.73 to 3.06		
	Acupuncture	1.0	0.5 to 1.84		
	Homeopathy	2.7	0.12 to 13.54		
	Oral prostaglandins	0.9	0.48 to 1.59		
	Buccal/sublingual misoprostol	0.9	0.45 to 1.44		

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
i.v. oxytocin plus amniotomy	NO	1.0	0.66 to 1.52		
	Mifepristone	1.9	1 to 3.15		
	Oestrogens	0.8	0.34 to 1.45		
	Relaxin	1.6	0.66 to 3.28		
	Mechanical methods – Foley catheter	0.7	0.52 to 1.04		
	Mechanical methods – laminaria	0.9	0.5 to 1.51		
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.5 to 1.28		
	Membrane sweeping	1.3	0.88 to 1.88		
	Extra-amniotic PGE_2	1.0	0.51 to 1.75		
	i.v. prostaglandin	2.2	0.92 to 4.65		
	Sexual intercourse	1.4	0.73 to 2.48		
	Acupuncture	0.9	0.51 to 1.5		
	Homeopathy	2.4	0.11 to 11.72		
	Oral prostaglandins	0.8	0.5 to 1.25	0.62	0.22 to 1.37
	Buccal/sublingual misoprostol	0.8	0.47 to 1.15	1.87	0.29 to 6.64
NO	Mifepristone	1.9	1.05 to 3.06		
	Oestrogens	0.8	0.34 to 1.45		
	Relaxin	1.6	0.68 to 3.2		
	Mechanical methods – Foley catheter	0.8	0.51 to 1.07		
	Mechanical methods – laminaria	0.9	0.49 to 1.57		
	Mechanical methods – double-balloon or Cook's catheter	0.8	0.49 to 1.3		
	Membrane sweeping	1.3	0.85 to 1.93		
	Extra-amniotic PGE_2	1.0	0.51 to 1.76		
	i.v. prostaglandin	2.2	0.9 to 4.63		
	Sexual intercourse	1.4	0.72 to 2.55		
	Acupuncture	0.9	0.52 to 1.46		
	Homeopathy	2.3	0.12 to 11.58		
	Oral prostaglandins	0.8	0.47 to 1.32		
	Buccal/sublingual misoprostol	0.8	0.45 to 1.2		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mifepristone	Oestrogens	0.4	0.17 to 0.89		
	Relaxin	0.9	0.35 to 1.95		
	Mechanical methods – Foley catheter	0.4	0.24 to 0.71		
	Mechanical methods – laminaria	0.5	0.24 to 0.99		
	Mechanical methods – double-balloon or Cook's catheter	0.5	0.24 to 0.83		
	Membrane sweeping	0.8	0.41 to 1.27		
	Extra-amniotic PGE_2	0.6	0.26 to 1.09		
	i.v. prostaglandin	1.3	0.46 to 2.8		
	Sexual intercourse	0.8	0.36 to 1.57		
	Acupuncture	0.5	0.26 to 0.93		
	Homeopathy	1.3	0.06 to 6.52		
	Oral prostaglandins	0.5	0.23 to 0.84		
	Buccal/sublingual misoprostol	0.4	0.22 to 0.77		
Oestrogens	Relaxin	2.4	0.77 to 5.89		
	Mechanical methods – Foley catheter	1.1	0.52 to 2.16		
	Mechanical methods – laminaria	1.3	0.57 to 2.74		
	Mechanical methods – double-balloon or Cook's catheter	1.2	0.53 to 2.48		
	Membrane sweeping	2.0	0.89 to 3.81		
	Extra-amniotic PGE_2	1.5	0.57 to 3.2		
	i.v. prostaglandin	3.3	1.05 to 8.1		
	Sexual intercourse	2.1	0.81 to 4.64		
	Acupuncture	1.4	0.56 to 2.81		
	Homeopathy	3.6	0.15 to 18.23		
	Oral prostaglandins	1.2	0.51 to 2.51		
	Buccal/sublingual misoprostol	1.1	0.49 to 2.22		
Relaxin	Mechanical methods – Foley catheter	0.5	0.23 to 1.09		
	Mechanical methods – laminaria	0.7	0.24 to 1.44		
	Mechanical methods – double-balloon or Cook's catheter	0.6	0.23 to 1.27		
	Membrane sweeping	1.0	0.39 to 1.94		
	Extra-amniotic PGE_2	0.7	0.26 to 1.6		
	i.v. prostaglandin	1.6	0.48 to 4.03		
	Sexual intercourse	1.0	0.36 to 2.34		
	Acupuncture	0.7	0.26 to 1.42		
	Homeopathy	1.7	0.07 to 8.78		
	Oral prostaglandins	0.6	0.22 to 1.27		
	Buccal/sublingual misoprostol	0.6	0.22 to 1.15		

continued

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TABLE 52 Instrumental delivery (*continued*)

Control treatment	Active treatment	NMA		Pairwise meta-analysis	
		OR	95% CrI	OR	95% CrI
Mechanical methods – Foley catheter	Mechanical methods – laminaria	1.2	0.7 to 2.02		
	Mechanical methods – double-balloon or Cook's catheter	1.1	0.75 to 1.56	1.14	0.66 to 1.85
	Membrane sweeping	1.8	1.24 to 2.46		
	Extra-amniotic PGE_2	1.4	0.72 to 2.33		
	i.v. prostaglandin	3.0	1.26 to 6.11		
	Sexual intercourse	1.9	1.01 to 3.31		
	Acupuncture	1.2	0.72 to 1.98		
	Homeopathy	3.2	0.15 to 15.55		
	Oral prostaglandins	1.1	0.67 to 1.71		
	Buccal/sublingual misoprostol	1.0	0.66 to 1.49		
Mechanical methods – laminaria	Mechanical methods – double-balloon or Cook's catheter	1.0	0.49 to 1.71		
	Membrane sweeping	1.5	0.84 to 2.58		
	Extra-amniotic PGE_2	1.2	0.52 to 2.29		
	i.v. prostaglandin	2.6	0.93 to 5.84		
	Sexual intercourse	1.7	0.73 to 3.24		
	Acupuncture	1.1	0.51 to 1.95		
	Homeopathy	2.8	0.12 to 13.79		
	Oral prostaglandins	0.9	0.47 to 1.72		
	Buccal/sublingual misoprostol	0.9	0.45 to 1.61		
Mechanical methods – double-balloon or Cook's catheter	Membrane sweeping	1.7	1.01 to 2.57		
	Extra-amniotic PGE_2	1.3	0.61 to 2.35		
	i.v. prostaglandin	2.8	1.1 to 6.01		
	Sexual intercourse	1.8	0.86 to 3.3		
	Acupuncture	1.2	0.6 to 2		
	Homeopathy	3.0	0.14 to 14.77		
	Oral prostaglandins	1.0	0.56 to 1.73		
	Buccal/sublingual misoprostol	1.0	0.54 to 1.55		
Membrane sweeping	Extra-amniotic PGE_2	0.8	0.4 to 1.39		
	i.v. prostaglandin	1.7	0.72 to 3.59		
	Sexual intercourse	1.1	0.59 to 1.88		
	Acupuncture	0.7	0.4 to 1.15		
	Homeopathy	1.8	0.09 to 9.03		
	Oral prostaglandins	0.6	0.38 to 0.99		
	Buccal/sublingual misoprostol	0.6	0.36 to 0.89		

TABLE 52 Instrumental delivery (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Extra-amniotic PGE_2	i.v. prostaglandin	2.4	0.87 to 5.32	17.37	0.18 to 73.85
	Sexual intercourse	1.5	0.65 to 3.1		
	Acupuncture	1.0	0.46 to 1.89		
	Homeopathy	2.6	0.12 to 13.14		
	Oral prostaglandins	0.9	0.42 to 1.64		
	Buccal/sublingual misoprostol	0.8	0.4 to 1.53		
i.v. prostaglandin	Sexual intercourse	0.7	0.26 to 1.67		
	Acupuncture	0.5	0.17 to 1.04		
	Homeopathy	1.2	0.05 to 5.98		
	Oral prostaglandins	0.4	0.16 to 0.91		
	Buccal/sublingual misoprostol	0.4	0.15 to 0.82		
Sexual intercourse	Acupuncture	0.7	0.32 to 1.32		
	Homeopathy	1.8	0.08 to 9.06		
	Oral prostaglandins	0.6	0.3 to 1.16		
	Buccal/sublingual misoprostol	0.6	0.28 to 1.05		
Acupuncture	Homeopathy	2.7	0.13 to 13.58		
	Oral prostaglandins	0.9	0.48 to 1.68		
	Buccal/sublingual misoprostol	0.9	0.47 to 1.49		
Homeopathy	Oral prostaglandins	1.4	0.07 to 7.09		
	Buccal/sublingual misoprostol	1.3	0.06 to 6.64		
Oral prostaglandins	Buccal/sublingual misoprostol	1.0	0.53 to 1.64		

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TABLE 53 Hyperstimulation with fetal heart changes

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	0.88	0.26 to 2.19		
	Vaginal PGE_2 (tablet)	1.60	0.46 to 4.13		
	Vaginal PGE_2 (gel)	1.86	0.64 to 4.34	28,310.00	0.42 to 3659
	Vaginal PGE_2 pessary (slow release)	2.40	0.76 to 5.92		
	Intracervical PGE_2	1.35	0.5 to 3.01	1.64	0.38 to 4.68
	Vaginal PGE_2 pessary (normal release)	1.12	0.23 to 3.35		
	Vaginal misoprostol (dose < 50 µg)	2.21	0.77 to 5.06		
	Vaginal misoprostol (dose ≥ 50 µg)	3.52	1.26 to 8	2.79	0.28 to 11.03
	Oral misoprostol tablet (dose < 50 µg)	0.90	0.18 to 2.82		
	Oral misoprostol tablet (dose ≥ 50 µg)	2.29	0.78 to 5.37		
	Titrated (low-dose) oral misoprostol solution	1.55	0.43 to 3.99		
	Sustained-release misoprostol vaginal pessary	4.51	0.96 to 13.54		
	i.v. oxytocin	1.70	0.56 to 4.06	1.95	0.15 to 8.08
	i.v. oxytocin plus amniotomy	5.98	0.18 to 33.89		
	NO	0.31	0.01 to 1.34		
	Mifepristone	315.50	0.69 to 309.5		
	Mechanical methods – Foley catheter	0.73	0.22 to 1.84	0.38	0 to 2.36
	Mechanical methods – laminaria	0.41	0 to 2.13		
	Mechanical methods – double-balloon or Cook's catheter	0.21	0 to 1.02		
	Buccal/sublingual misoprostol	3.41	1.01 to 8.65		
Placebo	Vaginal PGE_2 (tablet)	1.99	0.78 to 4.25	0.78	0 to 5.12
	Vaginal PGE_2 (gel)	2.33	1.1 to 4.4	5.81	0.32 to 29.93
	Vaginal PGE_2 pessary (slow release)	2.97	1.36 to 5.73	27.00	2.01 to 131.2
	Intracervical PGE_2	1.70	0.87 to 3.05	1.65	0.57 to 3.88
	Vaginal PGE_2 pessary (normal release)	1.40	0.37 to 3.68	0.46	0 to 3
	Vaginal misoprostol (dose < 50 µg)	2.75	1.36 to 5.04	2.46	0.25 to 10.23
	Vaginal misoprostol (dose ≥ 50 µg)	4.40	2.22 to 7.94	28.54	0.53 to 159.4
	Oral misoprostol tablet (dose < 50 µg)	1.13	0.28 to 3.15		
	Oral misoprostol tablet (dose ≥ 50 µg)	2.85	1.41 to 5.2	7.75	1.22 to 30.55
	Titrated (low-dose) oral misoprostol solution	1.93	0.73 to 4.19		
	Sustained-release misoprostol vaginal pessary	5.58	1.58 to 14.57		

TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	i.v. oxytocin	2.12	0.97 to 4.1	0.34	0 to 2.19
	i.v. oxytocin plus amniotomy	7.44	0.27 to 40.66		
	NO	0.38	0.02 to 1.54		
	Mifepristone	329.20	1.12 to 357.1	144,400.00	0.84 to 9849
	Mechanical methods – Foley catheter	0.92	0.37 to 1.93		
	Mechanical methods – laminaria	0.52	0.01 to 2.62		
	Mechanical methods – double-balloon or Cook's catheter	0.26	0 to 1.18		
	Buccal/sublingual misoprostol	4.25	1.71 to 9.02		
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	1.28	0.61 to 2.41	1.99	0.4 to 6.21
	Vaginal PGE_2 pessary (slow release)	1.65	0.73 to 3.24	2.37	0.2 to 10.35
	Intracervical PGE_2	0.95	0.44 to 1.79		
	Vaginal PGE_2 pessary (normal release)	0.78	0.2 to 2.08		
	Vaginal misoprostol (dose < 50 µg)	1.53	0.72 to 2.89		
	Vaginal misoprostol (dose ≥ 50 µg)	2.41	1.25 to 4.29	1.84	0.78 to 3.73
	Oral misoprostol tablet (dose < 50 µg)	0.62	0.15 to 1.75		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.58	0.74 to 2.99	10,220.00	0.39 to 3491
	Titrated (low-dose) oral misoprostol solution	1.07	0.39 to 2.33		
	Sustained-release misoprostol vaginal pessary	3.09	0.85 to 8.13		
	i.v. oxytocin	1.18	0.52 to 2.33		
	i.v. oxytocin plus amniotomy	4.14	0.15 to 22.8		
	NO	0.21	0.01 to 0.8	0.39	0 to 2.49
	Mifepristone	194.30	0.55 to 208.3		
	Mechanical methods – Foley catheter	0.51	0.2 to 1.08		
	Mechanical methods – laminaria	0.28	0 to 1.44		
	Mechanical methods – double-balloon or Cook's catheter	0.14	0 to 0.65		
	Buccal/sublingual misoprostol	2.34	0.93 to 4.98		

continued

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TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	1.33	0.7 to 2.32		
	Intracervical PGE_2	0.76	0.45 to 1.2	0.87	0.16 to 2.67
	Vaginal PGE_2 pessary (normal release)	0.62	0.19 to 1.51	17,770.00	0.4 to 6593
	Vaginal misoprostol (dose < 50 µg)	1.22	0.76 to 1.85	1.38	0.54 to 2.86
	Vaginal misoprostol (dose ≥ 50 µg)	1.95	1.25 to 2.92	1.18	0.55 to 2.26
	Oral misoprostol tablet (dose < 50 µg)	0.49	0.15 to 1.22	0.77	0.14 to 2.47
	Oral misoprostol tablet (dose ≥ 50 µg)	1.27	0.74 to 2.02	2.13	0.24 to 8.62
	Titrated (low-dose) oral misoprostol solution	0.85	0.41 to 1.52	1.28	0.5 to 2.68
	Sustained-release misoprostol vaginal pessary	2.50	0.77 to 6.12		
	Intravenous oxytocin	0.95	0.51 to 1.62		
	Intravenous oxytocin plus amniotomy	3.29	0.13 to 17.77		
	NO	0.17	0.01 to 0.66		
	Mifepristone	140.90	0.48 to 168.7		
	Mechanical methods – Foley catheter	0.41	0.2 to 0.71	0.64	0.21 to 1.43
	Mechanical methods – double-balloon or Cook's catheter	0.23	0 to 1.1	1.31	0 to 6.91
	Extra-amniotic PGE_2	0.11	0 to 0.5	0.14	0 to 0.84
	Buccal/sublingual misoprostol	1.89	0.9 to 3.52	2189.00	0.4 to 4820
Vaginal PGE_2 pessary (slow release)	Intracervical PGE_2	0.60	0.33 to 1.01	0.99	0.26 to 2.57
	Vaginal PGE_2 pessary (normal release)	0.50	0.14 to 1.26		
	Vaginal misoprostol (dose < 50 µg)	0.98	0.54 to 1.64	0.33	0.02 to 1.4
	Vaginal misoprostol (dose ≥ 50 µg)	1.55	0.9 to 2.51	2.71	1.11 to 5.69
	Oral misoprostol tablet (dose < 50 µg)	0.40	0.1 to 1.07		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.01	0.54 to 1.73		
	Titrated (low-dose) oral misoprostol solution	0.68	0.29 to 1.34	2.12	0.28 to 7.9
	Sustained-release misoprostol vaginal pessary	1.88	0.73 to 4	1.89	0.72 to 4.09
	Intravenous oxytocin	0.75	0.39 to 1.31	0.87	0.21 to 2.37
	Intravenous oxytocin plus amniotomy	2.63	0.1 to 14.43		
	NO	0.14	0.01 to 0.53		
	Mifepristone	106.00	0.38 to 136.4		
	Mechanical methods – Foley catheter	0.32	0.14 to 0.62	0.04	0 to 0.21
	Mechanical methods – laminaria	0.18	0 to 0.91		
	Mechanical methods – double-balloon or Cook's catheter	0.09	0 to 0.39	0.10	0 to 0.62
	Buccal/sublingual misoprostol	1.50	0.67 to 2.97		

TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	0.85	0.25 to 2.07		
	Vaginal misoprostol (dose < 50 µg)	1.65	1.06 to 2.47	1.47	0.7 to 2.78
	Vaginal misoprostol (dose ≥ 50 µg)	2.64	1.76 to 3.83	3.04	1.53 to 5.53
	Oral misoprostol tablet (dose < 50 µg)	0.68	0.19 to 1.75		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.71	1.07 to 2.61	2.12	0.75 to 4.91
	Titrated (low-dose) oral misoprostol solution	1.16	0.52 to 2.23		
	Sustained-release misoprostol vaginal pessary	3.37	1.07 to 8.18		
	i.v. oxytocin	1.28	0.72 to 2.1	3.33	0.52 to 11.85
	i.v. oxytocin plus amniotomy	4.50	0.18 to 24.61		
	NO	0.23	0.01 to 0.88	0.79	0 to 5.18
	Mifepristone	200.70	0.67 to 223.4		
	Mechanical methods – Foley catheter	0.55	0.27 to 1.01	1.17	0 to 7.37
	Mechanical methods – laminaria	0.31	0 to 1.48	0.24	0 to 1.53
	Mechanical methods – double-balloon or Cook's catheter	0.15	0 to 0.69		
	Buccal/sublingual misoprostol	2.55	1.24 to 4.73		
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	2.53	0.79 to 6.34	0.59	0.01 to 3.34
	Vaginal misoprostol (dose ≥ 50 µg)	4.05	1.31 to 10.04	22,750.00	3.18 to 28,850
	Oral misoprostol tablet (dose < 50 µg)	1.04	0.19 to 3.38		
	Oral misoprostol tablet (dose ≥ 50 µg)	2.64	0.81 to 6.76		
	Titrated (low-dose) oral misoprostol solution	1.77	0.46 to 4.85		
	Sustained-release misoprostol vaginal pessary	5.17	1 to 16.23		
	i.v. oxytocin	1.95	0.59 to 4.98	18.29	0.22 to 103.5
	i.v. oxytocin plus amniotomy	5.90	0.26 to 31.66	12.32	0.28 to 71.07
	NO	0.35	0.01 to 1.57		
	Mifepristone	271.00	0.74 to 350.2		
	Mechanical methods – Foley catheter	0.83	0.24 to 2.14	2.26	0.09 to 11.72
	Mechanical methods – laminaria	0.47	0.01 to 2.53		
	Mechanical methods – double-balloon or Cook's catheter	0.24	0 to 1.18		
	Buccal/sublingual misoprostol	3.92	1.06 to 10.62		

continued

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TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	1.63	1.1 to 2.35	1.95	0.78 to 4.19
	Oral misoprostol tablet (dose < 50 µg)	0.41	0.13 to 1.02	0.33	0.05 to 1.1
	Oral misoprostol tablet (dose ≥ 50 µg)	1.06	0.68 to 1.59	0.61	0.25 to 1.23
	Titrated (low-dose) oral misoprostol solution	0.71	0.34 to 1.29	0.22	0.02 to 0.77
	Sustained-release misoprostol vaginal pessary	2.09	0.66 to 5.05		
	i.v. oxytocin	0.79	0.45 to 1.29	2.27	0.42 to 7.45
	i.v. oxytocin plus amniotomy	2.77	0.11 to 15.05		
	NO	0.14	0.01 to 0.55		
	Mifepristone	121.10	0.41 to 139.8		
	Mechanical methods – Foley catheter	0.34	0.17 to 0.59	0.37	0.1 to 0.91
	Mechanical methods – laminaria	0.19	0 to 0.94		
	Mechanical methods – double-balloon or Cook's catheter	0.10	0 to 0.43		
	Buccal/sublingual misoprostol	1.57	0.82 to 2.76	1.47	0.5 to 3.42
Vaginal misoprostol (dose ≥ 50 µg)	Oral misoprostol tablet (dose < 50 µg)	0.26	0.08 to 0.66		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.66	0.44 to 0.93	0.77	0.43 to 1.25
	Titrated (low-dose) oral misoprostol solution	0.45	0.21 to 0.83		
	Sustained-release misoprostol vaginal pessary	1.29	0.42 to 3.06		
	i.v. oxytocin	0.49	0.3 to 0.76	0.29	0.1 to 0.65
	i.v. oxytocin plus amniotomy	1.72	0.07 to 9.37		
	NO	0.09	0 to 0.33	0.06	0 to 0.39
	Mifepristone	77.21	0.26 to 86.53		
	Mechanical methods – Foley catheter	0.21	0.11 to 0.37	0.43	0.04 to 1.58
	Mechanical methods – double-balloon or Cook's catheter	0.12	0 to 0.58		
	Extra-amniotic PGE_2	0.06	0 to 0.26		
	Buccal/sublingual misoprostol	0.97	0.52 to 1.68	1.02	0.42 to 2.09

TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	3.39	0.95 to 8.72		
	Titrated (low-dose) oral misoprostol solution	2.26	0.56 to 6.25		
	Sustained-release misoprostol vaginal pessary	6.66	1.21 to 21.51		
	i.v. oxytocin	2.52	0.68 to 6.71		
	i.v. oxytocin plus amniotomy	8.79	0.25 to 49.68		
	NO	0.46	0.02 to 2.04		
	Mifepristone	349.30	0.9 to 442.9		
	Mechanical methods – Foley catheter	1.08	0.28 to 2.95		
	Mechanical methods – laminaria	0.61	0.01 to 3.26		
	Mechanical methods – double-balloon or Cook's catheter	0.30	0 to 1.54		
	Buccal/sublingual misoprostol	5.01	1.27 to 13.91		
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	0.70	0.31 to 1.34		
	Sustained-release misoprostol vaginal pessary	2.02	0.63 to 4.95		
	i.v. oxytocin	0.76	0.45 to 1.2	0.85	0.37 to 1.68
	i.v. oxytocin plus amniotomy	2.70	0.1 to 14.79		
	NO	0.14	0.01 to 0.53		
	Mifepristone	118.70	0.4 to 135.8		
	Mechanical methods – Foley catheter	0.33	0.16 to 0.61		
	Mechanical methods – double-balloon or Cook's catheter	0.19	0 to 0.91		
	Extra-amniotic PGE_2	0.09	0 to 0.42		
	Buccal/sublingual misoprostol	1.52	0.76 to 2.77	2.76	0.23 to 12.25
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	3.22	0.87 to 8.6		
	i.v. oxytocin	1.23	0.52 to 2.48		
	i.v. oxytocin plus amniotomy	4.26	0.15 to 23.41		
	NO	0.22	0.01 to 0.9		
	Mifepristone	191.90	0.56 to 221.2		
	Mechanical methods – Foley catheter	0.52	0.22 to 1.07		
	Mechanical methods – laminaria	0.30	0 to 1.52		
	Mechanical methods – double-balloon or Cook's catheter	0.15	0 to 0.67		
	Buccal/sublingual misoprostol	2.45	0.95 to 5.28		

continued

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TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	0.48	0.15 to 1.18		
	i.v. oxytocin plus amniotomy	1.70	0.05 to 9.65		
	NO	0.09	0 to 0.38		
	Mifepristone	70.70	0.19 to 87.16		
	Mechanical methods – Foley catheter	0.21	0.06 to 0.54		
	Mechanical methods – laminaria	0.12	0 to 0.62		
	Mechanical methods – double-balloon or Cook's catheter	0.06	0 to 0.27		
	Buccal/sublingual misoprostol	0.97	0.27 to 2.54		
i.v. oxytocin	i.v. oxytocin plus amniotomy	3.68	0.14 to 20.13		
	NO	0.19	0.01 to 0.75		
	Mifepristone	152.30	0.55 to 182.9		
	Mechanical methods – Foley catheter	0.45	0.2 to 0.87		
	Mechanical methods – laminaria	152.30	0.55 to 182.9	87,840.00	0.13 to 1813
	Mechanical methods – double-balloon or Cook's catheter	0.25	0 to 1.27		
	Buccal/sublingual misoprostol	2.10	0.96 to 4.05		
i.v. oxytocin plus amniotomy	NO	0.25	0 to 1.56		
	Mifepristone	155.00	0.11 to 229.8		
	Mechanical methods – Foley catheter	0.57	0.02 to 2.85		
	Mechanical methods – double-balloon or Cook's catheter	0.33	0 to 2.15		
	Extra-amniotic PGE_2	0.16	0 to 1.05		
	Buccal/sublingual misoprostol	2.74	0.09 to 14.33		
NO	Mifepristone	2238.00	2.26 to 2959		
	Mechanical methods – Foley catheter	8.59	0.54 to 46.06		
	Mechanical methods – laminaria	5.14	0.02 to 29.25		
	Mechanical methods – double-balloon or Cook's catheter	2.50	0.01 to 14.17		
	Buccal/sublingual misoprostol	39.35	2.53 to 210.4		

TABLE 53 Hyperstimulation with fetal heart changes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mifepristone	Mechanical methods – Foley catheter	0.16	0 to 0.83		
	Mechanical methods – laminaria	0.09	0 to 0.63		
	Mechanical methods – double-balloon or Cook's catheter	0.05	0 to 0.29		
	Buccal/sublingual misoprostol	0.76	0.01 to 3.86		
Mechanical methods – Foley catheter	Mechanical methods – double-balloon or Cook's catheter	0.61	0.01 to 3.06		
	Mechanical methods – laminaria	0.30	0 to 1.38		
	Buccal/sublingual misoprostol	5.04	2.05 to 10.57		
Mechanical methods – laminaria	Mechanical methods – double-balloon or Cook's catheter	5.50	0.01 to 31.59		
	Buccal/sublingual misoprostol	107.70	1.51 to 539.2		
Mechanical methods – double-balloon or Cook's catheter	Buccal/sublingual misoprostol	629.00	3.28 to 947.3		

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TABLE 54 Apgar score < 7 at 5 minutes

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	1.04	0.54 to 1.94		
	Vaginal PGE_2 (tablet)	0.78	0.38 to 1.52	0.5181	0.01 to 2.4
	Vaginal PGE_2 (gel)	1.07	0.68 to 1.67	1.704	0.77 to 3.3
	Vaginal PGE_2 pessary (slow release)	1.10	0.5 to 2.44		
	Intracervical PGE_2	0.70	0.44 to 1.07	1.014	0.42 to 2.04
	Vaginal PGE_2 pessary (normal release)	0.82	0.39 to 1.71	0.5491	0.05 to 2
	Vaginal misoprostol (dose < 50 µg)	0.96	0.57 to 1.6		
	Vaginal misoprostol (dose ≥ 50 µg)	1.04	0.65 to 1.6	2.279	0.65 to 5.72
	Oral misoprostol tablet (dose < 50 µg)	0.55	0.14 to 1.99		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.59	0.34 to 1.05	1.969	0.1 to 8.97
	Titrated (low-dose) oral misoprostol solution	0.48	0.21 to 1.03		
	Sustained-release misoprostol vaginal pessary	1.97	0.61 to 6.18		
	i.v. oxytocin	0.88	0.58 to 1.32	0.7168	0.39 to 1.18
	Amniotomy	1.35	0.41 to 4.39		
	i.v. oxytocin plus amniotomy	2.48	0.75 to 8.72	7.825	0.92 to 34
	NO	0.51	0.18 to 1.13		
	Mifepristone	0.80	0.21 to 3.8		
	Mechanical methods – Foley catheter	0.85	0.48 to 1.46	0.03123	0 to 0.24
	Mechanical methods – laminaria	0.95	0.29 to 3.14	0.456	0.04 to 1.61
	Mechanical methods – double-balloon or Cook's catheter	0.18	0.01 to 1.67		
	Membrane sweeping	1.92	0.75 to 5.22	2.081	0.68 to 5.33
	Extra-amniotic PGE_2	659,329,628,928,704,000.00	70.53 to 3.60054679804453E+46		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	i.v. prostaglandin	1.16	0.34 to 4.03		
	Sexual intercourse	1.00	0.02 to 36.27	7.846	0.03 to 51.88
	Acupuncture	0.56	0.13 to 2.17	0.02285	0 to 0.15
	Oral prostaglandins	0.36	0.07 to 1.6		
	Buccal/sublingual misoprostol	0.43	0.17 to 0.97		
Placebo	Vaginal PGE_2 (tablet)	0.75	0.34 to 1.62	0.5717	0.04 to 2.04
	Vaginal PGE_2 (gel)	1.03	0.58 to 1.85	0.7006	0.12 to 2.21
	Vaginal PGE_2 pessary (slow release)	1.06	0.43 to 2.6		
	Intracervical PGE_2	0.67	0.38 to 1.2	0.4624	0.14 to 1.11
	Vaginal PGE_2 pessary (normal release)	0.80	0.35 to 1.84	1.791	0.11 to 8.27
	Vaginal misoprostol (dose < 50 µg)	0.92	0.49 to 1.69	0.0389	0 to 0.32
	Vaginal misoprostol (dose ≥ 50 µg)	1.01	0.56 to 1.81		
	Oral misoprostol tablet (dose < 50 µg)	0.53	0.13 to 2.08		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.57	0.3 to 1.13	0.8518	0.18 to 2.41
	Titrated (low-dose) oral misoprostol solution	0.46	0.19 to 1.09		
	Sustained-release misoprostol vaginal pessary	1.91	0.57 to 6.35		
	i.v. oxytocin	0.85	0.45 to 1.62	3.65E+22	1.77 to 3,182,000,000,000,000,000
	Amniotomy	1.30	0.37 to 4.61		
	i.v. oxytocin plus amniotomy	2.39	0.62 to 9.58		
	NO	0.49	0.2 to 0.95	0.9444	0.39 to 1.88

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	Mifepristone	0.77	0.23 to 3.37	0.7804	0.16 to 2.59
	Mechanical methods – Foley catheter	0.82	0.41 to 1.65		
	Mechanical methods – laminaria	0.92	0.25 to 3.41		
	Mechanical methods – double-balloon or Cook's catheter	0.17	0.01 to 1.67		
	Membrane sweeping	1.85	0.63 to 5.4	88.42	0.12 to 203
	Extra-amniotic PGE_2	633,476,944,394,919,000.00	69.9 to 2.94787839145551E+46		
	i.v. prostaglandin	1.12	0.29 to 4.25		
	Sexual intercourse	0.97	0.02 to 37.3		
	Acupuncture	0.54	0.14 to 1.87	0.8182	0.15 to 2.49
	Oral prostaglandins	0.35	0.06 to 1.68		
	Buccal/sublingual misoprostol	0.41	0.15 to 0.99		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	1.37	0.71 to 2.71	1.857	0.36 to 5.94
	Vaginal PGE_2 pessary (slow release)	1.41	0.56 to 3.65	4.7E+24	2.08 to 478,900,000,000,000,000
	Intracervical PGE_2	0.89	0.46 to 1.77	6.88E+20	0.74 to 6,076,000,000,000,000,000
	Vaginal PGE_2 pessary (normal release)	1.05	0.42 to 2.7		
	Vaginal misoprostol (dose < 50 µg)	1.23	0.6 to 2.52		
	Vaginal misoprostol (dose ≥ 50 µg)	1.33	0.7 to 2.66	1.348	0.23 to 4.45
	Oral misoprostol tablet (dose < 50 µg)	0.70	0.17 to 2.82		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.76	0.36 to 1.66		
	Titrated (low-dose) oral misoprostol solution	0.61	0.25 to 1.54		
	Sustained-release misoprostol vaginal pessary	2.53	0.73 to 8.77		
	i.v. oxytocin	1.13	0.57 to 2.29	0.03475	0 to 0.37
	Amniotomy	1.73	0.47 to 6.55		
	i.v. oxytocin plus amniotomy	3.17	0.81 to 13.3	0.236	0 to 0.75
	NO	0.65	0.24 to 1.63	0.1239	0 to 0.21
	Mifepristone	1.02	0.25 to 5.15		
	Mechanical methods – Foley catheter	1.09	0.54 to 2.3	2.726	0.41 to 10.52
	Mechanical methods – laminaria	1.22	0.32 to 4.82		

continued

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TABLE 54 Apgar score <7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	Mechanical methods – double-balloon or Cook's catheter	0.23	0.01 to 2.34		
	Membrane sweeping	2.45	0.81 to 7.97		
	Extra-amniotic PGE_2	838,172,230,557,343,000.00	80.8 to 4.39771779001637E+46	1.63E+25	0.83 to 1.911E+24
	i.v. prostaglandin	1.48	0.37 to 6.09		
	Sexual intercourse	1.28	0.02 to 51.11		
	Acupuncture	0.71	0.16 to 3.1		
	Oral prostaglandins	0.46	0.08 to 2.26		
	Buccal/sublingual misoprostol	0.55	0.2 to 1.45		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	1.03	0.47 to 2.24		
	Intracervical PGE_2	0.65	0.44 to 0.97	0.5104	0.2 to 1.07
	Vaginal PGE_2 pessary (normal release)	0.77	0.36 to 1.62	3.342	0.56 to 12.17
	Vaginal misoprostol (dose < 50 µg)	0.90	0.57 to 1.54	1.146	0.35 to 2.74
	Vaginal misoprostol (dose ≥ 50 µg)	0.97	0.64 to 1.48	1.135	0.38 to 2.69
	Oral misoprostol tablet (dose < 50 µg)	0.51	0.14 to 1.77	0.9368	0.01 to 4.78
	Oral misoprostol tablet (dose ≥ 50 µg)	0.56	0.33 to 0.94	0.474	0.04 to 1.72
	Titrated (low-dose) oral misoprostol solution	0.45	0.22 to 0.88	0.6843	0.28 to 1.37
	Sustained-release misoprostol vaginal pessary	1.85	0.6 to 5.69		
	i.v. oxytocin	0.82	0.52 to 1.26	1.429	0.41 to 3.77
	Amniotomy	1.26	0.41 to 3.99	1.539	0.34 to 4.66
	i.v. oxytocin plus amniotomy	2.31	0.65 to 8.44		
	NO	0.48	0.21 to 1.01	0.7503	0.11 to 2.55
	Mifepristone	0.74	0.2 to 3.53		
	Mechanical methods – Foley catheter	0.80	0.48 to 1.31	0.8217	0.28 to 1.94
	Mechanical methods – laminaria	0.89	0.24 to 3.1		
	Mechanical methods – double-balloon or Cook's catheter	0.17	0.01 to 1.52	0.008447	0 to 0.07
	Membrane sweeping	1.79	0.68 to 5.06		
	Extra-amniotic PGE_2	614,754,871,294,005,000.00	59.98 to 2.94787839145551E+46		
	i.v. prostaglandin	1.08	0.31 to 3.91		
	Sexual intercourse	0.94	0.02 to 35.52		
	Acupuncture	0.52	0.12 to 2.03		
	Oral prostaglandins	0.34	0.06 to 1.51		
	Buccal/sublingual misoprostol	0.40	0.17 to 0.97	0.6413	0 to 1.88

