# Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review)

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# TABLE OF CONTENTS

ABSTRACT	]
PLAIN LANGUAGE SUMMARY	2
BACKGROUND	2
OBJECTIVES	3
CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW	3
SEARCH METHODS FOR IDENTIFICATION OF STUDIES	4
METHODS OF THE REVIEW	4
DESCRIPTION OF STUDIES	5
METHODOLOGICAL QUALITY	7
RESULTS	8
DISCUSSION	11
AUTHORS' CONCLUSIONS	11
FEEDBACK	12
POTENTIAL CONFLICT OF INTEREST	12
ACKNOWLEDGEMENTS	12
SOURCES OF SUPPORT	12
REFERENCES	12
TABLES	17
Characteristics of included studies	17
Characteristics of excluded studies	23
ANALYSES	24
Comparison 01. Any planned versus expectant management: by type	24
Comparison 02. Any planned versus expectant management: by parity	25
Comparison 03. Oxytocin versus expectant management/placebo: by parity	25
Comparison 04. Prostaglandin versus expectant management/placebo: by parity	26
Comparison 05. Caulophyllum versus placebo: by parity	27
Comparison 05. Cathophynum versus placebo: by parity	27
Comparison 06. Digital vaginal exam: planned versus expectant management	27
	27
Comparison 08. Maternal antibiotic prophylaxis: planned versus expectant management	,
Comparison 09. Quality (excluding trials with inadequate allocation concealment): planned versus expectant managment	28
Comparison 10. Blinding: planned versus expectant management	28
INDEX TERMS	28
COVER SHEET	29
GRAPHS AND OTHER TABLES	30
Analysis 01.01. Comparison 01 Any planned versus expectant management: by type, Outcome 01 Maternal mortality	30
Analysis 01.02. Comparison 01 Any planned versus expectant management: by type, Outcome 02 Caesarean section	30
Analysis 01.03. Comparison 01 Any planned versus expectant management: by type, Outcome 03 Chorioamnionitis	32
Analysis 01.04. Comparison 01 Any planned versus expectant management: by type, Outcome 04 Endometritis	33
Analysis 01.05. Comparison 01 Any planned versus expectant management: by type, Outcome 05 Postpartum fever	34
Analysis 01.07. Comparison 01 Any planned versus expectant management: by type, Outcome 07 Induction of labour	35
Analysis 01.08. Comparison 01 Any planned versus expectant management: by type, Outcome 08 Vaginal birth	36
Analysis 01.09. Comparison 01 Any planned versus expectant management: by type, Outcome 09 Operative vaginal birth	37
Analysis 01.10. Comparison 01 Any planned versus expectant management: by type, Outcome 10 Use of epidural anaesthesia	38
Analysis 01.11. Comparison 01 Any planned versus expectant management: by type, Outcome 11 Uterine rupture .	39
Analysis 01.11. Comparison 01 Any planned versus expectant management: by type, Outcome 12 Antenatal hospital stay	39
Analysis 01.12. Comparison 01 Any planned versus expectant management: by type, Outcome 13 Postnatal hospital stay	40
Analysis 01.14. Comparison 01 Any planned versus expectant management: by type, Outcome 14 Maternal satisfaction:	41
nothing liked	7.1

Analysis 01.1). Comparison 01 Any planned versus expectant management: by type, Outcome 15 Maternal satisfaction:	42
nothing disliked	, .
Analysis 01.18. Comparison 01 Any planned versus expectant management: by type, Outcome 18 Breastfeeding	43
Analysis 01.19. Comparison 01 Any planned versus expectant management: by type, Outcome 19 Fetal/perinatal	43
mortality	
Analysis 01.20. Comparison 01 Any planned versus expectant management: by type, Outcome 20 Cord prolapse .	44
Analysis 01.21. Comparison 01 Any planned versus expectant management: by type, Outcome 21 Gestational age at	45
birth	
Analysis 01.22. Comparison 01 Any planned versus expectant management: by type, Outcome 22 Time from rupture of	46
membranes to birth	
Analysis 01.24. Comparison 01 Any planned versus expectant management: by type, Outcome 24 Apgar score < 7 at 5	47
minutes	
Analysis 01.25. Comparison 01 Any planned versus expectant management: by type, Outcome 25 Mechanical ventilation	48
Analysis 01.26. Comparison 01 Any planned versus expectant management: by type, Outcome 26 Birthweight	49
Analysis 01.27. Comparison 01 Any planned versus expectant management: by type, Outcome 27 Neonatal infection	50
Analysis 01.28. Comparison 01 Any planned versus expectant management: by type, Outcome 28 Neonatal intensive	51
care unit or special care nursery admission	,
	<i>-</i>
Analysis 01.29. Comparison 01 Any planned versus expectant management: by type, Outcome 29 Length of stay in	52
neonatal intensive care unit	
Analysis 01.35. Comparison 01 Any planned versus expectant management: by type, Outcome 35 Time from rupture of	52
membranes to birth: other data	
Analysis 02.01. Comparison 02 Any planned versus expectant management: by parity, Outcome 01 Caesarean section	53
Analysis 02.02. Comparison 02 Any planned versus expectant management: by parity, Outcome 02 Chorioamnionitis	54
Analysis 02.03. Comparison 02 Any planned versus expectant management: by parity, Outcome 03 Endometritis .	55
Analysis 02.04. Comparison 02 Any planned versus expectant management: by parity, Outcome 04 Postpartum fever	56
Analysis 02.05. Comparison 02 Any planned versus expectant management: by parity, Outcome 05 Induction of labour	57
Analysis 02.06. Comparison 02 Any planned versus expectant management: by parity, Outcome 06 Vaginal birth .	58
Analysis 02.07. Comparison 02 Any planned versus expectant management: by parity, Outcome 07 Operative vaginal	59
birth	
Analysis 02.08. Comparison 02 Any planned versus expectant management: by parity, Outcome 08 Use of epidural	60
anaesthesia	
Analysis 02.09. Comparison 02 Any planned versus expectant management: by parity, Outcome 09 Fetal/perinatal	61
mortality	
Analysis 02.10. Comparison 02 Any planned versus expectant management: by parity, Outcome 10 Cord prolapse .	62
Analysis 02.11. Comparison 02 Any planned versus expectant management: by parity, Outcome 11 Time from rupture	63
of membranes to birth (hours)	0.
Analysis 02.12. Comparison 02 Any planned versus expectant management: by parity, Outcome 12 Apgar score < 7 at 5	64
minutes	0-
	(5
Analysis 02.13. Comparison 02 Any planned versus expectant management: by parity, Outcome 13 Mechanical	65
ventilation (after initial resuscitation)	
Analysis 02.14. Comparison 02 Any planned versus expectant management: by parity, Outcome 14 Birthweight	66
Analysis 02.15. Comparison 02 Any planned versus expectant management: by parity, Outcome 15 Neonatal infection	67
Analysis 02.16. Comparison 02 Any planned versus expectant management: by parity, Outcome 16 Neonatal intensive	68
care unit or special care nursery admission	
Analysis 03.01. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 01 Caesarean	69
section	
Analysis 03.02. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 02	70
Chorioamnionitis	
Analysis 03.03. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 03 Endometritis	71
Analysis 03.04. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 04 Postpartum	72
fever	
Analysis 03.05. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 05 Induction of	73
labour	, .

Analysis 03.06. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 06 Vaginal birth	1/4
Analysis 03.07. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 07 Operative	7:
vaginal birth	
Analysis 03.08. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 08 Maternal satisfaction: nothing liked	70
Analysis 03.09. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 09 Maternal	77
satisfaction: nothing disliked	
Analysis 03.10. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 10 Breastfeeding	78
Analysis 03.11. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 11 Fetal/perinatal	79
mortality	
Analysis 03.12. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 12 Cord prolapse	80
Analysis 03.13. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 13 Time from	8
rupture of membranes to birth (hours)	0.
Analysis 03.14. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 14 Apgar score < 7	82
at 5 mins	0.2
Analysis 03.15. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 15 Mechanical	83
ventilation (after initial resuscitation)	0.
Analysis 03.16. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 16 Birthweight	84
	8
Analysis 03.17. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 17 Neonatal	0,
infection	0.4
Analysis 03.18. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 18 Neonatal	80
intensive care unit or special care nursery admission	0.7
Analysis 04.01. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 01 Caesarean	87
section	0.0
Analysis 04.02. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 02	88
Chorioamnionitis	0.0
Analysis 04.03. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 03	89
Endometritis	
Analysis 04.04. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 04 Postpartum	90
fever	
Analysis 04.05. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 05 Induction	9
of labour	_
Analysis 04.06. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 06 Vaginal	92
birth	
Analysis 04.07. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 07 Operative	93
vaginal birth	
Analysis 04.08. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 08 Use of	94
epidural anaesthesia	
Analysis 04.09. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 09 Uterine	9
rupture	
Analysis 04.10. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 10 Maternal	90
satisfaction: nothing liked	
Analysis 04.11. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 11 Maternal	97
satisfaction: nothing disliked	
Analysis 04.12. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 12 Fetal/	98
perinatal mortality	
Analysis 04.13. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 13 Cord	99
prolapse	
Analysis 04.14. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 14 Time	100
from rupture of membranes to birth (hours)	
Analysis 04.15. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 15 Apgar	101
score < 7 at 5 minutes	

Analysis 04.16. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 16  Mechanical ventilation (after initial resuscitation)	102
Analysis 04.17. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 17	103
Birthweight	104
infection	104
Analysis 04.19. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 19 Neonatal	105
intensive care unit or special care nursery admission	105
	106
Analysis 04.20. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 20 Length of	106
stay in neonatal intensive care unit	40=
Analysis 05.01. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 01 Caesarean section	107
Analysis 05.02. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 02 Induction of labour	108
Analysis 05.03. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 03 Vaginal birth	109
Analysis 05.04. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 04 Operative vaginal birth	110
Analysis 05.05. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 05 Use of epidural anaesthesia .	111
Analysis 05.06. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 06 Time from rupture of membranes	112
to birth (hours)	
Analysis 06.01. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 01	113
Chorioamnionitis	
Analysis 06.02. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 02 Endometritis	114
Analysis 06.03. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 03 Neonatal	115
infection	
Analysis 07.01. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 01	116
Caesarean section	
Analysis 07.02. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 02	117
Chorioamnionitis	/
Analysis 07.03. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 03	118
Endometritis	110
Analysis 07.04. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 04	119
Postpartum fever	11)
Analysis 07.05. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 05	120
Induction of labour	120
Analysis 07.06. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 06	121
· · · · · · · · · · · · · · · · · · ·	121
Vaginal birth	122
Analysis 07.07. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 07	122
Operative vaginal birth	100
Analysis 07.08. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 08	123
Use of epidural anaesthesia	
Analysis 07.09. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 09	124
Time of rupture of membranes to birth (hours)	
Analysis 07.10. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 10	125
Apgar score < 7 at 5 minutes	
Analysis 07.11. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 11	126
Birthweight	
Analysis 07.12. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 12	127
Neonatal infection	
Analysis 07.13. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 13	128
Neonatal intensive care unit or special care nursery admission	
Analysis 08.01. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 01	129
Caesarean section	
Analysis 08.02. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 02	130
Chorioamnionitis	

Analysis 08.03. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 03	131
Endometritis	
Analysis 08.04. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 04	132
Postpartum fever	
Analysis 08.05. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 05	133
Induction of labour	
Analysis 08.06. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 06	134
Vaginal birth	
Analysis 08.07. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 07	135
Operative vaginal birth	
Analysis 08.08. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 08	136
Neonatal infection	107
Analysis 09.01. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	137
expectant management, Outcome 01 Caesarean section	120
Analysis 09.02. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	138
expectant management, Outcome 02 Chorioamnionitis	120
Analysis 09.03. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	139
expectant management, Outcome 03 Endometritis	140
Analysis 09.04. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 04 Postpartum fever	140
Analysis 09.05. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	141
expectant managment, Outcome 05 Induction of labour	171
Analysis 09.06. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	142
expectant managment, Outcome 06 Vaginal birth	172
Analysis 09.07. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	143
expectant managment, Outcome 07 Operative vaginal birth	1 13
Analysis 09.08. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	144
expectant managment, Outcome 08 Time from rupture of membranes until birth (hours)	
Analysis 09.09. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	145
expectant managment, Outcome 09 Apgar score < 7 at 5 minutes	
Analysis 09.10. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	146
expectant managment, Outcome 10 Birthweight	
Analysis 09.11. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus	147
expectant managment, Outcome 11 Neonatal infection	
Analysis 10.01. Comparison 10 Blinding: planned versus expectant management, Outcome 01 Caesarean section .	148
Analysis 10.02. Comparison 10 Blinding: planned versus expectant management, Outcome 02 Chorioamnionitis .	149
Analysis 10.04. Comparison 10 Blinding: planned versus expectant management, Outcome 04 Postpartum fever	150
Analysis 10.05. Comparison 10 Blinding: planned versus expectant management, Outcome 05 Induction of labour .	151
Analysis 10.06. Comparison 10 Blinding: planned versus expectant management, Outcome 06 Vaginal birth	152
Analysis 10.07. Comparison 10 Blinding: planned versus expectant management, Outcome 07 Operative vaginal birth	153
Analysis 10.08. Comparison 10 Blinding: planned versus expectant management, Outcome 08 Use of epidural anaesthesia	154
Analysis 10.09. Comparison 10 Blinding: planned versus expectant management, Outcome 09 Apgar score < 7 at 5	155
minutes	
Analysis 10.10. Comparison 10 Blinding: planned versus expectant management, Outcome 10 Neonatal infection .	156
Analysis 10.11. Comparison 10 Blinding: planned versus expectant management, Outcome 11 Neonatal intensive care	157
unit or special care nursery admission	

# Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review)

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#### **ABSTRACT**

#### Background

Prelabour rupture of membranes at term is managed expectantly or by elective birth, but it is not clear if waiting for birth to occur spontaneously is better than intervening.

#### Objectives

To assess the effects of planned early birth versus expectant management for women with term prelabour rupture of membranes on fetal, infant and maternal wellbeing.

#### Search strategy

We searched the Cochrane Pregnancy and Childbirth Group Trials Register (November 2004), the Cochrane Central Register of Controlled Trials (*The Cochrane Library*, Issue 4, 2004), MEDLINE (1966 to November 2004) and EMBASE (1974 to November 2004).

#### Selection criteria

Randomised or quasi-randomised trials of planned early birth compared with expectant management in women with prelabour rupture of membranes at 37 weeks' gestation or more.

#### Data collection and analysis

Two review authors independently applied eligibility criteria, assessed trial quality and extracted data. A random-effects model was used.

#### Main results

Twelve trials (total of 6814 women) were included. Planned management was generally induction with oxytocin or prostaglandin, with one trial using homoeopathic caulophyllum. Overall, no differences were detected for mode of birth between planned and expectant groups: relative risk (RR) of caesarean section 0.94, 95% confidence interval (CI) 0.82 to 1.08 (12 trials, 6814 women); RR of operative vaginal birth 0.98, 95% 0.84 to 1.16 (7 trials, 5511 women). Significantly fewer women in the planned compared with expectant management groups had chorioamnionitis (RR 0.74, 95% CI 0.56 to 0.97; 9 trials, 6611 women) or endometritis (RR 0.30, 95% CI 0.12 to 0.74; 4 trials, 445 women). No difference was seen for neonatal infection (RR 0.83, 95% CI 0.61 to 1.12; 9 trials, 6406 infants). However, fewer infants under planned management went to neonatal intensive or special care compared with expectant management (RR 0.72, 95% CI 0.57 to 0.92, number needed to treat 20; 5 trials, 5679 infants). In a single trial, significantly more women with planned management viewed their care more positively than those expectantly managed (RR of "nothing liked" 0.45, 95% CI 0.37 to 0.54; 5031 women).

#### Authors' conclusions

Planned management (with methods such as oxytocin or prostaglandin) reduces the risk of some maternal infectious morbidity without increasing caesarean sections and operative vaginal births. Fewer infants went to neonatal intensive care under planned management although no differences were seen in neonatal infection rates. Since planned and expectant management may not be very different, women need to have appropriate information to make informed choices.

#### PLAIN LANGUAGE SUMMARY

Some evidence in favour of planned management (usually by induction) when women have prelabour rupture of membranes at term

When women's membranes rupture at or after 37 weeks' gestation without having contractions, they can choose to intervene (usually by immediate induction with oxytocin or prostaglandin) or they can wait for spontaneous labour to occur. The concern that early planned intervention might result in more caesarean and operative births was not supported in this review, which also found that fewer mothers developed infections and that fewer babies were admitted to the neonatal intensive care units than if women waited for spontaneous birth. Similar number of babies developed infections whether intervention was early or whether women waited. In one trial, women clearly preferred early planned intervention.

#### BACKGROUND

Prelabour rupture of membranes (PROM) is defined as rupture of membranes prior to the onset of labour (Duff 1998). PROM most frequently occurs at term (37 weeks or more of gestation) (Duff 1998), with the overall incidence of PROM at term being 8% (Cammu 1990). Spontaneous onset of labour after term PROM usually follows within 24 hours (Cammu 1990), with 79% of women labouring spontaneously within 12 hours, and 95% within 24 hours (Conway 1984; Zlatnik 1992). Even when the state of the cervix is unfavourable, the majority of women labour spontaneously within 24 hours (Hannah 1998). However, if the woman does not labour within 24 hours, labour may be delayed up to seven days after membrane rupture (Hannah 1998), with longer latent periods in nulliparous women (Zlatnik 1992). PROM at term may be managed expectantly or by elective birth, usually by induction of labour. Planned elective early birth is usually termed active or planned management. Expectant management involves waiting for labour to occur and then making management decisions (such as inducing labour) if labour does not happen spontaneously after a specified period.

PROM at term is known to be associated with overdistension of the uterus due to multiple pregnancy or polyhydramnios (abnormally high levels of amniotic fluid), cigarette smoking, altered mechanical properties of the amniotic membranes, frequent digital examinations, coitus and infection (Duff 1998; Hannah 1998), although it is not clear if these are causally related to PROM (Hannah 1998).

PROM may result in immediate risks such as cord prolapse, cord compression and placental abruptions; and later problems such as maternal or neonatal infection, as well as the use of interventions such as caesareans and instrumental vaginal delivery (Alexander 1996; Kong 1992; Merenstein 1996). Expectant management of term PROM has been associated with maternal infections such as chorioamnionitis (inflammations of the membranes) or endometritis (generally a postpartum infection). These infections may result in neonatal infection and mortality, chronic lung disease and cerebral palsy (Cammu 1990; Gonen 1989; Merenstein 1996; Robson 1990; Zlatnik 1992) as well as serious morbidity for the mother. Some reports have suggested that the risk of maternal and fetal infection increases proportionally with the time between membrane rupture and birth (Gafni 1997; Zlatnik 1992), while others refute this (Hannah 1998; Seaward 1997). Whether or not to induce labour may depend on the state of the cervix, with an insufficiently ripe cervix resulting in increased length of labour and failed induction requiring caesarean section (Cammu 1990; Duff 1996; Duff 1998; Yawn 2001). Uterine rupture has been reported, but only rarely. Induction of labour for women with PROM at term may incur fewer costs than expectant management (Gafni 1997). Women appear to be more satisfied with care when there is a short time between PROM and birth (Hannah 1999).

There are conflicting conclusions from literature reviews assessing PROM at term. Hallak 1999 found that with a longer interval from admission to the onset of labour, there is an increased incidence of neonatal intensive care unit admission, caesarean rates and more frequent maternal diarrhoea and use of analgesia or anaesthesia. Induction of labour is supported by a retrospective study (Johnson 1981), which reported increased perinatal mortality and intrapartum fever in women at term when there was delay of more than 72 hours between rupture of membranes and birth. Oxytocin infusion was recommended as the gold standard management of PROM at term in a recent review (Crane 2003). These results are in contrast to the findings of Guise 1992, who reported that induction of labour results in increased frequency

of chorioamnionitis, neonatal sepsis, caesarean section and longer duration of hospitalisation. Mozurkewich 1997 highlighted the risks and benefits of induction of labour, with reduced rates of chorioamnionitis, endometritis and neonatal infection, and increased number of caesarean births.

Two earlier Cochrane reviews have reported on the effect of labour induction or expectant management after 34 weeks' gestation. Tan 1996a found that induction of labour by oxytocin was associated with a decreased risk of maternal and neonatal infection and increased maternal satisfaction with care; and Tan 1996b found decreased risk of chorioamnionitis and admission to neonatal intensive care. These two reviews became outdated and have now been withdrawn from the Cochrane Database of Systematic Reviews. Another Cochrane review has found that there is insufficient evidence to assess the effects of routine use of maternal antibiotics for prelabour rupture of membranes at or near term (Flenady 2002). A Cochrane review evaluating management of women with preterm PROM between 34 and 37 weeks is currently in progress (Buchanan 2004) while our review focuses on women with prelabour rupture of membranes at term (a pregnancy of 37 weeks' gestation or more).

#### **OBJECTIVES**

The objective of this review is to assess the effects of planned early birth (immediate intervention or intervention within 24 hours) when compared with expectant management (no planned intervention within 24 hours) for women with term prelabour rupture of membranes on fetal, infant and maternal wellbeing.

# CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW

# Types of studies

Randomised and quasi-randomised trials.

#### Types of participants

Women with prelabour rupture of membranes of at least 37 weeks' gestation with no specific maternal or fetal contraindications to expectant management.

#### Types of intervention

Planned early birth was compared with expectant management (either in hospital or at home).

For an intervention to be considered 'planned early birth', a decision must be made to expedite birth after rupture of membranes through some form of induction of labour or by caesarean section. The planned intervention must have been implemented or intended to be implemented within 24 hours of randomisation.

Conversely, expectant management needed to have an intended delay of at least 24 hours.

#### Types of outcome measures

These were chosen to reflect outcomes of maternal morbidity, obstetric intervention and perinatal morbidity and mortality.

#### Maternal and birth outcomes

Maternal mortality

Caesarean section

Caesarean section for fetal distress

Chorioamnionitis (variously defined by authors)

Endometritis (variously defined by authors)

Postpartum fever (variously defined by authors)

Placental abruption

Induction of labour

Mode of induction of labour

Vaginal birth

Operative vaginal birth

Use of epidural anaesthesia

Uterine rupture

Days of antenatal hospitalisation

Days of postnatal hospitalisation

Maternal satisfaction

Views of care

Postnatal depression

Breastfeeding:

- Breastfeeding initiated in hospital
- Timing of initiation of breastfeeding (hours after birth)
- Breastfeeding at hospital discharge
- Breastfeeding at postnatal visit

#### Fetal, neonatal and infant outcomes

Mortality (stillbirth, perinatal, neonatal or infant death)

Cord prolapse

Gestational age at birth

Time from rupture of membranes to birth

Respiratory distress syndrome

Apgar score less than seven at five minutes

Use of mechanical ventilation

Days of mechanical ventilation

Birthweight

Neonatal infection/sepsis:

- Proven neonatal infection with positive blood culture up to 48 hours of birth
- Proven neonatal infection with positive blood culture 48 hours or more after birth
- Culture proven neonatal pneumonia or meningitis
- Presumed neonatal infection up to 48 hours of birth
- Presumed neonatal infection 48 hours or more after birth

Admission to neonatal intensive care unit Length of stay in neonatal intensive care unit Abnormality on cerebral ultrasound:

- Cystic periventricular leukomalacia
- Intraventricular haemorrhage (including grade)

Necrotising enterocolitis Neonatal encephalopathy Disability at time of childhood follow up

# SEARCH METHODS FOR IDENTIFICATION OF STUDIES

See: methods used in reviews.

We searched the Cochrane Pregnancy and Childbirth Group Trials Register by contacting the Trials Search Co-ordinator (November 2004).

The Cochrane Pregnancy and Childbirth Group's Trials Register is maintained by the Trials Search Co-ordinator and contains trials identified from:

- (1) quarterly searches of the Cochrane Central Register of Controlled Trials (CENTRAL);
- (2) monthly searches of MEDLINE;
- (3) handsearches of 30 journals and the proceedings of major conferences;
- (4) weekly current awareness search of a further 37 journals.

Details of the search strategies for CENTRAL and MEDLINE, the list of handsearched journals and conference proceedings, and the list of journals reviewed via the current awareness service can be found in the 'Search strategies for identification of studies' section within the editorial information about the Cochrane Pregnancy and Childbirth Group.

Trials identified through the searching activities described above are given a code (or codes) depending on the topic. The codes are linked to review topics. The Trials Search Co-ordinator searches the register for each review using these codes rather than keywords.

In addition, we searched the Cochrane Central Register of Controlled Trials (*The Cochrane Library*, Issue 4, 2004), MEDLINE (1966 to November 2004) and EMBASE (1974 to November 2004) using the following terms: (term) and [('rupture near membranes') or 'PROM'] and ('induction' and 'labo\*r') and ('randomi\*ed controlled trial').

We searched reference lists of trials and other review articles and contacted researchers to provide further information. We did not apply any language restrictions.

#### METHODS OF THE REVIEW

We considered all studies identified by the methods described in the search strategy for inclusion. Two review authors independently assessed trials for their eligibility for inclusion and methodological quality. We resolved any differences of opinion by discussion. We recorded and reported reasons for excluding trials in the review. Trial authorship was not blinded.

If the report of a trial stated only that women had prelabour rupture of membranes at term, we attempted to contact the authors to establish that gestation was 37 weeks or more. In trials where the gestational ages overlap the greater and lesser than 37 weeks' gestation inclusion criteria, we also requested gestational age specific data. A large number of trials of potentially eligible trials were excluded because we were unable to establish which women in the trials had or had not achieved 37 completed weeks of gestation. The reasons for not being able to establish this included inability to locate an email address for study authors, study authors did not respond to email contact, data were not separately available for women with at least 37 completed weeks' gestation.

We assessed methodological quality of the included studies using criteria described in the Cochrane Reviewers' Handbook (Alderson 2004). We assigned quality ratings for allocation concealment to each trial, where A = adequate, B = unclear, C = clearly inadequate.

We assessed studies for completeness of follow up:

- (a) less than 3% of participants excluded;
- (b) 3% to 9.9% of participants excluded;
- (c) 10% to 19.9% of participants excluded;
- (d) 20% or more excluded;
- (e) unclear.

We assessed whether the outcome assessors were blinded to the treatment allocation group and whether the caregivers or women were blinded.

Three review authors (M Dare, P Middleton, B Varatharaju) independently extracted and double-entered data, with each trial being extracted by two of the three authors. Unpublished data were sought from investigators where necessary. Where outcomes are published in the form of percentages or graphs, we calculated the number of events. We performed statistical analyses using the Review Manager software (RevMan 2004), and processed trial data as described in the Cochrane Reviewers' Handbook (Alderson 2004). We attempted to analyse outcomes with an intention-to-treat analysis (meaning that outcomes for women and neonates were analysed according to the groups to which they were randomised). Generally outcomes were analysed by the number of women and neonates completing the study rather than the total number randomised.

We compared categorical data with relative risks and 95% confidence intervals and continuous data with mean differences

and 95% confidence intervals, using a random-effects model. We assessed statistical heterogeneity between trials using the  $\rm I^2$  statistic.

We included all eligible trials in the initial analysis and performed sensitivity analyses to evaluate the effect of trial quality. A sensitivity analysis was performed based on the randomisation process, with quasi-randomised studies being excluded. We performed a sensitivity analysis assessing the presence of blinding of assessors to the primary outcome, but there were not enough studies to assess the quality of treatment allocation and the presence of losses to follow up.

We performed subgroup analyses on:

- (1) method of induction of labour used;
- (2) multiparous versus nulliparous women;
- (3) women with an unfavourable cervix (Bishop score less than five) versus a favourable cervix (Bishop score five or more);
- (4) maternal antibiotic versus no antibiotic prophylaxis;
- (5) women who had digital vaginal examinations versus women who had no vaginal examinations.

The rationale for these subgroup analyses follows.

- (1) Method of induction of labour some trials have found differences between different methods such as oxytocin and prostaglandin and any such differences would be expected to be operating in women with prelabour rupture of membranes at term. (2) and (3) Differences in outcomes according to parity and state of cervix would be expected for example nulliparous women and those with an unfavourable cervix are likely to have longer labours and this in turn may increase the risk of infection of infection and other adverse outcome.
- (4) Maternal antibiotic prophylaxis may be more likely to reduce maternal and neonatal infections than no maternal antibiotic prophylaxis.
- (5) Women who had digital examinations may be prone to more infections than those who did not have digital vaginal examinations.

### Differences from methods specified in the protocol

The title was changed to better reflect that the intervention is designed to result in early birth and to clarify that the definition of term was 37 weeks or more.

The objectives were clarified to explain the intervention and comparison, rather than using the term 'optimal management'.

The intervention and comparisons were clarified; planned intervention must have been implemented or intended to be implemented within 24 hours of randomisation and conversely, expectant management needed to have an intended delay of at least 24 hours.

The definition of postpartum fever was changed from a temperature greater than 38°C on at least two occasions after the first 24 hours after birth to postpartum fever as variously defined by authors.

Rationales for subgroup analyses were not included in the protocol.

A random-effects model was used throughout. (The protocol specified that a random-effects model would be used when there was a substantial amount of statistical heterogeneity.)

#### **DESCRIPTION OF STUDIES**

We included 12 trials in which a total of nearly 7000 women participated (including the large trial of Hannah 1996 with 5042 participants).

We excluded 34 trials, mostly because gestation was only reported as being at term or because some women in the trial may have not yet reached 37 completed weeks of gestation when their membranes ruptured.

#### Induction of labour methods

Seven trials used oxytocin, five trials used prostaglandin and one trial used caulophyllum as the planned or active management method. (One trial, Hannah 1996, used both oxytocin and prostaglandin and reported results for each induction method separately.)

#### Oxytocin

Akyol 1999

In the planned management group, immediate induction was by intravenous oxytocin and in the expectant management group, women were induced with oxytocin if spontaneous labour had not occurred within 24 hours.

### Hannah 1996

In the planned management group (oxytocin) labour was immediately induced with intravenous oxytocin, titrated according to contractions. Women in the expectant management group were observed for up to four days, then induced with intravenous oxytocin if spontaneous labour had not occurred. Labour was induced if complications developed.

#### McQueen 1992

Oxytocin infusion was compared with observation until birth (unless women in the expectant management group were in labour or were suspected to have sepsis). In the latter case they were induced with oxytocin.

# Natale 1994

In the planned management group, labour was induced eight hours after PROM with intravenous oxytocin. In the expectant management group, women were observed for 48 hours and induced if group B beta-haemolytic streptococci were detected on screen or culture; if a clinical diagnosis of chorioamnionitis was made; or if 48 hours from PROM had elapsed and spontaneous labour had not ensued.

Ottervanger 1996

In the planned management group, labour was induced by intravenous oxytocin, starting at a dose of 2.5 mU/min and augmented every 20 minutes until adequate contractility was achieved. In the expectant management group, women were admitted to hospital for 48 hours. If labour had not ensued within 48 hours in the expectant group, women were offered induction of labour by intravenous oxytocin.

#### Shalev 1995

Twelve-hour expectant management then oxytocin was compared with 72 hour expectant management. All women were managed with bed rest unless signs of chorioamnionitis or uterine contractions developed. Women who had not entered labour at the end of the assigned period were induced with oxytocin.

## Wagner 1989

In the planned (early) management group, women were immediately induced with oxytocin. If women randomised to the early group were not induced by 10 hours after spontaneous rupture of membranes, they were excluded. In the expectant (delayed) management group, labour was awaited and women were returned to the labour and delivery suite:

- (1) if signs of infection or fetal distress occurred;
- (2) when spontaneous labour occurred;
- (3) 24 hours after spontaneous rupture of membranes for oxytocin labour if labour did not occur spontaneously.

# Prostaglandin

#### Chung 1992

Prostaglandin E2 (3 mg) gel intravaginally was compared with sterile K-Y jelly intravaginally (placebo).

#### Hannah 1996

In the planned management group, labour was immediately induced with vaginal prostaglandin E2 gel (1 or 2 mg) inserted into the posterior vaginal fornix; repeated six hours later if labour had not started, followed by an infusion of oxytocin four or more hours later if labour still had not started. Women in the expectant management group were observed for up to four days, then induced with vaginal prostaglandin E2 gel if spontaneous labour had not occurred. Labour was induced if complications developed.

#### Mahmood 1992

In the planned management group, women were given PGE2 gel (2 mg) in the posterior fornix; if uterine activity did not ensue, a repeat treatment with PGE2 gel (1 mg) was given 6 hours later. Women in the expectant management group were observed for up to 24 hours; if labour did not ensue after 24 hours, women were treated with intravenous oxytocin. In both groups, intravenous oxytocin was started 24 hours after hospital admission if labour had not begun or sooner if augmentation of established labour was required.

#### Mahmood 1995

In the planned management group, PGE2 gel (1 mg) was administered at admission to the posterior fornix and this was repeated

six hours later if labour was not established. In the expectant management group, women were observed for up to 24 hours. Both groups received intravenous oxytocin if labour did not start within 24 hours of admission.

#### Milasinovic 1998

In the planned management group, labour was induced six hours following rupture of membranes with prostaglandin (Predipil) gel and oxytocin infusion. In the expectant management group, all women were given antibiotics but the use of induction was not reported.

#### Caulophyllum

#### Beer 1999

Caulophyllum (for seven hours or until labour started) was compared with placebo. Caulophyllum (also known as blue cohosh or papoose root) is a herbal preparation and in this trial it was given at a homoeopathic dose (dilution D4).

## **Parity**

In two trials, most outcomes for nulliparous women were reported separately (Hannah 1996) or the trial only included nulliparous women (Mahmood 1992). In two trials, most outcomes for multiparous women were reported separately (Hannah 1996) or the trial only included multiparous women (Mahmood 1995). The remaining nine trials either did not report parity at all or did not report most outcomes by parity. Parity was not stated in seven trials: Chung 1992; Milasinovic 1998; Natale 1994; Ottervanger 1996; Shalev 1995; Wagner 1989.

#### Favourable/unfavourable cervix

In six trials (Chung 1992; Mahmood 1992; Mahmood 1995; Milasinovic 1998; Natale 1994; Wagner 1989), all women had an unfavourable cervix, with the remaining trials either having a mixture of women with unfavourable and favourable cervices (Akyol 1999; Hannah 1996) or not reporting cervical state (Beer 1999; McQueen 1992; Ottervanger 1996; Shalev 1995).

# Antibiotic prophylaxis

Akyol 1999

44% of women in the planned management group received antibiotics before or during labour compared with 46% in the expectant management group.

#### Hannah 1996

502 women (10%) received antibiotics after rupture of membranes, either before or during labour but before birth.

#### Mahmood 1995

9/100 women were given prophylactic antibiotics because of a positive ß-haemolytic streptococci test (four in the planned management group and five in the expectant management group).

# Milasinovic 1998

Women in the expectant management group were given antibi-

#### McQueen 1992

Women were given antibiotics once membranes had been ruptured for 10 hours.

#### Ottervanger 1996

Prophylactic antibiotics were not administered except in association with caesarean section.

### Wagner 1989

Indicated that all women had received prophylactic antibiotics, but this was not explicitly stated.

Five trials (Beer 1999; Chung 1992; Mahmood 1992; Natale 1994; Shalev 1995) did not state whether any women were given prophylactic antibiotics.

#### Digital vaginal examination

In Mahmood 1992 and Mahmood 1995, all women were given a digital vaginal examination and in most of the other trials, at least some women were digitally examined. Women who were digitally examined were excluded from Shalev 1995 and women in Wagner 1989 generally were not digitally examined. Four trials (Beer 1999; Chung 1992; Milasinovic 1998; Ottervanger 1996) did not state whether any women were given digital examinations.

#### Determination of maternal infection

Chorioamnionitis was defined as fever before or during labour, although there were some differences between studies in regard to temperatures and requirement for antibiotics. Endometritis was generally defined as clinical signs of infection postpartum whereas postpartum fever was defined as raised temperature.

#### Determination of neonatal infection

In Akyol 1999 this was measured by the number of babies requiring antibiotics. In Hannah 1996 more than 80% of babies had blood cultures and white blood cell counts and in Shalev 1995 neonatal infection was determined by a positive blood culture of from cerebrospinal fluid. Seven studies did not report how they determined neonatal infection and two studies (Beer 1999; Natale 1994) did not report neonatal infection at all.

## METHODOLOGICAL QUALITY

#### Allocation concealment

Only two of the 12 trials (Chung 1992; Hannah 1996) clearly demonstrated an adequate method for allocation concealment.

#### Adequate

Chung 1992 kept the code with a third party and Hannah 1996 used centrally controlled computerised randomisation, with telephone access (in blocks of four and eight and stratified according to centre and parity).

#### Unclear

Mahmood 1995

Randomisation lists were used to assign odd and even numbers and then women opened a sealed, numbered envelope (which we judged to be unclear rather than inadequate allocation concealment).

#### Ottervanger 1996

Used sealed opaque envelopes.

Method of allocation concealment was not stated in five studies: Akyol 1999; Beer 1999; Mahmood 1992; McQueen 1992; Natale 1994.

## Inadequate

In Milasinovic 1998; Shalev 1995 and Wagner 1989, women were alternately allocated to groups.

#### Blinding

Two trials (Beer 1999; Chung 1992) were blinded throughout by use of a placebo, in two trials (Mahmood 1992; Natale 1994) neonatal outcomes were blinded and neonatal infection was blinded in another two trials (Akyol 1999; Hannah 1996).

In Akyol 1999 and Hannah 1996, an adjudication committee, unaware of the women's group assignments and of where labour was induced or spontaneous, determined whether neonatal infection was present.

In Beer 1999, both investigators and women were blinded since a placebo was used.

In Chung 1992, a placebo was also used and so the attendant obstetrician, paediatrician and women were all blinded to which of the gels the woman received.

In Mahmood 1992, each newborn was seen and examined by a paediatric resident who was unaware of the woman's allocation.

The Mahmood 1995 trial was described as "open".

In Natale 1994, while the study was not able to be blinded, neonatal treatment was prescribed by physicians who were blinded as to which arm the neonate was in and pathologists assigning diagnoses of chorioamnionitis and funisitis were also blinded.

Although the system of allocation in Shalev 1995 was known only to the attending physicians and women, nurses and other medical staff members were not told of the assignment method, it may have been easy to guess since it was based on alternation. Similarly, Wagner 1989 would effectively have been unblinded due to the alternation method of allocation.

Three trials (McQueen 1992; Milasinovic 1998; Ottervanger 1996) did not state whether anyone was blinded.

## Losses to follow up

One woman out of 5042 was lost to follow up in Hannah 1996 (data not received); and for the maternal satisfaction outcomes, completed questionnaires were obtained from 4129 women (81.9%).

In Mahmood 1992, 10/230 (4%) women were excluded from final analysis (five in each group) because they did not fulfil the study criteria (four with undiagnosed breech presentation; two who were parous, two who had a positive nitrazine test at randomisation but without a definite fluid pool in the vagina and two whose case notes could not be traced). Analysis was therefore based on 220 women.

In Milasinovic 1998, one out of 76 women was lost to follow up; this woman was from the planned management group.

In Natale 1994, 10 women from each group dropped out after randomisation, giving an overall 7.6% (20/262) loss to follow up. It was not clear whether results were reported for all women or for only the women completing the study, but the latter case (total of 242 women) was assumed.

Akyol 1999; Beer 1999; Chung 1992; and Mahmood 1995 did not state if there were any losses to follow up. Neither did McQueen 1992, but it was not clear whether seven exclusions out of a total 47 women occurred before or after randomisation.

#### RESULTS

#### Maternal outcomes

# Maternal mortality (Graph 01/01)

This was reported in only one trial (Ottervanger 1996), with no deaths in either the planned (oxytocin) or expectant group.

Caesarean section (Graphs 01/02, 02/01, 03/01, 04/01, 5/01) No differences were detected between the planned and expectant groups overall (relative risk (RR) 0.94, 95% confidence interval (CI) 0.82 to 1.08; 12 trials, 6814 women) with no parity differences seen. There were no significant differences between planned and expectant management in the oxytocin (RR 0.96, 95% CI 0.79 to 1.16; 7 trials, 3800 women), prostaglandin (RR 0.91, 95% CI 0.74 to 1.11; 5 trials, 2980 women) or caulophyllum (RR 5.00, 95% CI 0.26 to 98.00; 1 trial) subgroups. Similarly no parity differences were seen.

In Mahmood 1992, 4/110 women in the planned management group and 1/110 in the expectant management group had caesarean sections for fetal distress. The corresponding figures for Chung 1992 were 3/30 and 0/29; and for Wagner 1989, 0/86 and 3/96.

## Chorioamnionitis (Graphs 01/03, 02/02, 03/02, 4/02)

Significantly fewer women overall developed chorioamnionitis in planned management groups compared with expectant management groups (RR 0.74, 95% CI 0.56 to 0.97; 9 trials, 6611 women). However, neither the oxytocin or prostaglandin subgroups reached statistical significance on their own: oxytocin RR 0.74, 95% CI 0.51 to 1.07; prostaglandin 0.77, 95% CI 0.49 to 1.22. Substantial heterogeneity (I<sup>2</sup> = 66%) was seen between the oxytocin trials. The overall result gives a number needed to treat

(NNT) of 50, that is, for every 50 women undergoing planned management, one case of chorioamnionitis will be avoided.

#### Endometritis (Graphs 01/04, 02/03, 03/03, 04/03)

Four trials (445 women) reported significantly fewer instances of endometritis in the planned group compared with the expectant group (RR 0.30, 95% CI 0.12 to 0.74). Three of the four trials compared oxytocin with expectant management.

#### Postpartum fever (Graphs 01/05, 2/04, 3/04, 04/04)

Overall, no significant difference was seen in the number of women with postpartum fever in planned management groups compared with expectant management groups (RR 0.69, 95% CI 0.41 to 1.17; 5 trials, 5521 women). Mahmood 1992 (which only included nulliparous women) showed a significant difference in favour of planned management (RR 0.27, 95% CI 0.09 to 0.78). Four other trials of mixed or unknown parity showed no significant difference between planned and expectant management (RR 0.83, 95% CI 0.48 to 1.43). The oxytocin trials favoured planned management (RR 0.55, 95% CI 0.35 to 0.86; 2 trials), while no overall difference between planned and expectant management was seen for the prostaglandin trials (RR 0.75, 95% CI 0.32 to 1.76; 4 trials). This latter result showed significant heterogeneity (I<sup>2</sup>= 69%) which can only be partially explained by parity differences. Some heterogeneity may be explained by different definitions of postpartum fever. For example Chung 1992 defined this as an episode of more than 37.5°C, whereas Hannah 1996 defined it as a temperature greater than 37.5°C on two occasions equal to or greater than one hour apart or a temperature greater than 38°C.

# Induction of labour (Graphs 01/07, 02/05, 03/05, 04/05, 05/02)

Women in the planned management groups were more likely to have their labour induced than those in the expectant management groups (overall RR 3.51, 95% 3.03 to 4.05; 8 trials, 6420 women). This held true across parity and method of induction subgroups as well as for immediate versus delayed (8 to 12 hours) planned management. None of these factors explained the high amount of statistical heterogeneity (overall  $I^2 = 68\%$ ). As would be expected, almost all women (87%) in the planned management groups were induced. Overall, 22% of women in the expectant management groups were induced with a range from 18% to 45%. The most common method of induction used in the expectant management groups was oxytocin but the dose may have varied and so may the policy of each institution about when to induce women in the expectant management groups. In Hannah 1996 a small number of women in the induction oxytocin group received prostaglandin only and vice-versa for the induction prostaglandin group, but data were analysed according to the group to which the women were randomised.

Vaginal birth and operative vaginal birth (Graphs 01/08, 02/06, 03/06, 04/06, 05/03; and 01/09, 02/07, 03/07, 04/07, 05/04)

No overall differences were seen between planned and expectant management groups (RR 1.01, 95% 0.99 to 1.02; 12 trials, 6814 women) for vaginal birth and regardless of particular method of induction or parity. Similarly, no differences were seen between planned and expectant management groups for operative vaginal births (overall RR 0.98, 95% CI 0.84 to 1.16; 7 trials, 5611 women), with no differences seen for any of the method of induction or parity subgroups.

# Use of epidural anaesthesia (Graphs 01/10, 02/08, 04/08, 05/05)

In three trials, no differences between planned and expectant management groups were seen in regard to use of epidural analgesia (overall RR 1.09, 95% CI 0.74 to 1.61, 360 women). Two trials used prostaglandin and one trial used caulophyllum as the method of induction. Akyol 1999 did not state type of anaesthesia, but we have assumed it to have been epidural.

#### Uterine rupture (Graphs 01/11, 03/08)

Only one instance of uterine rupture was reported - this was in the prostaglandin arm of the Chung 1992 trial (RR 2.90, 95% CI 0.12 to 68.50, 59 women). Hannah 1996 stated they detected no differences in the rate of uterine rupture between planned and expectant management, but actual numbers were not reported.

#### Antenatal hospital stay

Hannah 1996 and Akyol 1999 reported antenatal hospital stay as medians and 5th, 95th percentiles.

Hannah 1996 (5041 women):

Induction oxytocin group: 12.0 hours (4.6, 32.1)

Induction prostaglandin group: 16.5 (2.9, 66.8)

Expectant oxytocin group: 17.0 (4.8, 38.9)

Expectant prostaglandin group: 16.9 (2.0, 69.7)

For the induction oxytocin group versus the expectant oxytocin group, the P value was < 0.001.

For the induction oxytocin group versus the induction prostaglandin group, the P value was < 0.001.

Akyol 1999 (126 women)

Induction oxytocin: 20.5 hours (3.0, 4.8)

Expectant: oxytocin 22.0 (4.9, 45.8); spontaneous labour 6.0 (1.3, 19.0)

There was a statistically significant difference (P < 0.05) when the expectant oxytocin group was compared with either the induction oxytocin group or the expectant spontaneous labour group.

#### Postnatal hospital stay

Hannah 1996 (5041 women) reported stay in the postpartum ward as medians and 5th, 95th percentiles.

Induction oxytocin group: 62.97 hours (22.40, 130.78)

Induction prostaglandin group: 62.50 (20.03, 136.88)

Expectant oxytocin group: 63.02 (23.05, 137.18)

Expectant prostaglandin group: 62.97 (23.03, 134.22)

Maternal satisfaction (Graphs 01/14, 01/15, 03/08, 03/09, 04/10, 04/11)

Only one trial of 5041 women (Hannah 1996) reported any measure of maternal satisfaction. Significantly fewer women in the two planned management groups compared with the two expectant management groups reported that there was nothing about their management that they liked (overall RR 0.43, 95% CI 0.36 to 0.52 (NNT 14); RR for oxytocin 0.43, 95% CI 0.33 to 0.56; RR for prostaglandin 0.44, 95% CI 0.33 to 0.58). A similar pattern in favour of planned management was seen when mothers reported satisfaction in terms of nothing disliked in their management (overall RR 1.20, 95% CI 1.10 to 1.30; RR for oxytocin 1.19, 95% CI 1.05 to 1.34; RR for prostaglandin 1.21, 95% CI 1.07 to 1.36).

No trials reported on placental abruption, maternal views of care, or postnatal depression.

# Fetal, neonatal and infant outcomes Fetal or perinatal mortality (Graphs 01/19, 02/09, 03/11, 04/12)

This was reported in five trials, with a total of three deaths in the planned management groups and seven in the expectant management groups (overall RR 0.46, 95% CI 0.13 to 1.66, 5870 infants). In Hannah 1996 five babies died from lethal congenital abnormalities; and four other babies died (one due to infection). Two of these were in the expectant oxytocin group and two were in the expectant prostaglandin group.

#### Cord prolapse (Graphs 01/20, 02/10, 03/12, 04/14)

Hannah 1996 reported one cord prolapse in each of the planned and expectant groups (both in the oxytocin planned and oxytocin expectant groups) and McQueen 1992 reported no instances of cord prolapse in either group (overall RR 1.00, 95% 0.06 to 16.03, 5081 infants).

# Apgar score < 7 at 5 minutes (Graphs 01/24, 02/12, 03/14, 04/15)

No statistically significant differences were seen between planned and expectant management, either overall (RR 0.93, 95% CI 0.81 to 1.07; 6 trials, 6005 infants); or for oxytocin (RR 0.94, 95% CI 0.78 to 1.14; 5 trials) or prostaglandin (RR 0.91, 95% CI 0.75 to 1.12; 2 trials) as the method of induction.

# Mechanical ventilation (after initial resuscitation) (Graphs 01/25, 02/13, 03/15, 04/16)

No statistically significant differences were seen between planned and expectant management, either overall (RR 0.99, 95% CI 0.46 to 2.12; 2 trials, 5158 infants) or for oxytocin (RR 0.69, 95% CI 0.34 to 1.40; 2 trials) or prostaglandin (RR 1.86, 95% CI 0.74 to 4.64; 1 trial).

#### Birthweight (Graphs 01/26, 02/14, 03/16, 04/17)

Planned induction with any method showed a small but statistically significant lower birthweight compared with expectant management (overall WMD -88.93 g, 95% CI -138.73 to - 39.13; 3 trials, 845 infants).

Neonatal infection (Graphs 01/27, 02/15, 03/17, 04/18)

No differences in neonatal infection rates were detected between planned and expectant management (overall RR 0.83, 95% CI 0.61 to 1.12; 9 trials, 6406 infants) or for oxytocin (RR 0.67, 95% CI 0.43 to 1.06; 4 trials), or prostaglandin (RR 0.99, 95% CI to 0.65 to 1.50; 5 trials). Wagner 1989 reported that the mothers of the five infants who developed neonatal infections (all from the expectant management group) had undergone digital vaginal examinations.

In Akyol 1999, this outcome was reported as need for antibiotics, with 2/52 (4%) in the planned group compared with 14/74 (30%) in the expectant group. Mothers of these 14 infants had all received oxytocin expectantly rather than giving birth spontaneously.

# Admission to neonatal intensive care unit or special care nursery (Graphs 01/28, 02/16, 03/18, 04/19)

Overall, there were fewer admissions to the neonatal intensive care unit or special care nursery for planned management compared with expectant management (RR 0.72, 95% CI 0.57 to 0.92; 5 trials, 5679 infants). This held true for oxytocin (0.58, 95% CI 0.39 to 0.85; 3 trials) but the results for prostaglandin did not quite reach statistical significance (RR 0.87, 95% CI 0.73 to 1.03; 3 trials). The overall result translates to a NNT of 20 (95% CI 14 to 50), that is, on average, for every 20 women undergoing planned management, there will be one less admission of their infant to the neonatal intensive care unit or special care nursery. Hannah 1996 also provided data for number of infants who spent more than 24 hours in the neonatal intensive care unit:

• Induction oxytocin: 83/1256 (7%)

• Induction prostaglandin: 116/1258 (9%)

• Expectant oxytocin: 146/1259 (12%)

• Expectant prostaglandin: 128/1259 (10%)

The P value for the induction oxytocin group versus the expectant oxytocin group was < 0.001.

# Length of stay in the neonatal intensive care unit (Graphs 01/29, 03/18, 04/20)

In one trial of prostaglandin, no difference was seen between planned and expectant management (RR 2.00, 95% CI 0.37 to 10.70; 220 infants).

Hannah 1996 (5041 infants) reported this outcome as medians and 5th and 95th percentiles:

• Induction oxytocin: 0 hours (0, 3.75)

• Induction prostaglandin: 0 (0, 14.00)

• Expectant oxytocin: 0 (0, 16.75)

• Expectant prostaglandin: 0 (0, 31.98)

No trials reported on gestational age at birth, respiratory distress syndrome, cystic periventricular leukomalacia, intraventricular haemorrhage, necrotising enterocolitis, neonatal encephalopathy or disability at time of childhood follow up.

#### Other outcomes

#### Breastfeeding(Graphs 01/18, 03/10)

A single trial of oxytocin versus expectant management (Akyol 1999; 126 women) found that no women in either group had problems with breastfeeding their babies 48 hours or more after birth.

# Time from rupture of membranes to birth (Graphs 01/22, 01/35, 02/11, 03/13, 04/14)

Overall, women experienced a significantly shorter time from rupture of membranes to birth in the planned management groups compared with the expectant management groups (WMD -9.53 hours, 95% CI -12.56 to -6.10; 5 trials, 1108 women). With oxytocin this reduction was nearly 13 hours (WMD -12.75, 95% CI -15.36 to -10.15; 2 trials) eight hours for prostaglandin (WMD -8.45, 95% CI -12.24 to -4.66; 2 trials) but was not statistically significant for caulophyllum (WMD -0.80 hours, 95% CI -9.50 to +7.90; 1 trial). Three other trials of 5942 women reported these times as medians and ranges (Akyol 1999; Hannah 1996) and in Milasinovic 1998 it was not clear if the variance measures were standard deviations. These results were consistent with the above trials and they are shown in graph 01/35.

#### **SUBGROUP ANALYSES**

The subgroup analyses for parity and method of induction were integrated into the main structure of the graphs and comments relating to these subgroups have been made above.

# Digital vaginal examination (Graphs 06/01, 06/02, 06/03)

Only outcomes relating to infection and containing sufficient data (chorioamnionitis, endometritis and neonatal infection) were included in this sensitivity analysis. No clear differences between the subgroups were seen, although the mixed or not stated subgroup showed planned management to result in less cases of chorioamnionitis, while both the digital examination and no examination subgroups failed to reach statistical significance.

#### Unfavourable/favourable cervix (Graphs 07/01 to 07/13)

For chorioamnionitis, neither the unfavourable or mixed state of cervix subgroups gave statistically significant results although the overall result was significantly in favour of planned management. Both subgroups showed substantial levels of statistical heterogeneity. Other outcomes did not show any clear differences that were not apparent in the main analyses.

#### Maternal prophylactic antibiotics (Graphs 08/01 to 08/08)

This subgroup analysis did not show any differences from the main analysis.

# Sensitivity analyses

#### Quality (Graphs 09/01 to 09/11)

A sensitivity analysis of quality was performed by omitting the three trials with clearly inadequate allocation concealment (Milasinovic 1998; Shalev 1995 and Wagner 1989).

For chorioamnionitis, the results strengthened slightly more in favour of planned management when the quasi-randomised trials were excluded (from RR 0.74, 95% CI 0.56 to 0.97 to RR 0.67, 95% 0.51 to 0.87). In addition, the moderate statistical heterogeneity of  $\rm I^2=37\%$  in the main analysis was reduced to 14% in this sensitivity analysis. However, for Apgar score, statistical heterogeneity increased from 0% in the main analysis to a moderate 36% in the sensitivity analysis. The small birthweight advantage seen for expectant management disappeared in this sensitivity analysis.

#### Blinding (Graphs 10/1 to 1011)

When study outcomes were subgrouped by type of blinding, no differences from the main analyses were apparent, although this is based on scant data.

#### DISCUSSION

The findings of this review are dominated by the largest trial, Hannah 1996 with over 5000 participants (which represents 70% of the total number of participants included in the review). In addition, Hannah 1996 was one of only two trials to report adequate allocation concealment and so rates more highly than most of the other studies in terms of trial quality.

Although 12 trials were able to be included, over 30 other trials were excluded even though many of them would have included relevant data. We do not know how the results of this review may have differed if these missing data had been able to be included. Most of these trials reported outcomes for women less than, as well as greater than, 37 weeks' gestation at rupture of membranes and so it was not possible to extract only the information relating to women with greater than 37 weeks' gestation. Nor were trial authors able to provide this information when we requested it from them. This strict inclusion criterion was applied because we believe that women at full term represent a different clinical group than women whose membranes rupture at less than 37 weeks' gestation (preterm rupture of membranes will be the topic of another Cochrane review (Buchanan 2004)).

Concerns that planned management may result in more caesarean sections and instrumental vaginal births were not supported by the review, which also showed no differences between women of different parities or between methods of induction for these outcomes. Planned management (whether using oxytocin or prostaglandin) resulted in a lower rate of chorioamnionitis and endometritis compared with expectant management, which might be expected to result in less neonatal infection. However, no overall differences between planned and expectant management were seen for rates of neonatal infection (though this nearly reached statistical significance in favour of planned management for oxytocin induction). Babies under planned management were less likely to be admitted to the neonatal care unit or the special care nursery than those

who experienced expectant management, which could relate to hospital policy but also may reflect less illness in the babies under planned management.