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	**Active treatment**	**OR**	**95% CrI**	**OR**	**95% CrI**
Vaginal PGE_2 pessary (slow release)	Intracervical PGE_2	0.63	0.29 to 1.38	2.066	0.12 to 8.9
	Vaginal PGE_2 pessary (normal release)	0.75	0.28 to 1.99		
	Vaginal misoprostol (dose < 50 µg)	0.87	0.38 to 1.93		
	Vaginal misoprostol (dose ≥ 50 µg)	0.95	0.45 to 2.03	1.282	0.26 to 3.93
	Oral misoprostol tablet (dose < 50 µg)	0.50	0.12 to 2.08		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.54	0.23 to 1.24		
	Titrated (low-dose) oral misoprostol solution	0.43	0.16 to 1.18		
	Sustained-release misoprostol vaginal pessary	1.79	0.8 to 4.06	1.955	0.84 to 4.11
	i.v. oxytocin	0.80	0.36 to 1.71	1.043	0.01 to 6.38
	Amniotomy	1.22	0.32 to 4.68		
	i.v. oxytocin plus amniotomy	2.25	0.56 to 9.37		
	NO	0.46	0.13 to 1.28		
	Mifepristone	0.72	0.16 to 3.83		
	Mechanical methods – Foley catheter	0.77	0.37 to 1.67	0.7099	0.2 to 1.71
	Mechanical methods – laminaria	0.87	0.22 to 3.46		
	Mechanical methods – double-balloon or Cook's catheter	0.16	0.01 to 1.46	3.77E+24	1.54 to 9.266E+20
	Membrane sweeping	1.74	0.52 to 5.94		
	Extra-amniotic PGE_2	596,586,119,074,455,000.00	51.16 to 2.94787839145551E+46		
	i.v. prostaglandin	1.05	0.26 to 4.34		
	Sexual intercourse	0.91	0.02 to 37.86		
	Acupuncture	0.51	0.1 to 2.27		
	Oral prostaglandins	0.33	0.05 to 1.65		
	Buccal/sublingual misoprostol	0.39	0.13 to 1.1		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	1.18	0.57 to 2.52	2.118	0.1 to 8.33
	Vaginal misoprostol (dose < 50 µg)	1.37	0.89 to 2.14	1.842	0.77 to 3.8
	Vaginal misoprostol (dose ≥ 50 µg)	1.50	1.03 to 2.24	0.8695	0.41 to 1.52
	Oral misoprostol tablet (dose < 50 µg)	0.79	0.21 to 2.8		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.85	0.5 to 1.45	0.4558	0 to 2.62
	Titrated (low-dose) oral misoprostol solution	0.69	0.31 to 1.44		
	Sustained-release misoprostol vaginal pessary	2.83	0.91 to 8.71		
	i.v. oxytocin	1.26	0.81 to 1.92	2.349	1 to 4.91
	Amniotomy	1.94	0.59 to 6.4		
	i.v. oxytocin plus amniotomy	3.55	0.99 to 12.96		
	NO	0.73	0.25 to 1.56		
	Mifepristone	1.14	0.31 to 5.26		
	Mechanical methods – Foley catheter	1.22	0.76 to 2.01	1.014	0.4 to 2.15
	Mechanical methods – laminaria	1.37	0.42 to 4.61	29.62	0.95 to 210
	Mechanical methods – double-balloon or Cook's catheter	0.26	0.01 to 2.35	0.2309	0 to 1.31
	Membrane sweeping	2.75	1.04 to 7.82		
	Extra-amniotic PGE_2	945,036,551,034,665,000.00	94.92 to 4.86022980742998E+46		
	i.v. prostaglandin	1.66	0.48 to 5.97		
	Sexual intercourse	1.44	0.02 to 54.87		
	Acupuncture	0.80	0.19 to 3.15		
	Oral prostaglandins	0.52	0.1 to 2.28		
	Buccal/sublingual misoprostol	0.61	0.26 to 1.36		

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	1.16	0.51 to 2.56		
	Vaginal misoprostol (dose ≥ 50 µg)	1.27	0.58 to 2.68	1.61E+28	0.88 to 1.142E+23
	Oral misoprostol tablet (dose < 50 µg)	0.67	0.15 to 2.9		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.72	0.31 to 1.71		
	Titrated (low-dose) oral misoprostol solution	0.58	0.22 to 1.54		
	Sustained-release misoprostol vaginal pessary	2.40	0.67 to 8.58		
	i.v. oxytocin	1.07	0.5 to 2.28	0.849	0.06 to 3.66
	Amniotomy	1.64	0.43 to 6.17		
	i.v. oxytocin plus amniotomy	3.01	0.76 to 12.82		
	NO	0.62	0.18 to 1.63		
	Mifepristone	0.97	0.22 to 4.98		
	Mechanical methods – Foley catheter	1.03	0.47 to 2.3	2.36E+15	3.25 to 324,300,000,000,000
	Mechanical methods – laminaria	1.16	0.28 to 4.67		
	Mechanical methods – double-balloon or Cook's catheter	0.22	0.01 to 2.27		
	Membrane sweeping	2.33	0.71 to 7.92		
	Extra-amniotic PGE_2	797,294,088,505,538,000.00	84.86 to 5.37138463833599E+46		
	i.v. prostaglandin	1.41	0.35 to 5.76		
	Sexual intercourse	1.21	0.02 to 47.04		
	Acupuncture	0.68	0.14 to 2.85		
	Oral prostaglandins	0.44	0.08 to 2.12		
	Buccal/sublingual misoprostol	0.52	0.17 to 1.46		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	1.09	0.7 to 1.66	1.849	0.73 to 4.3
	Oral misoprostol tablet (dose < 50 µg)	0.57	0.16 to 1.97	1.034	0.18 to 3.23
	Oral misoprostol tablet (dose ≥ 50 µg)	0.62	0.37 to 1.01	0.4391	0.17 to 0.91
	Titrated (low-dose) oral misoprostol solution	0.50	0.21 to 1.06	0.1201	0 to 0.5
	Sustained-release misoprostol vaginal pessary	2.06	0.65 to 6.61		
	i.v. oxytocin	0.92	0.56 to 1.48	1.861	0.63 to 4.36
	Amniotomy	1.41	0.42 to 4.8		
	i.v. oxytocin plus amniotomy	2.58	0.74 to 9.96		
	NO	0.53	0.19 to 1.19		
	Mifepristone	0.83	0.21 to 3.96		
	Mechanical methods – Foley catheter	0.89	0.51 to 1.53	0.9552	0.3 to 2.3
	Mechanical methods – laminaria	1.00	0.27 to 3.51		
	Mechanical methods – double-balloon or Cook's catheter	0.19	0.01 to 1.77		
	Membrane sweeping	2.00	0.75 to 5.77		
	Extra-amniotic PGE_2	686,237,381,533,263,000.00	72.46 to 3.25790946826023E+46		
	i.v. prostaglandin	1.21	0.34 to 4.44		
	Sexual intercourse	1.04	0.02 to 39.92		
	Acupuncture	0.58	0.14 to 2.31		
	Oral prostaglandins	0.38	0.07 to 1.72		
	Buccal/sublingual misoprostol	0.45	0.2 to 0.92	0.7231	0.26 to 1.52

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose ≥ 50 µg)	Oral misoprostol tablet (dose < 50 µg)	0.53	0.15 to 1.88		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.57	0.35 to 0.9	0.4848	0.21 to 0.9
	Titrated (low-dose) oral misoprostol solution	0.46	0.21 to 0.96		
	Sustained-release misoprostol vaginal pessary	1.89	0.6 to 5.62		
	i.v. oxytocin	0.84	0.56 to 1.26	0.9704	0.38 to 1.92
	Amniotomy	1.29	0.39 to 4.31		
	i.v. oxytocin plus amniotomy	2.38	0.68 to 8.66		
	NO	0.49	0.19 to 1.02	0.07819	0 to 0.34
	Mifepristone	0.76	0.2 to 3.53		
	Mechanical methods – Foley catheter	0.82	0.49 to 1.36	3.702	0.65 to 13.54
	Mechanical methods – laminaria	0.92	0.27 to 3.17		
	Mechanical methods – double-balloon or Cook's catheter	0.17	0.01 to 1.55		
	Membrane sweeping	1.84	0.69 to 5.2		
	Extra-amniotic PGE_2	627,173,743,482,117,000.00	62.68 to 3.25790946826023E+46		
	i.v. prostaglandin	1.11	0.31 to 3.98		
	Sexual intercourse	0.96	0.02 to 37.49		
	Acupuncture	0.54	0.13 to 2.06		
	Oral prostaglandins	0.35	0.07 to 1.52		
	Buccal/sublingual misoprostol	0.41	0.18 to 0.87	0.6738	0.05 to 2.8

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	1.08	0.3 to 3.98	6.78E+25	0.56 to 1.802E+25
	Titrated (low-dose) oral misoprostol solution	0.87	0.22 to 3.68		
	Sustained-release misoprostol vaginal pessary	3.60	0.68 to 19.2		
	i.v. oxytocin	1.60	0.45 to 6.03		
	Amniotomy	2.46	0.47 to 13.89		
	i.v. oxytocin plus amniotomy	4.51	0.78 to 27.36		
	NO	0.93	0.22 to 3.94		
	Mifepristone	1.45	0.24 to 10.22		
	Mechanical methods – Foley catheter	1.55	0.42 to 5.86		
	Mechanical methods – laminaria	1.74	0.3 to 9.87		
	Mechanical methods – double-balloon or Cook's catheter	0.33	0.01 to 4.18		
	Membrane sweeping	3.49	0.74 to 17.57		
	Extra-amniotic PGE_2	1,201,376,912,525,490,000.00	130.19 to 5.37138463833599E+46		
	i.v. prostaglandin	2.11	0.38 to 12.65		
	Sexual intercourse	1.82	0.03 to 80.32		
	Acupuncture	1.02	0.15 to 6.25		
	Oral prostaglandins	0.66	0.08 to 4.48		
	Buccal/sublingual misoprostol	0.78	0.18 to 3.26		

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	0.80	0.34 to 1.84		
	Sustained-release misoprostol vaginal pessary	3.32	1.01 to 10.77		
	i.v. oxytocin	1.48	0.88 to 2.51	0.8381	0.17 to 2.39
	Amniotomy	2.27	0.67 to 7.88		
	i.v. oxytocin plus amniotomy	4.16	1.17 to 16.48		
	NO	0.86	0.3 to 1.98		
	Mifepristone	1.34	0.34 to 6.52		
	Mechanical methods – Foley catheter	1.43	0.78 to 2.74		
	Mechanical methods – laminaria	1.60	0.42 to 5.91		
	Mechanical methods – double-balloon or Cook's catheter	0.30	0.01 to 2.93		
	Membrane sweeping	3.22	1.15 to 9.52		
	Extra-amniotic PGE_2	1,109,010,666,123,780,000.00	104.69 to 5.37138463833599E+46		
	i.v. prostaglandin	1.95	0.54 to 7.21		
	Sexual intercourse	1.68	0.03 to 64.59		
	Acupuncture	0.94	0.21 to 3.7		
	Oral prostaglandins	0.61	0.11 to 2.89		
	Buccal/sublingual misoprostol	0.72	0.31 to 1.62	0.2451	0.01 to 1.09

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	4.13	1.18 to 15.1		
	i.v. oxytocin	1.84	0.86 to 4.09	8.687	0.04 to 48.74
	Amniotomy	2.82	0.75 to 10.77		
	i.v. oxytocin plus amniotomy	5.18	1.24 to 22.07		
	NO	1.06	0.41 to 2.92		
	Mifepristone	1.67	0.38 to 9		
	Mechanical methods – Foley catheter	1.78	0.83 to 4.01		
	Mechanical methods – laminaria	1.99	0.47 to 8.09		
	Mechanical methods – double-balloon or Cook's catheter	0.38	0.02 to 3.76		
	Membrane sweeping	4.01	1.25 to 13.76		
	Extra-amniotic PGE_2	1,368,162,127,054,920,000.00	132.42 to 7.25061086293636E+46		
	i.v. prostaglandin	2.42	0.6 to 9.93		
	Sexual intercourse	2.09	0.04 to 85.54		
	Acupuncture	1.17	0.24 to 5.32		
	Oral prostaglandins	0.75	0.12 to 3.64		
	Buccal/sublingual misoprostol	0.89	0.32 to 2.84		

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	0.45	0.14 to 1.38		
	Amniotomy	0.68	0.14 to 3.26		
	i.v. oxytocin plus amniotomy	1.25	0.25 to 6.55		
	NO	0.26	0.06 to 0.96		
	Mifepristone	0.40	0.07 to 2.59		
	Mechanical methods – Foley catheter	0.43	0.14 to 1.32		
	Mechanical methods – laminaria	0.48	0.1 to 2.4		
	Mechanical methods – double-balloon or Cook's catheter	0.09	0 to 0.99		
	Membrane sweeping	0.97	0.23 to 4.24		
	Extra-amniotic PGE_2	334,027,593,585,380,000.00	27.19 to 1.78797862552213E+46		
	i.v. prostaglandin	0.59	0.11 to 2.96		
	Sexual intercourse	0.51	0.01 to 23.81		
	Acupuncture	0.28	0.05 to 1.65		
	Oral prostaglandins	0.18	0.03 to 1.15		
	Buccal/sublingual misoprostol	0.22	0.06 to 0.8		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
i.v. oxytocin	Amniotomy	1.53	0.46 to 5.2		
	i.v. oxytocin plus amniotomy	2.82	0.81 to 10.34		
	NO	0.58	0.2 to 1.31		
	Mifepristone	0.91	0.24 to 4.34	5.44E+27	2.41 to 4.997E+25
	Mechanical methods – Foley catheter	0.97	0.57 to 1.66		
	Mechanical methods – laminaria	1.08	0.31 to 3.74		
	Mechanical methods – double-balloon or Cook's catheter	0.20	0.01 to 1.82		
	Membrane sweeping	2.18	0.82 to 5.94		
	Extra-amniotic PGE_2	743,392,080,770,109,000.00	74.96 to 3.60054679804453E+46		
	i.v. prostaglandin	1.32	0.41 to 4.37		
	Sexual intercourse	1.14	0.02 to 43.42		
	Acupuncture	0.64	0.15 to 2.51		
	Oral prostaglandins	0.41	0.08 to 1.73		
	Buccal/sublingual misoprostol	0.48	0.2 to 1.09		

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Amniotomy	i.v. oxytocin plus amniotomy	1.83	0.47 to 7.62	3.534	0.2 to 14.52
	NO	0.38	0.09 to 1.48		
	Mifepristone	0.59	0.11 to 4.15		
	Mechanical methods – Foley catheter	0.63	0.18 to 2.16		
	Mechanical methods – laminaria	0.71	0.14 to 3.82		
	Mechanical methods – double-balloon or Cook's catheter	0.13	0.01 to 1.65		
	Membrane sweeping	1.42	0.32 to 6.3		
	Extra-amniotic PGE_2	488443402545697000.00	51.62 to 2.66735067240862E+46		
	i.v. prostaglandin	0.86	0.16 to 4.83		
	Sexual intercourse	0.74	0.01 to 31.25		
	Acupuncture	0.41	0.07 to 2.44		
	Oral prostaglandins	0.27	0.03 to 1.73		
	Buccal/sublingual misoprostol	0.32	0.08 to 1.24		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
i.v. oxytocin plus amniotomy	NO	0.21	0.04 to 0.89		
	Mifepristone	0.32	0.05 to 2.44		
	Mechanical methods – Foley catheter	0.34	0.09 to 1.27		
	Mechanical methods – laminaria	0.39	0.07 to 2.17		
	Mechanical methods – double-balloon or Cook's catheter	0.07	0 to 0.96		
	Membrane sweeping	0.77	0.16 to 3.66		
	Extra-amniotic PGE_2	265,396,147,266,911,000.00	22.13 to 1.61782996302093E+46		
	i.v. prostaglandin	0.47	0.08 to 2.61		
	Sexual intercourse	0.40	0.01 to 18.21		
	Acupuncture	0.23	0.04 to 1.47		
	Oral prostaglandins	0.15	0.02 to 0.99		
	Buccal/sublingual misoprostol	0.17	0.04 to 0.69		
NO	Mifepristone	1.57	0.39 to 7.55		
	Mechanical methods – Foley catheter	1.67	0.72 to 5.03		
	Mechanical methods – laminaria	1.87	0.44 to 7.5		
	Mechanical methods – double-balloon or Cook's catheter	0.35	0.01 to 3.63		
	Membrane sweeping	3.77	1.13 to 13.03		
	Extra-amniotic PGE_2	1,288,486,567,453,520,000.00	136.73 to 5.93629809208726E+46		
	i.v. prostaglandin	2.28	0.55 to 10.51		
	Sexual intercourse	1.97	0.03 to 74.14		
	Acupuncture	1.10	0.24 to 4.42		
	Oral prostaglandins	0.71	0.11 to 3.57		
	Buccal/sublingual misoprostol	0.84	0.28 to 3.14		

continued

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TABLE 54 Apgar score <7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mifepristone	Mechanical methods – Foley catheter	1.07	0.22 to 4.25		
	Mechanical methods – laminaria	1.20	0.18 to 6.94		
	Mechanical methods – double-balloon or Cook's catheter	0.23	0.01 to 2.92		
	Membrane sweeping	2.41	0.41 to 12.57		
	Extra-amniotic PGE_2	821,575,308,394,869,000.00	78.26 to 4.86022980742998E+46		
	i.v. prostaglandin	1.45	0.21 to 8.38		
	Sexual intercourse	1.26	0.02 to 56.6		
	Acupuncture	0.70	0.1 to 4.04		
	Oral prostaglandins	0.45	0.05 to 3.16		
	Buccal/sublingual misoprostol	0.54	0.09 to 2.39		
Mechanical methods – Foley catheter	Mechanical methods – laminaria	1.12	0.33 to 4.1		
	Mechanical methods – double-balloon or Cook's catheter	0.21	0.01 to 1.86		
	Membrane sweeping	2.25	0.81 to 6.78		
	Extra-amniotic PGE_2	773,730,487,114,827,000.00	75.49 to 3.60054679804453E+46		
	i.v. prostaglandin	1.36	0.38 to 5.06		
	Sexual intercourse	1.18	0.02 to 45.92		
	Acupuncture	0.66	0.14 to 2.66		
	Oral prostaglandins	0.42	0.08 to 1.89		
	Buccal/sublingual misoprostol	0.50	0.2 to 1.2		

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mechanical methods – laminaria	Mechanical methods – double-balloon or Cook's catheter	0.19	0.01 to 2.44		
	Membrane sweeping	2.01	0.45 to 8.76		
	Extra-amniotic PGE_2	686,237,381,533,263,000.00	66.29 to 3.97921961036919E+46		
	i.v. prostaglandin	1.21	0.22 to 6.61		
	Sexual intercourse	1.05	0.02 to 41.43		
	Acupuncture	0.59	0.09 to 3.34		
	Oral prostaglandins	0.38	0.05 to 2.57		
	Buccal/sublingual misoprostol	0.45	0.11 to 1.93		
Mechanical methods – double-balloon or Cook's catheter	Membrane sweeping	10.63	0.93 to 246.66		
	Extra-amniotic PGE_2	3,645,408,119,402,930,000.00	676.55 to 1.19542363552926E+47		
	i.v. prostaglandin	6.42	0.51 to 166		
	Sexual intercourse	5.55	0.06 to 476.28		
	Acupuncture	3.10	0.21 to 90.02		
	Oral prostaglandins	2.00	0.12 to 62.3		
	Buccal/sublingual misoprostol	2.37	0.21 to 60.95		
Membrane sweeping	Extra-amniotic PGE_2	344,200,248,275,638,000.00	39.33 to 1.19851791457072E+46		
	i.v. prostaglandin	0.60	0.13 to 2.81		
	Sexual intercourse	0.52	0.01 to 23.9		
	Acupuncture	0.29	0.05 to 1.51		
	Oral prostaglandins	0.19	0.03 to 1.06		
	Buccal/sublingual misoprostol	0.22	0.06 to 0.74		

continued

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TABLE 54 Apgar score < 7 at 5 minutes (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Extra-amniotic PGE_2	i.v. prostaglandin	0.00	0 to 0.02		
	Sexual intercourse	0.00	0 to 0.01		
	Acupuncture	0.00	0 to 0.01		
	Oral prostaglandins	0.00	0 to 0.01		
	Buccal/sublingual misoprostol	0.00	0 to 0.01		
i.v. prostaglandin	Sexual intercourse	0.86	0.01 to 42.18		
	Acupuncture	0.48	0.07 to 2.84		
	Oral prostaglandins	0.31	0.04 to 2.06		
	Buccal/sublingual misoprostol	0.37	0.09 to 1.5		
Sexual intercourse	Acupuncture	0.56	0.01 to 36.49		
	Oral prostaglandins	0.36	0.01 to 27.49		
	Buccal/sublingual misoprostol	0.43	0.01 to 26.39		
Acupuncture	Oral prostaglandins	0.65	0.08 to 5.26		
	Buccal/sublingual misoprostol	0.76	0.16 to 3.94		
Oral prostaglandins	Buccal/sublingual misoprostol	1.18	0.22 to 7.31		

TABLE 55 Neonatal intensive care unit admission

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
No treatment	Placebo	1.07	0.7 to 1.56	0.7355	0 to 0.77
	Vaginal PGE_2 (tablet)	0.85	0.48 to 1.41	0.5082	0.08 to 1.63
	Vaginal PGE_2 (gel)	0.91	0.7 to 1.15	0.899	0.56 to 1.36
	Vaginal PGE_2 pessary (slow release)	0.75	0.52 to 1.05		
	PGF_2 gel	0.58	0.19 to 1.34		
	Intracervical PGE_2	0.78	0.56 to 1.05	0.8517	0.16 to 2.54
	Vaginal PGE_2 pessary (normal release)	0.91	0.57 to 1.36	1.535	0.71 to 2.91
	Vaginal misoprostol (dose < 50 µg)	0.76	0.58 to 0.97	12.27	0.03 to 42.75
	Vaginal misoprostol (dose ≥ 50 µg)	0.88	0.67 to 1.13	1.238	0.46 to 2.64
	Oral misoprostol tablet (dose < 50 µg)	0.81	0.35 to 1.61		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.85	0.64 to 1.12	1.335E+28	0.52 to 9.656E+21
	Titrated (low-dose) oral misoprostol solution	0.69	0.45 to 1.01		
	Sustained-release misoprostol vaginal pessary	0.61	0.35 to 0.99		
	i.v. oxytocin	0.79	0.63 to 0.97	0.7211	0.54 to 0.93
	Amniotomy	0.86	0.24 to 2.19		
	i.v. oxytocin plus amniotomy	1.64	0.82 to 2.96	2.001	0.61 to 4.99
	NO	0.87	0.5 to 1.37	1.247	0.13 to 5.08
	Mifepristone	1.80	0.73 to 3.83		
	Oestrogens	1.50	0.01 to 8.27		
	Mechanical methods – Foley catheter	0.68	0.48 to 0.94	0.6182	0.11 to 1.75
	Mechanical methods – laminaria	1.59	0.43 to 4.34		
	Mechanical methods – double-balloon or Cook's catheter	0.62	0.3 to 1.13		
	Membrane sweeping	0.85	0.52 to 1.33	0.9813	0.57 to 1.57
	Extra-amniotic PGE_2	0.41	0.17 to 0.81		
	Sexual intercourse	0.49	0.16 to 1.12	0.4972	0.16 to 1.16
	Acupuncture	1.00	0.11 to 3.69	0.09124	0 to 0.17
	Oral prostaglandins	0.70	0.1 to 2.4		
	Buccal/sublingual misoprostol	0.75	0.47 to 1.15		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Placebo	Vaginal PGE_2 (tablet)	0.83	0.42 to 1.44		
	Vaginal PGE_2 (gel)	0.88	0.59 to 1.26	0.7141	0.26 to 1.58
	Vaginal PGE_2 pessary (slow release)	0.73	0.44 to 1.11	29.03	0.45 to 156.3
	PGF_2 gel	0.56	0.18 to 1.36		
	Intracervical PGE_2	0.76	0.48 to 1.12	1.059	0.08 to 4.41
	Vaginal PGE_2 pessary (normal release)	0.88	0.51 to 1.4	0.8597	0.3 to 1.94
	Vaginal misoprostol (dose < 50 µg)	0.74	0.49 to 1.06	0.9459	0.38 to 1.94
	Vaginal misoprostol (dose ≥ 50 µg)	0.85	0.57 to 1.23		
	Oral misoprostol tablet (dose < 50 µg)	0.79	0.31 to 1.63		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.83	0.55 to 1.2	0.7459	0.28 to 1.61
	Titrated (low-dose) oral misoprostol solution	0.67	0.39 to 1.07		
	Sustained-release misoprostol vaginal pessary	0.59	0.31 to 1.03		
	i.v. oxytocin	0.76	0.5 to 1.12	0.7765	0.06 to 3.02
	Amniotomy	0.84	0.22 to 2.26		
	i.v. oxytocin plus amniotomy	1.60	0.71 to 3.06		
	NO	0.82	0.54 to 1.2	0.9191	0.56 to 1.43
	Mifepristone	1.71	0.73 to 3.55	1.149	0.38 to 2.75
	Oestrogens	1.43	0.01 to 7.8	2.287	0.02 to 12.21
	Mechanical methods – Foley catheter	0.66	0.41 to 1		
	Mechanical methods – laminaria	1.54	0.4 to 4.31		
	Mechanical methods – double-balloon or Cook's catheter	0.60	0.26 to 1.15		
	Membrane sweeping	0.83	0.43 to 1.46	1.141	0.01 to 6.19
	Extra-amniotic PGE_2	0.40	0.16 to 0.82		
	Sexual intercourse	0.48	0.14 to 1.17		
	Acupuncture	0.94	0.11 to 3.36	1.429	0.13 to 5.95
	Oral prostaglandins	0.68	0.09 to 2.4		
	Buccal/sublingual misoprostol	0.73	0.42 to 1.19		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (tablet)	Vaginal PGE_2 (gel)	1.14	0.65 to 1.88	0.9833	0.01 to 5.19
	Vaginal PGE_2 pessary (slow release)	0.94	0.5 to 1.6		
	PGF_2 gel	0.72	0.22 to 1.82		
	Intracervical PGE_2	0.98	0.55 to 1.64		
	Vaginal PGE_2 pessary (normal release)	1.14	0.56 to 2.09		
	Vaginal misoprostol (dose < 50 µg)	0.95	0.54 to 1.56		
	Vaginal misoprostol (dose ≥ 50 µg)	1.10	0.64 to 1.77	0.8967	0.33 to 1.93
	Oral misoprostol tablet (dose < 50 µg)	1.02	0.37 to 2.21		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.07	0.62 to 1.74	1.136	0.38 to 2.65
	Titrated (low-dose) oral misoprostol solution	0.86	0.44 to 1.52		
	Sustained-release misoprostol vaginal pessary	0.76	0.36 to 1.44		
	i.v. oxytocin	0.99	0.56 to 1.64		
	Amniotomy	1.09	0.27 to 3.01		
	i.v. oxytocin plus amniotomy	2.06	0.85 to 4.28		
	NO	1.08	0.52 to 2.03	0.09229	0 to 0.47
	Mifepristone	2.26	0.78 to 5.32		
	Oestrogens	1.88	0.02 to 10.41		
	Mechanical methods – Foley catheter	0.85	0.47 to 1.43	1.641	0.33 to 5.09
	Mechanical methods – laminaria	1.99	0.48 to 5.81		
	Mechanical methods – double-balloon or Cook's catheter	0.77	0.31 to 1.59		
	Membrane sweeping	1.08	0.51 to 2.08		
	Extra-amniotic PGE_2	0.51	0.19 to 1.11		
	Sexual intercourse	0.62	0.17 to 1.57		
	Acupuncture	1.26	0.12 to 4.97		
	Oral prostaglandins	0.88	0.11 to 3.2		
	Buccal/sublingual misoprostol	0.94	0.48 to 1.69		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 (gel)	Vaginal PGE_2 pessary (slow release)	0.83	0.58 to 1.14		
	PGF_2 gel	0.64	0.22 to 1.48		
	Intracervical PGE_2	0.86	0.65 to 1.13	0.8812	0.43 to 1.61
	Vaginal PGE_2 pessary (normal release)	1.01	0.62 to 1.53		
	Vaginal misoprostol (dose < 50 µg)	0.84	0.67 to 1.04	0.9043	0.62 to 1.3
	Vaginal misoprostol (dose ≥ 50 µg)	0.97	0.77 to 1.21	1.194	0.76 to 1.8
	Oral misoprostol tablet (dose < 50 µg)	0.89	0.4 to 1.74	0.7755	0.21 to 1.99
	Oral misoprostol tablet (dose ≥ 50 µg)	0.95	0.73 to 1.2	0.5218	0.23 to 1
	Titrated (low-dose) oral misoprostol solution	0.76	0.51 to 1.09	0.835	0.45 to 1.42
	Sustained-release misoprostol vaginal pessary	0.68	0.39 to 1.09		
	i.v. oxytocin	0.87	0.67 to 1.12		
	Amniotomy	0.95	0.27 to 2.4	1.437	0.35 to 4.07
	i.v. oxytocin plus amniotomy	1.81	0.92 to 3.23	1.459	0.57 to 3.01
	NO	0.96	0.57 to 1.49	1.03	0.37 to 2.29
	Mifepristone	1.99	0.81 to 4.26		
	Oestrogens	1.66	0.02 to 9.07		
	Mechanical methods – Foley catheter	0.75	0.56 to 1.01	0.7575	0.43 to 1.21
	Mechanical methods – laminaria	1.75	0.49 to 4.72	1.061	0.07 to 4.61
	Mechanical methods – double-balloon or Cook's catheter	0.68	0.34 to 1.22	0.5625	0.22 to 1.18
	Membrane sweeping	0.95	0.54 to 1.56		
	Extra-amniotic PGE_2	0.46	0.19 to 0.89		
	Sexual intercourse	0.55	0.17 to 1.29		
	Acupuncture	1.11	0.12 to 4.03		
	Oral prostaglandins	0.78	0.11 to 2.67		
	Buccal/sublingual misoprostol	0.83	0.53 to 1.24		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (slow release)	PGF_2 gel	0.78	0.26 to 1.83		
	Intracervical PGE_2	1.07	0.72 to 1.51	7.959	0.51 to 41.36
	Vaginal PGE_2 pessary (normal release)	1.24	0.72 to 1.99		
	Vaginal misoprostol (dose < 50 µg)	1.04	0.74 to 1.41	1.177	0.52 to 2.28
	Vaginal misoprostol (dose ≥ 50 µg)	1.20	0.86 to 1.63	1.089	0.57 to 1.92
	Oral misoprostol tablet (dose < 50 µg)	1.11	0.46 to 2.24		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.17	0.81 to 1.63		
	Titrated (low-dose) oral misoprostol solution	0.94	0.58 to 1.42	5.206E+12	8.7 to 553,300,000,000
	Sustained-release misoprostol vaginal pessary	0.82	0.55 to 1.18	0.8202	0.53 to 1.22
	i.v. oxytocin	1.08	0.76 to 1.48	1.217	0.62 to 2.13
	Amniotomy	1.18	0.32 to 3.06		
	i.v. oxytocin plus amniotomy	2.25	1.03 to 4.25		
	NO	1.18	0.65 to 1.97		
	Mifepristone	2.45	0.96 to 5.35		
	Oestrogens	2.03	0.02 to 11.13		
	Mechanical methods – Foley catheter	0.93	0.65 to 1.27	0.7907	0.45 to 1.28
	Mechanical methods – laminaria	2.17	0.57 to 5.94		
	Mechanical methods – double-balloon or Cook's catheter	0.84	0.41 to 1.52	2.092	0.49 to 6.2
	Membrane sweeping	1.18	0.64 to 2.01	0.2399	0 to 1.11
	Extra-amniotic PGE_2	0.56	0.23 to 1.13		
	Sexual intercourse	0.67	0.2 to 1.62		
	Acupuncture	1.37	0.15 to 5.05		
	Oral prostaglandins	0.96	0.13 to 3.29		
	Buccal/sublingual misoprostol	1.03	0.62 to 1.62		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
PGF_2 gel	Intracervical PGE_2	1.71	0.57 to 3.98		
	Vaginal PGE_2 pessary (normal release)	2.00	0.61 to 4.91		
	Vaginal misoprostol (dose < 50 µg)	1.66	0.57 to 3.86		
	Vaginal misoprostol (dose ≥ 50 µg)	1.93	0.65 to 4.49		
	Oral misoprostol tablet (dose < 50 µg)	1.78	0.44 to 4.91		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.87	0.63 to 4.36		
	Titrated (low-dose) oral misoprostol solution	1.52	0.49 to 3.65		
	Sustained-release misoprostol vaginal pessary	1.33	0.41 to 3.31		
	i.v. oxytocin	1.73	0.58 to 4.05		
	Amniotomy	1.90	0.34 to 6.14		
	i.v. oxytocin plus amniotomy	3.60	0.97 to 9.39		
	NO	1.90	0.57 to 4.67		
	Mifepristone	3.96	0.93 to 11.34		
	Oestrogens	3.26	0.02 to 18.77		
	Mechanical methods – Foley catheter	1.47	0.53 to 3.3	1.479	0.52 to 3.4
	Mechanical methods – laminaria	3.48	0.61 to 11.7		
	Mechanical methods – double-balloon or Cook's catheter	1.35	0.37 to 3.5		
	Membrane sweeping	1.89	0.55 to 4.73		
	Extra-amniotic PGE_2	0.91	0.22 to 2.49		
	Sexual intercourse	1.09	0.21 to 3.35		
	Acupuncture	2.18	0.18 to 9.13		
	Oral prostaglandins	1.55	0.16 to 6.24		
	Buccal/sublingual misoprostol	1.65	0.51 to 4.01		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Intracervical PGE_2	Vaginal PGE_2 pessary (normal release)	1.18	0.7 to 1.88		
	Vaginal misoprostol (dose < 50 µg)	0.98	0.76 to 1.26	0.9989	0.66 to 1.47
	Vaginal misoprostol (dose ≥ 50 µg)	1.14	0.87 to 1.47	1.187	0.73 to 1.83
	Oral misoprostol tablet (dose < 50 µg)	1.05	0.45 to 2.07		
	Oral misoprostol tablet (dose ≥ 50 µg)	1.11	0.82 to 1.46	1.15	0.39 to 2.71
	Titrated (low-dose) oral misoprostol solution	0.90	0.57 to 1.33		
	Sustained-release misoprostol vaginal pessary	0.79	0.45 to 1.3		
	i.v. oxytocin	1.03	0.75 to 1.38		
	Amniotomy	1.13	0.31 to 2.91		
	i.v. oxytocin plus amniotomy	2.14	1.01 to 4		
	NO	1.13	0.65 to 1.82		
	Mifepristone	2.34	0.94 to 5.1		
	Oestrogens	1.94	0.02 to 10.61		
	Mechanical methods – Foley catheter	0.88	0.63 to 1.2	0.9001	0.44 to 1.64
	Mechanical methods – laminaria	2.05	0.57 to 5.51	4.442	0.68 to 17.69
	Mechanical methods – double-balloon or Cook's catheter	0.80	0.38 to 1.47		
	Membrane sweeping	1.12	0.62 to 1.89		
	Extra-amniotic PGE_2	0.54	0.22 to 1.06		
	Sexual intercourse	0.64	0.19 to 1.54		
	Acupuncture	1.30	0.14 to 4.82		
	Oral prostaglandins	0.91	0.13 to 3.17		
	Buccal/sublingual misoprostol	0.98	0.61 to 1.49		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal PGE_2 pessary (normal release)	Vaginal misoprostol (dose < 50 µg)	0.87	0.54 to 1.34	4.653	0.01 to 21.17
	Vaginal misoprostol (dose ≥ 50 µg)	1.01	0.64 to 1.54	1.879	0.76 to 4.08
	Oral misoprostol tablet (dose < 50 µg)	0.93	0.36 to 1.98		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.98	0.61 to 1.51		
	Titrated (low-dose) oral misoprostol solution	0.79	0.45 to 1.31	1.523	0.51 to 3.63
	Sustained-release misoprostol vaginal pessary	0.70	0.35 to 1.26		
	i.v. oxytocin	0.91	0.57 to 1.38	1.478	0.15 to 5.7
	Amniotomy	1.00	0.26 to 2.7		
	i.v. oxytocin plus amniotomy	1.89	0.81 to 3.7		
	NO	0.99	0.52 to 1.72		
	Mifepristone	2.06	0.78 to 4.64		
	Oestrogens	1.73	0.02 to 9.35		
	Mechanical methods – Foley catheter	0.79	0.46 to 1.26		
	Mechanical methods – laminaria	1.83	0.46 to 5.18		
	Mechanical methods – double-balloon or Cook's catheter	0.71	0.31 to 1.41		
	Membrane sweeping	0.99	0.5 to 1.77		
	Extra-amniotic PGE_2	0.47	0.18 to 0.97	0.9191	0.23 to 2.48
	Sexual intercourse	0.57	0.16 to 1.41		
	Acupuncture	1.14	0.12 to 4.29		
	Oral prostaglandins	0.81	0.11 to 2.9		
	Buccal/sublingual misoprostol	0.87	0.47 to 1.49		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Vaginal misoprostol (dose < 50 µg)	Vaginal misoprostol (dose ≥ 50 µg)	1.16	0.94 to 1.42	1.441	0.85 to 2.31
	Oral misoprostol tablet (dose < 50 µg)	1.07	0.47 to 2.08	1.825	0.42 to 5.4
	Oral misoprostol tablet (dose ≥ 50 µg)	1.13	0.9 to 1.4	0.9496	0.64 to 1.35
	Titrated (low-dose) oral misoprostol solution	0.91	0.61 to 1.31	0.5433	0.13 to 1.43
	Sustained-release misoprostol vaginal pessary	0.81	0.48 to 1.29		
	i.v. oxytocin	1.05	0.82 to 1.33	1.681	0.96 to 2.72
	Amniotomy	1.15	0.32 to 2.93		
	i.v. oxytocin plus amniotomy	2.18	1.07 to 3.97		
	NO	1.15	0.68 to 1.8		
	Mifepristone	2.39	0.98 to 5.13		
	Oestrogens	1.99	0.02 to 10.82		
	Mechanical methods – Foley catheter	0.90	0.67 to 1.19	0.9504	0.5 to 1.66
	Mechanical methods – laminaria	2.10	0.58 to 5.67		
	Mechanical methods – double-balloon or Cook's catheter	0.82	0.4 to 1.48		
	Membrane sweeping	1.14	0.65 to 1.88		
	Extra-amniotic PGE_2	0.55	0.23 to 1.06		
	Sexual intercourse	0.66	0.2 to 1.54		
	Acupuncture	1.33	0.15 to 4.81		
	Oral prostaglandins	0.93	0.13 to 3.18		
	Buccal/sublingual misoprostol	0.99	0.66 to 1.45	1.043	0.53 to 1.83
Vaginal misoprostol (dose ≥ 50 µg)	Oral misoprostol tablet (dose < 50 µg)	0.93	0.4 to 1.82		
	Oral misoprostol tablet (dose ≥ 50 µg)	0.98	0.79 to 1.2	1.234	0.87 to 1.7
	Titrated (low-dose) oral misoprostol solution	0.79	0.53 to 1.12	0.7044	0.23 to 1.65
	Sustained-release misoprostol vaginal pessary	0.70	0.41 to 1.11		
	i.v. oxytocin	0.90	0.71 to 1.14	0.9313	0.55 to 1.48
	Amniotomy	0.99	0.28 to 2.54		
	i.v. oxytocin plus amniotomy	1.89	0.92 to 3.46		
	NO	0.99	0.59 to 1.56	0.01104	0 to 0.1
	Mifepristone	2.07	0.84 to 4.41		
	Oestrogens	1.72	0.02 to 9.36		
	Mechanical methods – Foley catheter	0.78	0.57 to 1.04	1.725	0.42 to 4.97
	Mechanical methods – laminaria	1.82	0.5 to 4.9		
	Mechanical methods – double-balloon or Cook's catheter	0.71	0.34 to 1.28		
	Membrane sweeping	0.99	0.56 to 1.63		

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
	Extra-amniotic PGE_2	0.47	0.2 to 0.89	0.4223	0.11 to 1.07
	Sexual intercourse	0.57	0.17 to 1.33		
	Acupuncture	1.15	0.13 to 4.26		
	Oral prostaglandins	0.81	0.11 to 2.77		
	Buccal/sublingual misoprostol	0.86	0.57 to 1.25	1.078	0.47 to 2.11
Oral misoprostol tablet (dose < 50 µg)	Oral misoprostol tablet (dose ≥ 50 µg)	1.21	0.54 to 2.4	2.856	0.18 to 12.83
	Titrated (low-dose) oral misoprostol solution	0.98	0.4 to 2.02		
	Sustained-release misoprostol vaginal pessary	0.87	0.33 to 1.91		
	i.v. oxytocin	1.12	0.49 to 2.25		
	Amniotomy	1.23	0.26 to 3.68		
	i.v. oxytocin plus amniotomy	2.33	0.78 to 5.43		
	NO	1.23	0.47 to 2.67		
	Mifepristone	2.56	0.73 to 6.67		
	Oestrogens	2.14	0.02 to 12.26		
	Mechanical methods – Foley catheter	0.97	0.41 to 1.97		
	Mechanical methods – laminaria	2.25	0.48 to 6.95		
	Mechanical methods – double-balloon or Cook's catheter	0.88	0.29 to 2.06		
	Membrane sweeping	1.22	0.45 to 2.68		
	Extra-amniotic PGE_2	0.58	0.18 to 1.43		
	Sexual intercourse	0.70	0.17 to 1.94		
	Acupuncture	1.42	0.13 to 5.56		
	Oral prostaglandins	1.00	0.11 to 3.76		
	Buccal/sublingual misoprostol	1.07	0.43 to 2.25		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Oral misoprostol tablet (dose ≥ 50 µg)	Titrated (low-dose) oral misoprostol solution	0.81	0.54 to 1.19		
	Sustained-release misoprostol vaginal pessary	0.72	0.42 to 1.17		
	i.v. oxytocin	0.93	0.72 to 1.19	0.8406	0.5 to 1.33
	Amniotomy	1.03	0.28 to 2.63		
	i.v. oxytocin plus amniotomy	1.94	0.94 to 3.57		
	NO	1.02	0.6 to 1.61		
	Mifepristone	2.13	0.86 to 4.58		
	Oestrogens	1.77	0.02 to 9.78		
	Mechanical methods – Foley catheter	0.81	0.57 to 1.1		
	Mechanical methods – laminaria	1.88	0.51 to 5.07		
	Mechanical methods – double-balloon or Cook's catheter	0.73	0.35 to 1.34		
	Membrane sweeping	1.02	0.57 to 1.68		
	Extra-amniotic PGE_2	0.49	0.21 to 0.95		
	Sexual intercourse	0.58	0.18 to 1.37		
	Acupuncture	1.18	0.13 to 4.3		
	Oral prostaglandins	0.83	0.12 to 2.84		
	Buccal/sublingual misoprostol	0.89	0.58 to 1.3	0.7847	0.38 to 1.43
Titrated (low-dose) oral misoprostol solution	Sustained-release misoprostol vaginal pessary	0.91	0.49 to 1.58		
	i.v. oxytocin	1.18	0.78 to 1.73	31.66	0.89 to 177.1
	Amniotomy	1.30	0.34 to 3.4		
	i.v. oxytocin plus amniotomy	2.46	1.11 to 4.75		
	NO	1.30	0.69 to 2.21		
	Mifepristone	2.70	1.02 to 6.11		
	Oestrogens	2.25	0.02 to 12.26		
	Mechanical methods – Foley catheter	1.02	0.65 to 1.54		
	Mechanical methods – laminaria	2.38	0.61 to 6.66		
	Mechanical methods – double-balloon or Cook's catheter	0.92	0.42 to 1.79		
	Membrane sweeping	1.29	0.66 to 2.28		
	Extra-amniotic PGE_2	0.61	0.25 to 1.23		
	Sexual intercourse	0.74	0.22 to 1.82		
	Acupuncture	1.50	0.16 to 5.6		
	Oral prostaglandins	1.06	0.14 to 3.72		
	Buccal/sublingual misoprostol	1.13	0.64 to 1.83		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Sustained-release misoprostol vaginal pessary	i.v. oxytocin	1.37	0.8 to 2.2		
	Amniotomy	1.51	0.37 to 4.05		
	i.v. oxytocin plus amniotomy	2.86	1.17 to 5.83		
	NO	1.51	0.72 to 2.76		
	Mifepristone	3.13	1.1 to 7.26		
	Oestrogens	2.59	0.02 to 14.3		
	Mechanical methods – Foley catheter	1.18	0.69 to 1.9		
	Mechanical methods – laminaria	2.76	0.68 to 7.86		
	Mechanical methods – double-balloon or Cook's catheter	1.07	0.46 to 2.1		
	Membrane sweeping	1.50	0.71 to 2.8		
	Extra-amniotic PGE_2	0.72	0.26 to 1.56		
	Sexual intercourse	0.86	0.24 to 2.17		
	Acupuncture	1.75	0.18 to 6.59		
	Oral prostaglandins	1.22	0.16 to 4.34		
	Buccal/sublingual misoprostol	1.31	0.68 to 2.3		
i.v. oxytocin	Amniotomy	1.11	0.31 to 2.82		
	i.v. oxytocin plus amniotomy	2.10	1.03 to 3.85		
	NO	1.11	0.65 to 1.76		
	Mifepristone	2.29	0.94 to 4.83	7.815	1.31 to 28.37
	Oestrogens	1.91	0.02 to 10.47		
	Mechanical methods – Foley catheter	0.87	0.62 to 1.19		
	Mechanical methods – laminaria	2.03	0.55 to 5.49		
	Mechanical methods – double-balloon or Cook's catheter	0.79	0.38 to 1.44		
	Membrane sweeping	1.10	0.63 to 1.77		
	Extra-amniotic PGE_2	0.53	0.22 to 1.03		
	Sexual intercourse	0.63	0.2 to 1.46		
	Acupuncture	1.28	0.14 to 4.67		
	Oral prostaglandins	0.89	0.13 to 3.01		
	Buccal/sublingual misoprostol	0.96	0.61 to 1.45		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Amniotomy	i.v. oxytocin plus amniotomy	2.56	0.64 to 7.17	2.553E+23	21.92 to 1.433E+22
	NO	1.37	0.34 to 3.81		
	Mifepristone	2.86	0.57 to 9.12		
	Oestrogens	2.36	0.02 to 14.08		
	Mechanical methods – Foley catheter	1.08	0.3 to 2.87		
	Mechanical methods – laminaria	2.51	0.39 to 8.88		
	Mechanical methods – double-balloon or Cook's catheter	0.97	0.23 to 2.83		
	Membrane sweeping	1.36	0.34 to 3.74		
	Extra-amniotic PGE_2	0.65	0.14 to 1.99		
	Sexual intercourse	0.79	0.13 to 2.65		
	Acupuncture	1.61	0.1 to 7.07		
	Oral prostaglandins	1.11	0.1 to 4.65		
	Buccal/sublingual misoprostol	1.19	0.32 to 3.22		
i.v. oxytocin plus amniotomy	NO	0.58	0.25 to 1.18		
	Mifepristone	1.22	0.38 to 3.03		
	Oestrogens	1.03	0.01 to 5.84		
	Mechanical methods – Foley catheter	0.46	0.22 to 0.86		
	Mechanical methods – laminaria	1.07	0.24 to 3.24		
	Mechanical methods – double-balloon or Cook's catheter	0.42	0.15 to 0.92		
	Membrane sweeping	0.58	0.24 to 1.18		
	Extra-amniotic PGE_2	0.28	0.09 to 0.66		
	Sexual intercourse	0.33	0.08 to 0.88		
	Acupuncture	0.68	0.06 to 2.62		
	Oral prostaglandins	0.48	0.06 to 1.77		
	Buccal/sublingual misoprostol	0.51	0.22 to 1.01		
NO	Mifepristone	2.16	0.83 to 4.75		
	Oestrogens	1.81	0.02 to 9.98		
	Mechanical methods – Foley catheter	0.83	0.47 to 1.38		
	Mechanical methods – laminaria	1.94	0.49 to 5.52		
	Mechanical methods – double-balloon or Cook's catheter	0.75	0.32 to 1.51		
	Membrane sweeping	1.05	0.5 to 1.94		
	Extra-amniotic PGE_2	0.50	0.19 to 1.07		
	Sexual intercourse	0.60	0.17 to 1.52		
	Acupuncture	1.20	0.13 to 4.31		
	Oral prostaglandins	0.86	0.11 to 3.09		
	Buccal/sublingual misoprostol	0.92	0.49 to 1.6		

continued

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TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mifepristone	Oestrogens	0.97	0.01 to 5.52		
	Mechanical methods – Foley catheter	0.45	0.17 to 0.94		
	Mechanical methods – laminaria	1.04	0.21 to 3.26		
	Mechanical methods – double-balloon or Cook's catheter	0.41	0.12 to 0.98		
	Membrane sweeping	0.57	0.19 to 1.26		
	Extra-amniotic PGE_2	0.27	0.07 to 0.69		
	Sexual intercourse	0.33	0.07 to 0.93		
	Acupuncture	0.65	0.06 to 2.58		
	Oral prostaglandins	0.47	0.05 to 1.8		
	Buccal/sublingual misoprostol	0.50	0.18 to 1.08		
Oestrogens	Mechanical methods – Foley catheter	9.68	0.08 to 49.08		
	Mechanical methods – laminaria	20.18	0.12 to 102.9		
	Mechanical methods – double-balloon or Cook's catheter	8.64	0.07 to 43.03		
	Membrane sweeping	12.43	0.09 to 62.02		
	Extra-amniotic PGE_2	5.32	0.04 to 28.61		
	Sexual intercourse	6.83	0.04 to 33.44		
	Acupuncture	10.98	0.05 to 64.12		
	Oral prostaglandins	9.58	0.04 to 50.55		
	Buccal/sublingual misoprostol	10.48	0.09 to 52.25		
Mechanical methods – Foley catheter	Mechanical methods – laminaria	2.37	0.64 to 6.44		
	Mechanical methods – double-balloon or Cook's catheter	0.91	0.45 to 1.64		
	Membrane sweeping	1.29	0.71 to 2.19		
	Extra-amniotic PGE_2	0.62	0.25 to 1.23		
	Sexual intercourse	0.74	0.22 to 1.79		
	Acupuncture	1.50	0.16 to 5.53		
	Oral prostaglandins	1.05	0.14 to 3.65		
	Buccal/sublingual misoprostol	1.12	0.69 to 1.75		
Mechanical methods – laminaria	Mechanical methods – double-balloon or Cook's catheter	0.54	0.12 to 1.56		
	Membrane sweeping	0.76	0.18 to 2.12		
	Extra-amniotic PGE_2	0.36	0.07 to 1.11		
	Sexual intercourse	0.43	0.07 to 1.42		
	Acupuncture	0.89	0.06 to 3.85		
	Oral prostaglandins	0.62	0.05 to 2.58		
	Buccal/sublingual misoprostol	0.66	0.16 to 1.81		

TABLE 55 Neonatal intensive care unit admission (*continued*)

		NMA		Pairwise meta-analysis	
Control treatment	Active treatment	OR	95% CrI	OR	95% CrI
Mechanical methods – double-balloon or Cook's catheter	Membrane sweeping	1.55	0.64 to 3.23		
	Extra-amniotic PGE_2	0.74	0.24 to 1.72		
	Sexual intercourse	0.89	0.22 to 2.39		
	Acupuncture	1.80	0.17 to 7.02		
	Oral prostaglandins	1.27	0.15 to 4.7		
	Buccal/sublingual misoprostol	1.36	0.6 to 2.7		
Membrane sweeping	Extra-amniotic PGE_2	0.51	0.18 to 1.11		
	Sexual intercourse	0.61	0.17 to 1.54		
	Acupuncture	1.24	0.13 to 4.69		
	Oral prostaglandins	0.87	0.11 to 3.13		
	Buccal/sublingual misoprostol	0.93	0.46 to 1.68		
Extra-amniotic PGE_2	Sexual intercourse	1.38	0.33 to 3.8		
	Acupuncture	2.79	0.25 to 11.14		
	Oral prostaglandins	1.98	0.22 to 7.6		
	Buccal/sublingual misoprostol	2.11	0.85 to 4.5		
Sexual intercourse	Acupuncture	2.59	0.2 to 11.03		
	Oral prostaglandins	1.83	0.19 to 7.23		
	Buccal/sublingual misoprostol	1.98	0.59 to 5.17		
Acupuncture	Oral prostaglandins	1.59	0.07 to 8.28		
	Buccal/sublingual misoprostol	1.70	0.19 to 7.02		
Oral prostaglandins	Buccal/sublingual misoprostol	2.06	0.3 to 7.72		

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Appendix 13 Sensitivity analysis excluding trials at high risk of bias

Comparison of mean ranks (95% CrI) from complete analysis and ranks, having removed studies at high risk of bias on the allocation concealment domain.

TABLE 56 Vaginal delivery not achieved within 24 hours

	All studies (141 trials)		Only studies at low ROB (97 trials)	
Intervention	Mean rank	95% CrI	Mean rank	95% CrI
No treatment	21	19 to 21	19	14 to 21
Placebo	20	19 to 21	21	19 to 21
Vaginal PGE_2 (tablet)	12	6 to 17	9	3 to 16
Vaginal PGE_2 (gel)	8	5 to 12	7	3 to 11
Vaginal PGE_2 pessary (slow release)	11	6 to 16	12	7 to 16
Intracervical PGE_2	14	10 to 17	12	8 to 16
Vaginal PGE_2 pessary (normal release)	4	1 to 11	10	2 to 17
Vaginal misoprostol (dose < 50 µg)	6	3 to 9	6	3 to 9
Vaginal misoprostol (dose ≥ 50 µg)	4	2 to 7	3	1 to 6
Oral misoprostol tablet (dose < 50 µg)	14	5 to 18	15	6 to 19
Oral misoprostol tablet (dose ≥ 50 µg)	12	8 to 16	9	5 to 14
Titrated (low-dose) oral misoprostol solution	5	2 to 10	4	2 to 9
Sustained-release misoprostol insert	5	1 to 16	10	2 to 18
i.v. oxytocin	14	9 to 18	11	5 to 16
i.v. oxytocin plus amniotomy	2	1 to 10	1	1 to 8
NO	15	6 to 18	18	13 to 20
Mifepristone	19	17 to 21	19	15 to 21
Mechanical methods – Foley catheter	13	7 to 17	12	6 to 17
Mechanical methods – double-balloon or Cook's catheter	10	2 to 18	12	4 to 17
Extra-amniotic PGE_2	16	4 to 20	16	4 to 21
Buccal/sublingual misoprostol	6	2 to 11	4	2 to 9

ROB, risk of bias.

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TABLE 57 Uterine hyperstimulation

Intervention	All studies (180 trials)		Only studies at low ROB (127 trials)	
	Mean rank	95% CrI	Mean rank	95% CrI
No treatment	8	3 to 17	8	3 to 17
Placebo	6	3 to 10	4	3 to 7
Vaginal PGE_2 (tablet)	11	6 to 17	9	4 to 16
Vaginal PGE_2 (gel)	13	9 to 17	13	9 to 17
Vaginal PGE_2 pessary (slow release)	15	10 to 19	13	8 to 18
Intracervical PGE_2	10	6 to 13	9	5 to 14
Vaginal PGE_2 pessary (normal release)	8	3 to 16	5	3 to 14
Vaginal misoprostol (dose < 50 µg)	15	11 to 18	15	11 to 18
Vaginal misoprostol (dose ≥ 50 µg)	19	17 to 21	17	15 to 19
Oral misoprostol tablet (dose < 50 µg)	6	2 to 15	7	3 to 16
Oral misoprostol tablet (dose ≥ 50 µg)	15	11 to 18	14	10 to 18
Titrated (low-dose) oral misoprostol solution	11	5 to 17	11	5 to 17
Sustained-release misoprostol insert	18	11 to 21	11	3 to 19
i.v. oxytocin	12	7 to 17	12	6 to 17
i.v. oxytocin plus amniotomy	14	3 to 21	15	3 to 19
NO	3	1 to 8	2	1 to 2
Mifepristone	19	7 to 21	20	20 to 20
Mechanical methods – Foley catheter	5	3 to 9	6	3 to 11
Mechanical methods – laminaria	3	1 to 13	Not in network	
Mechanical methods – double-balloon or Cook's catheter	2	1 to 6	1	1 to 2
Buccal/sublingual misoprostol	18	13 to 21	17	11 to 19

ROB, risk of bias.

TABLE 58 Neonatal intensive care unit admission (excluding trials at high risk of bias)

Intervention	All studies (204 trials)		Only studies at low ROB (145 trials)	
	Mean rank	95% CrI	Mean rank	95% CrI
No treatment	23	16 to 27	19	10 to 25
Placebo	23	13 to 28	19	8 to 25
Vaginal PGE_2 (tablet)	16	4 to 27	20	5 to 27
Vaginal PGE_2 (gel)	20	13 to 25	18	11 to 24
Vaginal PGE_2 pessary (slow release)	13	6 to 23	14	6 to 24
PGF_2 gel	8	1 to 26	8	1 to 25
Intracervical PGE_2	14	7 to 23	13	5 to 24
Vaginal PGE_2 pessary (normal release)	18	6 to 27	15	4 to 25
Vaginal misoprostol (dose < 50 µg)	13	7 to 20	12	6 to 19
Vaginal misoprostol (dose ≥ 50 µg)	19	12 to 25	19	12 to 24
Oral misoprostol tablet (dose < 50 µg)	14	2 to 28	13	2 to 26
Oral misoprostol tablet (dose ≥ 50 µg)	18	10 to 24	16	8 to 23
Titrated (low-dose) oral misoprostol solution	11	4 to 22	12	4 to 23
Sustained-release misoprostol insert	8	2 to 22	9	1 to 24
i.v. oxytocin	15	8 to 22	15	7 to 23
Amniotomy	14	1 to 29	13	1 to 27
i.v. oxytocin plus amniotomy	27	17 to 29	24	7 to 27
NO	17	5 to 26	17	5 to 26
Mifepristone	26	13 to 29	24	11 to 27
Oestrogens	14	1 to 29	13	1 to 27
Mechanical methods – Foley catheter	10	5 to 19	10	4 to 20
Mechanical methods – laminaria	23	4 to 29	Not in network	
Mechanical methods – double-balloon or Cook's catheter	9	2 to 25	9	2 to 24
Membrane sweeping	16	5 to 27	12	3 to 25
Extra-amniotic PGE_2	4	1 to 15	4	1 to 16
Sexual intercourse	6	1 to 25	5	1 to 23
Acupuncture	14	1 to 29	12	1 to 27
Oral prostaglandins	10	1 to 29	Not in network	
Buccal/sublingual misoprostol	13	4 to 25	13	4 to 24

ROB, risk of bias.

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TABLE 59 Instrumental delivery (excluding trials at high risk of bias)

Intervention	All studies (299 trials)		Only studies at low ROB (163)	
	Mean rank	95% CrI	Mean rank	95% CrI
No treatment	24	17 to 29	17	9 to 23
Placebo	21	12 to 28	18	8 to 24
Vaginal PGE_2 (tablet)	17	8 to 26	12	3 to 23
Vaginal PGE_2 (gel)	18	11 to 24	12	7 to 19
Vaginal PGE_2 pessary (slow release)	7	2 to 17	7	1 to 17
PGF_2 gel	14	2 to 28	8	1 to 22
Intracervical PGE_2	15	8 to 23	19	11 to 25
Vaginal PGE_2 pessary (normal release)	23	13 to 30	24	18 to 27
Vaginal misoprostol (dose < 50 µg)	11	4 to 20	12	5 to 21
Vaginal misoprostol (dose ≥ 50 µg)	17	10 to 24	16	8 to 23
Oral misoprostol tablet (dose < 50 µg)	9	1 to 29	6	1 to 23
Oral misoprostol tablet (dose ≥ 50 µg)	13	6 to 21	14	7 to 22
Titrated (low-dose) oral misoprostol solution	19	5 to 30	15	4 to 25
Sustained-release misoprostol insert	16	1 to 31		
Intravenous oxytocin	24	18 to 29	19	11 to 24
Amniotomy	13	2 to 29	10	1 to 25
Intravenous oxytocin plus amniotomy	17	6 to 28	13	2 to 25
NO	17	5 to 28	13	3 to 24
Mifepristone	30	22 to 32	26	21 to 27
Oestrogens	8	1 to 28	9	1 to 25
Relaxin	25	4 to 32	22	4 to 27
Mechanical methods – Foley catheter	6	2 to 12	4	1 to 9
Mechanical methods – laminaria	12	1 to 29		
Mechanical methods – double-balloon or Cook's catheter	9	1 to 24	11	2 to 24
Membrane sweeping	26	16 to 31	21	9 to 26
Extra-amniotic PGE_2	15	1 to 30	8	1 to 26
Intravenous prostaglandin	30	15 to 32		
Sexual intercourse	25	7 to 32	19	4 to 27
Acupuncture	13	1 to 28	12	2 to 25
Homeopathy	18	1 to 32		
Oral prostaglandins	9	1 to 25		
Buccal/sublingual misoprostol	7	1 to 20	11	2 to 23

ROB, risk of bias.

Appendix 14 Data files for all outcomes considered in network meta-analysis

Data file for OpenBUGS analysis of failure to achieve vaginal delivery within 24 hours

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. intracervical PGE_2
7. vaginal PGE_2 pessary (normal release)
8. vaginal misoprostol (dose < 50 µg)
9. vaginal misoprostol (dose ≥ 50 µg)
10. oral misoprostol tablet (dose < 50 µg)
11. oral misoprostol tablet (dose ≥ 50 µg)
12. titrated (low-dose) oral misoprostol solution
13. sustained-release misoprostol insert
14. i.v. oxytocin
15. i.v. oxytocin plus amniotomy
16. NO
17. mifepristone
18. mechanical methods – Foley catheter
19. mechanical methods – double-balloon or Cook's catheter
20. extra-amniotic PGE_2
21. buccal/sublingual misoprostol.

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TABLE 60 Data file for OpenBUGS analysis of failure to achieve vaginal delivery within 24 hours

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
86	121	81	117	NA	NA	NA	NA	2	16	NA	NA	NA	2	Bollapragada 2009,[107] 18183
22	52	31	55	NA	NA	NA	NA	9	16	NA	NA	NA	2	Chanrachakul 2002,[146] 12397
76	200	48	200	NA	NA	NA	NA	4	16	NA	NA	NA	2	Kadian 2008,[393] 17403
2	19	12	19	NA	NA	NA	NA	7	14	NA	NA	NA	2	Ekman 1986,[230] 3199
4	10	9	10	NA	NA	NA	NA	4	14	NA	NA	NA	2	Ekman-Ordeberg 1985,[231] 759
48	223	81	221	NA	NA	NA	NA	5	14	NA	NA	NA	2	Güngördük 2012,[319] 20462
32	83	41	75	NA	NA	NA	NA	4	14	NA	NA	NA	2	Jackson 1994,[379] 8574
46	150	41	150	NA	NA	NA	NA	8	21	NA	NA	NA	2	Amador 2007,[67] 16714
17	70	12	70	NA	NA	NA	NA	8	21	NA	NA	NA	2	Bartusevicius 2006,[86] 15686
45	79	38	73	NA	NA	NA	NA	9	21	NA	NA	NA	2	Carlan 2002,[138] 12232
68	107	68	111	NA	NA	NA	NA	9	21	NA	NA	NA	2	Chanrachakul 2010,[148] 20064
71	225	70	225	NA	NA	NA	NA	8	21	NA	NA	NA	2	Esteve 2006,[246] 15559
34	75	40	75	NA	NA	NA	NA	8	21	NA	NA	NA	2	Feitosa 2006,[255] 15685
24	100	30	100	NA	NA	NA	NA	8	21	NA	NA	NA	2	Goel 2011,[297] 19230
4	25	10	25	NA	NA	NA	NA	15	21	NA	NA	NA	2	Lo 2006,[481] 15814
27	85	30	85	NA	NA	NA	NA	9	21	NA	NA	NA	2	Nassar 2007,[595] 16675
34	50	19	50	NA	NA	NA	NA	11	21	NA	NA	NA	2	Shetty 2002,[780] 12234
61	124	58	125	NA	NA	NA	NA	11	21	NA	NA	NA	2	Shetty 2002,[784] 12287
12	50	12	45	NA	NA	NA	NA	14	21	NA	NA	NA	2	Suvobrata 2011,[827] 19237
76	83	85	97	NA	NA	NA	NA	2	17	NA	NA	NA	2	Wing 2000,[902] 11237
7	32	16	33	NA	NA	NA	NA	14	17	NA	NA	NA	2	Wing 2005,[897] 14330
3	50	1	46	NA	NA	NA	NA	9	18	NA	NA	NA	2	Adeniji 2005,[53] 14393
52	103	33	105	NA	NA	NA	NA	5	19	NA	NA	NA	2	Cromi 2012,[181] 21024
21	50	43	59	NA	NA	NA	NA	7	18	NA	NA	NA	2	Lyndrup 1994,[497] 8315

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
51	119	57	121	NA	NA	NA	NA	8	18	NA	NA	NA	2	Moraes Filho 2010,[577] 18961
64	113	57	110	67	107	NA	NA	4	18	19	NA	NA	3	Pennell 2009,[660] 18562
40	145	45	148	NA	NA	NA	NA	18	19	NA	NA	NA	2	Salim 2011,[742] 19948
8	53	16	58	NA	NA	NA	NA	9	18	NA	NA	NA	2	Sciscione 2001,[760] 11601
16	60	29	61	NA	NA	NA	NA	8	18	NA	NA	NA	2	Tabowei 2003,[831] 2003
25	100	28	100	NA	NA	NA	NA	10	11	NA	NA	NA	2	De 2006,[197] 1563
14	76	34	76	NA	NA	NA	NA	9	20	NA	NA	NA	2	Majoko 2002,[529] 111995
11	101	5	99	NA	NA	NA	NA	3	15	NA	NA	NA	2	Lo 1994,[480] 9055
115	191	104	195	NA	NA	NA	NA	5	18	NA	NA	NA	2	Edwards 2014,[224] 22692
20	20	19	23	NA	NA	NA	NA	2	6	NA	NA	NA	2	Buttino 1990[127]
13	15	3	15	NA	NA	NA	NA	2	6	NA	NA	NA	2	Grünnberger 1986[316]
36	48	42	52	NA	NA	NA	NA	4	6	NA	NA	NA	2	Hales 1994[329]
56	60	40	60	NA	NA	NA	NA	2	6	NA	NA	NA	2	Heinzl 1980[345]
36	140	39	142	NA	NA	NA	NA	4	6	NA	NA	NA	2	Keirse 1995[414]
42	229	78	241	NA	NA	NA	NA	4	6	NA	NA	NA	2	Kemp 2000[418]
32	50	13	48	NA	NA	NA	NA	6	7	NA	NA	NA	2	Legarth 1988[458]
53	64	50	61	NA	NA	NA	NA	6	7	NA	NA	NA	2	Lyndrup 1991[496]
24	45	27	45	NA	NA	NA	NA	5	6	NA	NA	NA	2	Ottinger 1998[637]
49	116	45	110	NA	NA	NA	NA	6	7	NA	NA	NA	2	Poulsen 1991[679]
35	226	59	242	NA	NA	NA	NA	4	6	NA	NA	NA	2	Rath 1999[703]
36	155	42	173	NA	NA	NA	NA	3	4	NA	NA	NA	2	Rath 1999[702]
42	98	54	110	NA	NA	NA	NA	3	6	NA	NA	NA	2	Rix 1996[713]
18	56	25	51	NA	NA	NA	NA	5	6	NA	NA	NA	2	Strobelt 2006[818]
23	25	14	25	NA	NA	NA	NA	2	6	NA	NA	NA	2	Ulmsten 1982[871]

continued

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TABLE 60 Data file for OpenBUGS analysis of failure to achieve vaginal delivery within 24 hours (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
18	20	8	19	15	19	NA	NA	2	6	7	NA	NA	2	Ulmsten 1985[869]
22	41	25	40	28	38	NA	NA	6	7	19	NA	NA	2	Yuen 1996[924]
25	58	39	58	NA	NA	NA	NA	5	6	NA	NA	NA	2	Facchinetti 2007[248]
31	72	38	72	NA	NA	NA	NA	5	6	NA	NA	NA	2	Facchinetti 2005[249]
23	85	26	93	NA	NA	NA	NA	9	11	NA	NA	NA	2	Adair 1998[47,48]
5	65	8	65	NA	NA	NA	NA	11	14	NA	NA	NA	2	Al-Hussaini 2003[61]
50	100	36	100	NA	NA	NA	NA	6	11	NA	NA	NA	2	Bartha 2000[85]
49	106	6	101	NA	NA	NA	NA	8	12	NA	NA	NA	2	Cheng 2008[154]
48	111	37	93	NA	NA	NA	NA	8	11	NA	NA	NA	2	Colon 2005[173]
10	52	6	53	NA	NA	NA	NA	11	14	NA	NA	NA	2	Crane 2003[179]
38	100	44	100	NA	NA	NA	NA	4	10	NA	NA	NA	2	Dällenbach 2003[186]
155	376	168	365	NA	NA	NA	NA	4	12	NA	NA	NA	2	Dodd 2006[214]
5	14	8	14	NA	NA	NA	NA	12	14	NA	NA	NA	2	Dodd 2006[215]
47	64	32	62	NA	NA	NA	NA	9	11	NA	NA	NA	2	Fisher 2001[261]
52	112	66	112	NA	NA	NA	NA	4	11	NA	NA	NA	2	Henrich 2008[347]
20	49	3	47	NA	NA	NA	NA	2	11	NA	NA	NA	2	Hoffman 2001[361]
123	349	133	346	95	174	NA	NA	4	12	18	NA	NA	3	Hofmeyr 2001[363]
36	110	69	109	NA	NA	NA	NA	8	10	NA	NA	NA	2	How 2001[366]
50	95	45	96	NA	NA	NA	NA	6	11	NA	NA	NA	2	Langenegger 2005[453]
109	240	51	120	73	120	NA	NA	4	9	11	NA	NA	3	Le Roux 2002[456]
19	66	3	64	NA	NA	NA	NA	2	11	NA	NA	NA	2	Levy 2005[467]
18	68	25	60	NA	NA	NA	NA	9	11	NA	NA	NA	2	Mehrotra 2010[552]
89	193	46	100	46	103	NA	NA	4	8	12	NA	NA	3	Moodley 2003[576]
8	30	4	31	NA	NA	NA	NA	6	11	NA	NA	NA	2	Nagpal 2009[591]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
3	36	2	34	NA	NA	NA	NA	11	14	NA	NA	NA	2	Nigam 2004[609]
4	53	15	53	NA	NA	NA	NA	9	11	NA	NA	NA	2	Nopdonrattakoon 2003[614]
14	30	12	29	NA	NA	NA	NA	8	11	NA	NA	NA	2	Rizvi 2007[714]
28	50	17	50	40	50	NA	NA	6	8	11	NA	NA	3	Sheela 2007[771]
4	30	17	30	20	30	NA	NA	8	11	18	NA	NA	3	Sheikher 2009[772]
47	123	78	122	NA	NA	NA	NA	9	11	NA	NA	NA	2	Shetty 2001[779]
24	31	12	30	NA	NA	NA	NA	1	11	NA	NA	NA	2	Shetty 2002[974]
24	50	35	51	NA	NA	NA	NA	8	11	NA	NA	NA	2	Shetty 2003[783]
60	100	62	100	NA	NA	NA	NA	3	11	NA	NA	NA	2	Shetty 2004[782]
17	32	23	32	NA	NA	NA	NA	11	12	NA	NA	NA	2	Thaisomboon 2012[847]
58	110	76	110	NA	NA	NA	NA	8	11	NA	NA	NA	2	Wing 1999[899]
59	113	47	121	NA	NA	NA	NA	8	11	NA	NA	NA	2	Wing 2000[902]
20	110	10	88	NA	NA	NA	NA	11	14	NA	NA	NA	2	Wing 2004[893]
25	42	4	42	NA	NA	NA	NA	1	11	NA	NA	NA	2	Ayaz 2008[77]
24	155	24	148	NA	NA	NA	NA	12	14	NA	NA	NA	2	Bricker 2008[119]
52	110	56	110	NA	NA	NA	NA	8	11	NA	NA	NA	2	Rahman 2013[694]
36	80	24	80	NA	NA	NA	NA	5	12	NA	NA	NA	2	Rouzi 2014[725]
58	100	63	100	NA	NA	NA	NA	8	12	NA	NA	NA	2	Souza 2013[796]
24	36	20	37	NA	NA	NA	NA	3	4	NA	NA	NA	2	Al-Sebai 1993[65]
20	60	22	60	NA	NA	NA	NA	4	5	NA	NA	NA	2	Kalkat 2008[395]
22	50	10	50	NA	NA	NA	NA	1	4	NA	NA	NA	2	Mahmood 1995[524]
45	100	49	100	NA	NA	NA	NA	3	5	NA	NA	NA	2	Rabl 2002[693]
51	71	47	72	NA	NA	NA	NA	3	9	NA	NA	NA	2	Charoenkul 2000[149]