There was some suggestion that planned induction with oxytocin was more effective than prostaglandin in reducing the rate of admission, which is given more strength by the head-to-head randomised comparison in Hannah 1996. In addition, there was a 5% risk difference between planned and expectant oxytocin management and only a 1% risk difference for planned and expectant prostaglandin management in favour of planned management for babies spending more than 24 hours in the neonatal intensive care unit. This suggestion is supported to some extent by Cochrane reviews of general induction of labour at term, which indicate that oxytocin is better or equivalent to prostaglandin, although there may be some adverse effects from prostaglandin use (Kelly 2001; Luckas 2000).

Gafni 1997 performed an economic evaluation alongside the Hannah 1996 trial and found that while induction with oxytocin was less costly than induction with prostaglandin or with expectant management, the cost differences, while statistically significant, may not be important differences in most countries.

In the Hannah 1996 trial, women clearly preferred planned management. Although this finding is based on a single trial, it was a large and well conducted study. Particularly because there may not be large differences in maternal and neonatal outcomes for planned versus expectant management, it is vital to have a better understanding of women's preferences regarding whether or not they wish to be immediately induced or whether they wish to wait for spontaneous labour if their membranes have ruptured prematurely at term.

There was substantial heterogeneity for some outcomes, which was only partly able to be explained by factors such as parity, method of induction and study quality. Different methods of measurement and definitions, particularly for presence of maternal infections, were also likely to have contributed to heterogeneity, as well as limiting the ability to pool data. In addition, some trials did not report important outcomes such as maternal and neonatal infection, other neonatal morbidity outcomes and maternal satisfaction. No trials reported on longer term child development or disability.

# AUTHORS' CONCLUSIONS

## Implications for practice

Planned management (with methods such as oxytocin or prostaglandin) reduces the risk of some maternal infectious morbidity without increasing caesarean sections and operative vaginal births. Fewer infants were admitted to neonatal intensive care under planned management although no differences were seen in

neonatal infection rates between planned and expectant management. Since the differences in outcomes between planned and expectant management may not be substantial, women need to be able to access the appropriate information to make an informed choice.

## Implications for research

Future trial design should attempt to blind outcomes such as maternal and neonatal infection and to report these outcomes in a standardised way. Outcomes such as maternal satisfaction, maternal and neonatal infectious morbidity, other neonatal morbidities, and longer term child development/disability need to be included in future trials.

#### FEEDBACK

#### Kripke, March 2006

Summary

There appears to be an inconsistency between the abstract and text. In the abstract it says, "However, fewer infants under planned management went to neonatal intensive or special care compared with expectant management (RR 0.72, 95% CI 0.57 to 0.92)"

Then the main text of results states, "Overall, there were fewer admissions to the neonatal intensive care unit or special care nursery for planned management compared with expectant management (RR 0.73, 95% CI 0.58 to 0.91; 5 trials, 5679 infants)."

Which relative risk and confidence interval are correct?

(Summary of comment from Clarissa Kripke, March 2006)

Author's reply

Thank you for your comment. We have checked the figures and confirm that the relative risk and the confidence interval in the Abstract are correct. We have corrected the figures in the text.

(Reply from Philippa Middleton, February 2007)

Contributors

Clarissa Kripke

# POTENTIAL CONFLICT OF INTEREST

None known.

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Ruth Martis translated the German language study into English.

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Robson MS, Turner MJ, Stronge JM, O'Herlihy C. Is amniotic fluid quantitation of value in the diagnosis and conservative management of prelabour rupture of membranes at term?. *British Journal of Obstetrics and Gynaecology* 1990;**97**(4):324–8.

#### Seaward 1997

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term. American Journal of Obstetrics and Gynecology 1997;**177**:1024–9

# Tan 1996a

Tan BP, Hannah ME. Oxytocin for prelabour rupture of membranes at or near term. *Cochrane Database of Systematic Reviews* 1996, Issue 2. Art. No.: CD000157. DOI:10.1002/14651858.CD000157.

#### Tan 1996b

Tan BP, Hannah ME. Prostaglandins for prelabour rupture of membranes at or near term. *Cochrane Database of Systematic Reviews* 1996, Issue 2. Art. No.: CD000178. DOI:10.1002/14651858.CD000178.

#### Yawn 2001

Yawn B, Wollan P, McKeon K, Field C. Temporal changes in rates and reasons for medical induction of term labor, 1980-1996. *American Journal of Obstetrics and Gynecology* 2001;**184**:611–9.

#### Zlatnik 1992

Zlatnik FJ. Management of premature rupture of membranes at term. Obstetrics and Gynecology Clinics of North America 1992;19(2):353–64

#### TABLES

#### Characteristics of included studies

Study	Akyol 1999				
Methods	Randomisation: described as "simple randomisation"; no other details given for randomisation and allocation concealment.  Blinding: outcome assessment for neonatal infection.  Losses to follow-up: not stated.				
Participants	126 women with singleton pregnancy, cephalic presentation and gestation at least 37 weeks.  Nulliparous: 34/52 (65%) in the planned management group; 49/74 (66%) in the expectant management group.  Planned management: 26/52 (50%) unripe cervix.  Expectant management: 36/74 (49%) unripe cervix (defined as < 3 cm dilated or < 80% effaced.  Exclusion criteria: women in active labour, previous failed attempt to induce labour, contraindication to either induction of labour (such as placenta praevia) or expectant management (such as meconium staining of amniotic fluid or chorioamnionitis).				
Interventions	Planned management (n = 52): immediate induction of labour with intravenous oxytocin. Expectant management (n = 74): labour induced with oxytocin after 24 hours (n = 25) or labour began spontaneously within 24 hours (n = 49).				
Outcomes	Primary outcome was neonatal infection (reported as need for antibiotics); secondary outcome was need for caesarean; other outcomes were postpartum fever, induction of labour, use of anaesthesia, time from rupture of membranes to birth, fetal distress, seizures, Apgar score < 7 at 5 minutes, resuscitation with oxygen, neonatal ventilation, admission to NICU, breastfeeding.				
Notes	Time from rupture of membranes to birth reported as medians.				
Allocation concealment	B – Unclear				

<sup>\*</sup> Indicates the major publication for the study

# Characteristics of included studies (Continued)

Study	Beer 1999
Methods	Randomisation: not stated. Blinding: investigators and women were blinded (placebo was used). Losses to follow up: not stated.
Participants	40 women (28 (70%) nulliparas) with PROM between 38 and 42 weeks, and cervical dilatation 3 or less cm, with no regular uterine contractions.
Interventions	Planned management (n = 20): caulophyllum (D4) for 7 hours or until labour started. Expectant management (n = 20): placebo.
Outcomes	Caesarean section; vaginal birth; operative vaginal birth; use of epidural anaesthesia; time from rupture of membranes to birth.
Notes	
Allocation concealment	B – Unclear
Study	Chung 1992
Methods	Randomisation: "Computer-generated set of random numbers", and code kept by trial coordinator. Blinding: obstetrician, paediatrician and woman were all blinded (placebo used). Losses to follow up: not stated.
Participants	59 women with PROM, unfavourable cervix (Bishop score of 4 or less) and no evidence of infection or fetal distress; singleton pregnancy with cephalic presentation and at 37 completed weeks of gestation; no evidence of uterine contractions, no maternal tachycardia, absence of any medical or obstetric complications; parity not stated.
Interventions	Planned management (n = 30): Prostaglandin E2 (3 mg) gel intravaginally. Expectant management (n = 29): placebo - sterile K-Y jelly intravaginally.
Outcomes	Caesarean section; caesarean section for fetal distress, for induction failure, for failure to progress; vaginal birth; operative vaginal birth; postpartum fever; oxytocin infusion for induction or augmentation of labour; hyperstimulation; major complication (uterine rupture); neonatal infection/sepsis; Apgar score < 7; birthweight; admission to NICU.
Notes	
Allocation concealment	A – Adequate
Study	Hannah 1996
Methods	Randomisation: centrally controlled computerised randomisation, with telephone access.  Blinding: an adjudication committee, unaware of the women's group assignments and of whether labour was induced or spontaneous, determined whether neonatal infection was present.  Losses to follow up: 1/5042 (data not received). Completed questionnaires were obtained from 4129 women (81.9%).
Participants	5042 women (72 hospitals in 6 countries) at least 37 weeks' gestation, with ruptured membranes with a single fetus in a cephalic presentation, with no contraindications for induction of labour or expectant management. Exclusion criteria: women in active labour if there had been a previous failed attempt to induce labour or if there was a contraindication to either induction of labour (such as placenta praevia) or expectant management (such as meconium staining of the amniotic fluid or chorioamnionitis).  In the induction oxytocin group, 59% (743/1258) were nulliparous, in the induction prostaglandin group 60% (751/1259); in the expectant oxytocin group 59% (750/1263) and in the expectant prostaglandin group 60% (756/1261).  About half the women had an unfavourable cervix; in about one-third of women, state of the cervix was not assessed; and the balance of women had a favourable cervix.
Interventions	Planned management (n = 2517): EITHER immediate induction of labour with intravenous oxytocin (n = $1258$ ) OR immediate induction of labour with vaginal prostaglandin E2 gel (n = $1259$ ).

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Characteristics	of in	cluded	studies (	Continued	)

	Expectant management (n = 2524): expectant management for up to four days, then induced with intravenous
	oxytocin (n = 1263) or vaginal prostaglandin E2 gel (n = 1261) if spontaneous labour had not occurred.
Outcomes	Caesarean section; vaginal birth; operative vaginal birth, chorioamnionitis; postpartum fever; induction of labour and mode; antenatal and postnatal hospitalisation; maternal satisfaction; time from rupture of membranes to birth; fetal distress; cord prolapse; perinatal mortality; neonatal infection/sepsis; antibiotic use (neonatal); Apgar score < 7 at 5 minutes; neonatal ventilation; admission to NICU (> 24 hours); admission to NICU or special care nursery; length of stay in NICU; costs.
Notes	Time from rupture of membranes to birth reported as medians.  Power of 80% to detect a reduction of 50% or more, from = 4% to = 2% in the rate of neonatal infection in each treatment group.
Allocation concealment	A – Adequate
Study	Mahmood 1992
Methods	Randomisation: described as "numbered sealed randomisation envelope".  Blinding: Each newborn was seen and examined by a paediatric resident who was unaware of the woman's allocation.  Losses to follow up: 10/230 women were excluded from final analysis (5 in each group) because they did not fulfil the study criteria (4 with undiagnosed breech presentation; 2 who were parous, 2 who had a positive nitrazine test at randomisation but without a definite fluid pool in the vagina and 2 whose case notes could not be traced). Analysis based on 220 women.
Participants	230 women, primigravidae with PROM in an uncomplicated singleton pregnancy with gestation confirmed by early pregnancy ultrasound, cephalic presentation, with no uterine activity.  Exclusions: women with previous significant antepartum haemorrhage, intrauterine growth retardation, diabetes mellitus, Rhesus disease, moderate pre-eclampsia, a history of venereal disease, a temperature > 37.5 C on admission, ruptured membrane > 12 hours, or meconium stained amniotic fluid on admission.
Interventions	Planned management (n = 115): prostaglandin - 2 mg PGE2 gel in posterior fornix; if uterine activity did not ensue (after 1 hour), then a repeat treatment with PGE2 gel (1 mg) was given 6 hours later. Expectant management (n = 115): observed for up to 24 hours; if labour did not ensue after 24 hours, women were treated with intravenous oxytocin using an escalating scale of 1-32 mU/min.
	In both groups, intravenous oxytocin was started 24 hours after hospital admission, if labour had not begun or sooner if augmentation of established labour was required.
Outcomes	Caesarean section, vaginal birth, postpartum fever, use of epidural anaesthesia, time from rupture of membranes to birth, neonatal infection, Apgar score <= 8 at 5 mins, birthweight, admission to NICU, length of stay in NICU.
Notes	220 women (110 in each arm) would be required to test the hypothesis that PGE2 would reduce PROM to birth interval by 50% without increasing the frequency of caesarean section; a further 10 women (5 in each arm) needed to be recruited to account for protocol violations in the trial.
Allocation concealment	B – Unclear
Study	Mahmood 1995
Methods	Randomisation: randomisation lists were used to assign odd and even numbers, and each woman opened a sealed numbered envelope.  Blinding: the trial was described as "open".  Losses to follow up: not stated.
Participants	100 parous women.  Inclusion criteria: healthy, parous women with SROM and singleton uncomplicated pregnancies, cephalic presentation and no uterine activity.

Character	istics of	finclude	ed studies	(Continued)
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Characteristics of inc	Cluded studies (Continuea)
	Exclusion criteria: previous serious antepartum haemorrhage, fetal growth retardation, diabetes mellitus, Rh immunisation, moderate pre-eclampsia, history of venereal disease, previous caesarean birth, temperature above 37.5 C on admission, ruptured membranes for longer than 12 hours, or meconium-stained amniotic fluid on admission.  Mean gestational age at SROM (days):
	PG: 277 [5].
	Conservative: 278 [6].
	Each woman had a cervical dilatation less than 3 cm (on admission). Mean cervical score at admission (range): PG: 5 (2-8). Conservative: 5 (2-9).
Interventions	Planned management (n = 50): prostaglandin E2 gel, 1 mg administered at admission to posterior fornix and repeated 6 hours later if labour was not established. Expectant management (n = 50): conservative management (for up to 24 hours). Both groups received intravenous oxytocin if labour did not start within 24 hours of admission using an escalating scale of 1-32 $\mu$ /min.
Outcomes	Caesarean section, caesarean section for fetal distress, vaginal birth, induction of labour and mode, use of epidural anaesthesia, time from rupture of membranes to onset of labour, perinatal mortality, neonatal infection, birthweight.
Notes	Birthweight variance measures not specified as SDs.
Allocation concealment	B – Unclear
Study	McQueen 1992
Methods	Randomisation: random numbers were generated by a table of random numbers, but no details were given about the method of allocation concealment.  Blinding: not stated.  Losses to follow up: not stated (although not clear if 7/47 exclusions were before randomisation).
Participants	40 women.
	25% nulliparous (5 in each group).  Inclusion criteria: rupture of membranes confirmed by speculum examination and the presence of ferning. No contractions felt or observed after half hour of admission (therefore early ROM). Gestation of 37 weeks or more confirmed by the women's dates, by clinical assessments at antenatal visits, by ultrasound. No evidence of fetal distress, e.g. meconium staining of the liquor, and no sepsis, manifested by fetal or maternal tachycardia, pyrexia or uterine tenderness. No other risk factors in pregnancy, e.g. medical complication, abnormal lie, multiple pregnancy, previous caesarean section etc.  Active management: mean GA 38 weeks 5 days.  Expectant management: 39 weeks and one day.
Interventions	Planned management: oxytocin infusion (n = 20) Expectant management (n = 20): if in labour, managed in same way as planned management, or observed until contractions; or if sepsis suspected woman was given antibiotics and induced with oxytocin.
Outcomes	Caesarean section, vaginal birth, operative vaginal birth, maternal sepsis, overall hospital stay, cord prolapse, perinatal mortality, neonatal infection, Apgar score < 7 at 5 minutes.
Notes	
Allocation concealment	B – Unclear
Study	Milasinovic 1998
Methods	Randomisation: alternation.  Blinding: not stated.  Losses to follow up: 1/76 (from the planned management group).
Participants	76 women.

Characteristics of included studies (Continued)	Characteristics	of included	studies (	(Continued	)
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luded studies (Continued)
Parity: not stated.  Women with PROM at 259 days (= 37 weeks).  Bishop score 5 to 6.
Planned management (n = 38): labour was induced with prostaglandin gel and oxytocin infusion 6 hours following rupture of membranes (n = 38). Expectant management (n = 37): antibiotics.
Caesarean section, vaginal birth, chorioamnionitis, postpartum fever, time from rupture of membranes to birth, neonatal infection.
Time from rupture of membranes to birth - not clear if variance measures are SDs.  Paper was only partially translated.
C – Inadequate
Natale 1994
Randomisation: not stated.  Blinding: neonatal treatment was prescribed by physicians who were blinded as to which arm the neonate was in. Pathologists assigning diagnoses of chorioamnionitis and funisitis were also blinded.  Losses to follow up: 20/262 (10 women from each group dropped out after randomisation). Analysis was based on 242 women only.
262 women.  Parity: not stated.  Inclusion criteria: all women diagnosed with premature rupture of membranes with a confirmed gestational age greater than or equal to 37 completed weeks. PROM was confirmed by obvious pooling of amniotic fluid on sterile speculum examination. Women with no risks other than previous caesarean birth or breech presentation (frank or complete) were included.  Exclusion criteria: meconium staining of the amniotic fluid, diabetes (gestational or overt), pre-eclampsia, malpresentation (footling or incomplete breech, not frank breech), intrauterine growth restriction, women transferred from other centres, known placenta praevia or active vaginal bleeding, cervical dilatation > 3 cm and effacement > 80%, active herpes and known group B streptococci-positive women.
Planned management (n = 119): induction of labour 8 hours after PROM with intravenous oxytocin. Expectant management (n = 123): expectant management for 48 hours; induced if group B beta-haemolytic streptococci were detected on screen or culture; if a clinical diagnosis of chorioamnionitis was made; if 48 hours from PROM had elapsed and spontaneous labour had not ensued.
Caesarean section, caesarean section for Bishop score < 5, chorioamnionitis, funisitis, endometritis, induction of labour, admission to NICU.
B – Unclear
Ottervanger 1996
Randomisation: method of generation was not stated, and allocation concealment was by means of sealed opaque envelopes.  Blinding: not stated.  Losses to follow up: not stated.
Parity: not stated. Inclusion criteria: women with a singleton pregnancy with cephalic presentation and ruptured membranes for at least 8 hours at a gestational age between 37 and 42 weeks.  Exclusion criteria: women with obstetric problems judged to require direct intervention, such as signs of intrauterine infection, abnormal cardiotocographic registration or hypertensive disorders.

# Characteristics of included studies (Continued)

	State of cervix: not stated.
Interventions	Planned management (n = 61): intravenous oxytocin, starting at a dose of 2.5 mU/min and augmented every
	20 mins until adequate contractility was obtained.
	Expectant management (n = 62): admission to hospital for 48 hours; if labour had not ensued within 48 hours, women were offered induction of labour by intravenous oxytocin.
Outcomes	Maternal mortality, caesarean section, vaginal birth, operative vaginal birth, endometritis, induction of labour, perinatal mortality, neonatal infection.
Notes	
Allocation concealment	B – Unclear
Study	Shalev 1995
Methods	Randomisation: last digit of each woman's ID number (odd and even).
	Blinding: the alternation system of allocation was known only to the attending physicians - women, nurses and other medical staff members were not told of the assignment method (although this may have been quite easy to guess).  Losses to follow up: not stated.
Participants	566.
	Parity: not stated.  Inclusion criteria: women between 37-42 weeks' gestation (as defined by the last menstrual period and confirmed by ultrasound). All had presented with PROM followed by at least 6 hours without uterine contractions. Exclusion criteria: women with uncertain dating, maternal diseases (gestational diabetes and hypertension), maternal fever, previous caesarean, nonvertex presentation, suspected fetal malformation or fetal distress. Women who were examined digitally were excluded from further study.  State of cervix: not stated.
Interventions	Planned management (n = 298): 12 hour expectant management, then oxytocin.  Expectant management (n = 268): 72 hour expectant management.
Outcomes	Caesarean section, vaginal birth, operative vaginal birth, chorioamnionitis, mode of induction of labour, time from rupture of membranes to birth, perinatal mortality, neonatal sepsis, Apgar score < 7 at 5 minutes, birthweight.
Notes	
Allocation concealment	C – Inadequate
Study	Wagner 1989
Methods	Randomisation: last digit of the medical record number (odd/even).
	Blinding: not stated (but not possible here).  Losses to follow up: not stated but women in the planned management group were excluded if they had not gone into labour within 10 hours of ROM (likely reason for fewer women in planned management group compared with the expectant management group).
Participants	Parity: not stated. Inclusion criteria: healthy pregnant women with low risk pregnancies at 37-42 weeks' gestation, seen within 6 hours of spontaneous rupture of membranes, who had an unfavourable cervix and were not in labour. Rupture of membranes had to be documented by sterile speculum examination with positive ferning and nitrazine tests. Cervix had to appear dilated less than 2 cm and effaced less than 80%.
Interventions	Planned management (n = 86): immediate induction with oxytocin.  Expectant management (n = 96): waited for labour; returned to labour and delivery suite if: 1) if signs of infection or fetal distress occurred; 2) when spontaneous labour occurred; 3) 24 hours after spontaneous rupture of membranes for oxytocin labour if labour did not occur spontaneously (3 mU/minute and was increased by 3 mU.minute every 20 mins until the desired contraction pattern).

Outcomes	Caesarean section (and reason for caesarean section), vaginal birth, operative vaginal birth, chorioamnionitis, endometritis, neonatal infection, Apgar score < 7 at 5 minutes.
Notes	
Allocation concealment	C – Inadequate
GA: gestational age	
min/mins: minute(s)	
NICU: neonatal intensive	care unit
PROM: prelabour rupture	of membranes
ROM: rupture of membrar	nes
SD: standard deviation	
SROM: spontaneous ruptu	re of membranes

# Characteristics of excluded studies

Study	Reason for exclusion
Alcalay 1996	Could not establish that all women had gestations of at least 37 weeks; Paper stated "greater than 36 weeks".
Brosnan 1996	Plan for a study that appears not to have been carried out.
Cararach 1994	Could not establish that all women had gestations of at least 37 weeks; abstract stated greater than or equal to 34 weeks.
Chang 1997	Could not establish that all women had gestations of at least 37 weeks; abstract stated "at term".
Chua 1995	Could not establish that all women had gestations of at least 37 weeks; paper stated "after 36 weeks of pregnancy" plus labour was induced after only 12 hours in the expectant management group.
Davies 1991	Could not establish that all women had gestations of at least 37 weeks; paper stated "after 36 weeks of pregnancy".
Duff 1984	Could not establish that all women had gestations of at least 37 weeks; paper stated "greater than or equal to 36 weeks".
Freeman 1968	Could not establish that all women had gestations of at least 37 weeks; paper stated "36 weeks or greater".
Gloeb 1989	Could not establish that all women had gestations of at least 37 weeks; abstract stated "34 completed to 41 weeks gestation".
Gonen 1994	Could not establish that all women had gestations of at least 37 weeks; paper stated "PROM at or beyond 36 complete weeks".
Granstrom 1996	Could not establish that all women had gestations of at least 37 weeks; paper stated "36 to 42 weeks".
Grant 1992	Excluded women with gestation equal to or less than 36 weeks so trial may have included women with less than 37 weeks' gestation.
Hidar 2000	Could not establish that all women had gestations of at least 37 weeks; paper stated "greater than or equal to 36 weeks".
Hjertberg 1996	Could not establish that all women had gestations of at least 37 weeks; paper stated "36+0 to 46+0 weeks".
Hoffman 2001	Expectant management lasted less than 24 hours.
Ladfors 1996	Could not establish that all women had gestations of at least 37 weeks; paper stated "34 to 42 weeks".
Lo 2003	Could not establish that all women had gestations of at least 37 weeks; paper stated "at least 36 0/7 to 41 6/7 weeks' gestation".
Mahmood 1989	Could not establish that all women had gestations of at least 37 weeks; abstract stated "after 34 weeks' gestation".
Mateos 1998	> 34 weeks gestation; figures for 37 weeks or more gestation not reported separately.
McCaul 1997	Could not establish that all women had gestations of at least 37 weeks; paper stated "between 36 weeks and 42 weeks".
Morales 1986	Could not establish that all women had gestations of at least 37 weeks; paper stated "greater than 36 weeks".

# Characteristics of excluded studies (Continued)

Ngai 1996	Labour was induced after only 12 hours in the expectant management group.
Ozden 2002	Could not establish that all women had gestations of at least 37 weeks; paper stated "36 weeks of completed gestation".
Perez Picarol 1990	Could not establish that all women had gestations of at least 37 weeks; abstract stated "at term".
Ray 1992	Could not establish that all women had gestations of at least 37 weeks; paper stated "greater than 36 weeks".
Rydhstrom 1991	Could not establish that all women had gestations of at least 37 weeks; paper stated "between 36 weeks and 41 weeks".
Shetty 2002	Could not establish that all women had gestations of at least 37 weeks; specified only as at or after 36 weeks.
Shoaib 1994	Could not establish that all women had gestations of at least 37 weeks; specified only as "at or near term".
Sperling 1993	Could not establish that all women had gestations of at least 37 weeks; specified only as "after 36 weeks".
Suzuki 2000	Not all women had PROM.
Tamsen 1990	Could not establish that all women had gestations of at least 37 weeks; paper stated "> 36 completed weeks".
Thomas 2000	Could not establish that all women had gestations of at least 37 weeks; abstract stated "at term".
Van Heerden 1992	> 34 weeks gestation; figures for 37 weeks or more gestation not reported separately.
Van der Walt 1989	Could not establish that all women had gestations of at least 37 weeks; paper stated greater than or equal to 36 weeks.