continued

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TABLE 60 Data file for OpenBUGS analysis of failure to achieve vaginal delivery within 24 hours (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
23	50	10	49	NA	NA	NA	NA	6	9	NA	NA	NA	2	Chuck 1995[164]
52	106	21	105	NA	NA	NA	NA	4	9	NA	NA	NA	2	Danielian 1999[189]
20	105	38	105	NA	NA	NA	NA	8	14	NA	NA	NA	2	De Aquino 2003[198]
30	65	16	65	NA	NA	NA	NA	6	9	NA	NA	NA	2	Denguezli 2007[205]
47	192	56	207	NA	NA	NA	NA	8	9	NA	NA	NA	2	Farah 1997[250]
55	89	31	97	NA	NA	NA	NA	5	9	NA	NA	NA	2	Garry 2003[278]
33	58	35	56	NA	NA	NA	NA	8	9	NA	NA	NA	2	Has 2002[339]
33	58	35	56	NA	NA	NA	NA	6	9	NA	NA	NA	2	Herabutya 1997[351]
22	39	21	39	21	40	NA	NA	5	8	9	NA	NA	3	Khoury 2001[423]
50	78	38	81	NA	NA	NA	NA	6	9	NA	NA	NA	2	Kolderup 1999[430]
26	50	6	50	NA	NA	NA	NA	6	8	NA	NA	NA	2	Krithika 2008[440]
3	20	1	20	NA	NA	NA	NA	6	9	NA	NA	NA	2	Kulshreshtha 2007[441]
30	100	26	100	NA	NA	NA	NA	6	8	NA	NA	NA	2	Kumar 2001[442]
39	100	20	100	NA	NA	NA	NA	6	9	NA	NA	NA	2	Megalo 2004[551]
11	60	13	60	NA	NA	NA	NA	8	9	NA	NA	NA	2	Meydanli 2003[559]
4	37	3	34	NA	NA	NA	NA	9	14	NA	NA	NA	2	Morgan Ortiz 2002[579]
25	94	23	95	NA	NA	NA	NA	4	9	NA	NA	NA	2	Nunes 1999[618]
6	83	1	80	NA	NA	NA	NA	3	9	NA	NA	NA	2	Papanikolaou 2004[645]
103	225	72	210	NA	NA	NA	NA	4	9	NA	NA	NA	2	Pandis 2001[643]
80	185	60	184	NA	NA	NA	NA	4	9	NA	NA	NA	2	Rozenberg 2001[727]
45	115	31	108	NA	NA	NA	NA	5	9	NA	NA	NA	2	Sanchez-Ramos 1998[749]
82	211	61	204	NA	NA	NA	NA	3	9	NA	NA	NA	2	Sifakis 2007[786]
5	24	3	24	NA	NA	NA	NA	8	9	NA	NA	NA	2	Srisomboon 1998[803]
31	50	19	50	NA	NA	NA	NA	3	9	NA	NA	NA	2	Surbek 1997[822]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	[t,5]	na[]	Author/year, trial no. (where applicable)
96	137	66	138	NA	NA	NA	NA	6	8	NA	NA	NA	2	Wing 1995[906]
23	98	26	99	NA	NA	NA	NA	8	14	NA	NA	NA	2	Wing 1998[905]
31	100	16	100	NA	NA	NA	NA	6	8	NA	NA	NA	2	Anand 2012[68]
50	100	40	100	NA	NA	NA	NA	6	8	NA	NA	NA	2	Chitraker 2012[156]
57	57	17	56	NA	NA	NA	NA	1	9	NA	NA	NA	2	Frass 2011[268]
16	50	20	50	NA	NA	NA	NA	8	9	NA	NA	NA	2	Girija 2009[293]
55	161	61	159	NA	NA	NA	NA	6	8	NA	NA	NA	2	Girija 2011[294]
38	80	24	68	NA	NA	NA	NA	8	9	NA	NA	NA	2	Gupta 2010[320]
32	74	8	39	NA	NA	NA	NA	3	9	NA	NA	NA	2	Kim 2000[426]
14	60	20	60	NA	NA	NA	NA	8	9	NA	NA	NA	2	Nigam 2010[608]
20	56	15	56	NA	NA	NA	NA	5	9	NA	NA	NA	2	Ozkan 2009[641]
29	70	26	70	24	70	NA	NA	6	8	9	NA	NA	3	Saxena 2011[755]
141	340	177	341	NA	NA	NA	NA	4	8	NA	NA	NA	2	Van Gemund 2004[879]
35	67	20	68	NA	NA	NA	NA	6	9	NA	NA	NA	2	Wing 1995[900]
53	98	48	99	NA	NA	NA	NA	5	8	NA	NA	NA	2	Wing 1997[903]
214	426	424	871	NA	NA	NA	NA	5	13	NA	NA	NA	2	Wing 2008[896]
7	25	2	25	NA	NA	NA	NA	6	9	NA	NA	NA	2	Sahu 2004[738]
42	111	43	122	NA	NA	NA	NA	4	6	NA	NA	NA	2	Corrado 2001[175]
15	35	8	37	NA	NA	NA	NA	6	8	NA	NA	NA	2	Murthy 2006[587]
449	680	308	678	NA	NA	NA	NA	5	13	NA	NA	NA	2	Wing 2013[890,892]
15	55	31	55	NA	NA	NA	NA	9	14	NA	NA	NA	2	Tabasi 2007[829]
26	128	49	128	NA	NA	NA	NA	12	14	NA	NA	NA	2	Aalami-Harandi 2013[43]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of caesarean section

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. PGF_2 gel
7. intracervical PGE_2
8. vaginal PGE_2 pessary (normal release)
9. vaginal misoprostol (dose < 50 µg)
10. vaginal misoprostol (dose ≥ 50 µg)
11. oral misoprostol tablet (dose < 50 µg)
12. oral misoprostol tablet (dose ≥ 50 µg)
13. titrated (low-dose) oral misoprostol solution
14. sustained-release misoprostol insert
15. i.v. oxytocin
16. amniotomy
17. i.v. oxytocin plus amniotomy
18. NO
19. mifepristone
20. oestrogens
21. corticosteroids
22. relaxin
23. hyaluronidase
24. mechanical methods – Foley catheter
25. mechanical methods – laminaria
26. mechanical methods – double-balloon or Cook's catheter
27. membrane sweeping
28. extra-amniotic PGE_2
29. i.v. prostaglandin
30. sexual intercourse
31. acupuncture
32. oral prostaglandins
33. buccal/sublingual misoprostol.

TABLE 61 Data file for OpenBUGS analysis of caesarean section

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
56	173	65	177	NA	NA	NA	NA	2	18	NA	NA	2	Bollapragada 2009,[107] 18183
17	100	14	100	NA	NA	NA	NA	2	18	NA	NA	2	Bullarbo 2007,[123] 15979
16	52	20	55	NA	NA	NA	NA	10	18	NA	NA	2	Chanrachakul 2002,[146] 12397
20	56	19	54	NA	NA	NA	NA	3	18	NA	NA	2	Chanrachakul 2000,[144] 11236
6	10	8	20	NA	NA	NA	NA	3	18	NA	NA	2	Chanrachakul 2000,[145] 11245
16	66	11	66	NA	NA	NA	NA	9	18	NA	NA	2	Haghighi 2013,[326] 21669
4	12	8	24	NA	NA	NA	NA	1	18	NA	NA	2	Nicoll 2001,[607] 11517
61	198	65	197	NA	NA	NA	NA	4	18	NA	NA	2	Osman 2006,[632] 15372
11	30	8	30	NA	NA	NA	NA	10	18	NA	NA	2	Perche 2009,[662] 18430
12	78	11	78	NA	NA	NA	NA	2	18	NA	NA	2	Rameez 2007,[696] 16662
18	72	14	72	NA	NA	NA	NA	5	15	NA	NA	2	Akay 2012,[57] 20824
13	92	14	101	NA	NA	NA	NA	1	15	NA	NA	2	Chang 1997,[141,142] 10210
9	47	7	47	NA	NA	NA	NA	8	15	NA	NA	2	Chua 1991,[159] 6450
25	225	38	219	NA	NA	NA	NA	1	15	NA	NA	2	Grant 1992,[306] 6422
11	98	4	102	NA	NA	NA	NA	3	15	NA	NA	2	Griffith-Jones 1990,[315] 3129
41	223	67	221	NA	NA	NA	NA	5	15	NA	NA	2	Güngördük 2012,[319] 20462
123	1263	127	1258	NA	NA	NA	NA	1	15	NA	NA	2	Hannah 1996,[335] 9118a
17	83	16	75	NA	NA	NA	NA	4	15	NA	NA	2	Jackson 1994,[379] 8574
16	510	19	502	NA	NA	NA	NA	1	15	NA	NA	2	Ladfors 1996,[447] 9252
1	49	4	49	NA	NA	NA	NA	8	15	NA	NA	2	Legarth 1987,[460] 3900
3	19	4	24	NA	NA	NA	NA	8	15	NA	NA	2	Lyndrup 1989,[493] 4666
9	43	8	48	NA	NA	NA	NA	8	15	NA	NA	2	Lyndrup 1990,[494] 5660

continued

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0.5	41	4.5	46	NA	NA	NA	NA	6	15	NA	NA	2	MacLennan 1980,[506] 1766
19	33	20	33	19	33	NA	NA	7	15	20	NA	3	Magann 1995,[516] 9168
5	27	3	23	NA	NA	NA	NA	3	15	NA	NA	2	McQueen 1990,[549] 5921
2	62	4	61	NA	NA	NA	NA	1	15	NA	NA	2	Ottervanger 1996,[636] 8661
7	100	4	100	NA	NA	NA	NA	7	15	NA	NA	2	Pollnow 1996,[676] 9220
4	40	2	40	5	40	NA	NA	1	7	15	NA	3	Puertas 1997,[687] 12325
7	47	3	41	10	55	NA	NA	2	8	15	NA	3	Ray 1992,[705] 7125
8	24	3	27	6	25	5	28	1	4	15	25	4	Roberts 1986,[716] 1396
5	138	4	139	NA	NA	NA	NA	1	15	NA	NA	2	Rydhström 1991,[733] 3226
9	57	4	49	NA	NA	NA	NA	8	15	NA	NA	2	Rymer 1992,[734] 7399
8	62	6	62	NA	NA	NA	NA	1	15	NA	NA	2	Sperling 1993,[802] 8195
5	96	4	99	NA	NA	NA	NA	1	27	NA	NA	2	Allott 1993,[62] 8211
3.5	70	0.5	74	NA	NA	NA	NA	1	27	NA	NA	2	Berghella 1996,[95] 9250
8	138	5	140	NA	NA	NA	NA	1	27	NA	NA	2	Cammu 1998,[131] 9535
10	74	10	76	NA	NA	NA	NA	1	27	NA	NA	2	Crane 1997,[177] 9416
13	68	6	69	NA	NA	NA	NA	1	27	NA	NA	2	Dare 2002,[191] 12270
9	141	10	152	NA	NA	NA	NA	1	27	NA	NA	2	Goldenberg 1996,[300] 9089
8	50	6	50	NA	NA	NA	NA	1	27	NA	NA	2	Gupta 1998,[322] 9935
46	107	43	107	NA	NA	NA	NA	1	27	NA	NA	2	Hamdan 2009,[332] 18438
5	32	4	33	NA	NA	NA	NA	1	27	NA	NA	2	Magann 1998,[515] 10430
5	35	8	35	5	35	NA	NA	1	7	27	NA	3	Magann 1998,[513] 11075
25	91	17	91	NA	NA	NA	NA	5	27	NA	NA	2	Magann 1999,[512] 11100
33	116	58	234	NA	NA	NA	NA	1	27	NA	NA	2	Putnam 2011,[690] 20595
3	59	6	61	NA	NA	NA	NA	1	27	NA	NA	2	Wiriyasirivaj 1996,[910] 9050

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
10	60	8	60	NA	NA	NA	NA	1	27	NA	NA	2	Wong 2002,[916] 12285
32	167	38	179	NA	NA	NA	NA	1	27	NA	NA	2	Yildirim 2010,[921] 19038
7	37	3	38	NA	NA	NA	NA	2	31	NA	NA	2	Ajori 2013,[56] 21872
3	30	2	29	6	30	NA	NA	1	2	31	NA	3	Asher 2009,[72] 18576
2	52	4	48	NA	NA	NA	NA	1	31	NA	NA	2	Gaudernack 2006,[279] 15847
2	7	2	9	NA	NA	NA	NA	2	31	NA	NA	2	Gaudet 2008,[280] 17891
10	26	5	30	NA	NA	NA	NA	1	31	NA	NA	2	Harper 2005,[338] 16027
11	58	11	60	NA	NA	NA	NA	2	31	NA	NA	2	Modlock 2010,[569] 19120
42	180	34	180	NA	NA	NA	NA	2	31	NA	NA	2	Smith 2008,[792] 17746
46	150	41	150	NA	NA	NA	NA	9	33	NA	NA	2	Amador 2007,[67] 16714
14	70	12	70	NA	NA	NA	NA	9	33	NA	NA	2	Bartusevicius 2006,[86] 15686
28	79	18	73	NA	NA	NA	NA	10	33	NA	NA	2	Carlan 2002,[138] 12232
15	62	20	58	NA	NA	NA	NA	9	33	NA	NA	2	Moraes Filho 2010,[577] 14544
71	225	70	225	NA	NA	NA	NA	9	33	NA	NA	2	Esteve 2006,[246] 15559
23	75	32	75	NA	NA	NA	NA	9	33	NA	NA	2	Feitosa 2006,[255] 15685
4	25	3	25	NA	NA	NA	NA	17	33	NA	NA	2	Lo 2006,[481] 15814
24	85	30	85	NA	NA	NA	NA	10	33	NA	NA	2	Nassar 2006,[595] 16675
15	50	8	50	NA	NA	NA	NA	12	33	NA	NA	2	Shetty 2002,[780] 12234
32	124	31	125	NA	NA	NA	NA	12	33	NA	NA	2	Shetty 2002,[784] 12287
80	240	71	240	NA	NA	NA	NA	10	33	NA	NA	2	Zahran 2009,[927] 18699
14	61	10	61	NA	NA	NA	NA	2	21	NA	NA	2	Kashanian 2008,[404] 17709
5	33	1	32	NA	NA	NA	NA	1	21	NA	NA	2	Ziaei 2003,[935] 13355
42	85	15	83	NA	NA	NA	NA	2	23	NA	NA	2	Spallicci 2007,[797] 12096
40	70	28	70	NA	NA	NA	NA	23	24	NA	NA	2	Surita 2005,[826] 14379

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	22	2	18	NA	NA	NA	NA	2	22	NA	NA	2	Bell 1993,[89] 7978
4	23	15	73	NA	NA	NA	NA	2	22	NA	NA	2	Brennand 1997,[118] 9990
3	30	1	30	NA	NA	NA	NA	2	22	NA	NA	2	MacLennan 1980,[507] 1765
116	576	101	574	NA	NA	NA	NA	1	30	NA	NA	2	Omar 2013,[627] 21571
21	102	27	108	NA	NA	NA	NA	1	30	NA	NA	2	Tan 2007,[838] 16801
5	130	6	130	NA	NA	NA	NA	4	16	NA	NA	2	Mahmood 1995,[527] 8658
6	72	7	71	NA	NA	NA	NA	15	17	NA	NA	2	Gagnon-Gervais 2012,[275] 21163
23	103	24	106	NA	NA	NA	NA	15	17	NA	NA	2	Mercer 1995,[558] 9004
1	98	1	98	NA	NA	NA	NA	16	17	NA	NA	2	Moldin 1996,[572] 9225
6	34	7	30	3	30	NA	NA	8	17	24	NA	3	Orhue 1995,[629] 8657
28	157	22	163	NA	NA	NA	NA	4	17	NA	NA	2	Parazzini 1998,[646] 10784
17	62	12	61	NA	NA	NA	NA	16	17	NA	NA	2	Selo-Ojeme 2009,[767] 18022
7	101	9	105	NA	NA	NA	NA	16	17	NA	NA	2	Tan 2013,[837] 21568
4	21	6	21	NA	NA	NA	NA	8	17	NA	NA	2	Taylor 1993,[842] 11078
22	57	89	289	NA	NA	NA	NA	2	19	NA	NA	2	Berkane 2005,[97] 14327
6	42	7	41	NA	NA	NA	NA	2	19	NA	NA	2	Giacalone 1998,[285] 10355
8	16	5	16	NA	NA	NA	NA	2	19	NA	NA	2	Lelaidier 1994,[461] 8619
3	12	4	24	NA	NA	NA	NA	2	19	NA	NA	2	Stenlund 1991,[811] 10786
18	83	9	97	NA	NA	NA	NA	2	19	NA	NA	2	Wing 2000,[902] 11237
3	32	7	33	NA	NA	NA	NA	15	19	NA	NA	2	Wing 2005,[897] 14330
22	33	15	33	NA	NA	NA	NA	4	18	NA	NA	2	Romero-Gutiérrez 2011,[720] 19787
3	63	4	57	NA	NA	NA	NA	1	15	NA	NA	2	Naef 1998,[588] 9772
3	50	1	46	NA	NA	NA	NA	10	24	NA	NA	2	Adeniji 2005,[53] 14393

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
27	103	25	105	NA	NA	NA	NA	5	26	NA	NA	2	Cromi 2012,[181] 21024
49	128	41	112	NA	NA	NA	NA	1	25	NA	NA	2	Gilson 1996,[291] 9212
13	65	15	71	NA	NA	NA	NA	9	24	NA	NA	2	Greybush 2001,[313] 11975
6	42	11	43	NA	NA	NA	NA	7	24	NA	NA	2	Hemlin 1998,[346] 9674
5	50	18	59	NA	NA	NA	NA	8	24	NA	NA	2	Lyndrup 1994,[497] 8315
10	81	7	81	NA	NA	NA	NA	6	24	NA	NA	2	Mawire 1999,[539] 10676
32	119	44	121	NA	NA	NA	NA	9	24	NA	NA	2	Moraes Filho 2010,[577] 18961
12	44	11	45	NA	NA	NA	NA	3	24	NA	NA	2	Niromanesh 2003,[611] 13049
34	80	41	80	NA	NA	NA	NA	9	24	NA	NA	2	Oliveira 2010,[625] 19204
11	60	17	60	NA	NA	NA	NA	10	24	NA	NA	2	Owolabi 2005,[640] 14892
42	113	40	110	46	107	NA	NA	4	24	26	NA	3	Pennell 2009,[660] 18562
26	56	26	56	NA	NA	NA	NA	4	24	NA	NA	2	Rouben 1993,[721] 7918
15	145	26	148	NA	NA	NA	NA	24	26	NA	NA	2	Salim 2011,[742] 19948
21	72	21	77	NA	NA	NA	NA	7	24	NA	NA	2	Sciscione 1999,[759] 10512
20	53	18	58	NA	NA	NA	NA	10	24	NA	NA	2	Sciscione 2001,[760] 11601
7	28	6	34	NA	NA	NA	NA	7	24	NA	NA	2	St Onge 1995,[805] 8689
8	60	10	61	NA	NA	NA	NA	9	24	NA	NA	2	Tabowei 2003[831]
5	45	12	45	NA	NA	NA	NA	9	24	NA	NA	2	Ugwu 2013,[868] 22498
5	15	2	15	NA	NA	NA	NA	2	28	NA	NA	2	Fenton 1985,[256] 107
6	76	14	76	NA	NA	NA	NA	10	28	NA	NA	2	Majoko 2002,[529] 111995
2	95	1	101	NA	NA	NA	NA	7	28	NA	NA	2	Parewijck 1986,[647] 2809
2	10	1	15	NA	NA	NA	NA	2	28	NA	NA	2	Quinn 1981,[691] 1917
10	58	6	58	NA	NA	NA	NA	2	28	NA	NA	2	Sherman 2001,[774] 11529

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0.5	108	9.5	116	NA	NA	NA	NA	15	29	NA	NA	2	Spellacy 1972[800]
1	75	1	75	NA	NA	NA	NA	15	29	NA	NA	2	Vakhariya 1972,[874] 787
11	61	11	62	NA	NA	NA	NA	1	27	NA	NA	2	Ugwu 2014,[867] 22655
27	97	30	103	NA	NA	NA	NA	1	15	NA	NA	2	Witter 1987,[915] 3636
10	39	10	41	NA	NA	NA	NA	2	18	NA	NA	2	Yazdizadeh 2013,[919] 22483
6	20	3	15	NA	NA	NA	NA	15	32	NA	NA	2	Paul 1992,[652] 10915
73	191	56	195	NA	NA	NA	NA	5	24	NA	NA	2	Edwards 2014,[223] 22692
3	30	3	60	NA	NA	NA	NA	2	6	NA	NA	2	MacLennan 1980,[506] 1767
82	408	93	411	NA	NA	NA	NA	4	24	NA	NA	2	Jozwiak 2012,[390] 20221
26	119	21	107	NA	NA	NA	NA	5	24	NA	NA	2	Jozwiak 2013,[389] 22497
11	64	14	56	NA	NA	NA	NA	9	24	NA	NA	2	Ten Eikelder 2013,[843] 21691 (Jozwiak 2014[391])
65	194	56	203	NA	NA	NA	NA	2	7	NA	NA	2	Bernstein 1991[98]
7	20	5	23	NA	NA	NA	NA	2	7	NA	NA	2	Buttino 1990[127]
23	107	30	110	NA	NA	NA	NA	2	7	NA	NA	2	Cabrol 1988[129]
18	57	8	61	NA	NA	NA	NA	2	7	NA	NA	2	Darroca 1996[192]
6	38	16	41	NA	NA	NA	NA	2	7	NA	NA	2	Gilson 1993[290]
11	48	14	52	NA	NA	NA	NA	4	7	NA	NA	2	Hales 1994[328,329]
6	60	3	60	NA	NA	NA	NA	2	7	NA	NA	2	Heinzl 1980[345]
13	35	11	32	NA	NA	NA	NA	2	7	NA	NA	2	Hutchon 1980[372]
9	140	12	142	NA	NA	NA	NA	4	7	NA	NA	2	Keirse 1995[414]
10	43	5	41	13	44	NA	NA	2	7	20	NA	3	Larmon 2002[454]
1	15	8	30	NA	NA	NA	NA	2	7	NA	NA	2	Laube 1986[455]
8	47	6	46	NA	NA	NA	NA	2	7	NA	NA	2	Lien 1998[470]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
3	31	4	30	NA	NA	NA	NA	2	7	NA	NA	2	McKenna 1999[545]
0.5	16	4.5	31	NA	NA	NA	NA	2	7	NA	NA	2	Nimrod 1984[610]
10	21	4	24	NA	NA	NA	NA	2	7	NA	NA	2	Nuutila 1995[619]
17	71	6	39	NA	NA	NA	NA	4	7	NA	NA	2	Nuutila 1996[621]
13	45	11	45	NA	NA	NA	NA	5	7	NA	NA	2	Ottinger 1998[637]
16	53	13	47	NA	NA	NA	NA	2	7	NA	NA	2	Owen 1991[638]
7	30	9	33	NA	NA	NA	NA	5	7	NA	NA	2	Perry 2004[667]
21	116	22	110	NA	NA	NA	NA	7	8	NA	NA	2	Poulsen 1991[679]
49	226	68	242	NA	NA	NA	NA	4	7	NA	NA	2	Rath 1999[703]
19	155	16	173	NA	NA	NA	NA	3	4	NA	NA	2	Rath 1999[703]
5	27	6	21	NA	NA	NA	NA	2	7	NA	NA	2	Richardson 199[711]
4	38	5	35	5	38	NA	NA	5	7	10	NA	3	Ramsey 2003[699]
18	98	16	110	NA	NA	NA	NA	3	7	NA	NA	2	Rix 1996[713]
3	31	5	37	NA	NA	NA	NA	4	7	NA	NA	2	Seeras 1995[763]
0.5	41	0.5	42	1.5	41	NA	NA	2	3	7	NA	3	Thiery 1984[851]
26	236	26	252	NA	NA	NA	NA	1	7	NA	NA	2	Trofatter 1993[863]
7	68	6	71	NA	NA	NA	NA	2	7	NA	NA	2	Troostwijk 1992[864]
6	20	3	19	7	19	NA	NA	2	7	8	NA	3	Ulmsten 1985[869]
11	31	9	35	NA	NA	NA	NA	5	7	NA	NA	2	Wieland 1999[885]
6	41	5	40	10	38	NA	NA	7	8	26	NA	3	Yuen 1996[924]
20	115	17	120	20	106	NA	NA	1	7	15	NA	3	Cararach 1996[136]
15	112	9	88	NA	NA	NA	NA	3	7	NA	NA	2	Thavarahsah 1990[849]
31	125	39	122	NA	NA	NA	NA	4	7	NA	NA	2	Pedrazzoli 1997[658]
68	151	61	143	NA	NA	NA	NA	1	7	NA	NA	2	Rayburn 1999[709]

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
13	85	17	93	NA	NA	NA	NA	10	12	NA	NA	2	Adair 1998[48]
20	100	14	100	NA	NA	NA	NA	7	12	NA	NA	2	Bartha 2000[85]
22	78	10	78	NA	NA	NA	NA	2	12	NA	NA	2	Beigi 2003[88]
23	102	16	104	NA	NA	NA	NA	10	12	NA	NA	2	Bennett 1998[92]
8	55	7	53	NA	NA	NA	NA	12	15	NA	NA	2	Butt 1999[126]
120	501	147	503	NA	NA	NA	NA	10	12	NA	NA	2	Carlan 2001[139]
18	106	4	101	NA	NA	NA	NA	9	13	NA	NA	2	Cheng 2008[154]
3	32	7	66	NA	NA	NA	NA	2	12	NA	NA	2	Cheung 2006[155]
36	111	18	93	NA	NA	NA	NA	9	12	NA	NA	2	Colon 2005[173]
6	52	5	53	NA	NA	NA	NA	12	15	NA	NA	2	Crane 2003[179]
19	100	18	100	NA	NA	NA	NA	4	11	NA	NA	2	Dällenbach 2003[186]
100	376	83	365	NA	NA	NA	NA	4	13	NA	NA	2	Dodd 2006[214]
4	14	8	16	NA	NA	NA	NA	13	15	NA	NA	2	Dodd 2006[215]
14	64	12	62	NA	NA	NA	NA	10	12	NA	NA	2	Fisher 2001[261]
6	30	9	28	NA	NA	NA	NA	4	12	NA	NA	2	Gherman 2001[284]
8	48	9	59	NA	NA	NA	NA	9	12	NA	NA	2	Hall 2002[330]
17	112	20	112	NA	NA	NA	NA	4	12	NA	NA	2	Henrich 2008[347]
8	49	4	47	NA	NA	NA	NA	2	12	NA	NA	2	Hoffman 2001[361]
68	347	54	345	36	174	NA	NA	4	13	24	NA	3	Hofmeyr 2001[363]
19	110	35	109	NA	NA	NA	NA	9	11	NA	NA	2	How 2001[366]
5	52	13	51	NA	NA	NA	NA	10	12	NA	NA	2	Jindal 2011[385]
5	23	6	29	NA	NA	NA	NA	11	12	NA	NA	2	Kipikasa 2005[428]
19	82	13	78	NA	NA	NA	NA	10	12	NA	NA	2	Kwon 2001[444]
22	95	22	96	NA	NA	NA	NA	7	12	NA	NA	2	Langenegger 2005[453]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
82	240	42	120	39	120	NA	NA	4	10	12	NA	3	Le Roux 2002[456]
4	66	1	64	NA	NA	NA	NA	2	12	NA	NA	2	Levy 2005[467]
11	51	10	51	NA	NA	NA	NA	2	12	NA	NA	2	Lo 2003[478]
13	75	11	128	13	127	14	76	8	10	13	28	4	Majoko 2002[529]
80	193	40	100	41	103	NA	NA	4	9	13	NA	3	Moodley 2003[576]
3	30	3	31	NA	NA	NA	NA	7	12	NA	NA	2	Nagpal 2009[591]
3	41	3	39	NA	NA	NA	NA	2	12	NA	NA	2	Ngai 1996[605]
2	40	3	40	NA	NA	NA	NA	12	15	NA	NA	2	Ngai 2000[604]
7	53	3	53	NA	NA	NA	NA	10	12	NA	NA	2	Nopdonrattakoon 2003[614]
18	73	23	73	NA	NA	NA	NA	9	12	NA	NA	2	Paisarntantiwong 2005[642]
19	95	17	95	NA	NA	NA	NA	7	12	NA	NA	2	Patil 2005[651]
28	123	30	122	NA	NA	NA	NA	10	12	NA	NA	2	Shetty 2001[778]
5	31	5	30	NA	NA	NA	NA	1	12	NA	NA	2	Shetty 2002[974]
14	50	13	51	NA	NA	NA	NA	9	12	NA	NA	2	Shetty 2003[783]
27	100	25	100	NA	NA	NA	NA	3	12	NA	NA	2	Shetty 2004[782]
13	32	17	32	NA	NA	NA	NA	12	13	NA	NA	2	Thaisomboon 2012[847]
25	110	15	110	NA	NA	NA	NA	9	12	NA	NA	2	Wing 1999[899]
25	113	15	121	NA	NA	NA	NA	9	12	NA	NA	2	Wing 2000[902]
9	110	8	88	NA	NA	NA	NA	12	15	NA	NA	2	Wing 2004[893]
17	155	20	148	NA	NA	NA	NA	13	15	NA	NA	2	Bricker 2008[119]
32	110	34	110	NA	NA	NA	NA	9	12	NA	NA	2	Rahman 2013[694]
3	65	5	69	NA	NA	NA	NA	10	13	NA	NA	2	Zvandasara 2008[936]
18	80	9	80	NA	NA	NA	NA	5	13	NA	NA	2	Rouzi 2014[725]
37	100	41	100	NA	NA	NA	NA	9	13	NA	NA	2	Souza 2013[796]