A N A L Y S E S

Comparison 01. Any planned versus expectant management: by type

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Maternal mortality	1	123	Relative Risk (Random) 95% CI	Not estimable
02 Caesarean section	13	6814	Relative Risk (Random) 95% CI	0.94 [0.82, 1.08]
03 Chorioamnionitis	10	6611	Relative Risk (Random) 95% CI	0.74 [0.56, 0.97]
04 Endometritis	4	445	Relative Risk (Random) 95% CI	0.30 [0.12, 0.74]
05 Postpartum fever	6	5521	Relative Risk (Random) 95% CI	0.69 [0.41, 1.17]
06 Placental abruption	0	0	Relative Risk (Random) 95% CI	Not estimable
07 Induction of labour	9	6420	Relative Risk (Random) 95% CI	3.51 [3.03, 4.05]
08 Vaginal birth	13	6814	Relative Risk (Random) 95% CI	1.01 [0.99, 1.02]
09 Operative vaginal birth	8	5611	Relative Risk (Random) 95% CI	0.98 [0.84, 1.16]
10 Use of epidural anaesthesia	3	360	Relative Risk (Random) 95% CI	1.09 [0.74, 1.61]
11 Uterine rupture	1	59	Relative Risk (Random) 95% CI	2.90 [0.12, 68.50]
12 Antenatal hospital stay	0	0	Weighted Mean Difference (Random) 95% CI	Not estimable
13 Postnatal hospital stay	0	0	Weighted Mean Difference (Random) 95% CI	Not estimable
14 Maternal satisfaction: nothing liked	2	5041	Relative Risk (Random) 95% CI	0.43 [0.36, 0.52]
15 Maternal satisfaction: nothing disliked	2	5041	Relative Risk (Random) 95% CI	1.20 [1.10, 1.30]
16 Maternal views of care	0	0	Relative Risk (Random) 95% CI	Not estimable
17 Postnatal depression	0	0	Relative Risk (Random) 95% CI	Not estimable
18 Breastfeeding	1	126	Relative Risk (Random) 95% CI	Not estimable
19 Fetal/perinatal mortality	6	5870	Odds Ratio (Fixed) 95% CI	0.46 [0.13, 1.66]
20 Cord prolapse	3	5081	Relative Risk (Random) 95% CI	1.00 [0.06, 16.03]
21 Gestational age at birth	0	0	Weighted Mean Difference (Random) 95% CI	Not estimable
22 Time from rupture of membranes to birth	5	1108	Weighted Mean Difference (Random) 95% CI	-9.53 [-12.96, -6.10]
23 Respiratory distress syndrome	0	0	Relative Risk (Random) 95% CI	Not estimable

24 Apgar score < 7 at 5 minutes	7	6005	Relative Risk (Random) 95% CI	0.93 [0.81, 1.07]
25 Mechanical ventilation	3	5158	Relative Risk (Random) 95% CI	0.99 [0.46, 2.12]
26 Birthweight	3	845	Weighted Mean Difference (Random) 95% CI	-88.93 [-138.73, -39.13]
27 Neonatal infection	10	6406	Relative Risk (Random) 95% CI	0.83 [0.61, 1.12]
28 Neonatal intensive care unit or special care nursery admission	6	5679	Relative Risk (Random) 95% CI	0.73 [0.58, 0.91]
29 Length of stay in neonatal intensive care unit	1	220	Relative Risk (Random) 95% CI	2.00 [0.37, 10.70]
30 Cystic periventricular leukomalacia	0	0	Relative Risk (Random) 95% CI	Not estimable
31 Intraventricular haemorrhage	0	0	Relative Risk (Random) 95% CI	Not estimable
32 Necrotising enterocolitis	0	0	Relative Risk (Random) 95% CI	Not estimable
33 Neonatal encephalopathy	0	0	Relative Risk (Random) 95% CI	Not estimable
34 Disability at time of childhood follow up	0	0	Relative Risk (Random) 95% CI	Not estimable
35 Time from rupture of membranes to birth: other data			Other data	No numeric data

# Comparison 02. Any planned versus expectant management: by parity

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	14	6814	Relative Risk (Random) 95% CI	0.94 [0.82, 1.08]
02 Chorioamnionitis	9	6611	Relative Risk (Random) 95% CI	0.75 [0.59, 0.97]
03 Endometritis	4	445	Relative Risk (Random) 95% CI	0.30 [0.12, 0.74]
04 Postpartum fever	5	5521	Relative Risk (Random) 95% CI	0.69 [0.38, 1.24]
05 Induction of labour	8	6420	Relative Risk (Random) 95% CI	3.38 [2.81, 4.07]
06 Vaginal birth	14	6814	Relative Risk (Random) 95% CI	1.01 [0.99, 1.02]
07 Operative vaginal birth	9	5611	Relative Risk (Random) 95% CI	1.04 [0.83, 1.31]
08 Use of epidural anaesthesia	3	360	Relative Risk (Random) 95% CI	1.09 [0.74, 1.61]
09 Fetal/perinatal mortality	5	5870	Relative Risk (Random) 95% CI	0.47 [0.13, 1.67]
10 Cord prolapse	2	5081	Relative Risk (Random) 95% CI	1.00 [0.06, 16.02]
11 Time from rupture of membranes to birth (hours)	5	1108	Weighted Mean Difference (Random) 95% CI	-9.53 [-12.96, -6.10]
12 Apgar score < 7 at 5 minutes	6	6005	Relative Risk (Random) 95% CI	0.93 [0.81, 1.07]
13 Mechanical ventilation (after initial resuscitation)	2	5158	Relative Risk (Random) 95% CI	0.90 [0.33, 2.47]
14 Birthweight	3	845	Weighted Mean Difference (Random) 95% CI	-88.93 [-138.73, -39.13]
15 Neonatal infection	9	6406	Relative Risk (Random) 95% CI	0.83 [0.61, 1.12]
16 Neonatal intensive care unit or special care nursery admission	5	5679	Relative Risk (Random) 95% CI	0.72 [0.57, 0.92]

# Comparison 03. Oxytocin versus expectant management/placebo: by parity

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	9	3800	Relative Risk (Random) 95% CI	0.96 [0.80, 1.16]
02 Chorioamnionitis	5	3637	Relative Risk (Random) 95% CI	0.74 [0.51, 1.07]
03 Endometritis	3	345	Relative Risk (Random) 95% CI	0.29 [0.11, 0.76]
04 Postpartum fever	2	2647	Relative Risk (Random) 95% CI	0.55 [0.35, 0.86]

05 Induction of labour	6	3760	Relative Risk (Random) 95% CI	3.49 [2.89, 4.22]
06 Vaginal birth	9	3800	Relative Risk (Random) 95% CI	1.00 [0.98, 1.02]
07 Operative vaginal birth	7	2992	Relative Risk (Random) 95% CI	0.98 [0.74, 1.28]
08 Maternal satisfaction: nothing liked	1	2521	Relative Risk (Random) 95% CI	0.43 [0.33, 0.56]
09 Maternal satisfaction: nothing disliked	1	2521	Relative Risk (Random) 95% CI	1.19 [1.05, 1.34]
10 Breastfeeding	1	126	Relative Risk (Random) 95% CI	Not estimable
11 Fetal/perinatal mortality	4	3250	Relative Risk (Random) 95% CI	0.46 [0.10, 2.04]
12 Cord prolapse	2	2561	Relative Risk (Random) 95% CI	1.00 [0.06, 16.03]
13 Time from rupture of membranes to birth (hours)	2	748	Weighted Mean Difference (Random) 95% CI	-12.75 [-15.36, -10.15]
14 Apgar score < 7 at 5 mins	5	3429	Relative Risk (Random) 95% CI	0.94 [0.78, 1.14]
15 Mechanical ventilation (after initial resuscitation)	2	2641	Relative Risk (Random) 95% CI	0.69 [0.34, 1.40]
16 Birthweight	1	566	Weighted Mean Difference (Random) 95% CI	-113.00 [-186.16, -39.84]
17 Neonatal infection	5	3432	Relative Risk (Random) 95% CI	0.67 [0.43, 1.06]
18 Neonatal intensive care unit or special care nursery admission	3	2883	Relative Risk (Random) 95% CI	0.58 [0.39, 0.85]

# Comparison 04. Prostaglandin versus expectant management/placebo: by parity

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	6	2980	Relative Risk (Random) 95% CI	0.91 [0.74, 1.11]
02 Chorioamnionitis	5	2974	Relative Risk (Random) 95% CI	0.77 [0.49, 1.22]
03 Endometritis	1	100	Relative Risk (Random) 95% CI	0.33 [0.01, 7.99]
04 Postpartum fever	4	2874	Relative Risk (Random) 95% CI	0.75 [0.32, 1.76]
05 Induction of labour	2	2620	Relative Risk (Random) 95% CI	4.12 [3.50, 4.84]
06 Vaginal birth	6	2974	Relative Risk (Random) 95% CI	1.01 [0.99, 1.03]
07 Operative vaginal birth	3	2579	Relative Risk (Random) 95% CI	1.07 [0.82, 1.40]
08 Use of epidural anaesthesia	2	320	Relative Risk (Random) 95% CI	1.05 [0.70, 1.57]
09 Uterine rupture	1	59	Relative Risk (Random) 95% CI	2.90 [0.12, 68.50]
10 Maternal satisfaction: nothing liked	1	2520	Relative Risk (Random) 95% CI	0.44 [0.33, 0.58]
11 Maternal satisfaction: nothing disliked	1	2520	Relative Risk (Random) 95% CI	1.21 [1.07, 1.36]
12 Fetal/perinatal mortality	1	2520	Relative Risk (Random) 95% CI	0.50 [0.05, 5.52]
13 Cord prolapse	1	2520	Relative Risk (Random) 95% CI	Not estimable
14 Time from rupture of membranes to birth (hours)	2	320	Weighted Mean Difference (Random) 95% CI	-8.45 [-12.24, -4.66]
15 Apgar score < 7 at 5 minutes	2	2576	Relative Risk (Random) 95% CI	0.91 [0.75, 1.12]
16 Mechanical ventilation (after initial resuscitation)	1	2517	Relative Risk (Random) 95% CI	1.86 [0.74, 4.64]
17 Birthweight	2	279	Weighted Mean Difference (Random) 95% CI	-68.15 [-136.13, -0.17]
18 Neonatal infection	5	2974	Relative Risk (Random) 95% CI	0.99 [0.65, 1.50]
19 Neonatal intensive care unit or special care nursery admission	3	2796	Relative Risk (Random) 95% CI	0.87 [0.73, 1.03]

# Comparison 05. Caulophyllum versus placebo: by parity

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	1	40	Relative Risk (Random) 95% CI	5.00 [0.26, 98.00]
02 Induction of labour	1	40	Relative Risk (Random) 95% CI	2.22 [1.37, 3.61]
03 Vaginal birth	1	40	Relative Risk (Random) 95% CI	0.90 [0.78, 1.04]
04 Operative vaginal birth	1	40	Relative Risk (Random) 95% CI	1.00 [0.16, 6.42]
05 Use of epidural anaesthesia	1	40	Relative Risk (Random) 95% CI	2.00 [0.41, 9.71]
06 Time from rupture of	1	40	Weighted Mean Difference (Random) 95% CI	-0.80 [-9.50, 7.90]
membranes to birth (hours)				

# Comparison 06. Digital vaginal exam: planned versus expectant management

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Chorioamnionitis	9	6611	Relative Risk (Random) 95% CI	0.75 [0.59, 0.97]
02 Endometritis	4	445	Relative Risk (Random) 95% CI	0.30 [0.12, 0.74]
03 Neonatal infection	9	6406	Relative Risk (Random) 95% CI	0.85 [0.63, 1.15]

# Comparison 07. Unfavourable/favourable cervix: planned versus expectant management:

	No. of	No. of		
Outcome title	studies	participants	Statistical method	Effect size
01 Caesarean section	12	6814	Relative Risk (Random) 95% CI	0.94 [0.82, 1.08]
02 Chorioamnionitis	9	6611	Relative Risk (Random) 95% CI	0.75 [0.59, 0.97]
03 Endometritis	4	445	Relative Risk (Random) 95% CI	0.30 [0.12, 0.74]
04 Postpartum fever	5	5521	Relative Risk (Random) 95% CI	0.69 [0.38, 1.24]
05 Induction of labour	8	6420	Relative Risk (Random) 95% CI	3.38 [2.81, 4.07]
06 Vaginal birth	11	6739	Relative Risk (Random) 95% CI	1.00 [0.99, 1.02]
07 Operative vaginal birth	7	5611	Relative Risk (Random) 95% CI	1.11 [0.74, 1.69]
08 Use of epidural anaesthesia	3	360	Relative Risk (Random) 95% CI	1.09 [0.74, 1.61]
09 Time of rupture of membranes to birth (hours)	5	1108	Weighted Mean Difference (Random) 95% CI	-9.53 [-12.96, -6.10]
10 Apgar score < 7 at 5 minutes	6	6005	Relative Risk (Random) 95% CI	0.93 [0.81, 1.07]
11 Birthweight	3	845	Weighted Mean Difference (Random) 95% CI	-88.93 [-138.73, -39.13]
12 Neonatal infection	9	6406	Relative Risk (Random) 95% CI	0.83 [0.61, 1.12]
13 Neonatal intensive care unit or special care nursery admission	5	5679	Relative Risk (Random) 95% CI	0.72 [0.57, 0.92]

# Comparison 08. Maternal antibiotic prophylaxis: planned versus expectant management

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	11	6739	Relative Risk (Random) 95% CI	0.93 [0.81, 1.08]
02 Chorioamnionitis	9	6611	Relative Risk (Random) 95% CI	0.75 [0.59, 0.97]
03 Endometritis	4	445	Relative Risk (Random) 95% CI	0.30 [0.12, 0.74]
04 Postpartum fever	5	5521	Relative Risk (Random) 95% CI	0.69 [0.38, 1.24]
05 Induction of labour	8	6420	Relative Risk (Random) 95% CI	3.38 [2.81, 4.07]

06 Vaginal birth	12	6981	Relative Risk (Random) 95% CI	1.01 [0.99, 1.02]
07 Operative vaginal birth	7	5611	Relative Risk (Random) 95% CI	1.11 [0.74, 1.69]
08 Neonatal infection	9	6406	Relative Risk (Random) 95% CI	0.83 [0.61, 1.12]

# Comparison 09. Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section	11	5991	Relative Risk (Random) 95% CI	0.95 [0.82, 1.10]
02 Chorioamnionitis	6	5778	Relative Risk (Random) 95% CI	0.67 [0.51, 0.87]
03 Endometritis	3	263	Relative Risk (Random) 95% CI	0.31 [0.10, 0.95]
04 Postpartum fever	4	5446	Relative Risk (Random) 95% CI	0.75 [0.37, 1.51]
05 Induction of labour	6	5672	Relative Risk (Random) 95% CI	3.65 [2.99, 4.45]
06 Vaginal birth	11	5991	Relative Risk (Random) 95% CI	1.00 [0.99, 1.02]
07 Operative vaginal birth	8	4920	Relative Risk (Random) 95% CI	1.09 [0.84, 1.41]
08 Time from rupture of membranes until birth (hours)	3	360	Weighted Mean Difference (Random) 95% CI	-7.36 [-11.28, -3.45]
09 Apgar score < 7 at 5 minutes	4	5257	Relative Risk (Random) 95% CI	0.78 [0.43, 1.40]
10 Birthweight	2	279	Weighted Mean Difference (Random) 95% CI	-68.15 [-136.13, -0.17]
11 Neonatal infection	6	5583	Relative Risk (Random) 95% CI	0.85 [0.62, 1.17]

# Comparison 10. Blinding: planned versus expectant management

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Caesarean section			Relative Risk (Random) 95% CI	Subtotals only
02 Chorioamnionitis			Relative Risk (Random) 95% CI	Subtotals only
03 Endometritis			Relative Risk (Random) 95% CI	Subtotals only
04 Postpartum fever			Relative Risk (Random) 95% CI	Subtotals only
05 Induction of labour			Relative Risk (Random) 95% CI	Subtotals only
06 Vaginal birth			Relative Risk (Random) 95% CI	Subtotals only
07 Operative vaginal birth			Relative Risk (Random) 95% CI	Subtotals only
08 Use of epidural anaesthesia			Relative Risk (Random) 95% CI	Subtotals only
09 Apgar score < 7 at 5 minutes			Relative Risk (Random) 95% CI	Subtotals only
10 Neonatal infection			Relative Risk (Random) 95% CI	Subtotals only
11 Neonatal intensive care unit or special care nursery admission			Relative Risk (Random) 95% CI	Subtotals only

# INDEX TERMS

# Medical Subject Headings (MeSH)

Cesarean Section [utilization]; \*Fetal Membranes, Premature Rupture; Labor, Induced [\*methods]; Obstetric Labor Complications; Oxytocics; Pregnancy Outcome; Randomized Controlled Trials; \*Term Birth

# MeSH check words

Female; Humans; Pregnancy

#### **COVER SHEET**

**Title** Planned early birth versus expectant management (waiting) for prelabour rupture of mem-

branes at term (37 weeks or more)

Authors Dare MR, Middleton P, Crowther CA, Flenady VJ, Varatharaju B

**Contribution of author(s)**Marianna Dare wrote the protocol and Caroline Crowther and Philippa Middleton worked

with Marianna to produce the final draft. Marianna Dare, Philippa Middleton and Bala Varatharaju carried out the data extraction and all authors worked to produce the final draft

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**SUBSTANTIVE** amendment

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What's New Information not supplied by author

Date new studies sought but

none found

Information not supplied by author

Date new studies found but not

yet included/excluded

Information not supplied by author

Date new studies found and

included/excluded

Information not supplied by author

Date authors' conclusions

section amended

Information not supplied by author

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#### GRAPHS AND OTHER TABLES

# Analysis 01.01. Comparison 01 Any planned versus expectant management: by type, Outcome 01 Maternal mortality

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 01 Maternal mortality

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
Total (95% CI)	61	62		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not a	applicable				
Test for overall effect: not ap	oplicable				
			0.1 0.2 0.5 2 5 10		

Favours planned Favours expectant

# Analysis 01.02. Comparison 01 Any planned versus expectant management: by type, Outcome 02 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 02 Caesarean section

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
n/N	n/N	l n/N	95% CI	(%)	95% CI
01 Oxytocin					
Akyol 1999	10/52	21/74	+	4.5	0.68 [ 0.35, 1.32 ]
Hannah 1996	127/1258	123/1263	•	35.9	1.04 [ 0.82, 1.31 ]
McQueen 1992	1/20	0/20	<del>- </del>	0.2	3.00 [ 0.13, 69.52 ]
Natale 1994	15/119	17/123	+	4.8	0.91 [ 0.48, 1.74 ]
Ottervanger 1996	4/61	2/62	+-	0.7	2.03 [ 0.39, 10.69 ]
Shalev 1995	14/298	18/268	+	4.3	0.70 [ 0.35, 1.38 ]
Wagner 1989	12/86	15/96	+	4.1	0.89 [ 0.44, 1.80 ]
Subtotal (95% CI)	1894	1906	•	54.5	0.96 [ 0.79, 1.16 ]
Total events: 183 (planned),	196 (expectant)				
Test for heterogeneity chi-se	quare=3.66 df=6 p=0.	72  2 =0.0%			
Test for overall effect z=0.4	I p=0.7				
02 Prostaglandin					
			0.001 0.01 0.1 10 100 1000		
			Favours expectant Favours planned		(Continued )

(... Continued)

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
Chung 1992	7/30	7/29	+	2.4	0.97 [ 0.39, 2.41 ]
Hannah 1996	121/1259	138/1261	•	37.2	0.88 [ 0.70,  .   ]
Mahmood 1992	13/110	12/110	+	3.6	1.08 [ 0.52, 2.27 ]
Mahmood 1995	0/50	2/50		0.2	0.20 [ 0.01, 4.06 ]
Milasinovic 1998	7/38	5/37	-	1.8	1.36 [ 0.47, 3.91 ]
Subtotal (95% CI)	1487	1487	•	45.3	0.91 [ 0.74, 1.12 ]
Total events: 148 (planned) Test for heterogeneity chi-s Test for overall effect z=0.9	quare=1.86 df=4 p=0.	76 I² =0.0%			
03 Caulophyllum					
Beer 1999	2/20	0/20	<del></del>	0.2	5.00 [ 0.26, 98.00 ]
Subtotal (95% CI)	20	20		0.2	5.00 [ 0.26, 98.00 ]
Total events: 2 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=1.0	06 p=0.3				
Total (95% CI)	3401	3413	•	100.0	0.94 [ 0.82, 1.08 ]
Total events: 333 (planned)	, 360 (expectant)				
Test for heterogeneity chi-s	quare=6.89 df=12 p=0	0.86 I <sup>2</sup> =0.0%			
Test for overall effect z=0.8	7 p=0.4				

0.001 0.01 0.1 10
Favours expectant Favours

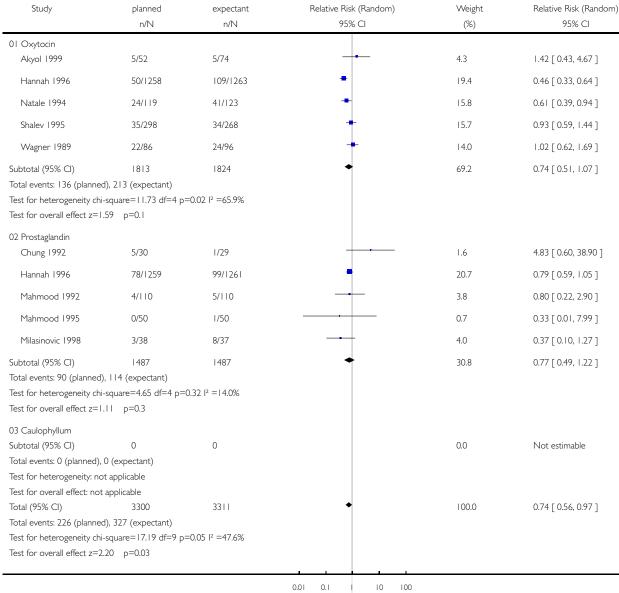
10 100 1000 Favours planned

#### Analysis 01.03. Comparison 01 Any planned versus expectant management: by type, Outcome 03 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 03 Chorioamnionitis



6.01 0.1 10 100

Favours planned Favours expectant

## Analysis 01.04. Comparison 01 Any planned versus expectant management: by type, Outcome 04 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 04 Endometritis

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					
McQueen 1992	2/20	8/20	-	41.2	0.25 [ 0.06, 1.03 ]
Ottervanger 1996	1/61	2/62		14.7	0.51 [ 0.05, 5.46 ]
Wagner 1989	2/86	8/96	-	35.9	0.28 [ 0.06, 1.28 ]
Subtotal (95% CI)	167	178	•	91.8	0.29 [ 0.11, 0.76 ]
Total events: 5 (planned), 18	(expectant)				
Test for heterogeneity chi-sc	quare=0.26 df=2 p=0	0.88 I <sup>2</sup> =0.0%			
Test for overall effect z=2.53	B p=0.01				
02 Prostaglandin					
Mahmood 1995	0/50	1/50		8.2	0.33 [ 0.01, 7.99 ]
Subtotal (95% CI)	50	50		8.2	0.33 [ 0.01, 7.99 ]
Total events: 0 (planned), I	(expectant)				
Test for heterogeneity: not a	pplicable				
Test for overall effect z=0.68	3 p=0.5				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not a	pplicable				
Test for overall effect: not ap	plicable				
Total (95% CI)	217	228	•	100.0	0.30 [ 0.12, 0.74 ]
Total events: 5 (planned), 19	(expectant)				
Test for heterogeneity chi-sc	uare=0.26 df=3 p=0	0.97 I <sup>2</sup> =0.0%			
Test for overall effect z=2.62	p=0.009				

Favours treatment

Favours control

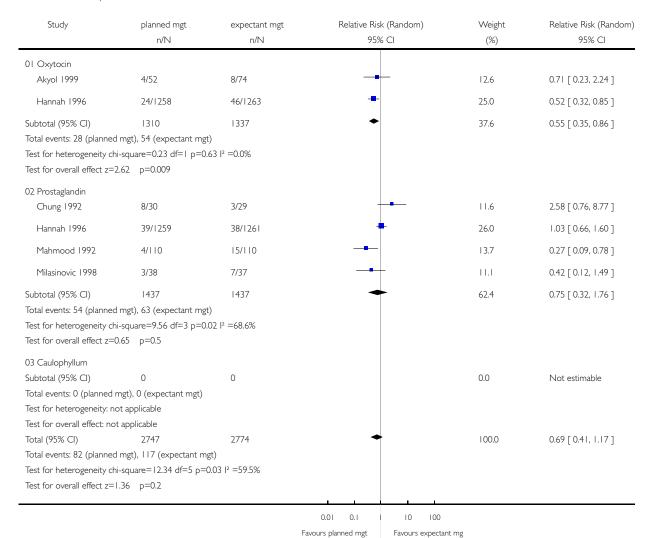
Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

#### Analysis 01.05. Comparison 01 Any planned versus expectant management: by type, Outcome 05 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 05 Postpartum fever



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# Analysis 01.07. Comparison 01 Any planned versus expectant management: by type, Outcome 07 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 07 Induction of labour

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Oxytocin					
Akyol 1999	52/52	25/74	-	10.3	2.96 [ 2.15, 4.07 ]
Hannah 1996	1120/1258	288/1263	•	18.7	3.90 [ 3.52, 4.33 ]
Natale 1994	101/119	23/123		8.6	4.54 [ 3.12, 6.61 ]
Ottervanger 1996	61/61	12/62		5.8	5.17 [ 3.11, 8.59 ]
Shalev 1995	164/298	47/268	-	11.7	3.14 [ 2.37, 4.15 ]
Wagner 1989	86/86	37/96	-	12.7	2.59 [ 2.02, 3.34 ]
Subtotal (95% CI) Total events: 1584 (planned) Test for heterogeneity chi-sc Test for overall effect z=13.0	uare=14.81 df=5 p=0.	1886 01 I <sup>2</sup> =66.2%	•	67.8	3.49 [ 2.89, 4.22 ]
02 Prostaglandin					
Hannah 1996	1129/1259	266/1261	•	18.5	4.25 [ 3.81, 4.74 ]
Mahmood 1995	50/50	15/50		7.5	3.33 [ 2.18, 5.09 ]
Subtotal (95% CI) Total events: 1179 (planned) Test for heterogeneity chi-sc Test for overall effect z=17.1	uare=1.19 df=1 p=0.2	1311 7   <sup>2</sup> =16.2%	•	26.0	4.12 [ 3.50, 4.84 ]
03 Caulophyllum					
Beer 1999	20/20	9/20		6.2	2.22 [ 1.37, 3.61 ]
Subtotal (95% CI) Total events: 20 (planned), 9 Test for heterogeneity: not a Test for overall effect z=3.23	pplicable	20	•	6.2	2.22 [ 1.37, 3.61 ]
Total (95% CI) Total events: 2783 (planned)	3203	3217 001   <sup>2</sup> =68.1%	•	100.0	3.51 [ 3.03, 4.05 ]

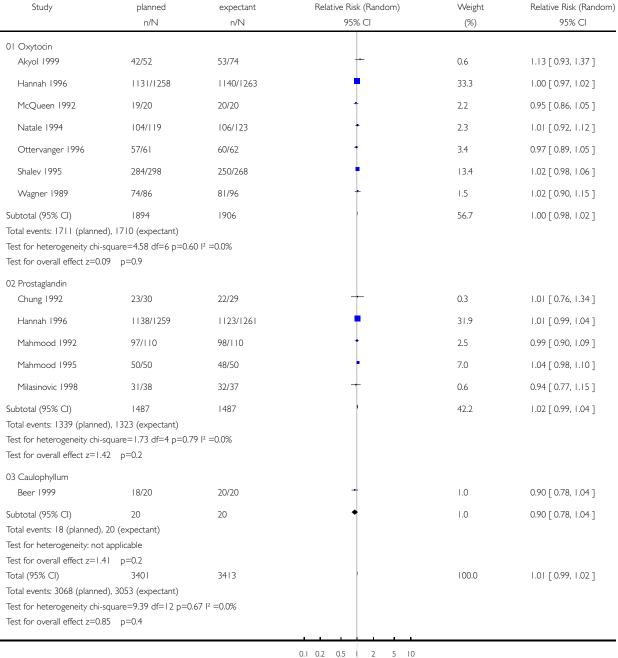
0.1 0.2 0.5 | 2 5 10 | Favours planned | Favours expectant

#### Analysis 01.08. Comparison 01 Any planned versus expectant management: by type, Outcome 08 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 08 Vaginal birth



Favours expectant Favours planned

# Analysis 01.09. Comparison 01 Any planned versus expectant management: by type, Outcome 09 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 09 Operative vaginal birth

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Oxytocin					_
Akyol 1999	1/52	0/74		0.3	4.25 [ 0.18, 102.21 ]
Hannah 1996	233/1258	256/1263	•	47.1	0.91 [ 0.78, 1.07 ]
× McQueen 1992	0/20	0/20		0.0	Not estimable
Ottervanger 1996	10/61	4/62	-	2.1	2.54 [ 0.84, 7.67 ]
Wagner 1989	7/86	12/96	-	3.3	0.65 [ 0.27, 1.58 ]
Subtotal (95% CI)	1477	1515	•	52.8	1.04 [ 0.62, 1.73 ]
Total events: 251 (planned)	, 272 (expectant)				
Test for heterogeneity chi-s	quare=4.73 df=3 p=0.	19 I <sup>2</sup> =36.6%			
Test for overall effect z=0.1	4 p=0.9				
02 Prostaglandin					
Chung 1992	6/30	2/29	+-	1.1	2.90 [ 0.64, 13.22 ]
Hannah 1996	228/1259	226/1261	•	45.3	1.01 [ 0.86, 1.19 ]
Subtotal (95% CI)	1289	1290	•	46.4	1.29 [ 0.54, 3.10 ]
Total events: 234 (planned)	, 228 (expectant)				
Test for heterogeneity chi-s	quare=1.84 df=1 p=0.	18 I <sup>2</sup> =45.5%			
Test for overall effect z=0.5	8 p=0.6				
03 Caulophyllum					
Beer 1999	2/20	2/20		0.8	1.00 [ 0.16, 6.42 ]
Subtotal (95% CI)	20	20	-	0.8	1.00 [ 0.16, 6.42 ]
Total events: 2 (planned), 2	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=0.0	0 p=1				
Total (95% CI)	2786	2825	•	100.0	0.98 [ 0.84, 1.16 ]
Total events: 487 (planned)	, 502 (expectant)				
Test for heterogeneity chi-s	quare=7.31 df=6 p=0.	29 I <sup>2</sup> = I 7.9%			
Test for overall effect z=0.1	9 p=0.8				
			0.001 0.01 0.1   10 100 1000		

Favours planned Favours expectant

# Analysis 01.10. Comparison 01 Any planned versus expectant management: by type, Outcome 10 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 10 Use of epidural anaesthesia

Study	planned	expectant			Relative Risk (Random)
n/N		n/N	n/N 95% CI		95% CI
01 Oxytocin					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect: not	applicable				
02 Prostaglandin					
Mahmood 1992	33/110	32/110	<u>=</u>	91.2	1.03 [ 0.69, 1.55 ]
Mahmood 1995	2/50	1/50		2.7	2.00 [ 0.19, 21.36 ]
Subtotal (95% CI)	160	160	<b>+</b>	93.9	1.05 [ 0.70, 1.57 ]
Total events: 35 (planned)	, 33 (expectant)				
Test for heterogeneity chi-	square=0.29 df=1 p=	=0.59 I <sup>2</sup> =0.0%			
Test for overall effect z=0.	24 p=0.8				
03 Caulophyllum					
Beer 1999	4/20	2/20		6.1	2.00 [ 0.41, 9.71 ]
Subtotal (95% CI)	20	20		6.1	2.00 [ 0.41, 9.71 ]
Total events: 4 (planned),	2 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0.	86 p=0.4				
Total (95% CI)	180	180	<b>*</b>	100.0	1.09 [ 0.74, 1.61 ]
Total events: 39 (planned)	, 35 (expectant)				
Test for heterogeneity chi-	square=0.90 df=2 p=	=0.64 I <sup>2</sup> =0.0%			
Test for overall effect z=0.	45 p=0.7				

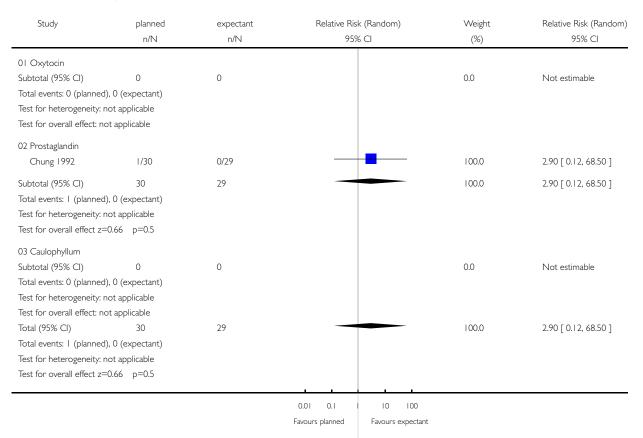
Favours planned Favours expectant

#### Analysis 01.11. Comparison 01 Any planned versus expectant management: by type, Outcome 11 Uterine rupture

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: II Uterine rupture



## Analysis 01.12. Comparison 01 Any planned versus expectant management: by type, Outcome 12 Antenatal hospital stay

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) Comparison: 01 Any planned versus expectant management: by type Outcome: 12 Antenatal hospital stay Weighted Mean Difference (Random) Study planned expectant Weight Weighted Mean Difference (Random) Ν Mean(SD) Ν 95% CI 95% CI Mean(SD) (%) 0.0 Total (95% CI) 0 Not estimable Test for heterogeneity: not applicable Test for overall effect: not applicable -10.0 -5.0 0 5.0 10.0 Favours planned Favours expectant

Analysis 01.13. Comparison 01 Any planned versus expectant management: by type, Outcome 13 Postnatal hospital stay

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 13 Postnatal hospital stay

Study	planned N	expectant	Weighted Mean Difference (Random)		Weight	Weighted Mean Difference (Random)
	Mean(SD)	Ν				
		Mean(SD)		95% CI	(%)	95% CI
Total (95% CI)	0	0			0.0	Not estimable
Test for heterogen	eity: not applicable					
Test for overall effe	ect: not applicable					
			-10.0 -5.0	0 5.0 10.0		
			Favours planned	Favours expectant		

# Analysis 01.14. Comparison 01 Any planned versus expectant management: by type, Outcome 14 Maternal satisfaction: nothing liked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 14 Maternal satisfaction: nothing liked

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Oxytocin					_
Hannah 1996	74/1258	173/1263	-	54.1	0.43 [ 0.33, 0.56 ]
Subtotal (95% CI)	1258	1263	•	54.1	0.43 [ 0.33, 0.56 ]
Total events: 74 (planned),	173 (expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=6.3	85 p<0.00001				
02 Prostaglandin					
Hannah 1996	64/1259	147/1261	-	45.9	0.44 [ 0.33, 0.58 ]
Subtotal (95% CI)	1259	1261	•	45.9	0.44 [ 0.33, 0.58 ]
Total events: 64 (planned),	147 (expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=5.7	75 p<0.00001				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect: not a	applicable				
Total (95% CI)	2517	2524	•	100.0	0.43 [ 0.36, 0.52 ]
Total events: 138 (planned)	, 320 (expectant)				
Test for heterogeneity chi-s	square=0.01 df=1 p=	=0.94  2 =0.0%			
Test for overall effect z=8.5	57 p<0.00001				

0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

## Analysis 01.15. Comparison 01 Any planned versus expectant management: by type, Outcome 15 Maternal satisfaction: nothing disliked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 15 Maternal satisfaction: nothing disliked

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					
Hannah 1996	397/1258	336/1263	•	48.0	1.19 [ 1.05, 1.34 ]
Subtotal (95% CI)	1258	1263	•	48.0	1.19 [ 1.05, 1.34 ]
Total events: 397 (planne	ed), 336 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect z=	2.73 p=0.006				
02 Prostaglandin					
Hannah 1996	424/1259	352/1261		52.0	1.21 [ 1.07, 1.36 ]
Subtotal (95% CI)	1259	1261	•	52.0	1.21 [ 1.07, 1.36 ]
Total events: 424 (planne	ed), 352 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect z=	3.12 p=0.002				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned)	), 0 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect: no	ot applicable				
Total (95% CI)	2517	2524	•	100.0	1.20 [ 1.10, 1.30 ]
Total events: 821 (planne	ed), 688 (expectant)				
Test for heterogeneity ch	ni-square=0.04 df=1 p=	0.85 l <sup>2</sup> =0.0%			
Test for overall effect z=	4.14 p=0.00003				

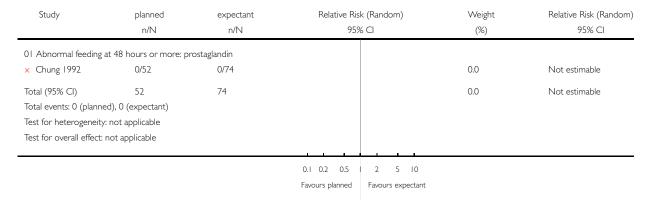
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

## Analysis 01.18. Comparison 01 Any planned versus expectant management: by type, Outcome 18 Breastfeeding

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 18 Breastfeeding



Analysis 01.19. Comparison 01 Any planned versus expectant management: by type, Outcome 19 Fetal/perinatal mortality

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 19 Fetal/perinatal mortality

Study	planned	expectant	Odds Ratio (Fixed)	Weight	Odds Ratio (Fixed)
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					_
Hannah 1996	2/1258	4/1263	-	53.5	0.50 [ 0.09, 2.74 ]
McQueen 1992	0/20	1/20		19.7	0.32 [ 0.01, 8.26 ]
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
× Shalev 1995	0/298	0/268		0.0	Not estimable
Subtotal (95% CI) Total events: 2 (planned), 5 Test for heterogeneity chi-se Test for overall effect z=1.0	quare=0.06 df=1 p=0.	1613 81   <sup>2</sup> =0.0%		73.2	0.45 [ 0.10, 2.03 ]
02 Prostaglandin					
Hannah 1996	1/1259	2/1261		26.8	0.50 [ 0.05, 5.53 ]
× Mahmood 1995	0/50	0/50		0.0	Not estimable
Subtotal (95% CI) Total events: I (planned), 2	1309 (expectant)	1311		26.8	0.50 [ 0.05, 5.53 ]
Test for heterogeneity: not					
			0.001 0.01 0.1 1 10 100 1000		
			Favours treatment Favours control		(Continued )

(... Continued)

Study	planned	expectant	Odds Ratio (Fixed)	Weight	Odds Ratio (Fixed)
	n/N	n/N	95% CI	(%)	95% CI
Test for overall effect z=0	0.57 p=0.6				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect: not	: applicable				
Total (95% CI)	2946	2924	-	100.0	0.46 [ 0.13, 1.66 ]
Total events: 3 (planned),	7 (expectant)				
Test for heterogeneity chi	-square=0.06 df=2 p=0.	97 I <sup>2</sup> =0.0%			
Test for overall effect $z=1$	.18 p=0.2				
			0.001 0.01 0.1 1 10 100 1000		

# Analysis 01.20. Comparison 01 Any planned versus expectant management: by type, Outcome 20 Cord prolapse

Favours treatment Favours control

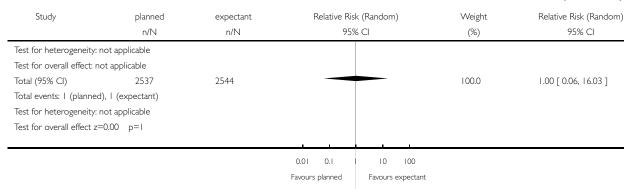
Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 20 Cord prolapse

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					
Hannah 1996	1/1258	1/1263		100.0	1.00 [ 0.06, 16.03 ]
× McQueen 1992	0/20	0/20		0.0	Not estimable
Subtotal (95% CI)	1278	1283		100.0	1.00 [ 0.06, 16.03 ]
Total events: I (planned),	l (expectant)				
Test for heterogeneity: not	t applicable				
Test for overall effect z=0.	00 <sub>P</sub> =I				
02 Prostaglandin					
× Hannah 1996	0/1259	0/1261		0.0	Not estimable
Subtotal (95% CI)	1259	1261		0.0	Not estimable
Total events: 0 (planned), 0	0 (expectant)				
Test for heterogeneity: not	t applicable				
Test for overall effect: not	applicable				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), (	0 (expectant)				
			0.01 0.1 1 10 100		,
			Favours planned Favours expectant		(Continued )

(... Continued)



## Analysis 01.21. Comparison 01 Any planned versus expectant management: by type, Outcome 21 Gestational age at birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Favours planned

Comparison: 01 Any planned versus expectant management: by type

Outcome: 21 Gestational age at birth

Study	planned N	expectant	Weighted Me	an Difference (Randon	n) Weight	Weighted Mean Difference (Random)
	Mean(SD)	Ν				
		Mean(SD)		95% CI	(%)	95% CI
Total (95% CI)	0	0			0.0	Not estimable
Test for heterogen	eity: not applicable					
Test for overall effe	ect: not applicable					
			-10.0 -5.0	0 5.0 10.0		

Favours expectant

## Analysis 01.22. Comparison 01 Any planned versus expectant management: by type, Outcome 22 Time from rupture of membranes to birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 22 Time from rupture of membranes to birth

Study		planned		expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Oxytocin							
Shalev 1995	298	20.80 (10.00)	268	33.90 (25.20)	•	23.0	-13.10 [ -16.32, -9.88 ]
Wagner 1989	86	16.20 (6.00)	96	28.30 (21.20)		19.5	-12.10 [ -16.53, -7.67 ]
Subtotal (95% CI)	384		364		•	42.5	-12.75 [ -15.36, -10.15 ]
Test for heterogeneit	y chi-squ	uare=0.13 df=1 p	=0.72 l <sup>2</sup>	=0.0%			
Test for overall effect	z=9.59	p<0.00001					
02 Prostaglandin							
Mahmood 1992	110	20.05 (6.55)	110	26.88 (8.90)	•	26.2	-6.83 [ -8.90, -4.76 ]
Mahmood 1995	50	6.50 (8.70)	50	17.26 (10.80)	•	21.2	-10.76 [ -14.60, -6.92 ]
Subtotal (95% CI)	160		160		•	47.4	-8.45 [ -12.24, -4.66 ]
Test for heterogeneit	y chi-squ	uare=3.12 df=1 p	=0.08 l <sup>2</sup>	=67.9%			
Test for overall effect	z=4.37	p=0.00001					
03 Caulophyllum							
Beer 1999	20	23.80 (15.50)	20	24.60 (12.40)	†	10.1	-0.80 [ -9.50, 7.90 ]
Subtotal (95% CI)	20		20		•	10.1	-0.80 [ -9.50, 7.90 ]
Test for heterogeneit	y: not ap	plicable					
Test for overall effect	z=0.18	p=0.9					
Total (95% CI)	564		544		•	100.0	-9.53 [ -12.96, -6.10 ]
Test for heterogeneit	y chi-squ	uare=16.53 df=4	p=0.002	$I^2 = 75.8\%$			
Test for overall effect	z=5.44	p<0.00001					

-100.0 -50.0 0 50.0 100.0 Favours planned Favours expectant

## Analysis 01.24. Comparison 01 Any planned versus expectant management: by type, Outcome 24 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 24 Apgar score < 7 at 5 minutes

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Oxytocin					
Akyol 1999	4/52	15/74		1.8	0.38 [ 0.13, 1.08 ]
Hannah 1996	164/1256	166/1259	-	47.7	0.99 [ 0.81, 1.21 ]
McQueen 1992	1/20	1/20		0.3	1.00 [ 0.07, 14.90 ]
Shalev 1995	8/298	10/268	-	2.3	0.72 [ 0.29, 1.80 ]
Wagner 1989	0/86	1/96		0.2	0.37 [ 0.02, 9.00 ]
Subtotal (95% CI)	1712	1717		52.2	0.94 [ 0.78, 1.14 ]
Total events: 177 (planne	d), 193 (expectant)				
Test for heterogeneity ch	i-square=3.82 df=4 p=0	).43 I <sup>2</sup> =0.0%			
Test for overall effect z=0	0.61 p=0.5				
02 Prostaglandin					
× Chung 1992	0/30	0/29		0.0	Not estimable
Hannah 1996	158/1258	173/1259	•	47.8	0.91 [ 0.75, 1.12 ]
Subtotal (95% CI)	1288	1288	•	47.8	0.91 [ 0.75, 1.12 ]
Total events: 158 (planne	d), 173 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect z=0	0.88 p=0.4				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect: no	t applicable				
Total (95% CI)	3000	3005	<b>†</b>	100.0	0.93 [ 0.81, 1.07 ]
Total events: 335 (planne	d), 366 (expectant)				
Test for heterogeneity ch	i-square=3.86 df=5 p=0	0.57 I <sup>2</sup> =0.0%			
Test for overall effect z=	1.05 p=0.3				

Favours planned Favours expectant

## Analysis 01.25. Comparison 01 Any planned versus expectant management: by type, Outcome 25 Mechanical ventilation

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 25 Mechanical ventilation

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Oxytocin					
Akyol 1999	5/52	14/74	<del></del>	33.8	0.51 [ 0.20, 1.32 ]
Hannah 1996	7/1256	7/1259		30.7	1.00 [ 0.35, 2.85 ]
Subtotal (95% CI)	1308	1333		64.5	0.69 [ 0.34, 1.40 ]
Total events: 12 (planned)	), 21 (expectant)				
Test for heterogeneity chi	i-square=0.88 df=1 p=	=0.35 I <sup>2</sup> =0.0%			
Test for overall effect z=1	.02 p=0.3				
02 Prostaglandin					
Hannah 1996	13/1258	7/1259		35.5	1.86 [ 0.74, 4.64 ]
Subtotal (95% CI)	1258	1259		35.5	1.86 [ 0.74, 4.64 ]
Total events: 13 (planned)	), 7 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect z=1	.33 p=0.2				
03 Caulophyllum					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect: not	applicable				
Total (95% CI)	2566	2592		100.0	0.99 [ 0.46, 2.12 ]
Total events: 25 (planned)	), 28 (expectant)				
Test for heterogeneity chi	i-square=3.68 df=2 p=	=0.16 l² =45.7%			
Test for overall effect z=0	0.02 p=1				

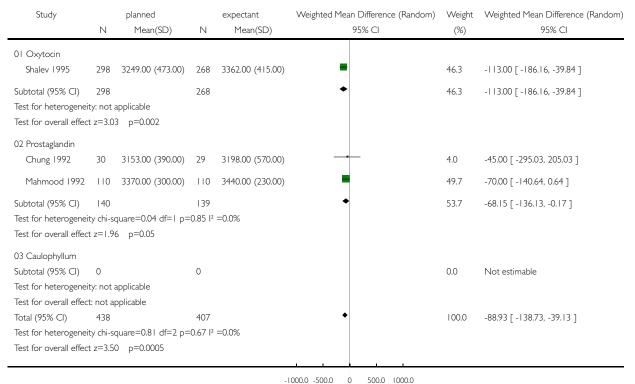
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

## Analysis 01.26. Comparison 01 Any planned versus expectant management: by type, Outcome 26 Birthweight

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 26 Birthweight



-1000.0 -500.0 0 50 Favours expectant Fav

Favours planned

## Analysis 01.27. Comparison 01 Any planned versus expectant management: by type, Outcome 27 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 27 Neonatal infection

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Oxytocin					
Hannah 1996	25/1258	36/1263	-	36.7	0.70 [ 0.42, 1.15 ]
McQueen 1992	0/20	2/20		1.1	0.20 [ 0.01, 3.92 ]
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
Shalev 1995	6/298	6/268	+	7.4	0.90 [ 0.29, 2.75 ]
Wagner 1989	0/86	5/96		1.1	0.10 [ 0.01, 1.81 ]
Subtotal (95% CI) Total events: 31 (planned), 4 Test for heterogeneity chi-so Test for overall effect z=1.72	quare=2.64 df=3 p=0.	1709 45 l² =0.0%	•	46.3	0.67 [ 0.43, 1.06 ]
02 Prostaglandin	·				
Chung 1992	0/30	1/29		0.9	0.32 [ 0.01, 7.61 ]
Hannah 1996	38/1259	34/1261	•	44.8	1.12 [ 0.71, 1.77 ]
Mahmood 1992	2/110	3/110	-	3.0	0.67 [ 0.11, 3.91 ]
Mahmood 1995	1/50	3/50		1.9	0.33 [ 0.04, 3.10 ]
Milasinovic 1998	2/38	3/37	_	3.1	0.65 [ 0.11, 3.67 ]
Subtotal (95% CI) Total events: 43 (planned), 4 Test for heterogeneity chi-sc Test for overall effect z=0.0!	quare=2.10 df=4 p=0.	1487 72 l² =0.0%	•	53.7	0.99 [ 0.65, 1.50 ]
03 Caulophyllum	ρ P-1				
Subtotal (95% CI) Total events: 0 (planned), 0 Test for heterogeneity: not a Test for overall effect: not ap	applicable	0		0.0	Not estimable
Total (95% CI)  Total events: 74 (planned), 9  Test for heterogeneity chi-so	3210 93 (expectant) quare=6.24 df=8 p=0.	3196 62 l² =0.0%	•	100.0	0.83 [ 0.61, 1.12 ]
Test for overall effect z=1.2	I p=0.2				

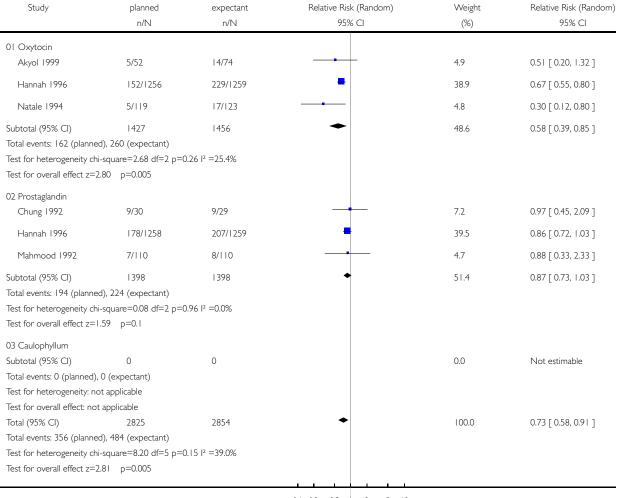
0.001 0.01 0.1 | 10 100 1000 Favours planned Favours expectant

#### Analysis 01.28. Comparison 01 Any planned versus expectant management: by type, Outcome 28 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 28 Neonatal intensive care unit or special care nursery admission



0.1 0.2 0.5 2 5 10

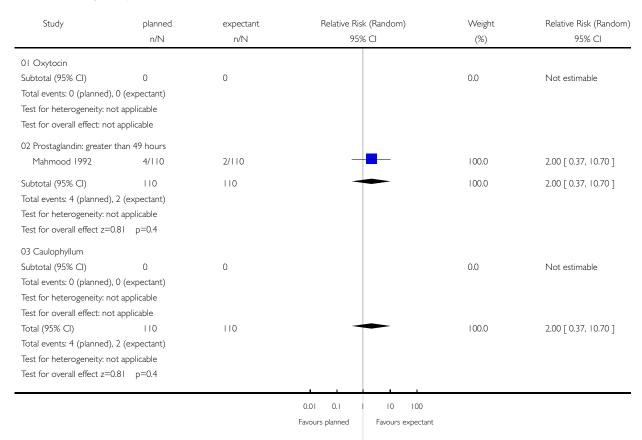
Favours planned Favours expectant

#### Analysis 01.29. Comparison 01 Any planned versus expectant management: by type, Outcome 29 Length of stay in neonatal intensive care unit

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 01 Any planned versus expectant management: by type

Outcome: 29 Length of stay in neonatal intensive care unit



Analysis 01.35. Comparison 01 Any planned versus expectant management: by type, Outcome 35 Time from rupture of membranes to birth: other data

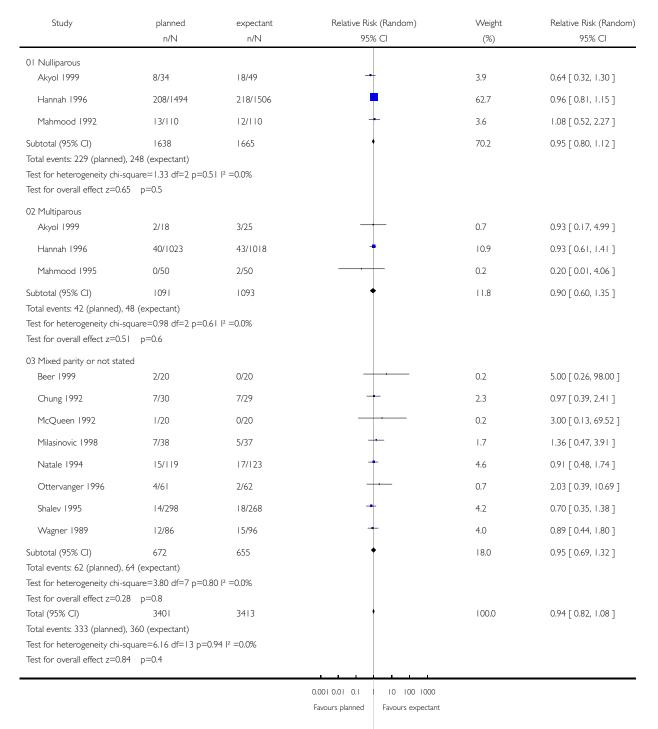
Time from rupt	ure of membranes to birth: other data			
Study	planned management	expecta	nt management	p value
Akyol 1999	OXYTOCIN median 13.0 hours (5th, 95th percentile 4.0, 37.2)	s	median 33.9 hours (5th, 95th per 25.0, 66.1)	centiles
Hannah 1996	OXYTOCIN OR PROSTAGLANDIN Induction oxytocin (IO) median 17.2 hours (5th, 95th percentiles 7.7, 47.1) Induction prostaglandin (IP)	95th pe	nt oxytocin (EO) median 33.3 (5th, recentiles 10.3, 94.4) Expectant andin (EP) 32.6 (5th, 95th iles 9.9, 106.5)	IO/EO: P< 0.001 IO/IP: P < 0.001 IP/EP: P < 0.001
Milasinovic 1998	PROSTAGLANDIN mean 15.9 hours (variance 4.4)	mean 2	8.4 (variance 7.6)	

#### Analysis 02.01. Comparison 02 Any planned versus expectant management: by parity, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 01 Caesarean section

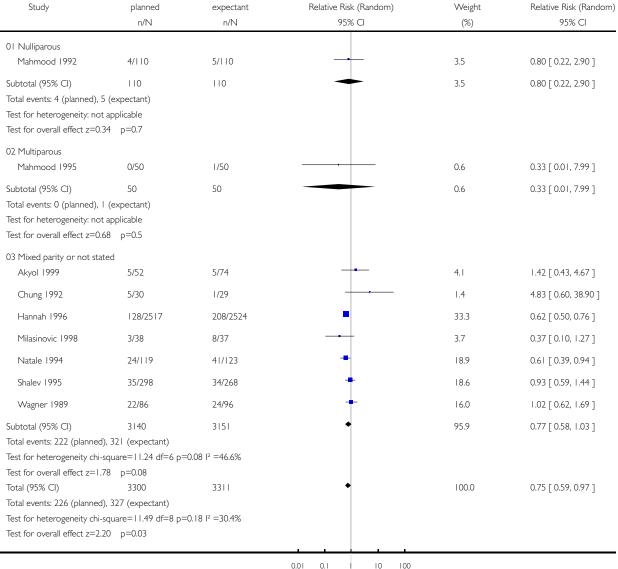


#### Analysis 02.02. Comparison 02 Any planned versus expectant management: by parity, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 02 Chorioamnionitis



0.01 0.1 10 100

Favours planned Favours expectant

# Analysis 02.03. Comparison 02 Any planned versus expectant management: by parity, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 03 Endometritis

Study	planned	expectant Relative Risk (Random)		Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
01 Nulliparous						
Subtotal (95% CI)	0	0		0.0	Not estimable	
Total events: 0 (planned), 0	(expectant)					
Test for heterogeneity: not	applicable					
Test for overall effect: not a	applicable					
02 Multiparous						
Mahmood 1995	0/50	1/50	-	8.2	0.33 [ 0.01, 7.99 ]	
Subtotal (95% CI)	50	50		8.2	0.33 [ 0.01, 7.99 ]	
Total events: 0 (planned), I	(expectant)					
Test for heterogeneity: not	applicable					
Test for overall effect z=0.6	68 p=0.5					
03 Mixed parity or not stat	ted					
McQueen 1992	2/20	8/20	-	41.2	0.25 [ 0.06, 1.03 ]	
Ottervanger 1996	1/61	2/62		14.7	0.51 [ 0.05, 5.46 ]	
Wagner 1989	2/86	8/96	-	35.9	0.28 [ 0.06, 1.28 ]	
Subtotal (95% CI)	167	178	•	91.8	0.29 [ 0.11, 0.76 ]	
Total events: 5 (planned), I	8 (expectant)					
Test for heterogeneity chi-s	square=0.26 df=2 p=0	).88 l² =0.0%				
Test for overall effect z=2.5	53 p=0.01					
Total (95% CI)	217	228	•	100.0	0.30 [ 0.12, 0.74 ]	
Total events: 5 (planned), I	9 (expectant)					
Test for heterogeneity chi-s	square=0.26 df=3 p=0	).97 I <sup>2</sup> =0.0%				
Test for overall effect z=2.6	62 p=0.009					

Favours planned

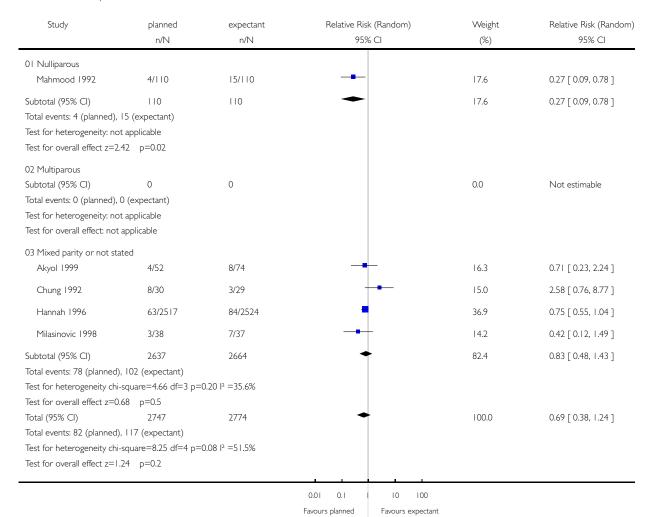
Favours expectant

#### Analysis 02.04. Comparison 02 Any planned versus expectant management: by parity, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 04 Postpartum fever



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

# Analysis 02.05. Comparison 02 Any planned versus expectant management: by parity, Outcome 05 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 05 Induction of labour