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
1	50	3	50	NA	NA	NA	NA	1	5	NA	NA	2	Berzircioglu 2012[101]
5	18	7	15	NA	NA	NA	NA	2	4	NA	NA	2	Chatterjee 1991[150]
12	76	11	79	NA	NA	NA	NA	2	8	NA	NA	2	Chua 1995[161]
7	29	7	30	NA	NA	NA	NA	2	4	NA	NA	2	Chung 1992[166]
13	26	14	28	NA	NA	NA	NA	2	4	NA	NA	2	Curet 1989[183]
1	28	3	37	4	50	NA	NA	2	4	27	NA	3	Doany 1997[212]
3	38	5	34	NA	NA	NA	NA	4	5	NA	NA	2	El-Shawarby 2006[241]
3	20	16	60	NA	NA	NA	NA	2	4	NA	NA	2	Graves 1985[307]
4	15	12	45	NA	NA	NA	NA	2	4	NA	NA	2	Hayashi 1983[343]
8	60	14	60	NA	NA	NA	NA	4	5	NA	NA	2	Kalkat 2008[394]
9	32	7	52	NA	NA	NA	NA	2	8	NA	NA	2	Liggins 1979[471]
12	40	6	40	NA	NA	NA	NA	3	4	NA	NA	2	Mahmood 1989[522]
12	110	13	110	NA	NA	NA	NA	1	4	NA	NA	2	Mahmood 1992[526]
2.5	51	0.5	51	NA	NA	NA	NA	1	4	NA	NA	2	Mahmood 1995[523]
1	31	3	35	2	25	NA	NA	1	4	15	NA	3	McCaul 1997[541]
9	100	10	165	NA	NA	NA	NA	2	6	NA	NA	2	Murphy 1980[584]
25	100	24	100	NA	NA	NA	NA	3	4	NA	NA	2	Murray 1995[585]
9	38	9	38	NA	NA	NA	NA	4	6	NA	NA	2	Neilson 1983[599]
10	50	7	50	NA	NA	NA	NA	2	4	NA	NA	2	O'Brien 1995[624]
11	45	15	45	NA	NA	NA	NA	4	8	NA	NA	2	Perryman 1992[669]
11	36	8	33	NA	NA	NA	NA	2	5	NA	NA	2	Prasad 1989[684]
7	15	4	15	NA	NA	NA	NA	2	4	NA	NA	2	Prins 1983[685]
21	63	10	55	NA	NA	NA	NA	2	4	NA	NA	2	Rayburn 1988[707]
18	105	16	96	NA	NA	NA	NA	1	8	NA	NA	2	Roach 1997[715]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	26	6	24	NA	NA	NA	NA	2	4	NA	NA	2	Sawai 1991[754]
28	83	29	82	NA	NA	NA	NA	3	4	NA	NA	2	Taher 2011[834]
6	34	4	35	NA	NA	NA	NA	4	5	NA	NA	2	Tomlinson 2001[856]
13	33	9	39	NA	NA	NA	NA	2	5	NA	NA	2	Witter 1992[914]
5	34	4	28	NA	NA	NA	NA	10	15	NA	NA	2	Abdul 2007[44]
17	79	27	76	NA	NA	NA	NA	7	10	NA	NA	2	Buser 1997[125]
10	50	10	49	NA	NA	NA	NA	7	10	NA	NA	2	Chuck 1995[164]
23	75	15	75	NA	NA	NA	NA	1	9	NA	NA	2	Da Graça 2005[184]
14	106	12	105	NA	NA	NA	NA	4	10	NA	NA	2	Danielian 1999[189]
20	105	38	105	NA	NA	NA	NA	9	15	NA	NA	2	De Aquino 2003[198]
36	168	38	192	NA	NA	NA	NA	10	15	NA	NA	2	De la Torre 2001[200]
44	125	40	126	NA	NA	NA	NA	9	10	NA	NA	2	Diro 1999[210]
23	192	33	207	NA	NA	NA	NA	9	10	NA	NA	2	Farah 1997[250]
20	51	18	53	NA	NA	NA	NA	10	15	NA	NA	2	Ferguson 2002[257]
3	21	2	24	NA	NA	NA	NA	2	10	NA	NA	2	Fletcher 1993[263]
31	164	22	163	NA	NA	NA	NA	9	15	NA	NA	2	Fonseca 2008[265]
14	55	10	54	NA	NA	NA	NA	4	10	NA	NA	2	Frohn 2002[269]
35	89	28	97	NA	NA	NA	NA	5	10	NA	NA	2	Garry 2003[278]
10	37	7	38	NA	NA	NA	NA	4	10	NA	NA	2	Gottschall 1997[303]
31	129	36	139	NA	NA	NA	NA	4	9	NA	NA	2	Gregson 2005[312]
9	54	13	54	NA	NA	NA	NA	9	15	NA	NA	2	Haghighi 2006[325]
12	58	22	56	NA	NA	NA	NA	9	10	NA	NA	2	Has 2002[339]
15	36	6	36	NA	NA	NA	NA	4	10	NA	NA	2	Howarth 1996[368]
11	63	14	57	NA	NA	NA	NA	2	9	NA	NA	2	Incerpi 2001[374,375]

continued

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TABLE 61 Data file for OpenBUGS analysis of caesarean section (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
22	112	12	112	NA	NA	NA	NA	7	10	NA	NA	2	Kadanali 1996[392]
11	39	15	39	11	40	NA	NA	5	9	10	NA	3	Khoury 2001[423]
7	71	23	71	NA	NA	NA	NA	9	15	NA	NA	2	Kidanto 2007[424]
21	78	23	81	NA	NA	NA	NA	7	10	NA	NA	2	Kolderup 1999[430]
4	25	2	25	NA	NA	NA	NA	3	10	NA	NA	2	Lee 1997[457]
10	40	10	44	10	47	NA	NA	7	10	15	NA	3	Lemancewicz 1999[463]
9	35	9	33	NA	NA	NA	NA	2	9	NA	NA	2	McKenna 2004[546]
14	100	18	100	NA	NA	NA	NA	7	10	NA	NA	2	Megalo 2004[551]
11	60	13	60	NA	NA	NA	NA	9	10	NA	NA	2	Meydanli 2003[559]
18	68	46	91	NA	NA	NA	NA	10	15	NA	NA	2	Montealegre 1999[575]
4	37	3	34	NA	NA	NA	NA	10	15	NA	NA	2	Morgan Ortiz 2002[579]
12	94	13	95	NA	NA	NA	NA	4	10	NA	NA	2	Nunes 1999[618]
7	39	3	38	NA	NA	NA	NA	1	9	NA	NA	2	Oboro 2005[622]
43	225	38	210	NA	NA	NA	NA	4	10	NA	NA	2	Pandis 2001[643]
16	63	13	62	NA	NA	NA	NA	8	10	NA	NA	2	Rowlands 2001[726]
30	185	33	184	NA	NA	NA	NA	4	10	NA	NA	2	Rozenberg 2001[727]
16	70	13	70	NA	NA	NA	NA	5	10	NA	NA	2	Rozenberg 2004[728]
5	27	1	30	NA	NA	NA	NA	4	10	NA	NA	2	Saggaf 2001[736]
8	70	9	71	NA	NA	NA	NA	10	15	NA	NA	2	Sanchez-Ramos 1997[745]
15	115	24	108	NA	NA	NA	NA	5	10	NA	NA	2	Sanchez-Ramos 1998[749]
55	211	51	204	NA	NA	NA	NA	3	10	NA	NA	2	Sifakis 2007[786]
8	33	4	27	NA	NA	NA	NA	2	9	NA	NA	2	Stitely 2000[817]
7	50	6	50	NA	NA	NA	NA	3	10	NA	NA	2	Surbek 1997[822]
38	137	28	138	NA	NA	NA	NA	7	9	NA	NA	2	Wing 1995[900]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
13	98	17	99	NA	NA	NA	NA	9	15	NA	NA	2	Wing 1998[904]
5	32	4	32	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[934]
18	60	4	60	NA	NA	NA	NA	3	10	NA	NA	2	Ayaz 2010[78]
15	102	8	105	NA	NA	NA	NA	4	9	NA	NA	2	Chaudhuri 2011[151]
12	52	16	54	9	52	NA	NA	4	9	24	NA	3	Deo 2012[206]
12	50	10	50	NA	NA	NA	NA	9	10	NA	NA	2	Girija 2009[293]
42	161	40	159	NA	NA	NA	NA	7	9	NA	NA	2	Girija 2011[294]
15	55	13	52	NA	NA	NA	NA	4	10	NA	NA	2	Hosli 2008[364]
37	95	29	96	NA	NA	NA	NA	4	10	NA	NA	2	Lokugamage 2003[482]
18	56	14	56	NA	NA	NA	NA	5	10	NA	NA	2	Ozkan 2009[641]
50	191	56	199	45	198	NA	NA	4	9	24	NA	3	Prager 2008[681]
70	340	53	341	NA	NA	NA	NA	4	9	NA	NA	2	Van Gemund 2004[879]
3	33	8	36	NA	NA	NA	NA	7	9	NA	NA	2	Varaklis 1995[880]
13	67	10	68	NA	NA	NA	NA	7	10	NA	NA	2	Wing 1995[901]
20	98	18	99	NA	NA	NA	NA	5	9	NA	NA	2	Wing 1997[903]
115	436	243	871	NA	NA	NA	NA	5	14	NA	NA	2	Wing 2008[896]
0.5	43	1.5	44	NA	NA	NA	NA	2	10	NA	NA	2	Deng 1999[204]
8	42	9	42	NA	NA	NA	NA	7	9	NA	NA	2	Meyer 2002[560]
11	47	8	42	NA	NA	NA	NA	10	15	NA	NA	2	Mosquera 1999[580]
138	1261	121	1259	NA	NA	NA	NA	1	4	NA	NA	2	Hannah 1996[335]
3	40	2	40	NA	NA	NA	NA	2	6	NA	NA	2	MacLennan 1979[504]
13	35	8	37	NA	NA	NA	NA	7	9	NA	NA	2	Murthy 2006[587]
29	132	34	135	NA	NA	NA	NA	4	12	NA	NA	2	Tessier 1997[845]
13	60	14	60	NA	NA	NA	NA	10	15	NA	NA	2	Abedi-Asl 2007[45]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of instrumental delivery

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. PGF_2 gel
7. intracervical PGE_2
8. vaginal PGE_2 pessary (normal release)
9. vaginal misoprostol (dose < 50 µg)
10. vaginal misoprostol (dose ≥ 50 µg)
11. oral misoprostol tablet (dose < 50 µg)
12. oral misoprostol tablet (dose ≥ 50 µg)
13. titrated (low-dose) oral misoprostol solution
14. sustained-release misoprostol insert
15. i.v. oxytocin
16. amniotomy
17. i.v. oxytocin plus amniotomy
18. NO
19. mifepristone
20. oestrogens
21. relaxin
22. mechanical methods – Foley catheter
23. mechanical methods – laminaria
24. mechanical methods – double-balloon or cook's catheter
25. membrane sweeping
26. extra-amniotic PGE_2
27. i.v. prostaglandin
28. sexual intercourse
29. acupuncture
30. homeopathy
31. oral prostaglandins
32. buccal/sublingual misoprostol.

TABLE 62 Data file for OpenBUGS analysis of instrumental delivery

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
54	173	47	177	NA	NA	NA	NA	2	18	NA	NA	2	Bollapragada 2009,[107] 18183
3	12	7	24	NA	NA	NA	NA	1	18	NA	NA	2	Nicoll 2001,[607] 11517
60	198	61	197	NA	NA	NA	NA	4	18	NA	NA	2	Osman 2006,[632] 15372
1	21	1	23	1	21	NA	NA	7	10	18	NA	3	Sharma 2005,[769] 14435
0	74	1	52	NA	NA	NA	NA	1	15	NA	NA	2	Akyol 1999,[58] 11035
3	80	12	74	NA	NA	NA	NA	1	15	NA	NA	2	Alcalay 1996,[59] 9273
9	49	5	49	NA	NA	NA	NA	7	15	NA	NA	2	Ashrafunnessa 1997,[73] 10447
8	41	7	39	NA	NA	NA	NA	4	15	NA	NA	2	Bung 1986,[124] 2000
9	47	10	47	NA	NA	NA	NA	8	15	NA	NA	2	Chua 1991,[159] 6450
27	105	21	97	NA	NA	NA	NA	6	15	NA	NA	2	Day 1985,[195] 1701
3	165	4	180	NA	NA	NA	NA	1	3	NA	NA	2	Egarter 1989,[227] 4739
9	35	12	25	NA	NA	NA	NA	7	15	NA	NA	2	Goeschen 1989,[298] 7124
59	225	68	219	NA	NA	NA	NA	1	15	NA	NA	2	Grant 1992,[306] 6422
10	98	23	102	NA	NA	NA	NA	3	15	NA	NA	2	Griffith-Jones 1990,[315] 3129
5	223	7	221	NA	NA	NA	NA	5	15	NA	NA	2	Güngördük 2012,[319] 20462
256	1263	233	1258	NA	NA	NA	NA	1	15	NA	NA	2	Hannah 1996,[335] 9118a
13	24	7	23	NA	NA	NA	NA	4	15	NA	NA	2	Herabutya 1997[351]
15	83	16	75	NA	NA	NA	NA	4	15	NA	NA	2	Jackson 1994,[379] 8574
5	89	3	79	NA	NA	NA	NA	5	15	NA	NA	2	Koc 2013,[429] 21668
5	23	9	25	NA	NA	NA	NA	15	27	NA	NA	2	Lamki 1974,[449] 18219
26	95	29	90	NA	NA	NA	NA	8	15	NA	NA	2	Lange 1984,[452] 2447
13	49	7	49	NA	NA	NA	NA	8	15	NA	NA	2	Legarth 1987,[460] 3900
5	19	4	24	NA	NA	NA	NA	8	15	NA	NA	2	Lyndrup 1989,[493] 4666

continued

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
9	43	9	48	NA	NA	NA	NA	8	15	NA	NA	2	Lyndrup 1990,[494] 5660
3	45	3	40	NA	NA	NA	NA	8	15	NA	NA	2	Macer 1984,[498] 2594
10	40	14	45	NA	NA	NA	NA	6	15	NA	NA	2	MacLennan 1980,[505] 1766
2	33	2	33	2	33	NA	NA	7	15	20	NA	3	Magann 1995,[516] 9168
3	15	1	21	NA	NA	NA	NA	8	15	NA	NA	2	Magos 1983,[518] 2157
9	27	8	23	NA	NA	NA	NA	3	15	NA	NA	2	McQueen 1990,[549] 5921
4	62	10	61	NA	NA	NA	NA	1	15	NA	NA	2	Ottervanger 1992,[635] 8661
11	40	13	40	15	40	NA	NA	1	7	15	NA	3	Puertas 1997,[687] 12325
21	138	13	139	NA	NA	NA	NA	1	15	NA	NA	2	Rydhström 1991,[733] 3226
21	57	10	49	NA	NA	NA	NA	8	15	NA	NA	2	Rymer 1992,[734] 7399
11	62	12	62	NA	NA	NA	NA	1	15	NA	NA	2	Sperling 1993,[802] 8195
6	50	3	43	NA	NA	NA	NA	1	15	NA	NA	2	Tamsen 1990,[836] 5545
1	50	3	50	NA	NA	NA	NA	7	15	NA	NA	2	Ulmsten 1979,[870] 1693
4	15	7	15	11	30	NA	NA	1	15	31	NA	3	Valentine 1977,[876] 1317
15	96	7	86	NA	NA	NA	NA	1	15	NA	NA	2	Wagner 1989,[882] 4992
3	15	2	15	4	15	3	15	3	15	26	31	4	Wilson 1978,[889] 1487
5	50	10	50	NA	NA	NA	NA	7	15	NA	NA	2	Zahradnik 1987,[926] 3681
7	83	9	82	NA	NA	NA	NA	7	15	NA	NA	2	Papageorgiou 1992,[644] 7364
4	65	7	65	NA	NA	NA	NA	1	25	NA	NA	2	Alcoseba-Lim 1992,[60] 9534
12	96	11	99	NA	NA	NA	NA	1	25	NA	NA	2	Allott 1993,[62] 8211
7	69	7	73	NA	NA	NA	NA	1	25	NA	NA	2	Berghella 1994,[94] 1996,[95] 9250
27	99	36	99	NA	NA	NA	NA	1	25	NA	NA	2	Boulvain 1998,[110] 9919
18	138	23	140	NA	NA	NA	NA	1	25	NA	NA	2	Cammu 1998,[131] 9535
12	74	15	76	NA	NA	NA	NA	1	25	NA	NA	2	Crane 1997,[177] 9416

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
53	367	55	375	NA	NA	NA	NA	1	25	NA	NA	2	De Miranda 2006,[201] 15427
3	32	2	33	NA	NA	NA	NA	1	25	NA	NA	2	El-Torkey 1992,[232] 7221
9	50	13	50	NA	NA	NA	NA	1	25	NA	NA	2	Gupta 1998,[322] 9935
4	107	4	107	NA	NA	NA	NA	1	25	NA	NA	2	Hamdan 2009,[332] 18438
5	35	3	35	4	35	NA	NA	1	7	25	NA	3	Magann 1998,[511] 11075
7	91	7	91	NA	NA	NA	NA	5	25	NA	NA	2	Magann 1999,[512] 11100
4	48	2	51	NA	NA	NA	NA	1	25	NA	NA	2	McColgin 1990,[544] 6231
9	39	4	41	NA	NA	NA	NA	1	25	NA	NA	2	Tannirandorn 1999,[841] 11231
11	59	10	61	NA	NA	NA	NA	1	25	NA	NA	2	Wiriyasirivaj 1996,[910] 9050
13	60	12	60	NA	NA	NA	NA	1	25	NA	NA	2	Wong 2002,[916] 12285
13	52	6	48	NA	NA	NA	NA	1	29	NA	NA	2	Gaudernack 2006,[279] 15847
2	7	2	9	NA	NA	NA	NA	2	29	NA	NA	2	Gaudet 2008,[280] 17891
1	32	2	35	NA	NA	NA	NA	9	29	NA	NA	2	Gribel 2011,[314] 19759
8	58	8	60	NA	NA	NA	NA	2	29	NA	NA	2	Modlock 2010,[569] 19120
3	20	3	25	NA	NA	NA	NA	1	29	NA	NA	2	Rabl 2002[693]
10	53	4	48	NA	NA	NA	NA	1	29	NA	NA	2	Selmer-Olsen 2007,[765] 16795
25	180	27	180	NA	NA	NA	NA	2	29	NA	NA	2	Smith 2008,[792] 17746
2	70	5	70	NA	NA	NA	NA	9	32	NA	NA	2	Bartusevicius 2006,[86] 15686
9	79	3	79	NA	NA	NA	NA	10	32	NA	NA	2	Carlan 2002,[138] 12232
19	225	12	225	NA	NA	NA	NA	9	32	NA	NA	2	Esteve 2006,[246] 15559
4	25	5	25	NA	NA	NA	NA	17	32	NA	NA	2	Lo 2006,[481] 15814
2	50	1	50	NA	NA	NA	NA	12	32	NA	NA	2	Malik 2010,[531] 18700
12	85	5	85	NA	NA	NA	NA	10	32	NA	NA	2	Nassar 2007,[595] 16675
7	50	11	50	NA	NA	NA	NA	12	32	NA	NA	2	Shetty 2002,[780] 12234

continued

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
28	124	34	125	NA	NA	NA	NA	12	32	NA	NA	2	Shetty 2002,[782] 12287
2	20	2	20	NA	NA	NA	NA	2	30	NA	NA	2	Beer 1999,[87] 11214
6	22	6	18	NA	NA	NA	NA	2	21	NA	NA	2	Bell 1993,[89] 7978
2	23	15	73	NA	NA	NA	NA	2	21	NA	NA	2	Brennand 1997,[118] 9990
15	30	14	30	NA	NA	NA	NA	2	21	NA	NA	2	MacLennan 1980,[507] 1765
46	576	52	574	NA	NA	NA	NA	1	28	NA	NA	2	Omar 2013,[627] 21571
19	130	17	130	NA	NA	NA	NA	4	16	NA	NA	2	Mahmood 1995,[527] 8658
6	30	10	30	NA	NA	NA	NA	7	17	NA	NA	2	Kennedy 1978,[419] 1413
4	50	7	50	NA	NA	NA	NA	3	17	NA	NA	2	Kennedy 1982,[420] 2046
31	165	45	155	NA	NA	NA	NA	4	17	NA	NA	2	MacLennan 1989,[503] 5027
4	40	4	40	NA	NA	NA	NA	3	17	NA	NA	2	Chua 1988,[162] 18082
9	72	9	71	NA	NA	NA	NA	15	17	NA	NA	2	Gagnon-Gervais 2012,[275] 21163
7	25	3	25	NA	NA	NA	NA	4	17	NA	NA	2	Melchior 1989,[976] 5333
4	34	5	30	6	30	NA	NA	8	17	22	NA	3	Orhue 1995,[629] 8657
4	157	2	163	NA	NA	NA	NA	4	17	NA	NA	2	Parazzini 1998,[646] 10784
25	50	25	50	NA	NA	NA	NA	16	17	NA	NA	2	Saleh 1975,[741] 1064
10	62	12	61	NA	NA	NA	NA	16	17	NA	NA	2	Selo-Ojeme 2009,[767] 18022
2	101	2	105	NA	NA	NA	NA	16	17	NA	NA	2	Tan 2013,[837] 21568
5	21	4	21	NA	NA	NA	NA	8	17	NA	NA	2	Taylor 1993,[842] 11078
9	57	80	289	NA	NA	NA	NA	2	19	NA	NA	2	Berkane 2005,[97] 14327
6	42	9	41	NA	NA	NA	NA	2	19	NA	NA	2	Giacalone 1998,[285] 10355
17	60	20	60	NA	NA	NA	NA	2	19	NA	NA	2	Frydman 1992,[271] 7447
4	16	5	16	NA	NA	NA	NA	2	19	NA	NA	2	Lelaidier 1994,[461] 8619
1	12	8	24	NA	NA	NA	NA	2	19	NA	NA	2	Stenlund 1999,[811] 10786

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	62	3	60	NA	NA	NA	NA	1	19	NA	NA	2	Su 1996,[820] 10911
2	17	2	16	NA	NA	NA	NA	4	31	NA	NA	2	Davey 1979,[193] 1535
12	63	12	57	NA	NA	NA	NA	1	15	NA	NA	2	Naef 1998,[588] 9772
3	50	2	46	NA	NA	NA	NA	10	22	NA	NA	2	Adeniji 2005,[53] 14393
8	75	8	72	NA	NA	NA	NA	3	22	NA	NA	2	Al-Taani 2004,[66] 15001
13	95	14	90	NA	NA	NA	NA	7	23	NA	NA	2	Chua 1997,[160] 9722
3	49	7	54	NA	NA	NA	NA	9	22	NA	NA	2	Chung 2003,[165] 13321
7	132	9	265	NA	NA	NA	NA	5	22	NA	NA	2	Cromi 2011,[180] 19650
1	103	6	105	NA	NA	NA	NA	5	24	NA	NA	2	Cromi 2012,[181] 21024
6	200	8	200	NA	NA	NA	NA	7	22	NA	NA	2	Deshmukh 2011,[207] 20161
10	50	4	50	NA	NA	NA	NA	7	22	NA	NA	2	Dalui 2005,[187] 14334
20	90	24	88	NA	NA	NA	NA	22	24	NA	NA	2	Haugland 2012,[340] 20890
3	42	1	43	NA	NA	NA	NA	7	22	NA	NA	2	Hemlin 1998,[346] 9674
21	40	15	40	NA	NA	NA	NA	4	23	NA	NA	2	Johnson 1985,[386] 192
2	50	3	50	NA	NA	NA	NA	9	22	NA	NA	2	Kandil 2012,[397] 21031
16	50	11	59	NA	NA	NA	NA	8	22	NA	NA	2	Lyndrup 1994,[497] 8315
1	81	1	81	NA	NA	NA	NA	6	22	NA	NA	2	Mawire 1999,[539] 10676
18	88	13	100	NA	NA	NA	NA	22	24	NA	NA	2	Mei-Dan 2012,[555] 20791
2	27	1	27	NA	NA	NA	NA	3	22	NA	NA	2	Ophir 1992,[628] 10910
3	60	3	60	NA	NA	NA	NA	10	22	NA	NA	2	Owolabi 2005,[640] 14892
28	113	25	110	23	107	NA	NA	4	22	24	NA	3	Pennell 2009,[660] 18562
5	83	4	82	5	82	NA	NA	7	20	23	NA	3	Roztocil 1998,[730] 10466
6	145	12	148	NA	NA	NA	NA	22	24	NA	NA	2	Salim 2011,[742] 19948
10	38	9	36	NA	NA	NA	NA	4	23	NA	NA	2	Sanchez-Ramos 1992,[748] 7847

continued

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
1	24	1	26	NA	NA	NA	NA	5	24	NA	NA	2	Shechter-Maor 2013,[770] 21802
8	28	13	34	NA	NA	NA	NA	7	22	NA	NA	2	St Onge 1995,[805] 8689
13	60	15	61	NA	NA	NA	NA	9	22	NA	NA	2	Tabowei 2003[831]
1	45	2	45	NA	NA	NA	NA	9	22	NA	NA	2	Ugwu 2013,[868] 22498
1	50	1	50	NA	NA	NA	NA	10	15	NA	NA	2	Balci 2010,[82] 19116
0	50	1	51	NA	NA	NA	NA	10	15	NA	NA	2	Balci 2011,[81] 20050
4	100	3	100	NA	NA	NA	NA	11	12	NA	NA	2	De 2006,[197] 1563
8	25	8	25	NA	NA	NA	NA	3	26	NA	NA	2	Greer 1989,[309] 5049
7	10	6	15	NA	NA	NA	NA	2	26	NA	NA	2	Quinn 1981,[691] 1917
7	15	8	15	NA	NA	NA	NA	2	26	NA	NA	2	Shepherd 1976,[773] 1194
5	58	5	58	NA	NA	NA	NA	2	26	NA	NA	2	Sherman 2001,[774] 11529
12	30	11	30	NA	NA	NA	NA	3	26	NA	NA	2	Stewart 1983,[815] 2580
1	20	2	20	NA	NA	NA	NA	26	27	NA	NA	2	Iskander 1978,[377] 1403
4	43	3	39	NA	NA	NA	NA	15	27	NA	NA	2	Moller 1991,[573] 3597
10	20	14	20	NA	NA	NA	NA	15	27	NA	NA	2	Naismith 1973,[592] 857
9	113	7	110	NA	NA	NA	NA	15	16	NA	NA	2	Bakos 1987,[80] 3890
5	22	5	20	NA	NA	NA	NA	3	23	NA	NA	2	Cahill 1988,[130] 16551
10	100	6	100	NA	NA	NA	NA	10	12	NA	NA	2	Deshmukh 2013,[208] 22653
6	100	2	100	NA	NA	NA	NA	7	9	NA	NA	2	Gupta 2006,[321] 17823
20	129	3	109	NA	NA	NA	NA	1	17	NA	NA	2	Heden 1991,[344] 6018
26	101	18	99	NA	NA	NA	NA	3	17	NA	NA	2	Lo 1994,[480] 9055
3	136	6	127	NA	NA	NA	NA	7	15	NA	NA	2	Misra 1994,[565] 8632
221	684	211	679	NA	NA	NA	NA	2	18	NA	NA	2	Schmitz 2014,[756] 22698
3	25	4	32	NA	NA	NA	NA	6	22	NA	NA	2	Thomas 1986,[853] 2883

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	25	5	25	NA	NA	NA	NA	7	31	NA	NA	2	Herabutya 1988,[349] 4482
9	102	8	99	NA	NA	NA	NA	15	31	NA	NA	2	Lange 1981,[450] 1271
23	92	11	69	NA	NA	NA	NA	17	31	NA	NA	2	Lykkesfeldt 1979,[490] 1578
8	33	7	36	NA	NA	NA	NA	15	31	NA	NA	2	Massil 1988,[535] 5006
20	119	10	125	NA	NA	NA	NA	15	31	NA	NA	2	Secher 1981,[762] 1981
2	42	5	46	NA	NA	NA	NA	3	15	NA	NA	2	Andersen 1990,[69] 6220
2	41	1	43	NA	NA	NA	NA	1	17	NA	NA	2	Tylleskar 1979,[866] 1827
12	76	17	90	NA	NA	NA	NA	1	15	NA	NA	2	Sande 1983,[750] 2434
15	30	19	60	NA	NA	NA	NA	2	6	NA	NA	2	MacLennan 1980,[506] 1767
54	408	45	411	NA	NA	NA	NA	4	22	NA	NA	2	Jozwiak 2012,[390] 20221
20	119	13	107	NA	NA	NA	NA	5	22	NA	NA	2	Jozwiak 2013,[389] 22497
18	64	8	56	NA	NA	NA	NA	9	22	NA	NA	2	Ten Eikelder 2013,[843] 21691 (Jozwiak 2014[391])
5	60	5	60	NA	NA	NA	NA	2	7	NA	NA	2	Heinzl 1980[345]
4	44	2	44	NA	NA	NA	NA	1	7	NA	NA	2	Hidar 2000[354]
32	125	24	122	NA	NA	NA	NA	4	7	NA	NA	2	Irion 1998[376]
17	140	16	140	NA	NA	NA	NA	4	7	NA	NA	2	Keirse 1995[414]
14	43	17	41	12	44	NA	NA	2	7	20	NA	3	Larmon 2002[454]
8	56	9	57	NA	NA	NA	NA	7	8	NA	NA	2	Legarth 1988[458]
3	47	6	46	NA	NA	NA	NA	2	7	NA	NA	2	Lien 1998[470]
5	22	4	28	NA	NA	NA	NA	4	7	NA	NA	2	Lopes 1991[485]
10	64	9	61	NA	NA	NA	NA	7	8	NA	NA	2	Lyndrup 1991[495]
9	31	14	37	NA	NA	NA	NA	4	7	NA	NA	2	Seeras 1995[763]
8	29	6	30	NA	NA	NA	NA	2	7	NA	NA	2	Trofatter 1985[861]

continued

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
3	68	3	71	NA	NA	NA	NA	2	7	NA	NA	2	Troostwijk 1992[864]
6	20	3	19	4	19	NA	NA	2	7	8	NA	3	Ulmsten 1985[869]
4	31	12	35	NA	NA	NA	NA	5	7	NA	NA	2	Wieland 1999[885]
5	41	10	40	3	38	NA	NA	7	8	24	NA	3	Yuen 1996[924]
1	48	2	52	NA	NA	NA	NA	4	7	NA	NA	2	Zanini 1990[929]
9	151	12	143	NA	NA	NA	NA	1	7	NA	NA	2	Rayburn 1999[709]
7	40	8	40	NA	NA	NA	NA	10	12	NA	NA	2	Adam 2005[49]
27	100	23	100	NA	NA	NA	NA	7	12	NA	NA	2	Bartha 2000[85]
23	102	30	104	NA	NA	NA	NA	10	12	NA	NA	2	Bennett 1998[92]
12	55	12	53	NA	NA	NA	NA	12	15	NA	NA	2	Butt 1999[126]
66	501	56	503	NA	NA	NA	NA	10	12	NA	NA	2	Carlan 2001[139]
3	32	2	66	NA	NA	NA	NA	2	12	NA	NA	2	Cheung 2006[155]
7	111	4	93	NA	NA	NA	NA	9	12	NA	NA	2	Colon 2005[173]
10	52	10	53	NA	NA	NA	NA	12	15	NA	NA	2	Crane 2003[179]
27	100	20	100	NA	NA	NA	NA	4	11	NA	NA	2	Dällenbach 2003[186]
63	376	65	365	NA	NA	NA	NA	4	13	NA	NA	2	Dodd 2006[214]
25	50	8	50	9	50	NA	NA	10	12	32	NA	3	Elhassan 2007[237]
6	64	8	62	NA	NA	NA	NA	10	12	NA	NA	2	Fisher 2001[261]
3	48	7	59	NA	NA	NA	NA	9	12	NA	NA	2	Hall 2002[330]
3	49	1	47	NA	NA	NA	NA	2	12	NA	NA	2	Hoffman 2001[361]
28	347	24	345	4	174	NA	NA	4	13	22	NA	3	Hofmeyr 2001[363]
3	52	2	51	NA	NA	NA	NA	10	12	NA	NA	2	Jindal 2011[385]
2	66	3	64	NA	NA	NA	NA	2	12	NA	NA	2	Levy 2005[467]
10	51	4	51	NA	NA	NA	NA	2	12	NA	NA	2	Lo 2003[478]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
17	159	18	146	NA	NA	NA	NA	12	15	NA	NA	2	Mozurkewich 2003[582]
2	30	1	31	NA	NA	NA	NA	7	12	NA	NA	2	Nagpal 2009[591]
10	41	7	39	NA	NA	NA	NA	2	12	NA	NA	2	Ngai 1996[605]
10	40	10	40	NA	NA	NA	NA	12	15	NA	NA	2	Ngai 2000[604]
1	53	3	53	NA	NA	NA	NA	10	12	NA	NA	2	Nopdonrattakoon 2003[614]
1	73	5	73	NA	NA	NA	NA	9	12	NA	NA	2	Paisarntantiwong 2005[642]
6	95	9	95	NA	NA	NA	NA	7	12	NA	NA	2	Patil 2005[651]
12	84	11	82	NA	NA	NA	NA	10	12	NA	NA	2	Pongsatha 2005[677]
30	123	28	122	NA	NA	NA	NA	10	12	NA	NA	2	Shetty 2001[778]
9	31	11	30	NA	NA	NA	NA	1	12	NA	NA	2	Shetty 2002[974]
7	50	18	50	NA	NA	NA	NA	9	12	NA	NA	2	Shetty 2003[783]
26	100	29	100	NA	NA	NA	NA	3	12	NA	NA	2	Shetty 2004[782]
15	66	14	65	NA	NA	NA	NA	10	12	NA	NA	2	Sitthiwattanawong 1999[789]
4	20	2	20	NA	NA	NA	NA	10	12	NA	NA	2	Toppozada 1997[857]
5	110	3	88	NA	NA	NA	NA	12	15	NA	NA	2	Wing 2004[893]
14	110	12	110	NA	NA	NA	NA	9	12	NA	NA	2	Rahman 2013[694]
3	65	3	69	NA	NA	NA	NA	10	13	NA	NA	2	Zvandasara 2008[936]
2	100	2	100	NA	NA	NA	NA	9	13	NA	NA	2	Souza 2013[796]
2	35	1	38	NA	NA	NA	NA	2	8	NA	NA	2	Buchanan 1984[121]
14	95	13	104	NA	NA	NA	NA	2	8	NA	NA	2	Campbell 1984[132]
49	207	35	195	NA	NA	NA	NA	1	8	NA	NA	2	Cardozo 1986[137]
2	29	6	30	NA	NA	NA	NA	2	4	NA	NA	2	Chung 1992[166]
1	28	1	37	9	50	NA	NA	2	4	25	NA	3	Doany 1997[212]
3	165	4	180	NA	NA	NA	NA	1	3	NA	NA	2	Husslein 1986[371]

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
10	100	9	100	NA	NA	NA	NA	3	8	NA	NA	2	El-Mardi 1991[240]
10	38	4	34	NA	NA	NA	NA	4	5	NA	NA	2	El-Shawarby 2006[241]
9	60	10	60	NA	NA	NA	NA	4	5	NA	NA	2	Kalkat 2008[394]
5	32	11	52	NA	NA	NA	NA	2	8	NA	NA	2	Liggins 1979[471]
0	12	1	12	NA	NA	NA	NA	3	5	NA	NA	2	McLaren 1987[547]
33	100	32	100	NA	NA	NA	NA	2	6	NA	NA	2	Murphy 1980[584]
40	100	35	100	NA	NA	NA	NA	3	4	NA	NA	2	Murray 1995[585]
3	50	1	50	NA	NA	NA	NA	1	4	NA	NA	2	Poornima 2011[678]
7	36	10	33	NA	NA	NA	NA	2	5	NA	NA	2	Prasad 1989[684]
17	100	9	100	NA	NA	NA	NA	3	5	NA	NA	2	Rabl 2002[693]
7	63	3	55	NA	NA	NA	NA	2	4	NA	NA	2	Rayburn 1988[707]
19	100	15	100	NA	NA	NA	NA	1	3	NA	NA	2	Shoaib 1994[785]
20	83	13	82	NA	NA	NA	NA	3	4	NA	NA	2	Taher 2011[834]
7	34	5	35	NA	NA	NA	NA	4	5	NA	NA	2	Tomlinson 2001[856]
10	65	2	65	NA	NA	NA	NA	4	5	NA	NA	2	Triglia 2010[860]
9	33	6	39	NA	NA	NA	NA	2	5	NA	NA	2	Witter 1992[914]
3	34	5	28	NA	NA	NA	NA	10	15	NA	NA	2	Abdul 2007[44]
12	120	19	118	NA	NA	NA	NA	7	10	NA	NA	2	Ayad 2002[76]
9	83	10	83	NA	NA	NA	NA	9	10	NA	NA	2	Bounyasong 2000[111]
3	30	2	30	NA	NA	NA	NA	3	10	NA	NA	2	Chang 1997[141]
3	50	1	49	NA	NA	NA	NA	7	10	NA	NA	2	Chuck 1995[163,164]
18	106	20	105	NA	NA	NA	NA	4	10	NA	NA	2	Danielian 1999[189]
25	168	23	192	NA	NA	NA	NA	10	15	NA	NA	2	De la Torre 2001[200]
3	65	4	65	NA	NA	NA	NA	7	10	NA	NA	2	Denguezli 2007[205]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
9	93	10	92	NA	NA	NA	NA	9	10	NA	NA	2	El Sherbiny 2001[243]
8	60	6	60	NA	NA	NA	NA	3	10	NA	NA	2	Elhassan 2004[238]
6	70	12	70	NA	NA	NA	NA	10	15	NA	NA	2	Elhassan 2005[236]
2	31	1	32	NA	NA	NA	NA	9	10	NA	NA	2	Elhassan 2005[235]
5	73	4	74	NA	NA	NA	NA	9	10	NA	NA	2	Eroglu 2007[244]
2	53	2	63	NA	NA	NA	NA	10	15	NA	NA	2	Escudero 1997[245]
50	192	59	207	NA	NA	NA	NA	9	10	NA	NA	2	Farah 1997[250]
1	21	1	24	NA	NA	NA	NA	2	10	NA	NA	2	Fletcher 1993[263]
0	31	4	32	NA	NA	NA	NA	3	10	NA	NA	2	Fletcher 1994[262]
26	129	29	139	NA	NA	NA	NA	4	9	NA	NA	2	Gregson 2005[312]
5	112	4	112	NA	NA	NA	NA	7	10	NA	NA	2	Kadanali 1996[392]
9	78	16	81	NA	NA	NA	NA	7	10	NA	NA	2	Kolderup 1999[430]
3	30	2	30	NA	NA	NA	NA	3	10	NA	NA	2	Kovavisarach 1997[432]
8	40	3	40	NA	NA	NA	NA	3	10	NA	NA	2	Kovavisarach 1998[433]
1	20	0	20	NA	NA	NA	NA	7	10	NA	NA	2	Kulshreshtha 2007[441]
2	25	3	25	NA	NA	NA	NA	3	10	NA	NA	2	Lee 1997[457]
6	35	3	33	NA	NA	NA	NA	2	9	NA	NA	2	McKenna 2004[546]
13	100	18	100	NA	NA	NA	NA	7	10	NA	NA	2	Megalo 2004[551]
2	60	3	60	NA	NA	NA	NA	9	10	NA	NA	2	Meydanli 2003[559]
3	68	16	91	NA	NA	NA	NA	10	15	NA	NA	2	Montealegre 1999[575]
11	39	12	38	NA	NA	NA	NA	1	9	NA	NA	2	Oboro 2005[622]
2	25	3	35	NA	NA	NA	NA	10	15	NA	NA	2	Pixiang 1999[977]
20	83	28	83	NA	NA	NA	NA	3	10	NA	NA	2	Papanikolaou 2004[645]
23	63	19	62	NA	NA	NA	NA	8	10	NA	NA	2	Rowlands 2001[726]

continued

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TABLE 62 Data file for OpenBUGS analysis of instrumental delivery (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
56	185	47	184	NA	NA	NA	NA	4	10	NA	NA	2	Rozenberg 2001[727]
3	27	0	30	NA	NA	NA	NA	4	10	NA	NA	2	Saggaf 2001[736]
10	70	15	71	NA	NA	NA	NA	10	15	NA	NA	2	Sanchez-Ramos 1997[745]
18	115	21	108	NA	NA	NA	NA	5	10	NA	NA	2	Sanchez-Ramos 1998[749]
9	30	10	32	NA	NA	NA	NA	2	10	NA	NA	2	Srisomboon 1996[804]
5	24	3	24	NA	NA	NA	NA	9	10	NA	NA	2	Srisomboon 1998[803]
6	50	10	50	NA	NA	NA	NA	3	10	NA	NA	2	Surbek 1997[822]
19	137	9	138	NA	NA	NA	NA	7	9	NA	NA	2	Wing 1995[906]
1	52	2	52	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2004[933]
0	50	2	50	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[932]
0	32	1	32	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[934]
0	48	2	49	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[931]
6	100	10	100	NA	NA	NA	NA	7	9	NA	NA	2	Anand 2012[68]
16	60	14	60	NA	NA	NA	NA	3	10	NA	NA	2	Ayaz 2010[78]
3	102	13	105	NA	NA	NA	NA	4	9	NA	NA	2	Chaudhuri 2011[151]
3	52	6	54	1	52	NA	NA	4	9	22	NA	3	Deo 2012[206]
2	50	2	50	NA	NA	NA	NA	9	10	NA	NA	2	Girija 2009[293]
12	161	11	159	NA	NA	NA	NA	7	9	NA	NA	2	Girija 2011[294]
13	55	5	52	NA	NA	NA	NA	4	10	NA	NA	2	Hosli 2008[364]
21	74	12	39	NA	NA	NA	NA	3	10	NA	NA	2	Kim 2000[426]
24	95	36	96	NA	NA	NA	NA	4	10	NA	NA	2	Lokugamage 2003[482]
31	191	33	199	29	198	NA	NA	4	9	22	NA	3	Prager 2008[681]
17	150	9	150	NA	NA	NA	NA	7	10	NA	NA	2	Trabelsi 2012[858]
11	33	6	36	NA	NA	NA	NA	7	9	NA	NA	2	Varaklis 1995[880]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2	27	2	21	NA	NA	NA	NA	9	10	NA	NA	2	Wang 1998[883]
8	67	7	68	NA	NA	NA	NA	7	10	NA	NA	2	Wing 1995[880,900,906]
2	25	1	25	NA	NA	NA	NA	7	10	NA	NA	2	Sahu 2004[738]
10	37	6	36	NA	NA	NA	NA	5	7	NA	NA	2	Chyu 1997[167]
226	1261	228	1259	NA	NA	NA	NA	1	4	NA	NA	2	Hannah 1996[335]
16	40	12	40	NA	NA	NA	NA	2	6	NA	NA	2	MacLennan 1979[504]
2	35	1	37	NA	NA	NA	NA	7	9	NA	NA	2	Murthy 2006[587]
1	50	2	50	NA	NA	NA	NA	10	12	NA	NA	2	Sultana 2006[821]
24	132	23	135	NA	NA	NA	NA	4	12	NA	NA	2	Tessier 1997[845]
35	680	43	678	NA	NA	NA	NA	5	14	NA	NA	2	Wing 2013[892]
1	263	5	263	NA	NA	NA	NA	8	17	NA	NA	2	MacKenzie 1981[500]
4	25	6	23	NA	NA	NA	NA	9	15	NA	NA	2	Lughmani 2009[488]
3	49	2	50	NA	NA	NA	NA	4	15	NA	NA	2	Egarter 1987[228]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. intracervical PGE_2
7. vaginal PGE_2 pessary (normal release)
8. vaginal misoprostol (dose < 50 µg)
9. vaginal misoprostol (dose ≥ 50 µg)
10. oral misoprostol tablet (dose < 50 µg)
11. oral misoprostol tablet (dose ≥ 50 µg)
12. titrated (low-dose) oral misoprostol solution
13. sustained-release misoprostol insert
14. i.v. oxytocin
15. i.v. oxytocin plus amniotomy
16. NO
17. mifepristone
18. mechanical methods – Foley catheter
19. mechanical methods – laminaria
20. mechanical methods – double-balloon or Cook's catheter
21. buccal/sublingual misoprostol.

TABLE 63 Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	194	2	203	NA	NA	NA	NA	2	6	NA	NA	2	Bernstein 1991[98]
0.5	21	1.5	24	NA	NA	NA	NA	2	6	NA	NA	2	Buttino 1990[127]
0.5	49	1.5	53	NA	NA	NA	NA	4	6	NA	NA	2	Hales 1994[329]
1.5	126	0.5	123	NA	NA	NA	NA	4	6	NA	NA	2	Irion 1998[376]
0.5	16	1.5	31	NA	NA	NA	NA	2	6	NA	NA	2	Laube 1986[455]
1	47	2	46	NA	NA	NA	NA	2	6	NA	NA	2	Lien 1998[470]
1	22	1	28	NA	NA	NA	NA	4	6	NA	NA	2	Lopes 1991[485]
0.5	32	1.5	31	NA	NA	NA	NA	2	6	NA	NA	2	McKenna 2004[546]
1	403	1	413	NA	NA	NA	NA	1	6	NA	NA	2	Noah 1987[612]
1	71	1	39	NA	NA	NA	NA	4	6	NA	NA	2	Nuutila 1996[621]
0.5	54	1.5	48	NA	NA	NA	NA	2	6	NA	NA	2	Owen 1991[638]
3	30	3	33	NA	NA	NA	NA	5	6	NA	NA	2	Perry 2004[667]
2	38	2	35	5	38	NA	NA	5	6	9	NA	3	Ramsey 2003[699]
1.5	41	0.5	42	1.5	41	NA	NA	2	3	6	NA	3	Thiery 1984[851]
1	29	1	30	NA	NA	NA	NA	2	6	NA	NA	2	Trofatter 1985[861]
11	249	16	265	NA	NA	NA	NA	1	6	NA	NA	2	Trofatter 1993[863]
0.5	26	1.5	26	NA	NA	NA	NA	2	6	NA	NA	2	Ulmsten 1982[871]
2.5	35	0.5	36	NA	NA	NA	NA	5	6	NA	NA	2	Wieland 1999[885]
2.5	49	0.5	53	NA	NA	NA	NA	4	6	NA	NA	2	Zanini 1990[929]
1	25	1	25	NA	NA	NA	NA	5	6	NA	NA	2	Lopez-Farfan 2010[486]
5	65	1	65	NA	NA	NA	NA	11	14	NA	NA	2	Al-Hussaini 2003[61]
2	100	6	100	NA	NA	NA	NA	6	11	NA	NA	2	Bartha 2000[85]

continued

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TABLE 63 Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
6	102	5	104	NA	NA	NA	NA	9	11	NA	NA	2	Bennett 1998[92]
3	55	4	53	NA	NA	NA	NA	11	14	NA	NA	2	Butt 1999[126]
66	501	90	503	NA	NA	NA	NA	9	11	NA	NA	2	Carlan 2001[139]
12.5	107	0.5	102	NA	NA	NA	NA	8	12	NA	NA	2	Cheng 2008[154]
0.5	33	2.5	67	NA	NA	NA	NA	2	11	NA	NA	2	Cheung 2006[155]
6	111	2	93	NA	NA	NA	NA	8	11	NA	NA	2	Colon 2005[173]
3	50	13	48	NA	NA	NA	NA	11	14	NA	NA	2	Crane 2003[179]
14	100	9	100	NA	NA	NA	NA	4	10	NA	NA	2	Dällenbach 2003[186]
6	376	3	365	NA	NA	NA	NA	4	12	NA	NA	2	Dodd 2006[214]
15	77	5	76	NA	NA	NA	NA	9	11	NA	NA	2	Dyar 2000[222]
5	64	1	62	NA	NA	NA	NA	9	11	NA	NA	2	Fisher 2001[261]
1	30	1	28	NA	NA	NA	NA	4	11	NA	NA	2	Gherman 2001[284]
4	48	4	59	NA	NA	NA	NA	8	11	NA	NA	2	Hall 2002[330]
1	112	1	112	NA	NA	NA	NA	4	11	NA	NA	2	Henrich 2008[347]
0.5	50	1.5	48	NA	NA	NA	NA	2	11	NA	NA	2	Hoffman 2001[361]
10	334	13	328	6	163	NA	NA	4	12	18	NA	3	Hofmeyr 2001[363]
17	110	5	110	NA	NA	NA	NA	8	10	NA	NA	2	How 2001[366]
12	95	12	96	NA	NA	NA	NA	6	11	NA	NA	2	Langenegger 2005[453]
0.5	67	2.5	65	NA	NA	NA	NA	2	11	NA	NA	2	Levy 2005[467]
0.5	52	3.5	52	NA	NA	NA	NA	2	11	NA	NA	2	Lo 2003[478]
17	193	21	100	17	103	NA	NA	4	8	12	NA	3	Moodley 2003[576]
22	159	13	146	NA	NA	NA	NA	11	14	NA	NA	2	Mozurkewich 2003[582]
0.5	42	1.5	40	NA	NA	NA	NA	2	11	NA	NA	2	Ngai 1996[605]
0.5	54	1.5	54	NA	NA	NA	NA	9	11	NA	NA	2	Nopdonrattakoon 2003[614]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2.5	74	0.5	74	NA	NA	NA	NA	8	11	NA	NA	2	Paisarntantiwong 2005[642]
0.5	96	5.5	96	NA	NA	NA	NA	6	11	NA	NA	2	Patil 2005[651]
6	84	1	82	NA	NA	NA	NA	9	11	NA	NA	2	Pongsatha 2005[677]
16	124	24	146	NA	NA	NA	NA	9	11	NA	NA	2	Puga 2001[688]
1	50	2	50	1	50	NA	NA	6	8	11	NA	3	Sheela 2007[771]
6	123	1	122	NA	NA	NA	NA	9	11	NA	NA	2	Shetty 2001[778,779]
2	50	1	51	NA	NA	NA	NA	8	11	NA	NA	2	Shetty 2003[781,783]
0.5	101	2.5	101	NA	NA	NA	NA	3	11	NA	NA	2	Shetty 2004[782]
0.5	67	2.5	66	NA	NA	NA	NA	9	11	NA	NA	2	Sitthiwattanawong 1999[789]
3	48	4	51	NA	NA	NA	NA	9	11	NA	NA	2	Uludag 2005[872]
3	110	2	110	NA	NA	NA	NA	8	11	NA	NA	2	Wing 1999[899]
0.5	113	3.5	122	NA	NA	NA	NA	8	11	NA	NA	2	Wing 2000[902]
7.5	111	0.5	89	NA	NA	NA	NA	11	14	NA	NA	2	Wing 2004[893]
1.5	37	0.5	37	NA	NA	NA	NA	8	11	NA	NA	2	Getgan 2003[282]
2.5	111	0.5	111	NA	NA	NA	NA	8	11	NA	NA	2	Rahman 2013[694]
5	80	7	80	NA	NA	NA	NA	5	12	NA	NA	2	Rouzi 2014[725]
2	100	2	100	NA	NA	NA	NA	8	12	NA	NA	2	Souza 2013[796]
0.5	27	1.5	29	NA	NA	NA	NA	2	4	NA	NA	2	Curet 1989[183]
0.5	21	2.5	61	NA	NA	NA	NA	2	4	NA	NA	2	Graves 1985[307]
0.5	16	1.5	46	NA	NA	NA	NA	2	4	NA	NA	2	Hayashi 1983[343]
0.5	111	2.5	111	NA	NA	NA	NA	1	4	NA	NA	2	Mahmood 1992[526]
1	100	2	100	NA	NA	NA	NA	3	4	NA	NA	2	Murray 1995[585]
0.5	46	2.5	46	NA	NA	NA	NA	4	7	NA	NA	2	Perryman 1992[669]
3	100	4	100	NA	NA	NA	NA	3	5	NA	NA	2	Rabl 2002[693]

continued

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TABLE 63 Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0.5	115	4.5	102	NA	NA	NA	NA	2	5	NA	NA	2	Rayburn 1992[710]
7	83	7	62	NA	NA	NA	NA	3	4	NA	NA	2	Taher 2011[834]
0.5	40	3.5	43	NA	NA	NA	NA	2	5	NA	NA	2	Witter 1992[914]
0.5	105	3.5	103	NA	NA	NA	NA	2	5	NA	NA	2	Witter 1996[912]
1	120	5	118	NA	NA	NA	NA	6	9	NA	NA	2	Ayad 2002[76]
0.5	80	14.5	77	NA	NA	NA	NA	6	9	NA	NA	2	Buser 1997[125]
2	53	4	53	NA	NA	NA	NA	8	14	NA	NA	2	Cecatti 2000[140]
0.5	72	5.5	73	NA	NA	NA	NA	3	9	NA	NA	2	Charoenkul 2000[149]
2	50	1	49	NA	NA	NA	NA	6	9	NA	NA	2	Chuck 1995[164]
14	66	13	72	NA	NA	NA	NA	6	8	NA	NA	2	Clark 1998[168]
1.5	107	0.5	106	NA	NA	NA	NA	4	9	NA	NA	2	Danielian 1999[189]
3	105	4	105	NA	NA	NA	NA	8	14	NA	NA	2	De Aquino 2003[198]
27	168	9	192	NA	NA	NA	NA	9	14	NA	NA	2	De la Torre 2001[200]
3	65	5	65	NA	NA	NA	NA	6	9	NA	NA	2	Denguezli 2007[205]
0.5	94	6.5	93	NA	NA	NA	NA	8	9	NA	NA	2	El Sherbiny 2001[243]
0.5	74	1.5	75	NA	NA	NA	NA	8	9	NA	NA	2	Eroglu 2007[244]
5.5	58	0.5	64	NA	NA	NA	NA	9	14	NA	NA	2	Escudero 1997[245]
10	192	12	207	NA	NA	NA	NA	8	9	NA	NA	2	Farah 1997[250]
4	51	1	53	NA	NA	NA	NA	9	14	NA	NA	2	Ferguson 2002[257]
4	31	3	32	NA	NA	NA	NA	3	9	NA	NA	2	Fletcher 1994[262]
1	89	4	97	NA	NA	NA	NA	5	9	NA	NA	2	Garry 2003[278]
5.5	301	3.5	101	2.5	101	0.5	101	1	9	14	18	4	Gelisen 2005[281]
0.5	38	1.5	39	NA	NA	NA	NA	4	9	NA	NA	2	Gottschall 1997[303]
4	129	1	139	NA	NA	NA	NA	4	8	NA	NA	2	Gregson 2005[312]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	36	5	36	NA	NA	NA	NA	4	9	NA	NA	2	Howarth 1996[368]
2	63	3	57	NA	NA	NA	NA	2	8	NA	NA	2	Incerpi 2001[375]
6	112	4	112	NA	NA	NA	NA	6	9	NA	NA	2	Kadanali 1996[392]
1.5	40	0.5	40	3.5	41	NA	NA	5	8	9	NA	3	Khoury 2001[423]
1	78	5	81	NA	NA	NA	NA	6	9	NA	NA	2	Kolderup 1999[430]
2	30	1	30	NA	NA	NA	NA	3	9	NA	NA	2	Kovavisarach 1997[432]
6	100	7	100	NA	NA	NA	NA	6	8	NA	NA	2	Kumar 2001[442]
1.5	26	0.5	26	NA	NA	NA	NA	3	9	NA	NA	2	Lee 1997[457]
0.5	41	0.5	45	1.5	48	NA	NA	6	9	14	NA	3	Lemancewicz 1999[463]
0.5	20	3.5	18	NA	NA	NA	NA	6	9	NA	NA	2	Magtibay 1998[520]
1	35	1	33	NA	NA	NA	NA	2	8	NA	NA	2	McKenna 2004[546]
3	60	2	60	NA	NA	NA	NA	8	9	NA	NA	2	Meydanli 2003[559]
0.5	30	4.5	33	NA	NA	NA	NA	6	9	NA	NA	2	Neiger 2001[598]
4	94	3	95	NA	NA	NA	NA	4	9	NA	NA	2	Nunes 1999[618]
1	83	2	80	NA	NA	NA	NA	3	9	NA	NA	2	Papanikolaou 2004[645]
2	225	5	210	NA	NA	NA	NA	4	9	NA	NA	2	Pandis 2001[643]
0.5	64	10.5	63	NA	NA	NA	NA	7	9	NA	NA	2	Rowlands 2001[726]
2	185	5	184	NA	NA	NA	NA	4	9	NA	NA	2	Rozenberg 2001[727]
1	70	5	70	NA	NA	NA	NA	5	9	NA	NA	2	Rozenberg 2004[728]
6	70	4	71	NA	NA	NA	NA	9	14	NA	NA	2	Sanchez-Ramos 1997[745]
9	115	12	108	NA	NA	NA	NA	5	9	NA	NA	2	Sanchez-Ramos 1998[749]
0.5	31	2.5	33	NA	NA	NA	NA	2	9	NA	NA	2	Srisomboon 1996[804]
1.5	51	0.5	51	NA	NA	NA	NA	3	9	NA	NA	2	Surbek 1997[822]
3	137	8	138	NA	NA	NA	NA	6	8	NA	NA	2	Wing 1995[906]

continued

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TABLE 63 Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2	60	6	60	NA	NA	NA	NA	3	9	NA	NA	2	Ayaz 2010[78]
1.5	51	0.5	51	NA	NA	NA	NA	8	9	NA	NA	2	Girija 2009[293]
2.5	162	0.5	160	NA	NA	NA	NA	6	8	NA	NA	2	Girija 2011[294]
1	80	3	68	NA	NA	NA	NA	8	9	NA	NA	2	Gupta 2010[320]
2.5	56	0.5	53	NA	NA	NA	NA	4	9	NA	NA	2	Hosli 2008[364]
12	95	10	96	NA	NA	NA	NA	4	9	NA	NA	2	Lokugamage 2003[482]
0.5	61	1.5	61	NA	NA	NA	NA	8	9	NA	NA	2	Nigam 2010[608]
1	56	2	56	NA	NA	NA	NA	5	9	NA	NA	2	Ozkan 2009[641]
4	100	10	100	NA	NA	NA	NA	3	9	NA	NA	2	Saeed 2011[735]
1	70	1	70	2	70	NA	NA	6	8	9	NA	3	Saxena 2011[755]
2	57	1	112	NA	NA	NA	NA	7	8	NA	NA	2	Tan 2010[840]
26	340	29	341	NA	NA	NA	NA	4	8	NA	NA	2	Van Gemund 2004[879]
0.5	34	2.5	37	NA	NA	NA	NA	6	8	NA	NA	2	Varaklis 1995[880]
2	67	5	68	NA	NA	NA	NA	6	9	NA	NA	2	Wing 1995[880,900,906]
4	98	1	99	NA	NA	NA	NA	5	8	NA	NA	2	Wing 1997[903]
28	436	39	871	NA	NA	NA	NA	5	13	NA	NA	2	Wing 2008[896]
0.5	43	1.5	44	NA	NA	NA	NA	2	9	NA	NA	2	Deng 1999[204]
1.5	101	0.5	101	NA	NA	NA	NA	8	11	NA	NA	2	Komala 2013[431]
0.5	38	1.5	37	NA	NA	NA	NA	5	6	NA	NA	2	Chyu 1997[167]
0.5	36	1.5	38	NA	NA	NA	NA	6	8	NA	NA	2	Murthy 2006[587]
2	50	3	50	NA	NA	NA	NA	6	8	NA	NA	2	Nanda 2007[593]
1	132	2	135	NA	NA	NA	NA	4	11	NA	NA	2	Tessier 1997[845]
18	680	70	678	NA	NA	NA	NA	5	13	NA	NA	2	Wing 2013[892]
8.5	53	0.5	56	NA	NA	NA	NA	9	16	NA	NA	2	Chanrachakul 2002,[146] 12397

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2.5	57	0.5	55	NA	NA	NA	NA	3	16	NA	NA	2	Chanrachakul 2000,[144] 11236
1.5	22	2.5	24	0.5	22	NA	NA	6	9	16	NA	3	Sharma 2005,[769] 14435
5	72	6	72	NA	NA	NA	NA	5	14	NA	NA	2	Akay 2012,[57] 20824
4	120	2	120	NA	NA	NA	NA	5	14	NA	NA	2	Kunt 2010,[443] 18965
1	15	3	21	NA	NA	NA	NA	7	14	NA	NA	2	Magos 1983,[518] 2157
1.5	26	0.5	26	NA	NA	NA	NA	5	14	NA	NA	2	Olmo 2001,[626] 11763
1	15	1	15	NA	NA	NA	NA	6	14	NA	NA	2	Parikh 2001,[648] 13941
2.5	48	0.5	42	0.5	56	NA	NA	2	7	14	NA	3	Ray 1992,[705] 7125
2	83	4	82	NA	NA	NA	NA	6	14	NA	NA	2	Papageorgiou 1992,[644] 7364
2	150	2	150	NA	NA	NA	NA	8	21	NA	NA	2	Amador 2007,[67] 16714
5	70	5	70	NA	NA	NA	NA	8	21	NA	NA	2	Bartusevicius 2006,[86] 15686
14	79	19	73	NA	NA	NA	NA	9	21	NA	NA	2	Carlan 2002,[138] 12232
2	62	1	58	NA	NA	NA	NA	8	21	NA	NA	2	Moraes Filho 2010,[577] 14544
2	225	4	225	NA	NA	NA	NA	8	21	NA	NA	2	Esteve 2006,[246] 15559
1	75	3	75	NA	NA	NA	NA	8	21	NA	NA	2	Feitosa 2006,[255] 15685
8	85	7	85	NA	NA	NA	NA	9	21	NA	NA	2	Nassar 2007,[595] 16675
0.5	29	2.5	30	NA	NA	NA	NA	4	21	NA	NA	2	Parisaei 2008,[649] 17372
0.5	51	1.5	51	NA	NA	NA	NA	11	21	NA	NA	2	Shetty 2002,[780] 12234
2	124	2	125	NA	NA	NA	NA	11	21	NA	NA	2	Shetty 2002,[784] 12287
25	240	16	240	NA	NA	NA	NA	9	21	NA	NA	2	Zahran 2009,[927] 18699
0.5	35	2.5	31	1.5	31	NA	NA	7	15	18	NA	3	Orhue 1995,[629] 8657
0.5	84	4.5	98	NA	NA	NA	NA	2	17	NA	NA	2	Wing 2000,[902] 11237
0.5	33	1.5	34	NA	NA	NA	NA	14	17	NA	NA	2	Wing 2005,[897] 14330
3.5	96	0.5	91	NA	NA	NA	NA	6	19	NA	NA	2	Chua 1995,[160] 9722

continued

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TABLE 63 Data file for OpenBUGS analysis of hyperstimulation with fetal heart rate changes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
16	49	6	54	NA	NA	NA	NA	8	18	NA	NA	2	Chung 2003,[165] 13321
8.5	133	0.5	266	NA	NA	NA	NA	5	18	NA	NA	2	Cromi 2011,[180] 19650
6.5	104	0.5	106	NA	NA	NA	NA	5	20	NA	NA	2	Cromi 2012,[181] 21024
1.5	41	0.5	41	NA	NA	NA	NA	4	19	NA	NA	2	Johnson 1985,[386] 192
1.5	51	0.5	51	NA	NA	NA	NA	8	18	NA	NA	2	Kandil 2012,[397] 21031
1.5	51	0.5	60	NA	NA	NA	NA	7	18	NA	NA	2	Lyndrup 1994,[497] 8315
3	119	2	121	NA	NA	NA	NA	8	18	NA	NA	2	Moraes Filho 2010,[577] 18961
1.5	60	0.5	54	NA	NA	NA	NA	6	18	NA	NA	2	Ntsaluba 1997,[617] 9924
4	60	2	60	NA	NA	NA	NA	9	18	NA	NA	2	Owolabi 2005,[640] 14892
6.5	114	0.5	111	0.5	108	NA	NA	4	18	20	NA	3	Pennell 2009,[660] 18562
2.5	54	0.5	59	NA	NA	NA	NA	9	18	NA	NA	2	Sciscione 2001,[760] 11601
3	60	1	61	NA	NA	NA	NA	8	18	NA	NA	2	Tabowei 2003[831]
2	100	1	100	NA	NA	NA	NA	9	11	NA	NA	2	Deshmukh 2013,[208] 22653
12	408	8	411	NA	NA	NA	NA	4	18	NA	NA	2	Jozwiak 2012,[390] 20221

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

Data file for OpenBUGS analysis of Neonatal mortality and serious morbidity

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. PGF_2 gel
7. intracervical PGE_2
8. vaginal PGE_2 pessary (normal release)
9. vaginal misoprostol (dose < 50 µg)
10. vaginal misoprostol (dose ≥ 50 µg)
11. oral misoprostol tablet (dose ≥ 50 µg)
12. titrated (low-dose) oral misoprostol solution
13. i.v. oxytocin
14. i.v. oxytocin plus amniotomy
15. NO
16. mechanical methods – Foley catheter
17. mechanical methods – laminaria
18. membrane sweeping
19. extra-amniotic PGE_2
20. i.v. prostaglandin
21. sexual intercourse
22. breast stimulation
23. oral prostaglandins
24. buccal/sublingual misoprostol.

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TABLE 64 Data file for OpenBUGS analysis of neonatal mortality and serious morbidity

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
1	173	0	177	NA	NA	NA	NA	2	15	NA	NA	2	Bollapragada 2009,[107] 18183
0	20	1	20	3	17	NA	NA	1	13	22	NA	3	Damania 1992,[188] 7763
2	1263	0	1258	NA	NA	NA	NA	1	13	NA	NA	2	Hannah 1996,[335] 9118a
1	20	0	20	NA	NA	NA	NA	1	13	NA	NA	2	McQueen 1990,[549] 5921
2	367	2	375	NA	NA	NA	NA	1	18	NA	NA	2	De Miranda 2006,[201] 15427
0	50	1	50	NA	NA	NA	NA	1	18	NA	NA	2	Gupta 1998,[322] 9935
0	90	1	90	NA	NA	NA	NA	1	18	NA	NA	2	McColgin 1990[542]
1	167	0	179	NA	NA	NA	NA	1	18	NA	NA	2	Yildirim 2010,[921] 19038
0	62	1	58	NA	NA	NA	NA	9	24	NA	NA	2	Moraes Filho 2010,[577] 14544
2	576	1	574	NA	NA	NA	NA	1	21	NA	NA	2	Omar 2013,[627] 21571
1	50	1	50	NA	NA	NA	NA	7	16	NA	NA	2	Benzineb 1996,[93] 10103
0	95	1	90	NA	NA	NA	NA	7	17	NA	NA	2	Chua 1997,[160] 9722
9	200	7	200	NA	NA	NA	NA	7	16	NA	NA	2	Deshmukh 2011,[207] 20161
2	81	3	81	NA	NA	NA	NA	6	16	NA	NA	2	Mawire 1999,[539] 10676
1	76	1	76	NA	NA	NA	NA	10	19	NA	NA	2	Majoko 2002,[529] 111995
0	10	1	15	NA	NA	NA	NA	2	19	NA	NA	2	Quinn 1981,[691] 1917
0	107	1	115	NA	NA	NA	NA	13	20	NA	NA	2	Spellacy 1973,[801] 876
1	100	0	100	NA	NA	NA	NA	10	11	NA	NA	2	Deshmukh 2013,[208] 22653
1	78	1	78	NA	NA	NA	NA	1	14	NA	NA	2	Katz 1983,[410] 2289
1	136	0	127	NA	NA	NA	NA	7	13	NA	NA	2	Misra 1994,[565] 8632
0	684	3	679	NA	NA	NA	NA	2	15	NA	NA	2	Schmitz 2014,[756] 22698
1	50	0	50	0	54	NA	NA	13	14	23	NA	3	Ratnam 1974,[704] 966
1	75	0	59	NA	NA	NA	NA	1	13	NA	NA	2	Duff 1984,[221] 2592
0	64	1	61	NA	NA	NA	NA	7	8	NA	NA	2	Lyndrup 1991[495]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2	403	0	413	NA	NA	NA	NA	1	7	NA	NA	2	Noah 1987[612]
1	349	1	345	1	171	NA	NA	4	12	16	NA	3	Hofmeyr 2001[363]
1	75	2	128	1	127	1	76	8	10	12	19	4	Majoko 2002[529]
1	193	2	100	0	103	NA	NA	4	9	12	NA	3	Moodley 2003[576]
1	110	0	110	NA	NA	NA	NA	9	11	NA	NA	2	Rahman 2013[694]
1	80	1	80	NA	NA	NA	NA	5	12	NA	NA	2	Rouzi 2014[725]
1	165	0	180	NA	NA	NA	NA	1	3	NA	NA	2	Husslein 1986[371]
0	32	1	52	NA	NA	NA	NA	2	8	NA	NA	2	Liggins 1979[471]
3	34	2	28	NA	NA	NA	NA	10	13	NA	NA	2	Abdul 2007[44]
0	79	2	76	NA	NA	NA	NA	7	10	NA	NA	2	Buser 1997[125]
1	300	0	100	0	100	0	100	1	10	13	16	4	Gelisen 2005[281]
1	39	0	38	NA	NA	NA	NA	1	9	NA	NA	2	Oboro 2005[622]
1	83	0	80	NA	NA	NA	NA	3	10	NA	NA	2	Papanikolaou 2004[645]
1	60	0	60	NA	NA	NA	NA	3	10	NA	NA	2	Ayaz 2010[78]
1	102	1	105	NA	NA	NA	NA	4	9	NA	NA	2	Chaudhuri 2011[151]
0	57	1	56	NA	NA	NA	NA	1	10	NA	NA	2	Frass 2011[268]
2	1261	0	1259	NA	NA	NA	NA	1	4	NA	NA	2	Hannah 1996[335]
1	167	2	172	NA	NA	NA	NA	10	13	NA	NA	2	Ezechi 2008[247]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of maternal mortality and serious morbidity

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release) Intracervical PGE_2
6. intracervical PGE_2
7. vaginal misoprostol (dose < 50 µg)
8. vaginal misoprostol (dose ≥ 50 µg)
9. oral misoprostol tablet (dose ≥ 50 µg)
10. i.v. oxytocin
11. i.v. oxytocin plus amniotomy
12. mifepristone
13. mechanical methods – Foley catheter
14. mechanical methods – laminaria
15. buccal/sublingual misoprostol.

TABLE 65 Data file for OpenBUGS analysis of maternal mortality and serious morbidity

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0	150	1	150	NA	NA	NA	NA	8	16	NA	NA	2	Amador 2007,[67] 16714
1	21	0	21	NA	NA	NA	NA	7	12	NA	NA	2	Taylor 1993,[842] 11078
0	57	3	289	NA	NA	NA	NA	2	13	NA	NA	2	Berkane 2005,[97] 14327
1	95	0	95	NA	NA	NA	NA	6	15	NA	NA	2	Chua 1997,[160] 9722
2	408	0	411	NA	NA	NA	NA	4	14	NA	NA	2	Jozwiak 2012,[390] 20221
0	125	1	122	NA	NA	NA	NA	4	6	NA	NA	2	Irion 1998[376]
1	403	0	413	NA	NA	NA	NA	1	6	NA	NA	2	Noah 1987[612]
0	26	1	22	NA	NA	NA	NA	3	6	NA	NA	2	Herabutya 1993[350]
0	64	1	62	NA	NA	NA	NA	9	10	NA	NA	2	Fisher 2001[261]
0	29	1	30	NA	NA	NA	NA	2	4	NA	NA	2	Chung 1992[166]
1	100	0	100	NA	NA	NA	NA	3	5	NA	NA	2	Rabl 2002[693]
1	34	0	28	NA	NA	NA	NA	9	11	NA	NA	2	Abdul 2007[44]
1	58	0	56	NA	NA	NA	NA	8	9	NA	NA	2	Has 2002[339]
0	100	1	100	NA	NA	NA	NA	6	8	NA	NA	2	Chitraker 2012[156]
0	50	1	50	NA	NA	NA	NA	8	9	NA	NA	2	Girija 2009[293]
1	340	1	341	NA	NA	NA	NA	4	8	NA	NA	2	Van Gemund 2004[879]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of NICU admission

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. PGF_2 gel
7. intracervical PGE_2
8. vaginal PGE_2 pessary (normal release)
9. vaginal misoprostol (dose < 50 µg)
10. vaginal misoprostol (dose ≥ 50 µg)
11. oral misoprostol tablet (dose < 50 µg)
12. oral misoprostol tablet (dose ≥ 50 µg)
13. titrated (low-dose) oral misoprostol solution
14. sustained-release misoprostol insert
15. i.v. oxytocin
16. amniotomy
17. i.v. oxytocin plus amniotomy
18. NO
19. mifepristone
20. oestrogens
21. mechanical methods – Foley catheter
22. mechanical methods – laminaria
23. mechanical methods – double-balloon or Cook's catheter
24. membrane sweeping
25. extra-amniotic PGE_2
26. sexual intercourse
27. acupuncture
28. oral prostaglandins
29. buccal/sublingual misoprostol.