Study	plannned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Immediate induction (pla	nned group): multiparo	us			
Mahmood 1995	50/50	15/50		10.0	3.33 [ 2.18, 5.09 ]
Subtotal (95% CI)	50	50	•	10.0	3.33 [ 2.18, 5.09 ]
Total events: 50 (plannned),	15 (expectant)				
Test for heterogeneity: not a	applicable				
Test for overall effect z=5.57	7 p<0.00001				
02 Immediate induction (pla	nned group): mixed par	rity or not stated			
Akyol 1999	52/52	25/74	-	12.9	2.96 [ 2.15, 4.07 ]
Beer 1999	20/20	9/20		8.6	2.22 [ 1.37, 3.61 ]
Hannah 1996	2249/2517	554/2524		20.0	4.07 [ 3.78, 4.39 ]
Ottervanger 1996	61/61	12/62		8.1	5.17 [ 3.11, 8.59 ]
Wagner 1989	86/86	37/96	-	15.0	2.59 [ 2.02, 3.34 ]
Subtotal (95% CI)	2736	2776	•	64.7	3.25 [ 2.46, 4.30 ]
Total events: 2468 (plannned	d), 637 (expectant)				
Test for heterogeneity chi-sc	quare=20.85 df=4 p=0.	0003 I <sup>2</sup> =80.8%			
Test for overall effect z=8.28	3 p<0.00001				
03 Delayed induction (8-12	hours; planned group):	mixed parity or not state	ed		
Natale 1994	101/119	23/123		11.2	4.54 [ 3.12, 6.61 ]
Shalev 1995	164/298	47/268	-	14.1	3.14 [ 2.37, 4.15 ]
Subtotal (95% CI)	417	391	•	25.3	3.69 [ 2.58, 5.28 ]
Total events: 265 (plannned)	), 70 (expectant)				
Test for heterogeneity chi-sc	quare=2.38 df=1 p=0.1	2  2 =58.1%			
Test for overall effect z=7.13	3 p<0.00001				
Total (95% CI)	3203	3217	•	100.0	3.38 [ 2.81, 4.07 ]
Total events: 2783 (plannned	d), 722 (expectant)				
Test for heterogeneity chi-sc	quare=23.94 df=7 p=0.	00 I I <sup>2</sup> =70.8%			
Test for overall effect z=12.8	31 p<0.00001				

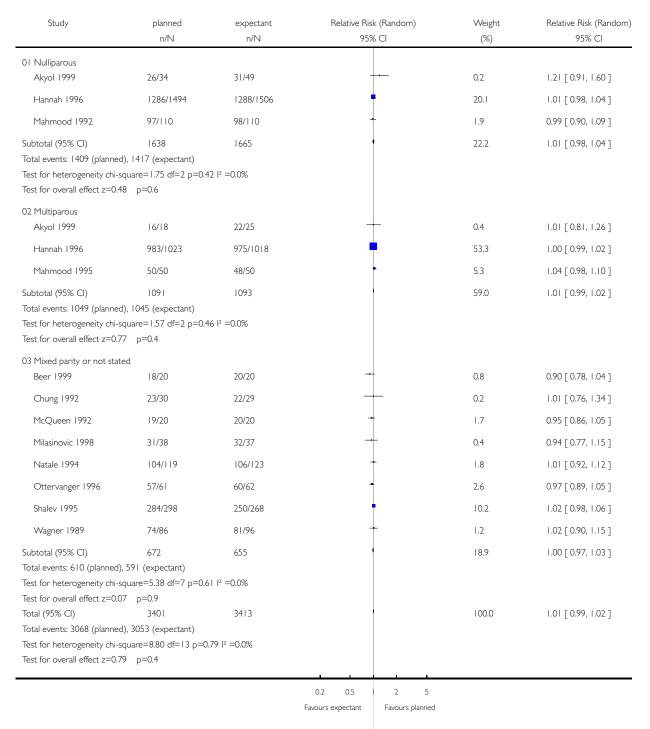
0.1 0.2 0.5 2 5 10 fewer planned fewer expectant

#### Analysis 02.06. Comparison 02 Any planned versus expectant management: by parity, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 06 Vaginal birth

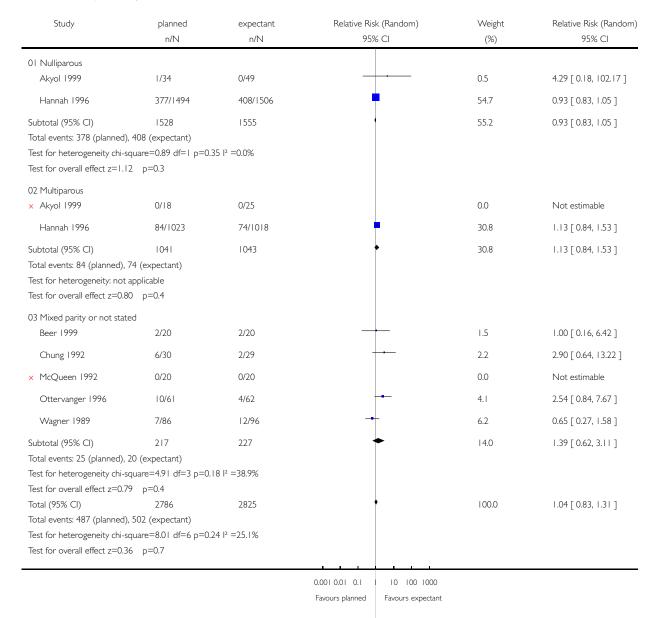


#### Analysis 02.07. Comparison 02 Any planned versus expectant management: by parity, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 07 Operative vaginal birth



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

# Analysis 02.08. Comparison 02 Any planned versus expectant management: by parity, Outcome 08 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 08 Use of epidural anaesthesia

Study	planned	expectant	Relative Risk (Random)		Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Nulliparous					
Mahmood 1992	33/110	32/110	<u>=</u>	91.2	1.03 [ 0.69, 1.55 ]
Subtotal (95% CI)	110	110	<b>+</b>	91.2	1.03 [ 0.69, 1.55 ]
Total events: 33 (planned)	, 32 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0	.15 p=0.9				
02 Multiparous					
Mahmood 1995	2/50	1/50	<del></del>	2.7	2.00 [ 0.19, 21.36 ]
Subtotal (95% CI)	50	50		2.7	2.00 [ 0.19, 21.36 ]
Total events: 2 (planned),	I (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0	.57 p=0.6				
03 Mixed parity or not sta	ated				
Beer 1999	4/20	2/20	-	6.1	2.00 [ 0.41, 9.71 ]
Subtotal (95% CI)	20	20	-	6.1	2.00 [ 0.41, 9.71 ]
Total events: 4 (planned),	2 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0	.86 p=0.4				
Total (95% CI)	180	180	<b>†</b>	100.0	1.09 [ 0.74, 1.61 ]
Total events: 39 (planned)	, 35 (expectant)				
Test for heterogeneity chi-	-square=0.90 df=2 p=	=0.64 I <sup>2</sup> =0.0%			
Test for overall effect z=0	.45 p=0.7				

0.01 0.1 10 100

Favours planned Favours expectant

# Analysis 02.09. Comparison 02 Any planned versus expectant management: by parity, Outcome 09 Fetal/perinatal mortality

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 09 Fetal/perinatal mortality

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Nulliparous					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect: not a	pplicable				
02 Multiparous					
× Mahmood 1995	0/50	0/50		0.0	Not estimable
Subtotal (95% CI)	50	50		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect: not a	pplicable				
03 Mixed parity or not state	ed				
Hannah 1996	3/2517	6/2524	<del> </del>	83.7	0.50 [ 0.13, 2.00 ]
McQueen 1992	0/20	1/20		16.3	0.33 [ 0.01, 7.72 ]
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
× Shalev 1995	0/298	0/268		0.0	Not estimable
Subtotal (95% CI)	2896	2874		100.0	0.47 [ 0.13, 1.67 ]
Total events: 3 (planned), 7	(expectant)				
Test for heterogeneity chi-s	quare=0.05 df=1 p=0	).82 I <sup>2</sup> =0.0%			
Test for overall effect z=1.1	7 p=0.2				
Total (95% CI)	2946	2924		100.0	0.47 [ 0.13, 1.67 ]
Total events: 3 (planned), 7	(expectant)				
Test for heterogeneity chi-s	quare=0.05 df=1 p=0	0.82 l <sup>2</sup> =0.0%			
Test for overall effect $z=1.1$	7 p=0.2				
			0.01 0.1 10 100		

0.01 0.1 10 100

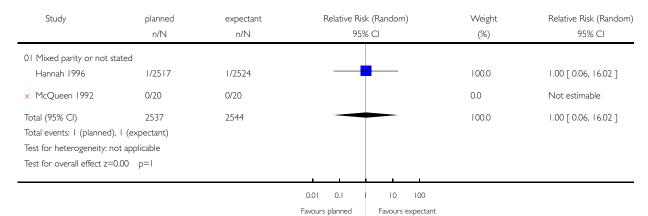
Favours planned Favours expectant

## Analysis 02.10. Comparison 02 Any planned versus expectant management: by parity, Outcome 10 Cord prolapse

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 10 Cord prolapse



## Analysis 02.11. Comparison 02 Any planned versus expectant management: by parity, Outcome 11 Time from rupture of membranes to birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity Outcome: 11 Time from rupture of membranes to birth (hours)

Study		planned		expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Nulliparous							_
Mahmood 1992	110	20.05 (6.55)	110	26.88 (8.90)	•	26.2	-6.83 [ -8.90, -4.76 ]
Subtotal (95% CI)	110		110		•	26.2	-6.83 [ -8.90, -4.76 ]
Test for heterogeneit	y: not ap	plicable					
Test for overall effect	z=6.48	p<0.00001					
02 Multiparous							
Mahmood 1995	50	6.50 (8.70)	50	17.26 (10.80)	•	21.2	-10.76 [ -14.60, -6.92 ]
Subtotal (95% CI)	50		50		•	21.2	-10.76 [ -14.60, -6.92 ]
Test for heterogeneit	y: not ap	plicable					
Test for overall effect	z=5.49	p<0.00001					
03 Mixed parity or no	ot stated	ł					
Beer 1999	20	23.80 (15.50)	20	24.60 (12.40)		10.1	-0.80 [ -9.50, 7.90 ]
Shalev 1995	298	20.80 (10.00)	268	33.90 (25.20)	•	23.0	-13.10 [ -16.32, -9.88 ]
Wagner 1989	86	16.20 (6.00)	96	28.30 (21.20)	=	19.5	-12.10 [ -16.53, -7.67 ]
Subtotal (95% CI)	404		384		•	52.6	-10.13 [ -15.41, -4.85 ]
Test for heterogeneit	y chi-squ	uare=6.78 df=2 p	=0.03 l <sup>2</sup>	=70.5%			
Test for overall effect	z=3.76	p=0.0002					
Total (95% CI)	564		544		•	100.0	-9.53 [ -12.96, -6.10 ]
Test for heterogeneit	y chi-squ	uare=16.53 df=4	p=0.002	I <sup>2</sup> =75.8%			
Test for overall effect	z=5.44	p<0.00001					

-100.0 -50.0 0 50.0 100.0 Favours planned Favours expectant

## Analysis 02.12. Comparison 02 Any planned versus expectant management: by parity, Outcome 12 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 12 Apgar score < 7 at 5 minutes

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Mixed parity or not st	ated				
Akyol 1999	4/52	15/74		1.8	0.38 [ 0.13, 1.08 ]
× Chung 1992	0/30	0/29		0.0	Not estimable
Hannah 1996	322/2514	339/2518	-	95.5	0.95 [ 0.83, 1.10 ]
McQueen 1992	1/20	1/20		0.3	1.00 [ 0.07, 14.90 ]
Shalev 1995	8/298	10/268	-	2.3	0.72 [ 0.29, 1.80 ]
Wagner 1989	0/86	1/96		0.2	0.37 [ 0.02, 9.00 ]
Total (95% CI)	3000	3005	•	100.0	0.93 [ 0.81, 1.07 ]
Total events: 335 (planne	d), 366 (expectant)				
Test for heterogeneity chi	-square=3.56 df=4 p=0	0.47 l <sup>2</sup> =0.0%			
Test for overall effect z=1	.05 p=0.3				
			0.01 0.1 1 10 100		

0.01 0.1 Favours planned

# Analysis 02.13. Comparison 02 Any planned versus expectant management: by parity, Outcome 13 Mechanical ventilation (after initial resuscitation)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity Outcome: 13 Mechanical ventilation (after initial resuscitation)

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N		95% CI	(%)	95% CI
01 Mixed parity or not	stated				
Akyol 1999	5/52	14/74		44.5	0.5   [ 0.20, 1.32 ]
Hannah 1996	20/2514	14/2518	+	55.5	1.43 [ 0.72, 2.83 ]
Total (95% CI)	2566	2592		100.0	0.90 [ 0.33, 2.47 ]
Total events: 25 (planne	ed), 28 (expectant)				
Test for heterogeneity	chi-square=2.98 df=1 p	=0.08 I <sup>2</sup> =66.5%			
Test for overall effect z	=0.20 p=0.8				

0.1 0.2 0.5 | 2 5 10

Favours planned Favours expectant

#### Analysis 02.14. Comparison 02 Any planned versus expectant management: by parity, Outcome 14 **Birthweight**

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 14 Birthweight

Study	planned			expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Nulliparous							_
Mahmood 1992	110	3370.00 (300.00)	110	3440.00 (230.00)	•	49.7	-70.00 [ -140.64, 0.64 ]
Subtotal (95% CI)	110		110		•	49.7	-70.00 [ -140.64, 0.64 ]
Test for heterogeneity: not applicable							
Test for overall effect	z=1.9	4 p=0.05					
02 Mixed parity or not stated							
Chung 1992	30	3153.00 (390.00)	29	3198.00 (570.00)		4.0	-45.00 [ -295.03, 205.03 ]
Shalev 1995	298	3249.00 (473.00)	268	3362.00 (415.00)	=	46.3	-113.00 [ -186.16, -39.84 ]
Subtotal (95% CI)	328		297		•	50.3	-107.64 [ -177.85, -37.42 ]
Test for heterogeneity chi-square=0.26 df=1 p=0.61   2 =0.0%							
Test for overall effect z=3.00 p=0.003							
Total (95% CI)	438		407		•	100.0	-88.93 [ -138.73, -39.13 ]
Test for heterogeneity chi-square=0.81 df=2 p=0.67 l² =0.0%							
Test for overall effect z=3.50 p=0.0005							

-1000.0 -500.0 0 500.0 1000.0

Favours expectant Favours planned

## Analysis 02.15. Comparison 02 Any planned versus expectant management: by parity, Outcome 15 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity

Outcome: 15 Neonatal infection

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Mahmood 1992	2/110	3/110	-	2.9	0.67 [ 0.11, 3.91 ]
Subtotal (95% CI)	110	110	-	2.9	0.67 [ 0.11, 3.91 ]
Total events: 2 (planned), 3 (	(expectant)				
Test for heterogeneity: not a					
Test for overall effect z=0.45	p=0.7				
02 Multiparous					
Mahmood 1995	1/50	3/50		1.9	0.33 [ 0.04, 3.10 ]
Subtotal (95% CI)	50	50	-	1.9	0.33 [ 0.04, 3.10 ]
Total events: I (planned), 3 (	(expectant)				
Test for heterogeneity: not a	pplicable				
Test for overall effect z=0.97	p=0.3				
03 Mixed parity or not state	d				
Chung 1992	0/30	1/29		0.9	0.32 [ 0.01, 7.61 ]
Hannah 1996	63/2517	70/2524	-	81.7	0.90 [ 0.65, 1.26 ]
McQueen 1992	0/20	2/20		1.0	0.20 [ 0.01, 3.92 ]
Milasinovic 1998	2/38	3/37	-	3.1	0.65 [ 0.11, 3.67 ]
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
Shalev 1995	6/298	6/268	+	7.4	0.90 [ 0.29, 2.75 ]
Wagner 1989	0/86	5/96		1.1	0.10 [ 0.01, 1.81 ]
Subtotal (95% CI)	3050	3036	•	95.2	0.85 [ 0.62, 1.16 ]
Total events: 71 (planned), 8	7 (expectant)				
Test for heterogeneity chi-sc		60 l <sup>2</sup> =0.0%			
Test for overall effect z=1.04					
Total (95% CI)	3210	3196	<b>T</b>	100.0	0.83 [ 0.61, 1.12 ]
Total events: 74 (planned), 9		74 12 -0 00/			
Test for heterogeneity chi-so Test for overall effect z=1.23		/+ iU.U%			

0.001 0.01 0.1 | 10 100 1000 Favours planned Favours expectant

#### Analysis 02.16. Comparison 02 Any planned versus expectant management: by parity, Outcome 16 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 02 Any planned versus expectant management: by parity Outcome: 16 Neonatal intensive care unit or special care nursery admission

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Mahmood 1992	7/110	8/110		5.6	0.88 [ 0.33, 2.33 ]
Subtotal (95% CI)	110	110		5.6	0.88 [ 0.33, 2.33 ]
Total events: 7 (planned), 8 (	expectant)				
Test for heterogeneity: not a	pplicable				
Test for overall effect z=0.27	p=0.8				
02 Mixed parity or not state	d				
Akyol 1999	5/52	14/74		5.8	0.51 [ 0.20, 1.32 ]
Chung 1992	9/30	9/29		8.7	0.97 [ 0.45, 2.09 ]
Hannah 1996	330/2514	436/2518	<u>-</u>	74.2	0.76 [ 0.66, 0.86 ]
Natale 1994	5/119	17/123		5.7	0.30 [ 0.12, 0.80 ]
Subtotal (95% CI)	2715	2744	•	94.4	0.68 [ 0.47, 0.97 ]
Total events: 349 (planned),	476 (expectant)				
Test for heterogeneity chi-sq	uare=4.45 df=3 p=0	).22 I <sup>2</sup> =32.6%			
Test for overall effect z=2.12	p=0.03				
Total (95% CI)	2825	2854	•	100.0	0.72 [ 0.57, 0.92 ]
Total events: 356 (planned),	484 (expectant)				
Test for heterogeneity chi-sq	uare=4.55 df=4 p=0	).34  2 =   2.1%			
Test for overall effect z=2.66	p=0.008				

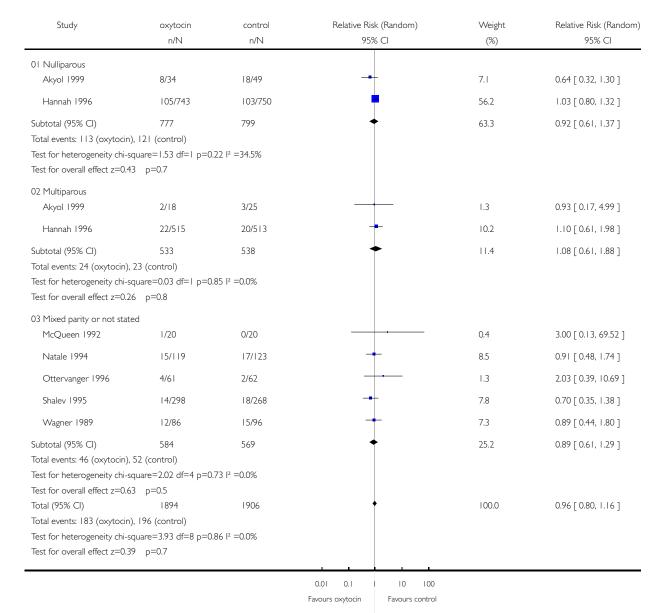
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

#### Analysis 03.01. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 01 Caesarean section

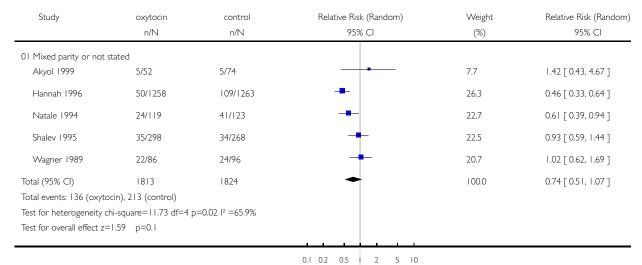


#### Analysis 03.02. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 02 Chorioamnionitis



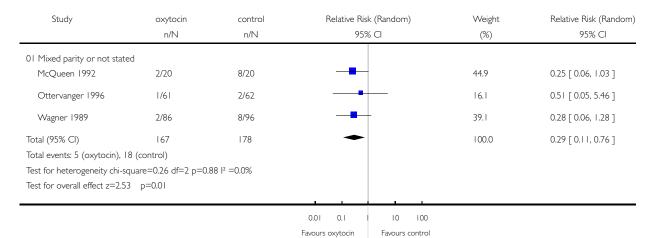
Favours oxytocin Favours control

#### Analysis 03.03. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 03 Endometritis



## Analysis 03.04. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 04 Postpartum fever

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Mixed parity or not	stated				
Akyol 1999	4/52	8/74		15.3	0.71 [ 0.23, 2.24 ]
Hannah 1996	24/1258	46/1263	-	84.7	0.52 [ 0.32, 0.85 ]
Total (95% CI)	1310	1337	•	100.0	0.55 [ 0.35, 0.86 ]
Total events: 28 (oxyto	cin), 54 (control)				
Test for heterogeneity	chi-square=0.23 df=1 p	=0.63 l <sup>2</sup> =0.0%			
Test for overall effect z	=2.62 p=0.009				

0.1 0.2 0.5 | 2 5 10 Favours oxytocin Favours control

## Analysis 03.05. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 05 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 05 Induction of labour

Study	oxytocin	control Relative Risk (Random)		Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
01 Immediate induction (pl	lanned oxytocin group):	mixed parity or not state	ed			
Akyol 1999	52/52	25/74		15.6	2.96 [ 2.15, 4.07 ]	
Hannah 1996	1120/1258	288/1263	•	25.9	3.90 [ 3.52, 4.33 ]	
Ottervanger 1996	61/61	12/62		9.2	5.17 [ 3.11, 8.59 ]	
Wagner 1989	86/86	37/96	-	18.7	2.59 [ 2.02, 3.34 ]	
Subtotal (95% CI)	1457	1495	•	69.4	3.42 [ 2.63, 4.45 ]	
Total events: 1319 (oxytoci	in), 362 (control)					
Test for heterogeneity chi-s	square=12.48 df=3 p=0.	006 I <sup>2</sup> =76.0%				
Test for overall effect z=9.1	13 p<0.00001					
02 Delayed induction (8-12	2 hours; planned oxytoci	n group): mixed parity o	or not stated			
Natale 1994	101/119	23/123	-	13.3	4.54 [ 3.12, 6.61 ]	
Shalev 1995	164/298	47/268	+	17.4	3.14 [ 2.37, 4.15 ]	
Subtotal (95% CI)	417	391	•	30.6	3.69 [ 2.58, 5.28 ]	
Total events: 265 (oxytocin	i), 70 (control)					
Test for heterogeneity chi-s	square=2.38 df=1 p=0.1	2  2 =58.1%				
Test for overall effect z=7.1	3 p<0.00001					
Total (95% CI)	1874	1886	•	100.0	3.49 [ 2.89, 4.22 ]	
Total events: 1584 (oxytoci	in), 432 (control)					
Test for heterogeneity chi-s	square=14.81 df=5 p=0.	01 I <sup>2</sup> =66.2%				
Test for overall effect z=13	1000000pc 10					

0.1 0.2 0.5 2 5 10 fewer oxytocin fewer control

# Analysis 03.06. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 06 Vaginal birth

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Akyol 1999	26/34	31/49	+	0.4	1.21 [ 0.91, 1.60 ]
Hannah 1996	638/743	647/750	•	18.6	1.00 [ 0.96, 1.04 ]
Subtotal (95% CI) Total events: 664 (oxytocin)	777 , 678 (control)	799	•	19.0	1.04 [ 0.88, 1.23 ]
Test for heterogeneity chi-so Test for overall effect $z=0.49$		8   <sup>2</sup> =44.7%			
02 Multiparous					
Akyol 1999	16/18	22/25	†	0.7	1.01 [ 0.81, 1.26 ]
Hannah 1996	493/515	493/513	•	48.6	1.00 [ 0.97, 1.02 ]
Subtotal (95% CI) Total events: 509 (oxytocin) Test for heterogeneity chi-sc	,	538 90   <sup>2</sup> =0.0%		49.3	1.00 [ 0.97, 1.02 ]
Test for overall effect z=0.29					
03 Mixed parity or not state	ed				
McQueen 1992	19/20	20/20	+	3.1	0.95 [ 0.86, 1.05 ]
Natale 1994	104/119	106/123	+	3.2	1.01 [ 0.92, 1.12 ]
Ottervanger 1996	57/61	60/62	+	4.8	0.97 [ 0.89, 1.05 ]
Shalev 1995	284/298	250/268	•	18.6	1.02 [ 0.98, 1.06 ]
Wagner 1989	74/86	81/96	+	2.1	1.02 [ 0.90, 1.15 ]
Subtotal (95% CI) Total events: 538 (oxytocin) Test for heterogeneity chi-sc	, ,	569 56 I <sup>2</sup> =0.0%	•	31.7	1.01 [ 0.97, 1.04 ]
Test for overall effect z=0.32		501 -0.0%			
Total (95% CI) Total events: 1711 (oxytocir Test for heterogeneity chi-so	1894 n), 1710 (control) quare=5.03 df=8 p=0.	1906 75   <sup>2</sup> =0.0%		100.0	1.00 [ 0.98, 1.02 ]
Test for overall effect z=0.04	4 p=1				
			0.1 0.2 0.5 2 5 10		

Favours control Favours oxytocin

# Analysis 03.07. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 07 Operative vaginal birth

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% Cl
01 Nulliparous					
Akyol 1999	1/34	0/49		0.7	4.29 [ 0.18, 102.17 ]
Hannah 1996	186/743	212/750	•	56.6	0.89 [ 0.75, 1.05 ]
Subtotal (95% CI)	777	799	•	57.3	0.89 [ 0.75, 1.05 ]
Total events: 187 (oxytocin)	, 212 (control)				
Test for heterogeneity chi-so	quare=0.95 df=1 p=0.	33 I <sup>2</sup> =0.0%			
Test for overall effect z=1.36	6 p=0.2				
02 Multiparous					
× Akyol 1999	0/18	0/25		0.0	Not estimable
Hannah 1996	47/515	44/513	•	28.8	1.06 [ 0.72, 1.58 ]
Subtotal (95% CI)	533	538	•	28.8	1.06 [ 0.72, 1.58 ]
Total events: 47 (oxytocin),	44 (control)				
Test for heterogeneity: not a	applicable				
Test for overall effect z=0.3	P=0.8				
03 Mixed parity or not state	ed				
× McQueen 1992	0/20	0/20		0.0	Not estimable
Ottervanger 1996	10/61	4/62	-	5.6	2.54 [ 0.84, 7.67 ]
Wagner 1989	7/86	12/96	-	8.3	0.65 [ 0.27, 1.58 ]
Subtotal (95% CI)	167	178	•	13.9	1.23 [ 0.33, 4.68 ]
Total events: 17 (oxytocin),	16 (control)				
Test for heterogeneity chi-sc	quare=3.56 df=1 p=0.	06 I <sup>2</sup> =71.9%			
Test for overall effect z=0.3	P=0.8				
Total (95% CI)	1477	1515	<b>†</b>	100.0	0.98 [ 0.74, 1.28 ]
Total events: 251 (oxytocin)	, ,				
Test for heterogeneity chi-so		24  2 =27.1%			
Test for overall effect z=0.17	7 5-09				

0.001 0.01 0.1 10 100 1000

Favours oxytocin Favours control

## Analysis 03.08. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 08 Maternal satisfaction: nothing liked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 08 Maternal satisfaction: nothing liked

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Mixed parity or not	stated				_
Hannah 1996	74/1258	173/1263	-	100.0	0.43 [ 0.33, 0.56 ]
Total (95% CI)	1258	1263	•	100.0	0.43 [ 0.33, 0.56 ]
Total events: 74 (oxytoo	cin), 173 (control)				
Test for heterogeneity:	not applicable				
Test for overall effect z=	=6.35 p<0.00001				

0.1 0.2 0.5 | 2 5 10 Favours oxytocin Favours control

## Analysis 03.09. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 09 Maternal satisfaction: nothing disliked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 09 Maternal satisfaction: nothing disliked