TABLE 66 Data file for OpenBUGS analysis of NICU admission

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
14	100	5	100	NA	NA	NA	NA	2	18	NA	NA	2	Agarwal 2012,[54] 21275
16	173	18	177	NA	NA	NA	NA	2	18	NA	NA	2	Bollapragada 2009,[107] 18183
9	100	13	100	NA	NA	NA	NA	2	18	NA	NA	2	Bullarbo 2007,[123] 15979
3	52	0	55	NA	NA	NA	NA	10	18	NA	NA	2	Chanrachakul 2002,[146] 12397
1	56	0	54	NA	NA	NA	NA	3	18	NA	NA	2	Chanrachakul 2000,[144] 11236
3	12	5	24	NA	NA	NA	NA	1	18	NA	NA	2	Nicoll 2001,[607] 11517
14	198	13	197	NA	NA	NA	NA	4	18	NA	NA	2	Osman 2006,[632] 15372
3	72	0	72	NA	NA	NA	NA	5	15	NA	NA	2	Akay 2012,[57] 20824
14	74	5	52	NA	NA	NA	NA	1	15	NA	NA	2	Akyol 1999,[58] 11035
16	92	21	101	NA	NA	NA	NA	1	15	NA	NA	2	Chang 1997,[142] 10210
3	47	2	47	NA	NA	NA	NA	8	15	NA	NA	2	Chua 1991,[159] 6450
4	223	6	221	NA	NA	NA	NA	5	15	NA	NA	2	Güngördük 2012,[319] 20462
146	1259	83	1256	NA	NA	NA	NA	1	15	NA	NA	2	Hannah 1996[335] 9118a
10	100	6	101	NA	NA	NA	NA	1	15	NA	NA	2	Hjertberg 1996,[359] 9117
6	89	4	79	NA	NA	NA	NA	5	15	NA	NA	2	Koc 2013,[429] 21668
13	120	20	120	NA	NA	NA	NA	5	15	NA	NA	2	Kunt 2010,[443] 18965
59	510	73	502	NA	NA	NA	NA	1	15	NA	NA	2	Ladfors 1996,[447] 9252
0	15	1	21	NA	NA	NA	NA	8	15	NA	NA	2	Magos 1983,[518] 2157
3	47	2	41	2	55	NA	NA	2	8	15	NA	3	Ray 1992,[705] 7125
5	62	2	62	NA	NA	NA	NA	1	15	NA	NA	2	Sperling 1993,[802] 8195
4	50	0	43	NA	NA	NA	NA	1	15	NA	NA	2	Tamsen 1990,[836] 5545
6	99	6	99	NA	NA	NA	NA	1	24	NA	NA	2	Boulvain 1998,[110] 9919
11	68	9	69	NA	NA	NA	NA	1	24	NA	NA	2	Dare 2002,[191] 12270

continued

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TABLE 66 Data file for OpenBUGS analysis of NICU admission (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2	367	2	375	NA	NA	NA	NA	1	24	NA	NA	2	De Miranda 2006,[201] 15427
2	50	0	50	NA	NA	NA	NA	1	24	NA	NA	2	Gupta 1998,[322] 9935
2	138	3	162	NA	NA	NA	NA	1	24	NA	NA	2	Hill 2008,[357] 17311
2	32	2	33	NA	NA	NA	NA	1	24	NA	NA	2	Magann 1998,[514] 10430
0	35	3	35	2	35	NA	NA	1	7	24	NA	3	Magann 1998,[513] 11075
5	91	1	91	NA	NA	NA	NA	5	24	NA	NA	2	Magann 1999,[512] 11100
4	116	4	234	NA	NA	NA	NA	1	24	NA	NA	2	Putnam 2011,[690] 20595
5	167	10	179	NA	NA	NA	NA	1	24	NA	NA	2	Yildirim 2010,[921] 19038
1	30	0	29	0	30	NA	NA	1	2	27	NA	3	Asher 2009,[72] 18576
0	7	3	9	NA	NA	NA	NA	2	27	NA	NA	2	Gaudet 2008,[280] 17891
3	183	0	181	NA	NA	NA	NA	2	27	NA	NA	2	Smith 2008,[792] 17746
9	150	8	150	NA	NA	NA	NA	9	29	NA	NA	2	Amador 2007,[67] 16714
2	70	2	70	NA	NA	NA	NA	9	29	NA	NA	2	Bartusevicius 2006,[86] 15686
10	79	11	79	NA	NA	NA	NA	10	29	NA	NA	2	Carlan 2002,[138] 12232
14	225	15	225	NA	NA	NA	NA	9	29	NA	NA	2	Esteve 2006,[246] 15559
1	75	1	75	NA	NA	NA	NA	9	29	NA	NA	2	Feitosa 2006,[255] 15685
6	50	4	50	NA	NA	NA	NA	12	29	NA	NA	2	Malik 1996,[531] 18700
3	85	3	85	NA	NA	NA	NA	10	29	NA	NA	2	Nassar 2007,[595] 16675
6	50	5	50	NA	NA	NA	NA	12	29	NA	NA	2	Shetty 2002,[780] 12234
15	124	12	125	NA	NA	NA	NA	12	29	NA	NA	2	Shetty 2002,[784] 12287
5	240	4	240	NA	NA	NA	NA	10	29	NA	NA	2	Zahran 2009,[927] 18699
12	576	5	574	NA	NA	NA	NA	1	26	NA	NA	2	Omar 2013,[627] 21571
3	102	2	108	NA	NA	NA	NA	1	26	NA	NA	2	Tan 2007,[838] 16801
6	130	7	130	NA	NA	NA	NA	4	16	NA	NA	2	Mahmood 1995,[527] 8658

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0	125	1	124	NA	NA	NA	NA	1	17	NA	NA	2	Chanrachakul 2003,[143] 12688
5	25	6	25	NA	NA	NA	NA	4	17	NA	NA	2	Melchior 1989,[976] 5333
15	157	8	63	NA	NA	NA	NA	4	17	NA	NA	2	Parazzini 1998,[646] 10784
0	62	2	61	NA	NA	NA	NA	16	17	NA	NA	2	Selo-Ojeme 2009,[767] 18022
0	101	1	105	NA	NA	NA	NA	16	17	NA	NA	2	Tan 2013,[837] 21568
11	83	13	97	NA	NA	NA	NA	2	19	NA	NA	2	Wing 2000,[902] 11237
3	32	11	33	NA	NA	NA	NA	15	19	NA	NA	2	Wing 2005,[897] 14330
15	63	11	57	NA	NA	NA	NA	1	15	NA	NA	2	Naef 1998,[588] 9772
5	75	6	72	NA	NA	NA	NA	3	21	NA	NA	2	Al-Taani 2004,[66] 15001
3	95	7	90	NA	NA	NA	NA	7	22	NA	NA	2	Chua 1997,[160] 9722
5	49	5	54	NA	NA	NA	NA	9	21	NA	NA	2	Chung 1992[166]
7	132	11	265	NA	NA	NA	NA	5	21	NA	NA	2	Cromi 2011,[180] 19650
5	103	8	105	NA	NA	NA	NA	5	23	NA	NA	2	Cromi 2012,[181] 21024
42	200	37	200	NA	NA	NA	NA	7	21	NA	NA	2	Deshmukh 2011,[207] 20161
10	65	9	71	NA	NA	NA	NA	9	21	NA	NA	2	Greybush 2001,[313] 11975
12	81	15	81	NA	NA	NA	NA	6	21	NA	NA	2	Mawire 1999,[539] 10676
5	80	3	80	NA	NA	NA	NA	9	21	NA	NA	2	Oliveira 2010,[625] 19204
6	60	8	60	NA	NA	NA	NA	10	21	NA	NA	2	Owolabi 2005,[640] 14892
21	113	22	110	13	107	NA	NA	4	21	23	NA	3	Pennell 2009,[660] 18562
3	38	2	36	NA	NA	NA	NA	4	22	NA	NA	2	Sanchez-Ramos 1992,[748] 7847
4	60	3	61	NA	NA	NA	NA	9	21	NA	NA	2	Tabowei 2003[831]
2	45	3	45	NA	NA	NA	NA	9	21	NA	NA	2	Ugwu 2013,[868] 22498
2	50	2	50	NA	NA	NA	NA	10	15	NA	NA	2	Balci 2010,[82] 19116
1	100	1	100	NA	NA	NA	NA	11	12	NA	NA	2	De 2006,[197] 1563

continued

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TABLE 66 Data file for OpenBUGS analysis of NICU admission (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
14	76	6	76	NA	NA	NA	NA	10	25	NA	NA	2	Majoko 2002,[529] 111995
28	100	30	100	NA	NA	NA	NA	10	12	NA	NA	2	Deshmukh 2013,[208] 22653
10	100	14	100	NA	NA	NA	NA	7	9	NA	NA	2	Gupta 2006,[321] 17823
1	51	0	51	NA	NA	NA	NA	2	18	NA	NA	2	Habib 2008[324]
8	129	10	109	NA	NA	NA	NA	1	17	NA	NA	2	Heden 1991,[344] 6018
11	684	11	679	NA	NA	NA	NA	2	18	NA	NA	2	Schmitz 2014,[756] 22698
5	33	4	36	NA	NA	NA	NA	15	28	NA	NA	2	Massil 1988,[535] 5006
34	191	30	195	NA	NA	NA	NA	5	21	NA	NA	2	Edwards 2014,[224] 22692
10	76	2	90	NA	NA	NA	NA	1	15	NA	NA	2	Sande 1983,[750] 2434
4	408	3	411	NA	NA	NA	NA	4	21	NA	NA	2	Jozwiak 2012,[390] 20221
8	119	4	107	NA	NA	NA	NA	5	21	NA	NA	2	Jozwiak 2013,[389] 22497
1	64	2	56	NA	NA	NA	NA	9	21	NA	NA	2	Ten Eikelder 2013,[843] 21691 (Jozwiak 2014[391])
27	140	25	142	NA	NA	NA	NA	4	7	NA	NA	2	Keirse 1995[414]
1	43	1	41	1	44	NA	NA	2	7	20	NA	3	Larmon 2002[454]
2	31	1	30	NA	NA	NA	NA	2	7	NA	NA	2	McKenna 1999[545]
1	38	3	35	1	38	NA	NA	5	7	10	NA	3	Ramsey 2003[699]
5	31	4	37	NA	NA	NA	NA	4	7	NA	NA	2	Seeras 1995[763]
4	51	1	57	NA	NA	NA	NA	1	7	NA	NA	2	Herabutya 1992[352]
1	75	0	75	NA	NA	NA	NA	1	7	NA	NA	2	Sahraoui 2005[737]
11	85	17	93	NA	NA	NA	NA	10	12	NA	NA	2	Adair 1998[48]
11	100	12	100	NA	NA	NA	NA	7	12	NA	NA	2	Bartha 2000[85]
2	78	2	78	NA	NA	NA	NA	2	12	NA	NA	2	Beigi 2003[88]
10	55	8	53	NA	NA	NA	NA	12	15	NA	NA	2	Butt 1999[126]
37	501	43	503	NA	NA	NA	NA	10	12	NA	NA	2	Carlan 2001[139]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
6	106	0	101	NA	NA	NA	NA	9	13	NA	NA	2	Cheng 2008[154]
11	111	11	93	NA	NA	NA	NA	9	12	NA	NA	2	Colon 2005[173]
2	52	3	53	NA	NA	NA	NA	12	15	NA	NA	2	Crane 2003,[179] 9416
10	100	7	100	NA	NA	NA	NA	4	11	NA	NA	2	Dällenbach 2003[186]
2	376	5	365	NA	NA	NA	NA	4	13	NA	NA	2	Dodd 2006[214]
9	64	9	62	NA	NA	NA	NA	10	12	NA	NA	2	Fisher 2001[261]
3	48	0	59	NA	NA	NA	NA	9	12	NA	NA	2	Hall 2002[330]
17	112	9	112	NA	NA	NA	NA	4	12	NA	NA	2	Henrich 2008[347]
12	49	9	47	NA	NA	NA	NA	2	12	NA	NA	2	Hoffman 2001[361]
14	346	9	345	2	171	NA	NA	4	13	21	NA	3	Hofmeyr 2001[363]
5	110	7	109	NA	NA	NA	NA	9	11	NA	NA	2	How 2001[366]
0	52	2	51	NA	NA	NA	NA	10	12	NA	NA	2	Jindal 2011[385]
4	30	5	30	NA	NA	NA	NA	9	12	NA	NA	2	Khazardoost 2011[421]
1	23	2	29	NA	NA	NA	NA	11	12	NA	NA	2	Kipikasa 2005[428]
8	240	6	120	2	120	NA	NA	4	10	12	NA	3	Le Roux 2002[456]
8	75	19	128	16	127	6	76	8	10	13	25	4	Majoko 2002[529]
19	49	12	40	NA	NA	NA	NA	10	12	NA	NA	2	Mehrotra 2010[552]
29	193	21	100	12	103	NA	NA	4	9	13	NA	3	Moodley 2003[576]
32	159	18	146	NA	NA	NA	NA	12	15	NA	NA	2	Mozurkewich 2003[582]
3	41	1	39	NA	NA	NA	NA	2	12	NA	NA	2	Ngai 1996[605]
3	40	4	40	NA	NA	NA	NA	12	15	NA	NA	2	Ngai 2000[604]
0	76	1	75	NA	NA	NA	NA	10	12	NA	NA	2	Paungmora 2004[654]
96	150	35	150	NA	NA	NA	NA	1	12	NA	NA	2	Rath 2007[701]
4	30	5	29	NA	NA	NA	NA	9	12	NA	NA	2	Rizvi 2007[714]

continued

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TABLE 66 Data file for OpenBUGS analysis of NICU admission (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0	50	1	50	0	50	NA	NA	7	9	12	NA	3	Sheela 2007[771]
0	30	1	30	1	30	NA	NA	9	12	21	NA	3	Sheikher 2009[772]
7	123	17	122	NA	NA	NA	NA	10	12	NA	NA	2	Shetty 2001[779]
0	31	1	30	NA	NA	NA	NA	1	12	NA	NA	2	Shetty 2002[974]
4	50	7	51	NA	NA	NA	NA	9	12	NA	NA	2	Shetty 2003[783]
12	100	12	100	NA	NA	NA	NA	3	12	NA	NA	2	Shetty 2004[782]
3	48	0	51	NA	NA	NA	NA	10	12	NA	NA	2	Uludag 2005[872]
31	110	29	110	NA	NA	NA	NA	9	12	NA	NA	2	Wing 1999[898]
36	113	34	121	NA	NA	NA	NA	9	12	NA	NA	2	Wing 2000[902]
11	110	10	88	NA	NA	NA	NA	12	15	NA	NA	2	Wing 2004[893]
9	110	5	110	NA	NA	NA	NA	9	12	NA	NA	2	Rahman 2013[694]
15	65	11	69	NA	NA	NA	NA	10	13	NA	NA	2	Zvandasara 2008[936]
0	80	6	80	NA	NA	NA	NA	5	13	NA	NA	2	Rouzi 2014[725]
4	100	5	100	NA	NA	NA	NA	9	13	NA	NA	2	Souza 2013[796]
3	207	6	195	NA	NA	NA	NA	1	8	NA	NA	2	Cardozo 1986[137]
6	76	6	79	NA	NA	NA	NA	2	8	NA	NA	2	Chua 1995[161]
9	29	9	30	NA	NA	NA	NA	2	4	NA	NA	2	Chung 1992[166]
0	28	2	37	1	50	NA	NA	2	4	24	NA	3	Doany 1997[212]
8	110	7	110	NA	NA	NA	NA	1	4	NA	NA	2	Mahmood 1992[526]
5	50	1	50	NA	NA	NA	NA	2	4	NA	NA	2	O'Brien 1995[624]
4	50	3	50	NA	NA	NA	NA	1	4	NA	NA	2	Poornima 2011[678]
1	36	3	33	NA	NA	NA	NA	2	5	NA	NA	2	Prasad 1989[684]
20	105	22	96	NA	NA	NA	NA	1	8	NA	NA	2	Roach 1997[715]
2	26	0	24	NA	NA	NA	NA	2	4	NA	NA	2	Sawai 1991[754]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	42	2	38	NA	NA	NA	NA	2	8	NA	NA	2	Sawai 1994[752]
7	100	3	100	NA	NA	NA	NA	1	3	NA	NA	2	Shoaib 1994[785]
2	83	1	83	NA	NA	NA	NA	3	4	NA	NA	2	Taher 2011[834]
30	120	24	118	NA	NA	NA	NA	7	10	NA	NA	2	Ayad 2002[76]
1	71	0	72	NA	NA	NA	NA	3	10	NA	NA	2	Charoenkul 2000[149]
6	106	8	105	NA	NA	NA	NA	4	10	NA	NA	2	Danielian 1999[189]
15	168	13	192	NA	NA	NA	NA	10	15	NA	NA	2	De la Torre 2001[200]
6	65	4	65	NA	NA	NA	NA	7	10	NA	NA	2	Denguezli 2007[205]
11	93	13	92	NA	NA	NA	NA	9	10	NA	NA	2	El Sherbiny 2001[243]
6	60	6	60	NA	NA	NA	NA	3	10	NA	NA	2	Elhassan 2004[238]
3	31	2	32	NA	NA	NA	NA	9	10	NA	NA	2	Elhassan 2005[235]
11	192	23	207	NA	NA	NA	NA	9	10	NA	NA	2	Farah 1997[250]
10	53	7	53	NA	NA	NA	NA	10	15	NA	NA	2	Ferguson 2002[257]
5	164	3	163	NA	NA	NA	NA	9	15	NA	NA	2	Fonseca 2008[265]
11	55	10	54	NA	NA	NA	NA	4	10	NA	NA	2	Frohn 2002[269]
6	89	12	97	NA	NA	NA	NA	5	10	NA	NA	2	Garry 2003[278]
15	300	5	100	5	100	3	100	1	10	15	21	4	Gelisen 2005[281]
2	129	1	139	NA	NA	NA	NA	4	9	NA	NA	2	Gregson 2005[312]
3	58	4	56	NA	NA	NA	NA	9	10	NA	NA	2	Has 2002[339]
20	63	18	57	NA	NA	NA	NA	2	9	NA	NA	2	Incerpi 2001[375]
0	39	0	39	1	40	NA	NA	5	9	10	NA	3	Khoury 2001[423]
17	71	32	71	NA	NA	NA	NA	9	15	NA	NA	2	Kidanto 2007[424]
2	67	10	76	NA	NA	NA	NA	7	10	NA	NA	2	Kolderup 1999[430]
6	50	6	50	NA	NA	NA	NA	7	9	NA	NA	2	Krithika 2008[440]

continued

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TABLE 66 Data file for OpenBUGS analysis of NICU admission (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
6	100	7	100	NA	NA	NA	NA	7	9	NA	NA	2	Kumar 2001[442]
4	100	10	100	NA	NA	NA	NA	7	10	NA	NA	2	Megalo 2004[551]
2	60	2	60	NA	NA	NA	NA	9	10	NA	NA	2	Meydanli 2003[559]
1	39	1	38	NA	NA	NA	NA	1	9	NA	NA	2	Oboro 2005[622]
3	225	6	210	NA	NA	NA	NA	4	10	NA	NA	2	Pandis 2001[643]
3	63	6	62	NA	NA	NA	NA	8	10	NA	NA	2	Rowlands 2001[726]
16	185	15	184	NA	NA	NA	NA	4	10	NA	NA	2	Rozenberg 2001[727]
9	70	4	70	NA	NA	NA	NA	5	10	NA	NA	2	Rozenberg 2004[728]
8	115	8	108	NA	NA	NA	NA	5	10	NA	NA	2	Sanchez-Ramos 1998[749]
3	33	1	27	NA	NA	NA	NA	2	9	NA	NA	2	Stitely 2000[817]
3	50	0	50	NA	NA	NA	NA	3	10	NA	NA	2	Surbek 1997[822]
23	137	17	138	NA	NA	NA	NA	7	9	NA	NA	2	Wing 1995[900]
25	98	32	99	NA	NA	NA	NA	9	15	NA	NA	2	Wing 1998[905]
2	50	2	50	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[932]
3	32	2	32	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[934]
3	48	4	49	NA	NA	NA	NA	10	15	NA	NA	2	Zeteroğlu 2006[931]
4	60	6	60	NA	NA	NA	NA	3	10	NA	NA	2	Ayaz 2010[78]
9	102	12	105	NA	NA	NA	NA	4	9	NA	NA	2	Chaudhuri 2011[151]
22	100	22	100	NA	NA	NA	NA	7	9	NA	NA	2	Chitraker 2012[156]
3	57	5	56	NA	NA	NA	NA	1	10	NA	NA	2	Frass 2011[268]
7	50	8	50	NA	NA	NA	NA	9	10	NA	NA	2	Girija 2009[293]
1	161	0	159	NA	NA	NA	NA	7	9	NA	NA	2	Girija 2011[294]
6	55	0	52	NA	NA	NA	NA	4	10	NA	NA	2	Hosli 2008[364]
4	95	11	96	NA	NA	NA	NA	4	10	NA	NA	2	Lokugamage 2003[482]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
3	56	2	56	NA	NA	NA	NA	5	10	NA	NA	2	Ozkan 2009[641]
12	191	7	199	7	198	NA	NA	4	9	21	NA	3	Prager 2008[681]
1	57	1	112	NA	NA	NA	NA	8	9	NA	NA	2	Tan 2010[840]
89	340	67	341	NA	NA	NA	NA	4	9	NA	NA	2	Van Gemund 2004[879]
11	67	13	68	NA	NA	NA	NA	7	10	NA	NA	2	Wing 1995[900]
27	98	30	99	NA	NA	NA	NA	5	9	NA	NA	2	Wing 1997[903]
33	436	50	871	NA	NA	NA	NA	5	14	NA	NA	2	Wing 2008[896]
5	42	4	42	NA	NA	NA	NA	7	9	NA	NA	2	Meyer 2002[560]
2	25	0	25	NA	NA	NA	NA	7	10	NA	NA	2	Sahu 2004[738]
128	1259	116	1258	NA	NA	NA	NA	1	4	NA	NA	2	Hannah 1996[335]
5	132	3	135	NA	NA	NA	NA	4	12	NA	NA	2	Tessier 1997[844]
71	680	61	678	NA	NA	NA	NA	5	14	NA	NA	2	Wing 2013[892]
9	60	12	60	NA	NA	NA	NA	10	15	NA	NA	2	Abedi-Asl 2007[45]
1	128	5	128	NA	NA	NA	NA	13	15	NA	NA	2	Aalami-Harandi 2013[43]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Data file for OpenBUGS analysis of Apgar score < 7 at 5 minutes

Treatments included in analysis:

1. no treatment
2. placebo
3. vaginal PGE_2 (tablet)
4. vaginal PGE_2 (gel)
5. vaginal PGE_2 pessary (slow release)
6. PGF_2 gel
7. intracervical PGE_2
8. vaginal PGE_2 pessary (normal release)
9. vaginal misoprostol (dose < 50 μg)
10. vaginal misoprostol (dose ≥ 50 μg)
11. oral misoprostol tablet (dose < 50 μg)
12. oral misoprostol tablet (dose ≥ 50 μg)
13. titrated (low-dose) oral misoprostol solution
14. sustained-release misoprostol insert
15. i.v. oxytocin
16. amniotomy
17. i.v. oxytocin plus amniotomy
18. NO
19. mifepristone
20. mechanical methods – Foley catheter
21. mechanical methods – laminaria
22. mechanical methods – double-balloon or Cook's catheter
23. membrane sweeping
24. extra-amniotic PGE_2
25. i.v. prostaglandin
26. sexual intercourse
27. acupuncture
28. oral prostaglandins
29. buccal/sublingual misoprostol.

TABLE 67 Data file for OpenBUGS analysis of Apgar score < 7 at 5 minutes

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
3.5	101	0.5	101	NA	NA	NA	NA	2	17	NA	NA	2	Agarwal 2012,[54] 21275
2	173	3	177	NA	NA	NA	NA	2	17	NA	NA	2	Bollapragada 2009,[107] 18183
1	100	2	100	NA	NA	NA	NA	2	17	NA	NA	2	Bullarbo 2007,[123] 15979
3.5	53	0.5	56	NA	NA	NA	NA	9	17	NA	NA	2	Chanrachakul 2002,[146] 12397
1.5	57	0.5	55	NA	NA	NA	NA	3	17	NA	NA	2	Chanrachakul 2002,[144] 11236
5	198	3	198	NA	NA	NA	NA	4	17	NA	NA	2	Osman 2006,[632] 15372
8	30	1	30	NA	NA	NA	NA	9	17	NA	NA	2	Perche 2009,[662] 18430
1	47	1	47	NA	NA	NA	NA	7	14	NA	NA	2	Chua 1991,[159] 6450
0.5	79	2.5	79	NA	NA	NA	NA	6	14	NA	NA	2	Domínguez Salgado 1999,[218] 11479
0.5	11	2.5	11	NA	NA	NA	NA	4	14	NA	NA	2	Ekman-Ordeberg 1985,[231] 759
2	223	1	221	NA	NA	NA	NA	5	14	NA	NA	2	Güngördük 2012,[319] 20462
16	1259	13	1256	NA	NA	NA	NA	1	14	NA	NA	2	Hannah 1996,[335] 9118a
1.5	101	0.5	102	NA	NA	NA	NA	1	14	NA	NA	2	Hjertberg 1996,[359] 9117
5	83	5	75	NA	NA	NA	NA	4	14	NA	NA	2	Jackson 1994,[379] 8574
6	510	6	502	NA	NA	NA	NA	1	14	NA	NA	2	Ladfors 1996,[447] 9252
1.5	50	0.5	50	NA	NA	NA	NA	7	14	NA	NA	2	Legarth 1987,[460] 3900
1	15	1	21	NA	NA	NA	NA	7	14	NA	NA	2	Magos 1983,[518] 2157
3.5	28	0.5	24	NA	NA	NA	NA	3	14	NA	NA	2	McQueen 1990,[549] 5921
4	20	1	20	NA	NA	NA	NA	1	14	NA	NA	2	McQueen 1992,[548] 7430
0.5	48	0.5	42	1.5	56	NA	NA	2	7	14	NA	3	Ray 1992,[705] 7125
2.5	139	0.5	140	NA	NA	NA	NA	1	14	NA	NA	2	Rydhström 1991,[733] 3226
1	25	1	25	NA	NA	NA	NA	4	14	NA	NA	2	Silva-Cruz 1988,[787] 4525
0.5	51	1.5	44	NA	NA	NA	NA	1	14	NA	NA	2	Tamsen 1990,[836] 5545

continued

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TABLE 67 Data file for OpenBUGS analysis of Apgar score <7 at 5 minutes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0.5	97	1.5	87	NA	NA	NA	NA	1	14	NA	NA	2	Wagner 1989,[882] 4992
0.5	51	1.5	51	NA	NA	NA	NA	6	14	NA	NA	2	Zahradnik 1987,[926] 3681
2	83	8	82	NA	NA	NA	NA	6	14	NA	NA	2	Papageorgiou 1992,[644] 7364
0.5	100	3.5	100	NA	NA	NA	NA	1	22	NA	NA	2	Boulvain 1998,[110] 9919
1	68	2	69	NA	NA	NA	NA	1	22	NA	NA	2	Dare 2002,[191] 12270
1	32	1	33	NA	NA	NA	NA	1	22	NA	NA	2	El-Torkey 1992,[232] 7221
3	141	4	152	NA	NA	NA	NA	1	22	NA	NA	2	Goldenberg 1996,[300] 9089
1.5	36	1.5	36	0.5	36	NA	NA	1	6	22	NA	3	Magann 1998,[513] 11075
0.5	117	2.5	235	NA	NA	NA	NA	1	22	NA	NA	2	Putnam 2011,[690] 20595
0.5	8	1.5	10	NA	NA	NA	NA	2	26	NA	NA	2	Gaudet 2008,[280] 17891
1	58	1	60	NA	NA	NA	NA	2	26	NA	NA	2	Modlock 2010,[569] 19120
1.5	54	0.5	49	NA	NA	NA	NA	1	26	NA	NA	2	Selmer-Olsen 2007,[765] 16795
5	183	2	181	NA	NA	NA	NA	2	26	NA	NA	2	Smith 2008,[792] 17746
5	150	3	150	NA	NA	NA	NA	8	28	NA	NA	2	Amador 2007,[67] 16714
2	70	2	70	NA	NA	NA	NA	8	28	NA	NA	2	Bartusevicius 2006,[86] 15686
3	62	2	58	NA	NA	NA	NA	8	28	NA	NA	2	Moraes Filho 2010,[577] 14544
2	225	2	225	NA	NA	NA	NA	8	28	NA	NA	2	Esteve 2006,[246] 15559
2.5	76	0.5	76	NA	NA	NA	NA	8	28	NA	NA	2	Feitosa 2006,[255] 15685
1.5	29	0.5	30	NA	NA	NA	NA	4	28	NA	NA	2	Parisaei 2008,[649] 17372
5	124	1	125	NA	NA	NA	NA	11	28	NA	NA	2	Shetty 2002,[782] 12287
4	240	2	240	NA	NA	NA	NA	9	28	NA	NA	2	Zahran 2009,[927] 18699
1	576	1	574	NA	NA	NA	NA	1	25	NA	NA	2	Omar 2013,[627] 21571
5	130	6	130	NA	NA	NA	NA	4	15	NA	NA	2	Mahmood 1995,[527] 8658

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
0.5	126	1.5	125	NA	NA	NA	NA	1	16	NA	NA	2	Chanrachakul 2003,[143] 12688
2	62	2	61	NA	NA	NA	NA	15	16	NA	NA	2	Selo-Ojeme 2009,[767] 18022
0.5	102	1.5	106	NA	NA	NA	NA	15	16	NA	NA	2	Tan 2013,[837] 21568
4	57	7	289	NA	NA	NA	NA	2	18	NA	NA	2	Berkane 2005,[97] 14327
0.5	84	2.5	98	NA	NA	NA	NA	2	18	NA	NA	2	Wing 2000,[902] 11237
0.5	33	1.5	34	NA	NA	NA	NA	14	18	NA	NA	2	Wing 2005,[897] 14330
3	75	5	72	NA	NA	NA	NA	3	19	NA	NA	2	Al-Taani 2004,[66] 15001
1	95	5	95	NA	NA	NA	NA	6	20	NA	NA	2	Chua 1997,[160] 9722
2	132	1	265	NA	NA	NA	NA	5	19	NA	NA	2	Cromi 2011,[180] 19650
0.5	104	1.5	106	NA	NA	NA	NA	5	21	NA	NA	2	Cromi 2012,[181] 21024
16	200	15	200	NA	NA	NA	NA	6	19	NA	NA	2	Deshmukh 2011,[207] 20161
6	128	2	112	NA	NA	NA	NA	1	20	NA	NA	2	Gilson 1996,[291] 9212
0.5	51	2.5	60	NA	NA	NA	NA	7	19	NA	NA	2	Lyndrup 1994,[497] 8315
0.5	120	1.5	122	NA	NA	NA	NA	8	19	NA	NA	2	Moraes Filho 2010,[577] 18961
3	80	3	80	NA	NA	NA	NA	8	19	NA	NA	2	Oliveira 2010,[625] 19204
3	60	7	60	NA	NA	NA	NA	9	19	NA	NA	2	Owolabi 2005,[640] 14892
3.5	114	2.5	111	0.5	108	NA	NA	4	19	21	NA	3	Pennell 2009,[660] 18562
4	60	3	61	NA	NA	NA	NA	8	19	NA	NA	2	Tabowei 2003,[831]
1	50	1	51	NA	NA	NA	NA	9	14	NA	NA	2	Balci 2011,[81] 20050
0.5	31	1.5	33	NA	NA	NA	NA	3	23	NA	NA	2	Stewart 1983,[815] 2580
6	107	7	115	NA	NA	NA	NA	14	24	NA	NA	2	Spellacy 1973,[801] 876
0.5	76	1.5	76	NA	NA	NA	NA	14	24	NA	NA	2	Vakhariya 1972,[874] 787
19	100	9	100	NA	NA	NA	NA	9	11	NA	NA	2	Deshmukh 2013,[208] 22653
6	100	8	100	NA	NA	NA	NA	6	8	NA	NA	2	Gupta 2006,[321] 17823

continued

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TABLE 67 Data file for OpenBUGS analysis of Apgar score <7 at 5 minutes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
1.5	52	0.5	52	NA	NA	NA	NA	2	17	NA	NA	2	Habib 2008[324]
1	129	3	109	NA	NA	NA	NA	1	16	NA	NA	2	Heden 1991,[344] 6018
1	78	3	78	NA	NA	NA	NA	1	16	NA	NA	2	Katz 1983,[410] 2289
1.5	102	0.5	100	NA	NA	NA	NA	3	16	NA	NA	2	Lo 1994,[480] 9055
4	136	2	127	NA	NA	NA	NA	6	14	NA	NA	2	Misra 1994,[565] 8632
9	684	9	679	NA	NA	NA	NA	2	17	NA	NA	2	Schmitz 2014,[756] 22698
2.5	98	0.5	104	NA	NA	NA	NA	1	14	NA	NA	2	Witter 1987,[915] 3636
1	25	1	25	NA	NA	NA	NA	6	27	NA	NA	2	Herabutya 1988,[349] 4482
3	102	1	99	NA	NA	NA	NA	14	27	NA	NA	2	Lange 1981,[450] 1271
2	119	1	125	NA	NA	NA	NA	14	27	NA	NA	2	Secher 1981[762]
2	191	2	195	NA	NA	NA	NA	5	19	NA	NA	2	Edwards 2014,[223] 22692
2	76	1	90	NA	NA	NA	NA	1	14	NA	NA	2	Sande 1983,[750] 2434
2	75	1	59	NA	NA	NA	NA	1	14	NA	NA	2	Duff 1984[221]
6	119	4	107	NA	NA	NA	NA	5	19	NA	NA	2	Jozwiak 2013,[389] 22497
2.5	65	0.5	57	NA	NA	NA	NA	8	19	NA	NA	2	Ten Eikelder 2013,[843] 21691 (Jozwiak 2014[391])
1	107	3	110	NA	NA	NA	NA	2	6	NA	NA	2	Cabrol 1988[129]
2	48	1	48	NA	NA	NA	NA	4	6	NA	NA	2	Hales 1994[329]
4.5	126	0.5	123	NA	NA	NA	NA	4	6	NA	NA	2	Irion 1998[376]
0.5	141	1.5	143	NA	NA	NA	NA	4	6	NA	NA	2	Keirse 1995[414]
3	229	5	241	NA	NA	NA	NA	4	6	NA	NA	2	Kemp 2000[418]
1	56	2	57	NA	NA	NA	NA	6	7	NA	NA	2	Legarth 1988[458]
1.5	48	0.5	47	NA	NA	NA	NA	2	6	NA	NA	2	Lien 1998[470]
2.5	32	0.5	31	NA	NA	NA	NA	2	6	NA	NA	2	McKenna 1999[545]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2.5	404	0.5	414	NA	NA	NA	NA	1	6	NA	NA	2	Noah 1987[612]
1	45	2	45	NA	NA	NA	NA	5	6	NA	NA	2	Ottinger 1998[637]
6	226	3	242	NA	NA	NA	NA	4	6	NA	NA	2	Rath 1999[703]
3	155	3	173	NA	NA	NA	NA	3	4	NA	NA	2	Rath 1999[703]
1.5	32	0.5	38	NA	NA	NA	NA	4	6	NA	NA	2	Seeras 1995[763]
4	40	2	41	2	40	NA	NA	2	3	6	NA	3	Thiery 1984[851]
9	249	14	266	NA	NA	NA	NA	1	6	NA	NA	2	Trofatter 1993[863]
5	68	1	71	NA	NA	NA	NA	2	6	NA	NA	2	Troostwijk 1992[864]
1.5	40	0.5	40	0.5	37	NA	NA	6	7	21	NA	3	Yuen 1996[924]
4	51	1	57	NA	NA	NA	NA	1	6	NA	NA	2	Herabutya 1992[352]
0.5	27	1.5	23	NA	NA	NA	NA	3	6	NA	NA	2	Herabutya 1993[350]
0.5	26	3.5	26	NA	NA	NA	NA	6	14	NA	NA	2	Pulle 1986[689]
4.5	126	0.5	123	NA	NA	NA	NA	4	6	NA	NA	2	Pedrazzoli 1997[658]
3	85	2	93	NA	NA	NA	NA	9	11	NA	NA	2	Adair 1998[48]
4	40	2	40	NA	NA	NA	NA	9	11	NA	NA	2	Adam 2005[49]
3	78	3	78	NA	NA	NA	NA	2	11	NA	NA	2	Beigi 2003[88]
0.5	103	1.5	105	NA	NA	NA	NA	9	11	NA	NA	2	Bennett 1998[92]
2.5	56	0.5	54	NA	NA	NA	NA	11	14	NA	NA	2	Butt 1999[126]
6.5	107	0.5	102	NA	NA	NA	NA	8	12	NA	NA	2	Cheng 2008[154]
1	52	2	53	NA	NA	NA	NA	11	14	NA	NA	2	Crane 2003[179]
2	100	1	100	NA	NA	NA	NA	4	10	NA	NA	2	Dällenbach 2003[186]
5	376	2	365	NA	NA	NA	NA	4	12	NA	NA	2	Dodd 2006[214]
2.5	49	0.5	60	NA	NA	NA	NA	8	11	NA	NA	2	Hall 2002[330]
1	112	1	112	NA	NA	NA	NA	4	11	NA	NA	2	Henrich 2008[347]

continued

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TABLE 67 Data file for OpenBUGS analysis of Apgar score <7 at 5 minutes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
3	49	1	47	NA	NA	NA	NA	2	11	NA	NA	2	Hoffman 2001[361]
15	349	11	346	6	171	NA	NA	4	12	19	NA	3	Hofmeyr 2001[363]
5	110	4	109	NA	NA	NA	NA	8	10	NA	NA	2	How 2001[366]
0.5	24	1.5	30	NA	NA	NA	NA	10	11	NA	NA	2	Kipikasa 2005[428]
2.5	83	0.5	79	NA	NA	NA	NA	9	11	NA	NA	2	Kwon 2001[444]
3	159	2	146	NA	NA	NA	NA	11	14	NA	NA	2	Mozurkewich 2003[582]
1	41	1	39	NA	NA	NA	NA	2	11	NA	NA	2	Ngai 1996[605]
0.5	51	1.5	51	0.5	51	NA	NA	6	8	11	NA	3	Sheela 2007[771]
0.5	31	1.5	31	1.5	31	NA	NA	8	11	19	NA	3	Sheikher 2009[772]
4	113	1	121	NA	NA	NA	NA	8	11	NA	NA	2	Wing 2000[902]
2	42	2	42	NA	NA	NA	NA	1	11	NA	NA	2	Ayaz 2008[77]
15	110	8	110	NA	NA	NA	NA	8	11	NA	NA	2	Rahman 2013[694]
3	100	1	100	NA	NA	NA	NA	8	12	NA	NA	2	Souza 2013[796]
1.5	36	0.5	39	NA	NA	NA	NA	2	7	NA	NA	2	Buchanan 1984[121]
4	207	2	195	NA	NA	NA	NA	1	7	NA	NA	2	Cardozo 1986[137]
0.5	77	1.5	80	NA	NA	NA	NA	2	7	NA	NA	2	Chua 1995[161]
0.5	29	1.5	38	2.5	51	NA	NA	2	4	22	NA	3	Doany 1997[212]
1	20	2	60	NA	NA	NA	NA	2	4	NA	NA	2	Graves 1985[307]
1	40	1	40	NA	NA	NA	NA	3	4	NA	NA	2	Mahmood 1989[522]
2.5	51	0.5	51	NA	NA	NA	NA	2	4	NA	NA	2	O'Brien 1995[624]
3	45	4	45	NA	NA	NA	NA	4	7	NA	NA	2	Perryman 1992[669]
2	50	2	50	NA	NA	NA	NA	1	4	NA	NA	2	Poornima 2011[678]
0.5	16	1.5	16	NA	NA	NA	NA	2	4	NA	NA	2	Prins 1983[685]
0.5	101	1.5	101	NA	NA	NA	NA	3	5	NA	NA	2	Rabl 2002[693]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2.5	64	0.5	56	NA	NA	NA	NA	2	4	NA	NA	2	Rayburn 1988[707]
1.5	106	0.5	97	NA	NA	NA	NA	1	7	NA	NA	2	Roach 1997[715]
1	42	1	38	NA	NA	NA	NA	2	7	NA	NA	2	Sawai 1994[752]
3	100	1	100	NA	NA	NA	NA	1	3	NA	NA	2	Shoaib 1994[785]
0.5	35	2.5	36	NA	NA	NA	NA	4	7	NA	NA	2	Smith 1990[794]
0.5	84	2.5	83	NA	NA	NA	NA	3	4	NA	NA	2	Taher 2011[834]
10	120	10	118	NA	NA	NA	NA	6	9	NA	NA	2	Ayad 2002[76]
2.5	78	0.5	76	NA	NA	NA	NA	9	14	NA	NA	2	Campos 1991[133]
1	105	2	105	NA	NA	NA	NA	8	14	NA	NA	2	De Aquino 2003[198]
1	168	4	192	NA	NA	NA	NA	9	14	NA	NA	2	De la Torre 2001[200]
3.5	66	0.5	66	NA	NA	NA	NA	6	9	NA	NA	2	Denguezli 2007[205]
2	93	2	92	NA	NA	NA	NA	8	9	NA	NA	2	El Sherbiny 2001[243]
4	60	2	60	NA	NA	NA	NA	3	9	NA	NA	2	Elhassan 2004[238]
1	192	7	207	NA	NA	NA	NA	8	9	NA	NA	2	Farah 1997[250]
3	53	1	53	NA	NA	NA	NA	9	14	NA	NA	2	Ferguson 2002[257]
1	164	2	163	NA	NA	NA	NA	8	14	NA	NA	2	Fonseca 2008[265]
1	55	2	54	NA	NA	NA	NA	4	9	NA	NA	2	Frohn 2002[269]
3.5	301	2.5	101	1.5	101	0.5	101	1	9	14	19	4	Gelisen 2005[281]
1	54	1	54	NA	NA	NA	NA	8	14	NA	NA	2	Haghighi 2006[325]
3	58	4	56	NA	NA	NA	NA	8	9	NA	NA	2	Has 2002[339]
1.5	51	0.5	61	NA	NA	NA	NA	6	9	NA	NA	2	Herabutya 1997[351]
2	112	2	112	NA	NA	NA	NA	6	9	NA	NA	2	Kadanali 1996[392]
2	71	4	71	NA	NA	NA	NA	8	14	NA	NA	2	Kidanto 2007[424]
2	100	3	100	NA	NA	NA	NA	6	8	NA	NA	2	Kumar 2001[442]

continued

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TABLE 67 Data file for OpenBUGS analysis of Apgar score <7 at 5 minutes (*continued*)

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
2	44	3	47	2	40	NA	NA	6	9	14	NA	3	Lemancewicz 1999[463]
2.5	36	0.5	34	NA	NA	NA	NA	2	8	NA	NA	2	McKenna 2004[546]
3	100	2	100	NA	NA	NA	NA	6	9	NA	NA	2	Megalo 2004[551]
3	60	2	60	NA	NA	NA	NA	8	9	NA	NA	2	Meydanli 2003[559]
0.5	84	1.5	81	NA	NA	NA	NA	3	9	NA	NA	2	Papanikolaou 2004[645]
3	225	2	210	NA	NA	NA	NA	4	9	NA	NA	2	Pandis 2001[643]
0.5	64	1.5	63	NA	NA	NA	NA	7	9	NA	NA	2	Rowlands 2001[726]
3	185	2	184	NA	NA	NA	NA	4	9	NA	NA	2	Rozenberg 2001[727]
1	70	2	70	NA	NA	NA	NA	5	9	NA	NA	2	Rozenberg 2004[728]
1	70	2	71	NA	NA	NA	NA	9	14	NA	NA	2	Sanchez-Ramos 1997[745]
2	115	1	108	NA	NA	NA	NA	5	9	NA	NA	2	Sanchez-Ramos 1998[749]
2	98	2	99	NA	NA	NA	NA	8	14	NA	NA	2	Wing 1998[905]
0.5	49	1.5	50	NA	NA	NA	NA	9	14	NA	NA	2	Zeteroğlu 2006[931]
0.5	61	1.5	61	NA	NA	NA	NA	3	9	NA	NA	2	Ayaz 2010[78]
1	102	1	105	NA	NA	NA	NA	4	8	NA	NA	2	Chaudhuri 2011[151]
4	57	7	56	NA	NA	NA	NA	1	9	NA	NA	2	Frass 2011[268]
1	161	3	159	NA	NA	NA	NA	6	8	NA	NA	2	Girija 2011[294]
2	95	3	96	NA	NA	NA	NA	4	9	NA	NA	2	Lokugamage 2003[482]
2	56	2	56	NA	NA	NA	NA	5	9	NA	NA	2	Ozkan 2009[641]
1	70	2	70	2	70	NA	NA	6	8	9	NA	3	Saxena 2011[755]
1.5	32	0.5	36	NA	NA	NA	NA	6	9	NA	NA	2	Shakya 2010[768]
8	340	8	341	NA	NA	NA	NA	4	8	NA	NA	2	Van Gemund 2004[879]
1	33	1	36	NA	NA	NA	NA	6	8	NA	NA	2	Varaklis 1995[880]
0.5	68	1.5	69	NA	NA	NA	NA	6	9	NA	NA	2	Wing 1995[900]

[r,1]	[n,1]	[r,2]	[n,2]	[r,3]	[n,3]	[r,4]	[n,4]	[t,1]	[t,2]	[t,3]	[t,4]	na[]	Author/year, trial number (where applicable)
4	436	11	871	NA	NA	NA	NA	5	13	NA	NA	2	Wing 2008[896]
0.5	43	1.5	43	NA	NA	NA	NA	6	8	NA	NA	2	Meyer 2002[560]
2.5	26	0.5	26	NA	NA	NA	NA	6	9	NA	NA	2	Sahu 2004[738]
1.5	38	0.5	37	NA	NA	NA	NA	5	6	NA	NA	2	Chyu 1997[167]
15	1259	25	1258	NA	NA	NA	NA	1	4	NA	NA	2	Hannah 1996[335]
4	132	1	135	NA	NA	NA	NA	4	11	NA	NA	2	Tessier 1997[844]
7	680	14	678	NA	NA	NA	NA	5	13	NA	NA	2	Wing 2013[892]
1	60	1	60	NA	NA	NA	NA	9	14	NA	NA	2	Abedi-Asl 2007[45]
6	55	4	55	NA	NA	NA	NA	9	14	NA	NA	2	Tabasi 2007[829]
1	128	1	128	NA	NA	NA	NA	12	14	NA	NA	2	Aalami-Harandi 2013[43]
1.5	50	0.5	51	NA	NA	NA	NA	4	14	NA	NA	2	Egarter 1987[228]

n, number of participants randomised; na, number of arms in the trial; NA, not applicable; r, number of events; t, treatment used.

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Appendix 15 Subgroup analysis for intact membranes compared with ruptured membranes

Outcome: vaginal delivery not achieved within 24 hours

FIGURE 23 Network for intact membranes only. Treatments are numbered as follows: 1, no treatment; 2, vaginal PGE_2 (tablet); 3, vaginal PGE_2 (gel); 4, vaginal PGE_2 pessary (slow release); 5, intracervical PGE_2; 6, vaginal PGE_2 pessary (normal release); 7, vaginal misoprostol (dose $< 50\,\mu g$); 8, vaginal misoprostol (dose $\geq 50\,\mu g$); 9, oral misoprostol tablet (dose $\geq 50\,\mu g$); 10, titrated (low-dose) oral misoprostol solution; 11, i.v. oxytocin; 12, i.v. oxytocin plus amniotomy; 13, mechanical methods – Foley catheter; 14, mechanical methods – double-balloon or Cook's catheter; 15, buccal/sublingual misoprostol.

TABLE 68 Model fit and heterogeneity for intact membranes: VD 24 hours

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 118	119.9	0.42 (0.27 to 0.60)	750
REs inconsistency: 118	119.1	0.43 (0.24 to 0.66)	756.6

a Residual deviance.

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Outcome: vaginal delivery not achieved in 24 hours

FIGURE 24 Network for ruptured membranes only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (gel); 4, vaginal PGE_2 pessary (slow release); 5, intracervical PGE_2; 6, vaginal misoprostol (dose < 50 µg); 7, vaginal misoprostol (dose ≥ 50 µg); 8, oral misoprostol tablet (dose < 50 µg); 9, oral misoprostol tablet (dose ≥ 50 µg); 10, titrated (low-dose) oral misoprostol solution; 11, i.v. oxytocin; 12, mifepristone.

TABLE 69 Model fit and heterogeneity for ruptured membranes: VD 24 hours

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 34	35.42	0.90 (0.08 to 2.38)	199.8

a Residual deviance.

Note: The REs inconsistency model would not compile.

Outcome: caesarean section

FIGURE 25 Network for intact membranes only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (dose < 50 µg); 10, vaginal misoprostol (dose ≥ 50 µg); 11, oral misoprostol tablet (dose < 50 µg); 12, oral misoprostol tablet (dose ≥ 50 µg); 13, titrated (low-dose) oral misoprostol solution; 14, i.v. oxytocin; 15, amniotomy; 16, i.v. oxytocin plus amniotomy; 17, NO; 18, mifepristone; 19, oestrogens; 20, corticosteroids; 21, relaxin; 22, hyaluronidase; 23, mechanical methods – Foley catheter; 24, mechanical methods – laminaria; 25, mechanical methods – double-balloon or Cook's catheter; 26, membrane sweeping; 27, extra-amniotic PGE_2; 28, i.v. prostaglandin; 29, sexual intercourse; 30, acupuncture; 31, buccal/sublingual misoprostol.

TABLE 70 Model fit and heterogeneity for intact membranes: CS

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 335	346.2	0.1823 (0.008 to 0.32)	1890
REs inconsistency: 335	340.1	0.2 (0.04 to 0.36)	1928

a Residual deviance.

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FIGURE 26 Network for ruptured membranes only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 tablet; 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (dose <50 µg); 10, vaginal misoprostol (dose ≥ 50 µg); 11, oral misoprostol tablet (dose <50 µg); 12, oral misoprostol tablet (dose ≥ 50 µg); 13, titrated (low-dose) oral misoprostol solution; 14, i.v. oxytocin; 15, mifepristone; 16, mechanical methods – Foley catheter; 17, acupuncture.

TABLE 71 Model fit and heterogeneity for ruptured membranes: CS

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 98	87.02	0.11 (0.004 to 0.297)	520.4
REs inconsistency: 98	87.19	0.11 (0.007 to 0.324)	529.9

a Residual deviance.

Outcome: Apgar score < 7 at 5 minutes

Subgroup analysis for women with low Bishop score (< 6) or higher Bishop score (≥ 6)

FIGURE 27 Network for intact membranes only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose < 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, i.v. oxytocin; 14, amniotomy; 15, i.v. oxytocin plus amniotomy; 16, NO; 17, mifepristone; 18, mechanical methods – Foley catheter; 19, mechanical methods – laminaria; 20, mechanical methods – double-balloon or Cook's catheter; 21, membrane sweeping; 22, i.v. prostaglandin; 23, sexual intercourse; 24, acupuncture; 25, oral prostaglandins; 26, buccal/sublingual misoprostol.

TABLE 72 Model fit and heterogeneity for intact membranes: Apgar score < 7 at 5 minutes

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 205	230.8	0.36 (0.01 to 0.898)	762
REs inconsistency: 205	209.9	0.47 (0.03 to 1.34)	760

a Residual deviance.

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Subgroup analysis for women with low Bishop score (< 6) or higher Bishop score (≥ 6)

Outcome: vaginal delivery not achieved within 24 hours

FIGURE 28 Network for unfavourable cervix only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose < 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, NO; 16, mifepristone; 17, mechanical methods – Foley catheter; 18, mechanical methods – double-balloon or Cook's catheter; 19, buccal/sublingual misoprostol.

TABLE 73 Model fit and heterogeneity for unfavourable cervix: VD not achieved in 24 hours

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 221	233.5	0.59 (0.47 to 0.73)	1429
REs inconsistency: 221	225.8	0.53 (0.38 to 0.70)	1429

a Residual deviance.

FIGURE 29 Network for favourable cervix only. Treatments are numbered as follows: 1, vaginal PGE_2 (tablet); 2, vaginal PGE_2 (gel); 3, oral misoprostol tablet (dose ≥ 50 µg); 4, titrated (low-dose) oral misoprostol solution; 5, i.v. oxytocin; 6, i.v. oxytocin plus amniotomy; 7, buccal/sublingual misoprostol.

Outcome: caesarean section

FIGURE 30 Network for unfavourable cervix only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, PGF_2 gel; 7, intracervical PGE_2; 8, vaginal PGE_2 pessary (normal release); 9, vaginal misoprostol (dose < 50 µg); 10, vaginal misoprostol (dose ≥ 50 µg); 11, oral misoprostol tablet (dose < 50 µg); 12, oral misoprostol tablet (dose ≥ 50 µg); 13, titrated (low-dose) oral misoprostol solution; 14, sustained-release misoprostol insert; 15, i.v. oxytocin; 16, i.v. oxytocin plus amniotomy; 17, NO; 18, mifepristone; 19, oestrogens; 20, relaxin; 21, hyaluronidase; 22, mechanical methods – Foley catheter; 23, mechanical methods – laminaria; 24, mechanical methods – double-balloon or Cook's catheter; 25, membrane sweeping; 26, extra-amniotic PGE_2; 27, acupuncture; 28, i.v. prostaglandin.

TABLE 74 Model fit and heterogeneity for unfavourable cervix: CS

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 429	440	0.2 (0.09 to 0.3)	2461
REs inconsistency: 429	440.7	0.19 (0.05 to 0.32)	2505

a Residual deviance.

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FIGURE 31 Network for favourable cervix only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (normal release); 6, oral misoprostol tablet (dose $\geq 50\,\mu g$); 7, titrated (low-dose) oral misoprostol solution; 8, i.v. oxytocin; 9, amniotomy; 10, i.v. oxytocin plus amniotomy; 11, corticosteroids; 12, relaxin, 13; buccal/sublingual misoprostol.

TABLE 75 Favourable cervix only

Number of data points	totresdev[a]	Between-study SD: posterior mean (95% CrI)	DIC
REs consistency: 20	19.8	1.17 (0.04 to 4.23)	110.4
REs inconsistency: 20	19.77	1.05 (0.03 to 3.49)	110.4

a Residual deviance.

Outcome: Apgar score < 7 at 5 minutes

FIGURE 32 Network for unfavourable cervix only. Treatments are numbered as follows: 1, no treatment; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose < 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, NO; 16, mifepristone; 17, mechanical methods – Foley catheter; 18, mechanical methods – laminaria; 19, mechanical methods – double-balloon or Cook's catheter; 20, membrane sweeping; 21, extra-amniotic PGE_2; 22, acupuncture; 23, oral prostaglandins; 24, buccal/sublingual misoprostol.

FIGURE 33 Network for favourable cervix only. Treatments are numbered as follows: 1, no treatment; 2, vaginal PGE_2 (tablet); 3, vaginal PGE_2 (gel); 4, vaginal PGE_2 pessary (normal release); 5, oral misoprostol tablet (dose ≥ 50 µg); 6, amniotomy; 7, i.v. oxytocin plus amniotomy; 8, corticosteroids; 9, buccal/sublingual misoprostol.

Model would not converge because of sparse network and small number of events on some arms.

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Appendix 16 Joint estimation of intervention efficacy for use in economic model

After induction of labour there are three mutually exclusive outcomes that can occur: VD within 24 hours (VD24), VD after 24 hours (VD > 24) and CS. If a study reports all outcomes then we can jointly estimate the probability of each of these outcomes using a multinomial likelihood, which ensures that the three outcome probabilities sum to 1. However, not all of our included studies report all of these outcomes. Restricting to only studies that report all three outcomes substantially reduces the number of studies that are included to 86. In order to include as many studies as possible, we note that the multinomial likelihood with three outcomes can be written as two conditionally independent binomial likelihoods. We therefore first estimate the relative effects (ORs) for CS using the NMA presented in *Chapter 3* (including 307 studies). Then, conditional on not having a CS, we estimate the relative effects (ORs) for a VD within 24 hours compared with after 24 hours, in an additional NMA performed specifically for the economic model (including 86 studies – see below). Care is required to ensure that the correct denominator (number of women who did not have a CS) is used in this analysis.

Given estimates of the probability of (1) a VD within 24 hours and (2) CS conditional on failure to achieve a VD in 24 hours, for the reference treatment, *ref*, we can apply the ORs estimated in the NMA to obtain probabilities for these outcomes for any intervention k using the relationship: log–odds (probability (k)) = log–odds (probability(ref)) + log–odds ratio.

We can then find the overall p(VD24) = (1 – p(CS)) x p(VD24 given no CS). The probability of a VD in > 24 hours, p(VD > 24), can be computed as p(VD > 24) = 1 – p(VD24) – p(CS).

For the additional NMA for a VD within 24 hours given no CS, after excluding trials with zero events in all arms and those that did not report both CS and failure to deliver vaginally within 24 hours, 86 trials of 21 interventions were incorporated, including placebo and no intervention comparisons. The network plot is shown in *Figure 34*.

For the additional NMA for a VD within 24 hours given no CS, in the subgroup of women with intact membranes only, 33 trials of 13 interventions were included. The network plot is shown in *Figure 35*.

For the additional NMA for a VD within 24 hours given no CS in the subgroup of women with an unfavourable cervix only, 63 trials of 19 interventions were incorporated, including placebo and no intervention. The network plot is shown in *Figure 36*.

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FIGURE 34 Vaginal delivery within 24 hours, given no CS. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials comparing directly each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). Interventions are numbered as follows: 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose < 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, i.v. oxytocin plus amniotomy; 16, NO; 17, mifepristone; 18, mechanical methods – Foley catheter; 19, mechanical methods – double-balloon or Cook's catheter; 20, extra-amniotic PGE_2; 21, buccal/sublingual misoprostol.

FIGURE 35 Subgroup analysis (i): women with intact membranes only. VD within 24 hours, given no CS. Network diagram of all of the studies included in analysis. The width of the lines is proportional to the number of trials comparing directly each pair of interventions. The size of each node is proportional to the number of randomised participants (sample size). Interventions are numbered as follows: 1, vaginal PGE_2 (tablet); 2, vaginal PGE_2 (gel); 3, vaginal PGE_2 pessary (slow release); 4, intracervical PGE_2; 5, vaginal PGE_2 pessary (normal release); 6, vaginal misoprostol (dose < 50 µg); 7, vaginal misoprostol (dose ≥ 50 µg); 8, oral misoprostol tablet (dose ≥ 50 µg); 9, titrated (low-dose) oral misoprostol solution; 10, i.v. oxytocin plus amniotomy; 11, mechanical methods – Foley catheter; 12, mechanical methods – double-balloon or Cook's catheter; 13, buccal/sublingual misoprostol.

FIGURE 36 Subgroup analysis (ii): women with an unfavourable cervix only. VD within 24 hours given no CS. Network diagram of all of the studies included in analysis. Interventions are numbered as follows: 1, no intervention; 2, placebo; 3, vaginal PGE_2 (tablet); 4, vaginal PGE_2 (gel); 5, vaginal PGE_2 pessary (slow release); 6, intracervical PGE_2; 7, vaginal PGE_2 pessary (normal release); 8, vaginal misoprostol (dose < 50 µg); 9, vaginal misoprostol (dose ≥ 50 µg); 10, oral misoprostol tablet (dose < 50 µg); 11, oral misoprostol tablet (dose ≥ 50 µg); 12, titrated (low-dose) oral misoprostol solution; 13, sustained-release misoprostol insert; 14, i.v. oxytocin; 15, NO; 16, mifepristone; 17, mechanical methods – Foley catheter; 18, mechanical methods – double-balloon or Cook's catheter; 19, buccal/sublingual misoprostol.

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Appendix 17 Review of economic evidence

The economic search strategy is shown below for The Cochrane Library. The same strategy was translated for the other databases searched. *Table 76* gives a list of excluded studies for model inputs for utilities, with reasons.

ID	Search	Hits
#1	MeSH descriptor: [Pregnancy] explode all trees	5896
#2	MeSH descriptor: [Pregnancy Complications] explode all trees	8008
#3	MeSH descriptor: [Infant, Newborn] explode all trees	13,392
#4	MeSH descriptor: [Maternal Health Services] explode all trees	1652
#5	MeSH descriptor: [Maternal-Child Nursing] explode all trees	194
#6	MeSH descriptor: [Perinatal Care] explode all trees	436
#7	pregnan* (Word variations have been searched)	31,254
#8	birth or childbirth	16,329
#9	labour or laboring	4572
#10	labour*	4470
#11	caesar*	3126
#12	cesar*	6306
#13	obstetric*	26,797
#14	matern*	12,662
#15	(#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14)	64,641
#16	Economics	23,886
#17	(exp "Costs and Cost Analysis")	15
#18	exp Models, Economic	662
#19	Decision Trees	2207
#20	econom$	12
#21	cba	404
#22	cea	861
#23	cua	70
#24	(monteadjcarlo)	30
#25	(decision adj3 (tree$ or analys$))	90
#26	(cost or costs or costing$ or costly or costed)	60,137
#27	#16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26	63,745
#28	"Quality of Life"	43,721
#29	quality of life	50,815
#30	"Value of Life"	168
#31	Quality-Adjusted Life Years	6281
#32	quality adjusted life	10,178
#33	(qaly$ or qald$ or qale$ or qtime$)	3670

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ID	Search	Hits
#34	Health Status Indicators	2532
#35	(sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortformthirtysix or shortform thirty six or short form thirtysix or short form thirty six)	9841
#36	sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six	11718
#37	sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve	9713
#38	sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen	6468
#39	sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty	7651
#40	euroqol or euro qol or eq5d or eq 5d	2773
#41	qol or hql or hqol or hrqol	7840
#42	hye or hyes	53
#43	health$ year$ equivalent$	2861
#44	utilit*	11,896
#45	hui or hui1 or hui2 or hui3	1263
#46	disutili*	205
#47	quality of well-being	996
#48	quality of well-being	3585
#49	qwb	68
#50	willingness-to-pay	1337
#51	standard gamble$	528
#52	time trade-off	66
#53	time trade-off	939
#54	tto	95
#55	#28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54	67,456
#56	#27 or #55	109,206
#57	#15 and #27	8908
#58	#56 and #57	8908

ID, search line number identifier; MeSH, medical subject heading.

TABLE 76 Excluded studies from the review of utility studies

Study	NICU	VD	Emergency CS	How derived	Reason for inclusion/exclusion
Chung *et al.* 2001 Cost-effectiveness of a trial of labour after previous cesarean. *Obstet Gynecol* **97**:932–41	Neonatal health state: no/mild or moderate morbidity – 1, range: 0.9–1	Successful trial of labour – per diem disutility of 0.35 for 7 days	Elective repeat caesarean delivery – per diem disutility of 0.45 over 21 days	Quality of Well-being classification system	Excluded, as utilities not elicited from patients
Wymer *et al.* 2014 The cost-effectiveness of a trial of labour accrues with multiple subsequent vaginal deliveries. *Am J Obstet Gynecol* **211**:211:e.1–56.e12	0.92, range 0.88–0.96	0.9973, range 0.9919–0.9987	0.9954, range 0.9931–0.9977	NICU admission from Hamel 2000; VD and CS from Plunkett and Grobman 2005	Excluded, as no utilities measured, utilities taken from excluded studies
Hamel *et al.* 2000 Outcomes and cost-effectiveness of ventilator support and aggressive care for patients with acute respiratory failure due to pneumonia or acute respiratory distress syndrome. *Am J Med* **109**:614–20	ICU utility – median: 0.92; 25th, 75th percentile 0.92, 1			Time trade-off by 225 patients with acute respiratory failure	Excluded due to wrong patient population
Kaimal *et al.* 2011[12] Cost-effectiveness of elective induction of labor at 41 weeks in nulliparous women. *Am J Obstet Gynecol* 2011;**204**:137.e1–9		VD – 1	Caesarean delivery – 0.99 (0.9–1.0)	Vaginal assumed. CS assumed from Caughey *et al.*[975] no utilities given in paper	Excluded as no utilities measured, unclear where utility values taken from
Fawsitt *et al.* 2013 At what price? A cost-effectiveness analysis comparing trial of labour after previous caesarean versus elective repeat cesarean delivery. *PLOS ONE* **8**:e58577		Successful trial of labour – 0.41 for 7 days	Emergency CS – 0.58 for 21 days	Adapted from Chung *et al.* 2001	Excluded, as no utilities measured, utilities taken from excluded studies

continued

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TABLE 76 Excluded studies from the review of utility studies (*continued*)

Study	NICU	VD	Emergency CS	How derived	Reason for inclusion/exclusion
Ohno *et al.* 2011 Treating mild gestational diabetes mellitus: a cost-effectiveness analysis. *Am J Obstet Gynecol* **205**:282.e1–7	NICU admission – 1	VD – 1	Caesarean delivery – 0.99	VD assumed, CS assumed based on Caughey *et al.* 2006, NICU assumed	Excluded, as no utilities measured
Tan *et al.* 2010 Cost-effectiveness of external cephalic version for term breech presentation. *BMC Pregnancy Childbirth* **10**:3	0.76/0.75 – derived from an assumed 2-day ICU or NICU stay at a utility of 0.17 and 0.20, respectively, for mother and child, followed by utility of 0.60 for the subsequent 2 weeks post delivery and a utility of 0.77 for the following 8 weeks until return to perfect health	0.86 – based on the first 7 days at a utility of 0.50 and the remainder of the 6 weeks for recovery at a utility of 0.77 Assumed that the mother would subsequently return to perfect health at a utility of 1.00	0.78 – based on the first 21 days at a utility of 0.41 and the remainder of the 8 weeks for recovery at a utility of 0.77 Assumed that the mother would subsequently return to perfect health at a utility of 1.00	Estimated through observation and simulation of a mother and child experiencing each of the four health states used in the model	Excluded, as utilities not elicited from patients
Gilbert *et al.* 2013 Cost-effectiveness of trial of labor after previous cesarean in a minimally biased cohort. *Am J Perinatol* **30**:11–20		Successful trial of labour – per diem disutility of 0.35 for 7 days	Elective Repeat Caesarean Delivery – per diem disutility of 0.45 over 21 days	From Chung *et al.* 2001	Excluded as no utilities measured, utilities taken from excluded studies
Culligan *et al.* 2005 Elective cesarean section to prevent anal incontinence and brachial plexus injuries associated with macrosomia: a decision analysis. *Int Urogynecol J* **16**:19–28		Uncomplicated VD and healthy child – 1, range: 0.9–1, VD including first or second degree episiotomy that heals normally and healthy child – 0.995, range: 0.90–1		Assigned by a panel of five experts	Excluded, because of lack of instrument to value health states
Xu *et al.* 2010 Pelvic floor consequences of caesarean delivery on maternal request in women with a single birth: a cost-effectiveness analysis. *J Women Health* **19**:147–60	Admission to neonatal nursery – 0.99, range 0.70–0.99	VD – 0.92, range 0.69–1.00	Emergency CS – 0.59, range 0.44–0.74	From Pham and Crowther and Vandenbussche 1999; from Turner *et al.* 2008	Excluded, as no utilities measured, utilities taken from other studies

Appendix 18 Elicitation of utilities

Visual analogue scale

The VAS consists of a single line with anchors representing best possible health and death (or some alternative). Respondents are asked to place each health state on the line, such that the intervals between the placements reflect their perceived differences between the health states. Our VAS depicted a 10-point horizontal line ranging from 'worst imaginable health state' (lower anchor) to 'best imaginable health state' (upper anchor). Each respondent was asked to draw a horizontal line on the VAS to indicate where they thought the described maternal and neonatal health states should be positioned, taking the top and bottom anchors into consideration.

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Utility elicitation questionnaire

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate your health if you had:

- Light bleeding from the vagina
- Some soreness
- Slightly reduced to normal mobility

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate your health if you had:

- A urinary catheter
- Soreness, bruising and numbness
- Problems with incontinence
- Slightly reduced to normal mobility

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate your health if you had:

- Restricted mobility
- Pain requiring painkillers
- A urinary catheter
- Inability to drive, carry heavy things
- A wound that required cleaning and drying daily

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate *your* health if you had:

1. A baby who had serious potential health problems and was on the neonatal intensive care unit, on a ventilator and needed constant care to be kept alive.

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

2. Please place a mark on the scale to indicate how you would rate *your baby's* health

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate *your* health if you had:

- A baby who was recovering from critical illness and in the high-dependency unit, and needed a great deal of observation and support such as breathing via continuous positive airway pressure or intravenous feeding.

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

3. Please place a mark on the scale to indicate how you would rate *your baby's* health

Worst imaginable health state | | | | | | | | | | | **Best imaginable**

The continuous scale below goes from the worst health state you can imagine to the best. Please place a mark on the scale to indicate how you would rate *your* health if you had:

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- A baby who needed some medical treatment but was well enough to be cared for at your bedside.

Worst imaginable health state											**Best imaginable**

4. Please place a mark on the scale to indicate how you would rate *your baby's* health

Worst imaginable health state											**Best imaginable**

Statistical analysis

The responses for each of the 10 respondents are plotted in *Figure 37*. Overall utility scores are very variable across respondents, but similar patterns are seen between health states. We fitted a normal distribution to the utility scores for the first state (VD from the mother's perspective), giving an estimated mean score 0.65, across respondents, and estimated between respondent SD of 2.05. Then for each of the other health states we estimate the mean difference in score relative to state 1 (VD from the mother's perspective) and between-respondent SD in these differences. Modelling differences in this way accounts for the variability between respondents and allows for correlations between scores from the same respondent. Adding the estimated mean difference to the mean score for health state 1 gives an absolute score for each health state, and dividing by 10 gives a value on the interval 0–1. The OpenBUGS code is given below.

Table 77 shows how the utility scores from the questions in the VAS questionnaire are combined to obtain the utility scores for the health states required in our model. Note that to obtain the utility scores for the mother's perspective only the first term is used for each state, whereas for the utilities from the baby's perspective only the second term is used for each state.

FIGURE 37 Utility scores from the VAS questionnaire. Each line represents a different respondent. The health states valued are given on the *x*-axis, where CS = caesarean section, IC = intensive care, HD = high dependency, TC = transitional care. 'Mother' indicates the perspective of the mother, and 'Baby' indicates the perspective of the baby. If not specified then score represents the perspective of the mother.

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TABLE 77 Derivation of the utilities for each health state as functions of the estimated utility from the VAS questionnaire (numbered 1–9 as indicated in *Figure 37*). Each state is a sum of the utility from the mother's perspective and the utility from the baby's perspective

Health state	Derivation
VD with no neonatal complications	utility1 + 1
Emergency CS with no neonatal complications	utility3 + 1
VD with transitional care	utility1*utility8 + utility9
VD with intensive care	utility1*utility6 + utility7
VD with high-dependency care	utility1*utility4 + utility5
Emergency CS with transitional care	utility3*utility8 + utility9
Emergency CS with intensive care	utility3*utility6 + utility7
Emergency CS with high-dependency care	utility3*utility4 + utility5

OpenBUGS Code for analysis of utility scores from visual analogue scale questionnaire

```
model{

for (i in 1:10){
      x[1,i]~dnorm(theta[1],prec[1])      #Vaginal Delivery outcome
likelihood
      for (j in 2:9){
            x[j,i]~dnorm(mu[i,j],prec[j]) #Other outcomes likelihood
            mu[i,j]<-x[1,i] + d[j]                # d[j] = mean difference
for outcome j compared to outcome 1, allowing for individual correlations
      }
}

theta[1]~dnorm(0,.001)
for (j in 2:9){
      theta[j]<-theta[1]+d[j]       #Estimated mean utility for outcome j
      d[j]~dnorm(0,.001)                        #prior for d's
}

for (j in 1:9){
      prec[j]<-pow(sd[j],-2)
      sd[j]~dunif(0,5)                    #prior for sd's

      utility[j]<-theta[j]/10             #utilities for each outcome
}

#Derive utility scores for health states in model (Table B.1)
VD<-utility[1]+1
VD.TC<-(utility[1]*utility[8]) + utility[9]
VD.HD<-(utility[1]*utility[6]) + utility[7]
VD.IC<-(utility[1]*utility[4]) + utility[5]

CS<-utility[3] + 1
CS.TC<-(utility[3]*utility[8]) + utility[9]
CS.HD<-(utility[3]*utility[6]) + utility[7]
CS.IC<-(utility[3]*utility[4]) + utility[5]


}

#DATA
#Note column=respondent i, row=health outcome, j as defined in Fig. B.1
x[,1] x[,2] x[,3] x[,4] x[,5] x[,7] x[,8] x[,9] x[,10]
8     7.5   5.5   4.5   4.1   9.5   6.1   6.5   7     7.6
5.5   5.5   3.7   3.5   3.1   9.1   4.1   3.85  6     6.5
3.8   3.5   2.5   2.8   2.1   8.6   2.1   2.5   6     5.2
4.8   2.5   0.5   0.5   0.1   4     5.1   5.25  3     8.2
1.2   1.5   0.5   0.5   0.1   2     1.1   2.8   3     1.3
5.2   3.5   2.1   0.5   0.1   6     6.1   5.25  4     8.3
1     1.5   2.1   0.5   1.1   4     2.1   4.8   4     2.4
6.6   7.5   7.5   3.5   2.1   8     7.1   6.8   8     9.6
4.1   5.5   7.6   3.5   2.1   7.5   5.1   5.5   8     6.7
END

#INITIAL VALUES
list(theta=c(5,NA,NA,NA,NA,   NA,NA,NA,NA), sd=c(1,1,1,1,1, 1,1,1,1),
d=c(NA, 2, 2, 2, 2,     2,2,2,2))

list(theta=c(8,NA,NA,NA,NA,   NA,NA,NA,NA), sd=c(2,3,1,0.5,1.5,
      2,1.5,2,3), d=c(NA, 5, 4, 2, 3,     1,3,4,5))
```

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