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Mixed parity or not	stated				
Hannah 1996	397/1258	336/1263		100.0	1.19 [ 1.05, 1.34 ]
Total (95% CI)	1258	1263	•	100.0	1.19 [ 1.05, 1.34 ]
Total events: 397 (oxyto	ocin), 336 (control)				
Test for heterogeneity:	not applicable				
Test for overall effect z	=2.73 p=0.006				
			0.000.05		

0.1 0.2 0.5 | 2 5 10 Favours oxytocin Favours control

# Analysis 03.10. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 10 Breastfeeding

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 10 Breastfeeding

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Abnormal feeding	at 48 hours or more: m	ixed parity or not stated			
× Akyol 1999	0/52	0/74		0.0	Not estimable
Total (95% CI)	52	74		0.0	Not estimable
Total events: 0 (oxyto	cin), 0 (control)				
Test for heterogeneity	v: not applicable				
Test for overall effect:	not applicable				

0.1 0.2 0.5 2 5 10

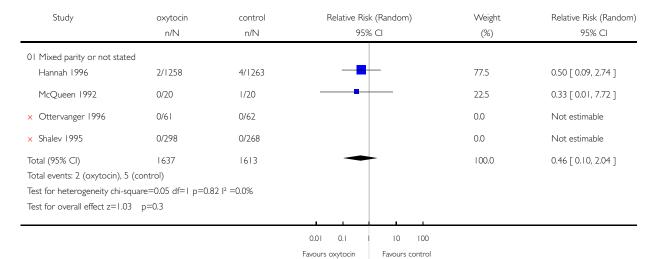
Favours oxytocin Favours control

## Analysis 03.11. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 11 Fetal/perinatal mortality

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: II Fetal/perinatal mortality

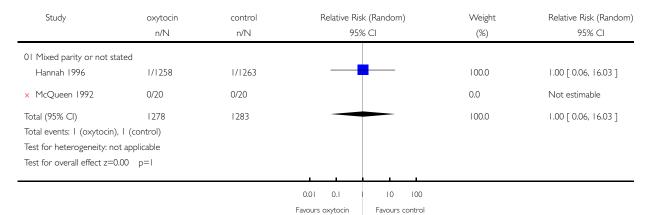


## Analysis 03.12. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 12 Cord prolapse

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 12 Cord prolapse



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

80

## Analysis 03.13. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 13 Time from rupture of membranes to birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 13 Time from rupture of membranes to birth (hours)

Study		oxytocin		control	Weighted Mean Difference (F	Random) Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Mixed parity or	not state	ed					
Shalev 1995	298	20.80 (10.00)	268	33.90 (25.20)		65.3	-13.10 [ -16.32, -9.88 ]
Wagner 1989	86	16.20 (6.00)	96	28.30 (21.20)	•	34.7	-12.10 [ -16.53, -7.67 ]
Total (95% CI)	384		364		•	100.0	-12.75 [ -15.36, -10.15 ]
Test for heterogene	ity chi-s	quare=0.13 df=1	p=0.72 I	2 =0.0%			
Test for overall effective	ct z=9.5	9 p<0.00001					

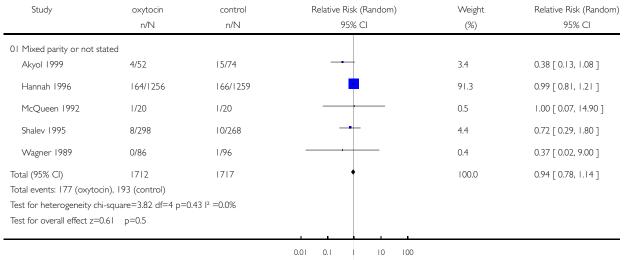
-100.0 -50.0 0 50.0 100.0 Favours oxytocin Favours control

# Analysis 03.14. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 14 Apgar score < 7 at 5 mins

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 14 Apgar score < 7 at 5 mins



Favours oxytocin Favours control

# Analysis 03.15. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 15 Mechanical ventilation (after initial resuscitation)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 15 Mechanical ventilation (after initial resuscitation)

Study	oxytocin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% Cl
01 Mixed parity or not	stated				
Akyol 1999	5/52	14/74		54.3	0.51 [ 0.20, 1.32 ]
Hannah 1996	7/1256	7/1259		45.7	1.00 [ 0.35, 2.85 ]
Total (95% CI)	1308	1333	-	100.0	0.69 [ 0.34, 1.40 ]
Total events: 12 (oxytoo	cin), 21 (control)				
Test for heterogeneity	chi-square=0.88 df=1 p=	=0.35 I <sup>2</sup> =0.0%			
Test for overall effect z	=1.02 p=0.3				

0.1 0.2 0.5 2 5 10

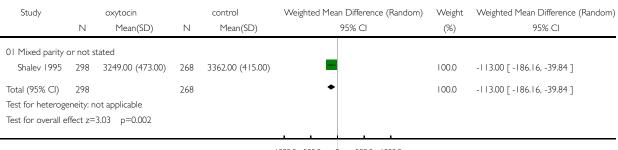
Favours oxytocin Favours control

## Analysis 03.16. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 16 Birthweight

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 16 Birthweight



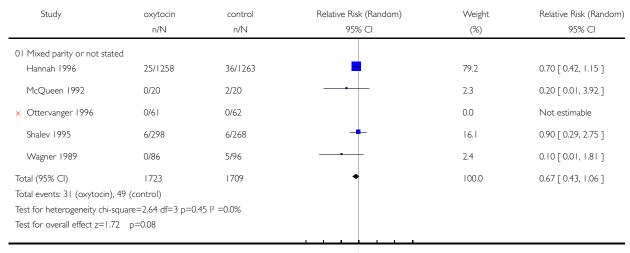
-1000.0 -500.0 0 500.0 1000.0 Favours control Favours oxytocin

## Analysis 03.17. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 17 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity

Outcome: 17 Neonatal infection



0.001 0.01 0.1 Favours oxytocin 10 100 1000 Favours control

# Analysis 03.18. Comparison 03 Oxytocin versus expectant management/placebo: by parity, Outcome 18 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 03 Oxytocin versus expectant management/placebo: by parity Outcome: 18 Neonatal intensive care unit or special care nursery admission

Study	oxytocin	control	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Mixed parity or not	stated				
Akyol 1999	5/52	14/74		13.6	0.51 [ 0.20, 1.32 ]
Hannah 1996	152/1256	229/1259	-	72.9	0.67 [ 0.55, 0.80 ]
Natale 1994	5/119	17/123		13.4	0.30 [ 0.12, 0.80 ]
Total (95% CI)	1427	1456	•	100.0	0.58 [ 0.39, 0.85 ]
Total events: 162 (oxyto	ocin), 260 (control)				
Test for heterogeneity	chi-square=2.68 df=2 p=	=0.26 I <sup>2</sup> =25.4%			
Test for overall effect z	=2.80 p=0.005				
			01 02 05 1 2 5 10		

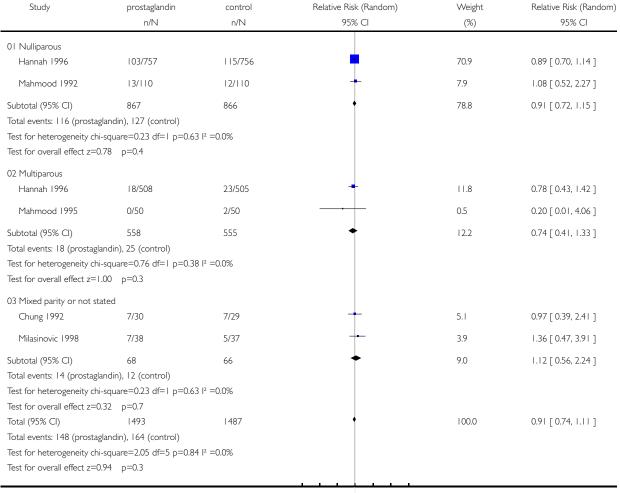
Favours oxytocin Favours control

#### Analysis 04.01. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 01 Caesarean section



0.001 0.01 0.1 10 100 1000

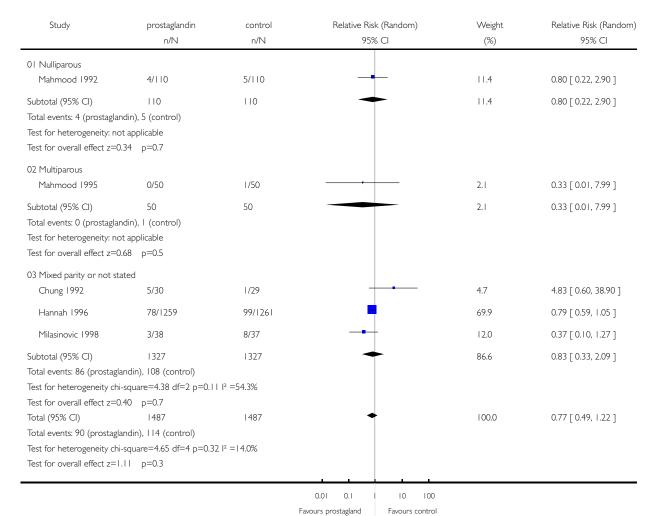
Favours prostagland Favours control

#### Analysis 04.02. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 02 Chorioamnionitis



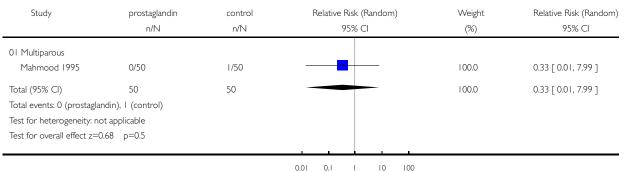
Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

#### Analysis 04.03. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 03 Endometritis



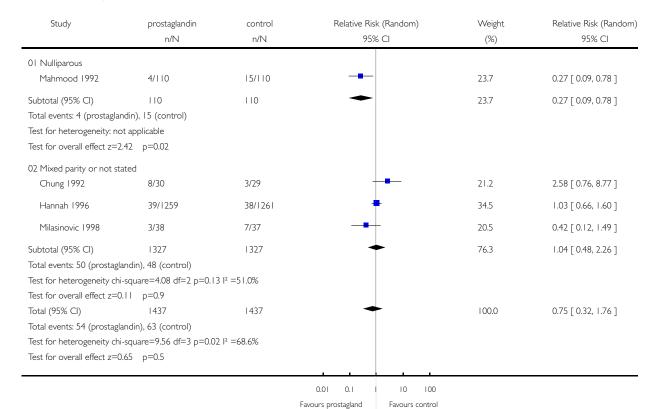
Favours prostaglandi Favours contr

#### Analysis 04.04. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 04 Postpartum fever



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## Analysis 04.05. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 05 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 05 Induction of labour

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
01 Immediate induction (plant	ned prostaglandin gro	up): multiparous				
Mahmood 1995	50/50	15/50		13.3	3.33 [ 2.18, 5.09 ]	
Subtotal (95% CI)	50	50	•	13.3	3.33 [ 2.18, 5.09 ]	
Total events: 50 (prostaglandin	n), 15 (control)					
Test for heterogeneity: not app	olicable					
Test for overall effect z=5.57	p<0.00001					
02 Immediate induction (plann	ned prostaglandin gro	up): mixed parity or not	stated			
Hannah 1996	1129/1259	266/1261	•	86.7	4.25 [ 3.81, 4.74 ]	
Subtotal (95% CI)	1259	1261	•	86.7	4.25 [ 3.81, 4.74 ]	
Total events: 1129 (prostaglan	din), 266 (control)					
Test for heterogeneity: not app	olicable					
Test for overall effect z=26.17	p<0.00001					
Total (95% CI)	1309	1311	•	100.0	4.12 [ 3.50, 4.84 ]	
Total events: 1179 (prostaglan	din), 281 (control)					
Test for heterogeneity chi-squa	are=1.19 df=1 p=0.2	7  2 =   6.2%				
Test for overall effect z=17.13	p<0.00001					

0.1 0.2 0.5 2 5 10 fewer prostaglandin fewer control

## Analysis 04.06. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 06 Vaginal birth

Study	prostaglandin n/N	control n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Hannah 1996	648/751	641/756	•	22.3	1.02 [ 0.98, 1.06 ]
Mahmood 1992	97/110	98/110	+	4.3	0.99 [ 0.90, 1.09 ]
Subtotal (95% CI)	861	866	•	26.6	1.01 [ 0.98, 1.05 ]
Total events: 745 (prostag	glandin), 739 (control)				
Test for heterogeneity chi	-square=0.28 df=1 p=0.60	)   <sup>2</sup> =0.0%			
Test for overall effect z=0	.67 p=0.5				
02 Multiparous					
Hannah 1996	490/508	482/505	•	60.0	1.01 [ 0.99, 1.04 ]
Mahmood 1995	50/50	48/50	•	12.0	1.04 [ 0.98, 1.10 ]
Subtotal (95% CI)	558	555		72.0	1.02 [ 0.99, 1.04 ]
Total events: 540 (prostag	glandin), 530 (control)				
Test for heterogeneity chi	-square=0.95 df=1 p=0.33	<sup>2</sup> =0.0%			
Test for overall effect $z=1$	.32 p=0.2				
03 Mixed parity or not sta	ated				
Chung 1992	23/30	22/29	+	0.5	1.01 [ 0.76, 1.34 ]
Milasinovic 1998	31/38	32/37	+	1.0	0.94 [ 0.77, 1.15 ]
Subtotal (95% CI)	68	66	<b>+</b>	1.5	0.96 [ 0.82, 1.13 ]
Total events: 54 (prostagla	andin), 54 (control)				
Test for heterogeneity chi	-square=0.16 df=1 p=0.69	<sup>2</sup> =0.0%			
Test for overall effect z=0	.43 p=0.7				
Total (95% CI)	1487	1487		100.0	1.01 [ 0.99, 1.03 ]
Total events: 1339 (prosta	aglandin), 1323 (control)				
Test for heterogeneity chi	-square=1.78 df=5 p=0.88	<sup>2</sup> =0.0%			
Test for overall effect $z=1$	.42 p=0.2				

0.1 0.2 0.5 | 2 5 10 Favours control Favours prostagland

## Analysis 04.07. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 07 Operative vaginal birth

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Nulliparous					
Hannah 1996	191/751	196/756	-	71.7	0.98 [ 0.83, 1.16 ]
Subtotal (95% CI)	751	756	•	71.7	0.98 [ 0.83, 1.16 ]
Total events: 191 (prostagla	ndin), 196 (control)				
Test for heterogeneity: not a	applicable				
Test for overall effect z=0.22	2 p=0.8				
02 Multiparous					
Hannah 1996	37/508	30/505	+	25.2	1.23 [ 0.77, 1.95 ]
Subtotal (95% CI)	508	505	<b>+</b>	25.2	1.23 [ 0.77, 1.95 ]
Total events: 37 (prostagland	din), 30 (control)				
Test for heterogeneity: not a	applicable				
Test for overall effect z=0.86	6 p=0.4				
03 Mixed parity or not state	ed				
Chung 1992	6/30	2/29	+-	3.1	2.90 [ 0.64, 13.22 ]
Subtotal (95% CI)	30	29		3.1	2.90 [ 0.64, 13.22 ]
Total events: 6 (prostagland	in), 2 (control)				
Test for heterogeneity: not a	applicable				
Test for overall effect z=1.38	8 p=0.2				
Total (95% CI)	1289	1290	<b>†</b>	100.0	1.07 [ 0.82, 1.40 ]
Total events: 234 (prostagla	ndin), 228 (control)				
Test for heterogeneity chi-so	quare=2.64 df=2 p=0.2	7 I <sup>2</sup> =24.2%			
Test for overall effect z=0.5	I p=0.6				

0.01 0.1 10 100

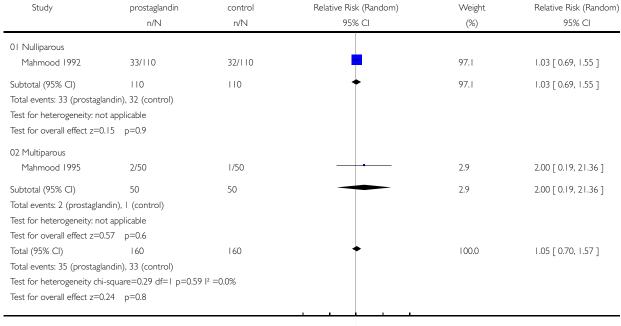
Favours prostagland Favours control

## Analysis 04.08. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 08 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 08 Use of epidural anaesthesia



0.01 0.1 I 10 100

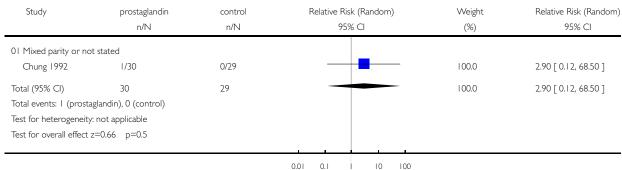
Favours prostagland Favours control

## Analysis 04.09. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 09 Uterine rupture

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 09 Uterine rupture



0.01 0.1 10 100

Favours prostagland Favours control

## Analysis 04.10. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 10 Maternal satisfaction: nothing liked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 10 Maternal satisfaction: nothing liked

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Mixed parity or not	stated				
Hannah 1996	64/1259	147/1261	-	100.0	0.44 [ 0.33, 0.58 ]
Total (95% CI)	1259	1261	•	100.0	0.44 [ 0.33, 0.58 ]
Total events: 64 (prost	aglandin), 147 (control)				
Test for heterogeneity:	not applicable				
Test for overall effect z	=5.75 p<0.00001				
			0.1 0.2 0.5 2 5 10		

Favours prostagland Favours control

## Analysis 04.11. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 11 Maternal satisfaction: nothing disliked

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: II Maternal satisfaction: nothing disliked

Study	prostaglandin n/N	control n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Mixed parity or not	stated			<u> </u>	_
Hannah 1996	424/1259	352/1261	-	100.0	1.21 [ 1.07, 1.36 ]
Total (95% CI)	1259	1261	•	100.0	1.21 [ 1.07, 1.36 ]
Total events: 424 (pros	taglandin), 352 (control)				
Test for heterogeneity:	not applicable				
Test for overall effect z	=3.12 p=0.002				
			01 02 05 1 2 5 10		

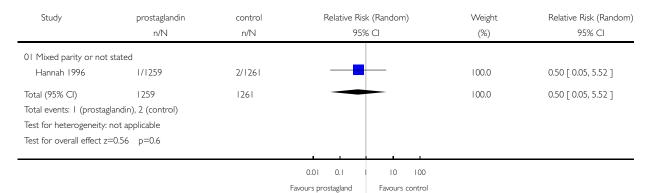
0.1 0.2 0.5 | 2 5 10 | Favours control | Favours prostagland

## Analysis 04.12. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 12 Fetal/perinatal mortality

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 12 Fetal/perinatal mortality



## Analysis 04.13. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 13 Cord prolapse

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 13 Cord prolapse

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
01 Mixed parity or not	stated					
× Hannah 1996	0/1259	0/1261		0.0	Not estimable	
Total (95% CI)	1259	1261		0.0	Not estimable	
Total events: 0 (prostag	landin), 0 (control)					
Test for heterogeneity:	not applicable					
Test for overall effect: n	ot applicable					

0.1 0.2 0.5 2 5 10

Favours prostagland Favours control

## Analysis 04.14. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 14 Time from rupture of membranes to birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 14 Time from rupture of membranes to birth (hours)

Study	pn	ostaglandin		control	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Nulliparous							
Mahmood 1992	110	20.05 (6.55)	110	26.88 (8.90)	•	58.9	-6.83 [ -8.90, -4.76 ]
Subtotal (95% CI)	110		110		•	58.9	-6.83 [ -8.90, -4.76 ]
Test for heterogeneit	y: not ap	plicable					
Test for overall effect	z=6.48	p<0.00001					
02 Multiparous							
Mahmood 1995	50	6.50 (8.70)	50	17.26 (10.80)		41.1	-10.76 [ -14.60, -6.92 ]
Subtotal (95% CI)	50		50		•	41.1	-10.76 [ -14.60, -6.92 ]
Test for heterogeneit	y: not ap	plicable					
Test for overall effect	z=5.49	p<0.00001					
Total (95% CI)	160		160		•	100.0	-8.45 [ -12.24, -4.66 ]
Test for heterogeneit	y chi-squ	iare=3.12 df=1 p	=0.08 F	=67.9%			
Test for overall effect	z=4.37	p=0.00001					

-100.0 -50.0 0 50.0 100.0 Favours prostagland Favours control

#### Analysis 04.15. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 15 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 15 Apgar score < 7 at 5 minutes

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Mixed parity or not	stated				
× Chung 1992	0/30	0/29		0.0	Not estimable
Hannah 1996	158/1258	173/1259	•	100.0	0.91 [ 0.75, 1.12 ]
Total (95% CI)	1288	1288	•	100.0	0.91 [ 0.75, 1.12 ]
Total events: 158 (prost	taglandin), 173 (control)				
Test for heterogeneity:	not applicable				
Test for overall effect z	=0.88 p=0.4				

0.1 0.2 0.5 2 5 10 Favours treatment Favours control

# Analysis 04.16. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 16 Mechanical ventilation (after initial resuscitation)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 16 Mechanical ventilation (after initial resuscitation)

Study	prostaglandin	control	Relative Risk (Random)	Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
I Mixed parity or not :	stated					
Hannah 1996	13/1258	7/1259	<del>                                     </del>	100.0	1.86 [ 0.74, 4.64 ]	
otal (95% CI)	1258	1259		100.0	1.86 [ 0.74, 4.64 ]	
otal events: 13 (prosta	glandin), 7 (control)					
est for heterogeneity: r	not applicable					
est for overall effect z=	=1.33 p=0.2					
	·					

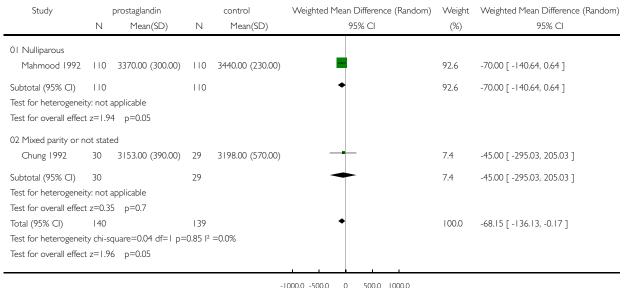
0.1 0.2 0.5 | 2 5 10 Favours prostagland Favours control

# Analysis 04.17. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 17 Birthweight

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 17 Birthweight



Favours control

500.0 1000.0

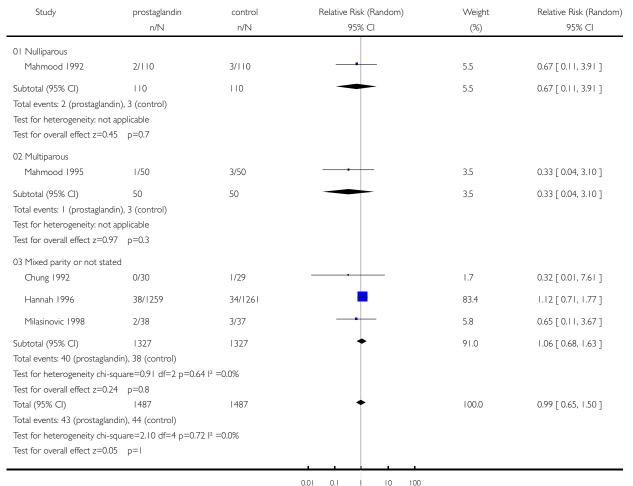
Favours prostagland

### Analysis 04.18. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 18 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 18 Neonatal infection



Favours prostagland

Favours control

# Analysis 04.19. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 19 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity
Outcome: 19 Neonatal intensive care unit or special care nursery admission

Study	prostaglandin n/N	control n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Mahmood 1992	7/110	8/110		3.2	0.88 [ 0.33, 2.33 ]
Subtotal (95% CI)	110	110		3.2	0.88 [ 0.33, 2.33 ]
Total events: 7 (prostagla	ndin), 8 (control)				
Test for heterogeneity: no	ot applicable				
Test for overall effect z=0	).27 p=0.8				
02 Mixed parity or not st	ated				
Chung 1992	9/30	9/29		5.3	0.97 [ 0.45, 2.09 ]
Hannah 1996	178/1258	207/1259	<u>-</u>	91.5	0.86 [ 0.72, 1.03 ]
Subtotal (95% CI)	1288	1288	•	96.8	0.87 [ 0.72, 1.04 ]
Total events: 187 (prosta	glandin), 216 (control)				
Test for heterogeneity ch	i-square=0.08 df=1 p=0.7	77  2 =0.0%			
Test for overall effect z=1	.57 p=0.1				
Total (95% CI)	1398	1398	<b>+</b>	100.0	0.87 [ 0.73, 1.03 ]
Total events: 194 (prosta	glandin), 224 (control)				
Test for heterogeneity ch	i-square=0.08 df=2 p=0.9	96 I <sup>2</sup> =0.0%			
Test for overall effect z=1	.59 p=0.1				

0.1 0.2 0.5 | 2 5 10

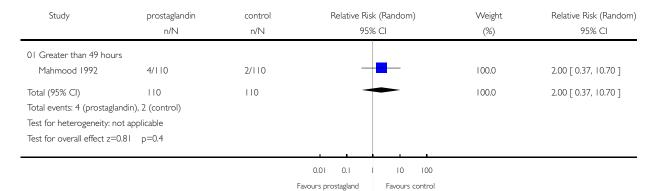
Favours prostagland Favours control

# Analysis 04.20. Comparison 04 Prostaglandin versus expectant management/placebo: by parity, Outcome 20 Length of stay in neonatal intensive care unit

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 04 Prostaglandin versus expectant management/placebo: by parity

Outcome: 20 Length of stay in neonatal intensive care unit

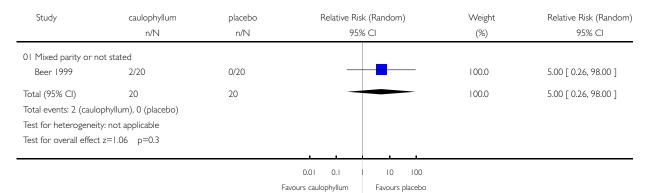


#### Analysis 05.01. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity

Outcome: 01 Caesarean section



#### Analysis 05.02. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 02 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity

Outcome: 02 Induction of labour

Study	caulophyllum n/N	placebo n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Immediate induct	ion (caulophyllum group): m	iixed parity			
Beer 1999	20/20	9/20	-	100.0	2.22 [ 1.37, 3.61 ]
Total (95% CI)	20	20	•	100.0	2.22 [ 1.37, 3.61 ]
Total events: 20 (cau	lophyllum), 9 (placebo)				
Test for heterogeneit	y: not applicable				
Test for overall effect	z=3.23 p=0.001				
			01 02 05 1 2 5 10		

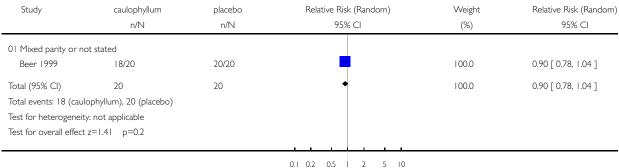
0.1 0.2 0.5 2 5 10 fewer caulophyllum fewer placebo

#### Analysis 05.03. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 03 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity

Outcome: 03 Vaginal birth



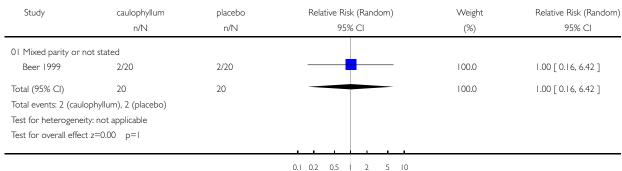
Favours placebo Favours caulophyllum

#### Analysis 05.04. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 04 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity

Outcome: 04 Operative vaginal birth



Favours caulophyllum Favours placebo

# Analysis 05.05. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 05 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity

Outcome: 05 Use of epidural anaesthesia

Study	caulophyllum	placebo	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Mixed parity or no	ot stated				
Beer 1999	4/20	2/20		100.0	2.00 [ 0.41, 9.71 ]
Total (95% CI)	20	20		100.0	2.00 [ 0.41, 9.71 ]
Total events: 4 (caulo	phyllum), 2 (placebo)				
Test for heterogeneit	y: not applicable				
Test for overall effect	z=0.86 p=0.4				
			_ , , , , , , ,		

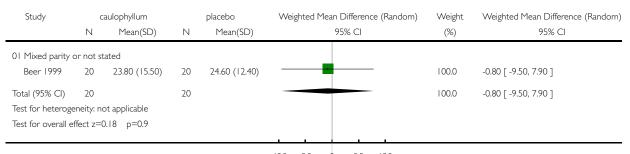
0.1 0.2 0.5 | 2 5 10

Favours caulophyllum Favours placebo

# Analysis 05.06. Comparison 05 Caulophyllum versus placebo: by parity, Outcome 06 Time from rupture of membranes to birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 05 Caulophyllum versus placebo: by parity
Outcome: 06 Time from rupture of membranes to birth (hours)



-10.0 -5.0 0 5.0 10.0

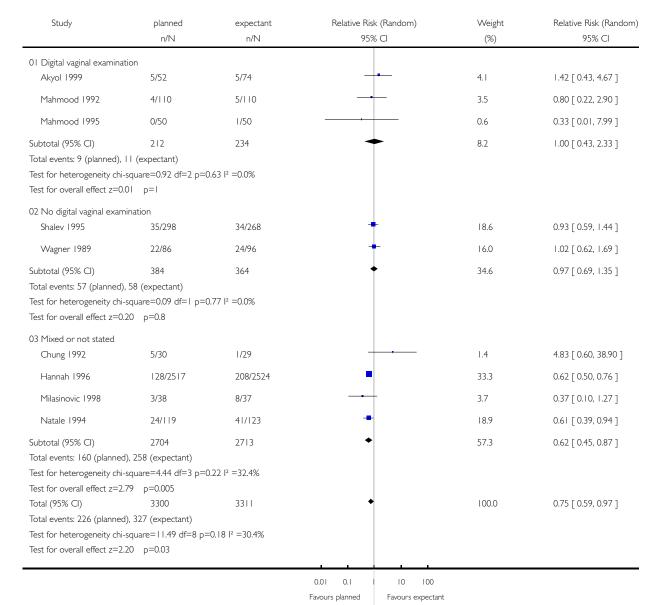
Favours caulophyllum Favours placebo

### Analysis 06.01. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 01 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 06 Digital vaginal exam: planned versus expectant management

Outcome: 01 Chorioamnionitis



### Analysis 06.02. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 02 **Endometritis**

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 06 Digital vaginal exam: planned versus expectant management

Outcome: 02 Endometritis

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight	Relative Risk (Random) 95% CI
	N/IN	n/IN	95% CI	(%)	93% CI
01 Digital vaginal examination	on				
Mahmood 1995	0/50	1/50		8.2	0.33 [ 0.01, 7.99 ]
Subtotal (95% CI)	50	50		8.2	0.33 [ 0.01, 7.99 ]
Total events: 0 (planned), I	(expectant)				-
Test for heterogeneity: not a	applicable				
Test for overall effect z=0.68	8 p=0.5				
02 No digital vaginal examir	nation				
Wagner 1989	2/86	8/96	-	35.9	0.28 [ 0.06, 1.28 ]
Subtotal (95% CI)	86	96		35.9	0.28 [ 0.06, 1.28 ]
Total events: 2 (planned), 8	(expectant)				
Test for heterogeneity: not a	applicable				
Test for overall effect $z=1.64$	4 p=0.1				
03 Not stated or mixed					
McQueen 1992	2/20	8/20		41.2	0.25 [ 0.06, 1.03 ]
Ottervanger 1996	1/61	2/62		14.7	0.51 [ 0.05, 5.46 ]
Subtotal (95% CI)	81	82	•	55.9	0.30 [ 0.09, 1.02 ]
Total events: 3 (planned), 10	(expectant)				
Test for heterogeneity chi-so	quare=0.25 df=1 p=0	0.62 l <sup>2</sup> =0.0%			
Test for overall effect z=1.93	3 p=0.05				
Total (95% CI)	217	228	•	100.0	0.30 [ 0.12, 0.74 ]
Total events: 5 (planned), 19	expectant)				
Test for heterogeneity chi-so	quare=0.26 df=3 p=0	).97 I <sup>2</sup> =0.0%			
Test for overall effect z=2.62	2 p=0.009				

Favours planned

Favours expectant

### Analysis 06.03. Comparison 06 Digital vaginal exam: planned versus expectant management, Outcome 03 **Neonatal infection**

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 06 Digital vaginal exam: planned versus expectant management

Outcome: 03 Neonatal infection

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Digital vaginal examination	on				_
Mahmood 1992	2/110	3/110	_	2.9	0.67 [ 0.11, 3.91 ]
Mahmood 1995	1/50	3/50		1.8	0.33 [ 0.04, 3.10 ]
McQueen 1992	0/20	2/20		1.0	0.20 [ 0.01, 3.92 ]
Subtotal (95% CI)	180	180	•	5.8	0.43 [ 0.12, 1.52 ]
Total events: 3 (planned), 8	(expectant)				
Test for heterogeneity chi-so	quare=0.55 df=2 p=0	76 I² =0.0%			
Test for overall effect z=1.3	I p=0.2				
02 No digital vaginal examir	nation				
Shalev 1995	6/298	6/268	+	7.3	0.90 [ 0.29, 2.75 ]
Wagner 1989	0/86	5/96		1.1	0.10 [ 0.01, 1.81 ]
Subtotal (95% CI)	384	364		8.3	0.44 [ 0.05, 3.60 ]
Total events: 6 (planned), 1 l	I (expectant)				
Test for heterogeneity chi-so	quare=2.10 df=1 p=0	.15 l² =52.3%			
Test for overall effect z=0.76	6 p=0.4				
03 Mixed or not stated					
Chung 1992	0/30	1/29		0.9	0.32 [ 0.01, 7.61 ]
Hannah 1996	65/2517	70/2524	-	81.9	0.93 [ 0.67, 1.30 ]
Milasinovic 1998	2/38	3/37	-	3.0	0.65 [ 0.11, 3.67 ]
× Ottervanger 1996	0/61	0/62		0.0	Not estimable
Subtotal (95% CI)	2646	2652	•	85.9	0.91 [ 0.66, 1.26 ]
Total events: 67 (planned), 7	74 (expectant)				
Test for heterogeneity chi-so	quare=0.58 df=2 p=0	75 I <sup>2</sup> =0.0%			
Test for overall effect z=0.57	7 p=0.6				
Total (95% CI)	3210	3196	<b>†</b>	100.0	0.85 [ 0.63, 1.15 ]
Total events: 76 (planned), 9	, , , ,				
Test for heterogeneity chi-so		71 12 =0.0%			
Test for overall effect z=1.06	6 p=0.3				

0.001 0.01 0.1 1 10 100 1000 Favours planned Favours expectant

# Analysis 07.01. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 01 Caesarean section

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Unfavourable cervix					
Chung 1992	7/30	7/29	+	2.4	0.97 [ 0.39, 2.41 ]
Mahmood 1992	13/110	12/110	+	3.6	1.08 [ 0.52, 2.27 ]
Mahmood 1995	0/50	2/50		0.2	0.20 [ 0.01, 4.06 ]
Milasinovic 1998	7/38	5/37	-	1.8	1.36 [ 0.47, 3.91 ]
Natale 1994	15/119	17/123	+	4.8	0.91 [ 0.48, 1.74 ]
Wagner 1989	12/86	15/96	+	4.0	0.89 [ 0.44, 1.80 ]
Subtotal (95% CI) Total events: 54 (planned), 5 Test for heterogeneity chi-sq Test for overall effect z=0.16	uare=1.64 df=5 p=0.9	445 90 l² =0.0%	•	16.8	0.97 [ 0.69, 1.37 ]
	,				
02 Mixed state of cervix or Akyol 1999	not stated 10/52	21/74	+	4.5	0.68 [ 0.35, 1.32 ]
Beer 1999	2/20	0/20	<del></del>	0.2	5.00 [ 0.26, 98.00 ]
Hannah 1996	248/2517	261/2524	•	73.2	0.95 [ 0.81, 1.12 ]
McQueen 1992	1/20	0/20		0.2	3.00 [ 0.13, 69.52 ]
Ottervanger 1996	4/61	2/62	-	0.7	2.03 [ 0.39, 10.69 ]
Shalev 1995	14/298	18/268	-	4.3	0.70 [ 0.35, 1.38 ]
Subtotal (95% CI)	2968	2968	•	83.2	0.93 [ 0.80, 1.09 ]
Total events: 279 (planned), Test for heterogeneity chi-sq Test for overall effect z=0.87	uare=4.25 df=5 p=0.5	51 12 =0.0%			
Total (95% CI)  Total events: 333 (planned),  Test for heterogeneity chi-sq	3401 360 (expectant)	3413 1.88 I <sup>2</sup> =0.0%		100.0	0.94 [ 0.82, 1.08 ]
Test for overall effect z=0.86	p=0.4				

0.001 0.01 0.1 Favours planned

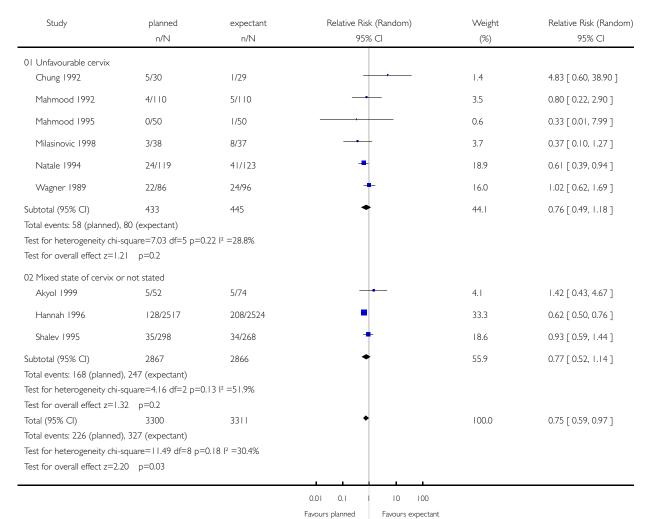
Favours expectant

### Analysis 07.02. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 02 Chorioamnionitis



# Analysis 07.03. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 03 Endometritis

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)	
	n/N	n/N	95% CI	(%)	95% CI	
01 Unfavourable cervix						
Mahmood 1995	0/50	1/50		8.2	0.33 [ 0.01, 7.99 ]	
Wagner 1989	2/86	8/96	-	35.9	0.28 [ 0.06, 1.28 ]	
Subtotal (95% CI)	136	146	-	44.1	0.29 [ 0.07, 1.14 ]	
Total events: 2 (planned), 9	(expectant)					
Test for heterogeneity chi-s	quare=0.01 df=1 p=0	.92 I <sup>2</sup> =0.0%				
Test for overall effect z=1.7	8 p=0.08					
02 Mixed state of cervix or	not stated					
McQueen 1992	2/20	8/20		41.2	0.25 [ 0.06, 1.03 ]	
Ottervanger 1996	1/61	2/62		14.7	0.51 [ 0.05, 5.46 ]	
Subtotal (95% CI)	81	82	•	55.9	0.30 [ 0.09, 1.02 ]	
Total events: 3 (planned), 10	0 (expectant)					
Test for heterogeneity chi-s	quare=0.25 df=1 p=0	.62 I <sup>2</sup> =0.0%				
Test for overall effect z=1.9	3 p=0.05					
Total (95% CI)	217	228	•	100.0	0.30 [ 0.12, 0.74 ]	
Total events: 5 (planned), 1	9 (expectant)					
Test for heterogeneity chi-s	quare=0.26 df=3 p=0	.97 I <sup>2</sup> =0.0%				
Test for overall effect z=2.6	2 p=0.009					
			0.01 0.1 10 100			

Favours planned

Favours expectant

# Analysis 07.04. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 04 Postpartum fever

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Unfavourable cervix					
Chung 1992	8/30	3/29	-	15.0	2.58 [ 0.76, 8.77 ]
Mahmood 1992	4/110	15/110		17.6	0.27 [ 0.09, 0.78 ]
Milasinovic 1998	3/38	7/37		14.2	0.42 [ 0.12, 1.49 ]
Subtotal (95% CI)	178	176	-	46.9	0.65 [ 0.17, 2.55 ]
Total events: 15 (planned),	25 (expectant)				
Test for heterogeneity chi-s	square=7.96 df=2 p=	0.02 I <sup>2</sup> =74.9%			
Test for overall effect z=0.6	62 p=0.5				
02 Mixed state of cervix or	r not stated				
Akyol 1999	4/52	8/74		16.3	0.71 [ 0.23, 2.24 ]
Hannah 1996	63/2517	84/2524	-	36.9	0.75 [ 0.55, 1.04 ]
Subtotal (95% CI)	2569	2598	•	53.1	0.75 [ 0.55, 1.02 ]
Total events: 67 (planned),	92 (expectant)				
Test for heterogeneity chi-s	square=0.01 df=1 p=	0.93 l <sup>2</sup> =0.0%			
Test for overall effect $z=1.8$	33 p=0.07				
Total (95% CI)	2747	2774	<b>→</b>	100.0	0.69 [ 0.38, 1.24 ]
Total events: 82 (planned),	117 (expectant)				
Test for heterogeneity chi-s	square=8.25 df=4 p=	0.08 I <sup>2</sup> =5 I.5%			
Test for overall effect z=1.2	24 p=0.2				
			0.01 0.1 10 100		

Favours planned

Favours expectant

### Analysis 07.05. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, **Outcome 05 Induction of labour**

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 05 Induction of labour

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Unfavourable cervix					
Mahmood 1995	50/50	15/50	-	10.0	3.33 [ 2.18, 5.09 ]
Natale 1994	101/119	23/123	-	11.2	4.54 [ 3.12, 6.61 ]
Wagner 1989	86/86	37/96		15.0	2.59 [ 2.02, 3.34 ]
Subtotal (95% CI)	255	269	•	36.2	3.33 [ 2.33, 4.77 ]
Total events: 237 (planned	), 75 (expectant)				
Test for heterogeneity chi-	square=6.45 df=2 p=0.0	4 I <sup>2</sup> =69.0%			
Test for overall effect z=6.5	57 p<0.00001				
02 Mixed state of cervix o	r not stated				
Akyol 1999	52/52	25/74	-	12.9	2.96 [ 2.15, 4.07 ]
Beer 1999	20/20	9/20		8.6	2.22 [ 1.37, 3.61 ]
Hannah 1996	2249/2517	554/2524	•	20.0	4.07 [ 3.78, 4.39 ]
Ottervanger 1996	61/61	12/62	-	8.1	5.17 [ 3.11, 8.59 ]
Shalev 1995	164/298	47/268	-	14.1	3.14 [ 2.37, 4.15 ]
Subtotal (95% CI)	2948	2948	•	63.8	3.43 [ 2.72, 4.31 ]
Total events: 2546 (planne	d), 647 (expectant)				
Test for heterogeneity chi-	square=12.90 df=4 p=0.	01 12 =69.0%			
Test for overall effect z=10	0.52 p<0.00001				
Total (95% CI)	3203	3217	•	100.0	3.38 [ 2.81, 4.07 ]
Total events: 2783 (planne	d), 722 (expectant)				
Test for heterogeneity chi-	square=23.94 df=7 p=0.	00 l l² =70.8%			
Test for overall effect $z=12$	2.81 p<0.00001				

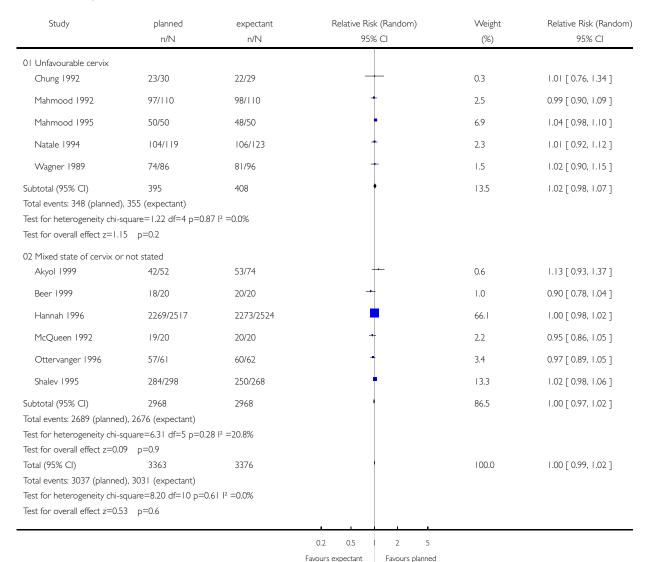
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

### Analysis 07.06. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 06 Vaginal birth



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review)

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### Analysis 07.07. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 07 Operative vaginal birth

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Unfavourable cervix					
Chung 1992	6/30	2/29	-	6.7	2.90 [ 0.64, 13.22 ]
Wagner 1989	7/86	12/96	-	16.2	0.65 [ 0.27, 1.58 ]
Subtotal (95% CI)	116	125	•	22.9	1.20 [ 0.28, 5.11 ]
Total events: 13 (planned),	14 (expectant)				
Test for heterogeneity chi-s	square=2.79 df=1 p=0.0	)9 I <sup>2</sup> =64.2%			
Test for overall effect z=0.2	25 p=0.8				
02 Mixed state of cervix or	not stated				
Akyol 1999	1/52	0/74		1.7	4.25 [ 0.18, 102.21 ]
Beer 1999	2/20	2/20	_	4.6	1.00 [ 0.16, 6.42 ]
Hannah 1996	461/2517	482/2524	•	59.4	0.96 [ 0.85, 1.08 ]
× McQueen 1992	0/20	0/20		0.0	Not estimable
Ottervanger 1996	10/61	4/62	-	11.5	2.54 [ 0.84, 7.67 ]
Subtotal (95% CI)	2670	2700	•	77.1	1.17 [ 0.71, 1.94 ]
Total events: 474 (planned)	, 488 (expectant)				
Test for heterogeneity chi-s	quare=3.79 df=3 p=0.2	28 I² =20.9%			
Test for overall effect z=0.6	51 p=0.5				
Total (95% CI)	2786	2825	<b>†</b>	100.0	1.11 [ 0.74, 1.69 ]
Total events: 487 (planned)	, 502 (expectant)				
Test for heterogeneity chi-s	square=6.57 df=5 p=0.2	25 I <sup>2</sup> =23.9%			
Test for overall effect z=0.5	51 p=0.6				

0.001 0.01 0.1 10 100 1000 Favours planned Favours expectant

# Analysis 07.08. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 08 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 08 Use of epidural anaesthesia

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random) 95% CI
	n/N	n/N	95% CI	(%)	
01 Unfavourable cervix					
Mahmood 1992	33/110	32/110	<del>-</del>	91.2	1.03 [ 0.69, 1.55 ]
Mahmood 1995	2/50	1/50		2.7	2.00 [ 0.19, 21.36 ]
Subtotal (95% CI)	160	160	<b>+</b>	93.9	1.05 [ 0.70, 1.57 ]
Total events: 35 (planned)	, 33 (expectant)				
Test for heterogeneity chi	-square=0.29 df=1 p=	=0.59 I <sup>2</sup> =0.0%			
Test for overall effect z=0	.24 p=0.8				
02 Mixed state of cervix of	or not stated				
Beer 1999	4/20	2/20	<del></del>	6.1	2.00 [ 0.41, 9.71 ]
Subtotal (95% CI)	20	20	-	6.1	2.00 [ 0.41, 9.71 ]
Total events: 4 (planned),	2 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0	.86 p=0.4				
Total (95% CI)	180	180	<b>+</b>	100.0	1.09 [ 0.74, 1.61 ]
Total events: 39 (planned)	, 35 (expectant)				
Test for heterogeneity chi	-square=0.90 df=2 p=	=0.64 I <sup>2</sup> =0.0%			
Test for overall effect z=0	.45 p=0.7				
			0.01 0.1 1 10 100		

Favours planned

Favours expectant

#### Analysis 07.09. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 09 Time of rupture of membranes to birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 09 Time of rupture of membranes to birth (hours)

Study		planned		expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Unfavourable cerv	rix						
Mahmood 1992	110	20.05 (6.55)	110	26.88 (8.90)	•	26.2	-6.83 [ -8.90, -4.76 ]
Mahmood 1995	50	6.50 (8.70)	50	17.26 (10.80)	•	21.2	-10.76 [ -14.60, -6.92 ]
Wagner 1989	86	16.20 (6.00)	96	28.30 (21.20)	-	19.5	-12.10 [ -16.53, -7.67 ]
Subtotal (95% CI)	246		256		•	66.9	-9.48 [ -12.95, -6.00 ]
Test for heterogeneity	y chi-squ	uare=6.35 df=2 p	=0.04 l <sup>2</sup>	=68.5%			
Test for overall effect	z=5.35	p<0.00001					
02 Mixed state of cer	vix or n	ot stated					
Beer 1999	20	23.80 (15.50)	20	24.60 (12.40)	+	10.1	-0.80 [ -9.50, 7.90 ]
Shalev 1995	298	20.80 (10.00)	268	33.90 (25.20)	•	23.0	-13.10 [ -16.32, -9.88 ]
Subtotal (95% CI)	318		288		•	33.1	-7.64 [ -19.62, 4.34 ]
Test for heterogeneity	y chi-squ	uare=6.75 df=1 p	=0.009 I	2 =85.2%			
Test for overall effect	z=1.25	p=0.2					
Total (95% CI)	564		544		•	100.0	-9.53 [ -12.96, -6.10 ]
Test for heterogeneity	y chi-squ	uare=16.53 df=4	p=0.002	I <sup>2</sup> =75.8%			
Test for overall effect	z=5.44	p<0.00001					

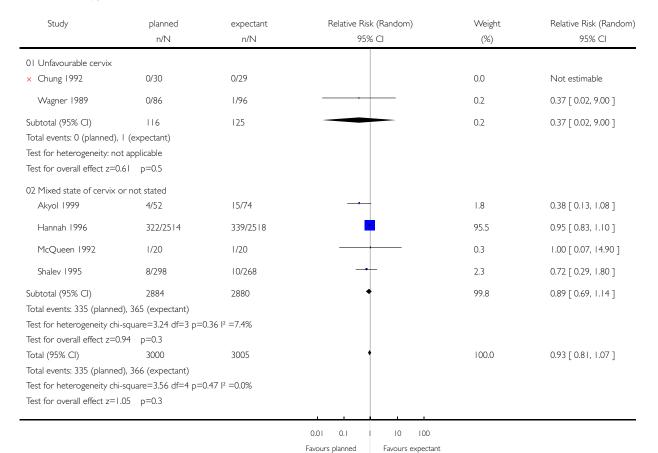
-100.0 -50.0 0 50.0 100.0 Favours expectant Favours planned

### Analysis 07.10. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 10 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 10 Apgar score < 7 at 5 minutes



### Analysis 07.11. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome II Birthweight

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: II Birthweight

Study planned			expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)	
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Unfavourable cer	vix						
Chung 1992	30	3153.00 (390.00)	29	3198.00 (570.00)	-	4.0	-45.00 [ -295.03, 205.03 ]
Mahmood 1992	110	3370.00 (300.00)	110	3440.00 (230.00)	•	49.7	-70.00 [ -140.64, 0.64 ]
Subtotal (95% CI)	140		139		•	53.7	-68.15 [ -136.13, -0.17 ]
Test for heterogeneit	y chi-s	quare=0.04 df=1 p=	0.85 l <sup>2</sup>	=0.0%			
Test for overall effect	z=1.9	6 p=0.05					
02 Mixed state of ce	rvix or	not stated					
Shalev 1995	298	3249.00 (473.00)	268	3362.00 (415.00)	-	46.3	-113.00 [ -186.16, -39.84 ]
Subtotal (95% CI)	298		268		•	46.3	-113.00 [ -186.16, -39.84 ]
Test for heterogeneit	y: not	applicable					
Test for overall effect	z=3.0	3 p=0.002					
Total (95% CI)	438		407		•	100.0	-88.93 [ -138.73, -39.13 ]
Test for heterogeneit	y chi-s	quare=0.81 df=2 p=	0.67 12	=0.0%			
Test for overall effect z=3.50 p=0.0005							

-1000.0 -500.0 0 500.0 1000.0

Favours planned Favours expectant

# Analysis 07.12. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 12 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 12 Neonatal infection

	n/N		expectant Relative Risk (Random)		Relative Risk (Random)
		n/N	95% CI	(%)	95% CI
I Unfavourable cervix					
Chung 1992	0/30	1/29		0.9	0.32 [ 0.01, 7.61 ]
Mahmood 1992	2/110	3/110		2.9	0.67 [ 0.11, 3.91 ]
Mahmood 1995	1/50	3/50		1.9	0.33 [ 0.04, 3.10 ]
Milasinovic 1998	2/38	3/37		3.1	0.65 [ 0.11, 3.67 ]
Wagner 1989	0/86	5/96		1.1	0.10 [ 0.01, 1.81 ]
ubtotal (95% CI)	314	322	•	9.9	0.44 [ 0.17, 1.15 ]
otal events: 5 (planned), 15 (exp	pectant)				
est for heterogeneity chi-square	e=1.59 df=4 p=0	81 I <sup>2</sup> =0.0%			
est for overall effect z=1.67 p	=0.09				
2 Mixed state of cervix or not s	stated				
Hannah 1996	63/2517	70/2524	-	81.7	0.90 [ 0.65, 1.26 ]
McQueen 1992	0/20	2/20		1.0	0.20 [ 0.01, 3.92 ]
Ottervanger 1996	0/61	0/62		0.0	Not estimable
Shalev 1995	6/298	6/268	+	7.4	0.90 [ 0.29, 2.75 ]
ubtotal (95% CI)	2896	2874	•	90.1	0.89 [ 0.64, 1.22 ]
otal events: 69 (planned), 78 (ex	xpectant)				
est for heterogeneity chi-square	=0.98 df=2 p=0	.61 I <sup>2</sup> =0.0%			
est for overall effect z=0.74 p	=0.5				
otal (95% CI)	3210	3196	•	100.0	0.83 [ 0.61, 1.12 ]
otal events: 74 (planned), 93 (ex	xpectant)				
est for heterogeneity chi-square	=4.37 df=7 p=0	74 I <sup>2</sup> =0.0%			
est for overall effect z=1.23 p	=0.2				

0.001 0.01 0.1 1 10 100 1000

Favours planned Favours expectant

### Analysis 07.13. Comparison 07 Unfavourable/favourable cervix: planned versus expectant management:, Outcome 13 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 07 Unfavourable/favourable cervix: planned versus expectant management:

Outcome: 13 Neonatal intensive care unit or special care nursery admission

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% Cl
01 Unfavourable cervix					
Chung 1992	9/30	9/29		8.7	0.97 [ 0.45, 2.09 ]
Mahmood 1992	7/110	8/110		5.6	0.88 [ 0.33, 2.33 ]
Natale 1994	5/119	17/123		5.7	0.30 [ 0.12, 0.80 ]
Subtotal (95% CI) Total events: 21 (planned)	259 ), 34 (expectant)	262		20.0	0.66 [ 0.32, 1.35 ]
Test for heterogeneity chi Test for overall effect z=1		.15  2 =48.2%			
02 Mixed state of cervix	or not stated				
Akyol 1999	5/52	14/74		5.8	0.51 [ 0.20, 1.32 ]
Hannah 1996	330/2514	436/2518	<u>-</u>	74.2	0.76 [ 0.66, 0.86 ]
Subtotal (95% CI)	2566	2592	•	80.0	0.75 [ 0.66, 0.86 ]
Total events: 335 (planne	d), 450 (expectant)				
Test for heterogeneity chi		.42 I <sup>2</sup> =0.0%			
Test for overall effect z=4					
Total (95% CI)	2825	2854	•	100.0	0.72 [ 0.57, 0.92 ]
Total events: 356 (planne	, , ,				
Test for heterogeneity chi	-square=4.55 df=4 p=0	.34  2 =   2.1%			
Test for overall effect z=2	2.66 p=0.008				

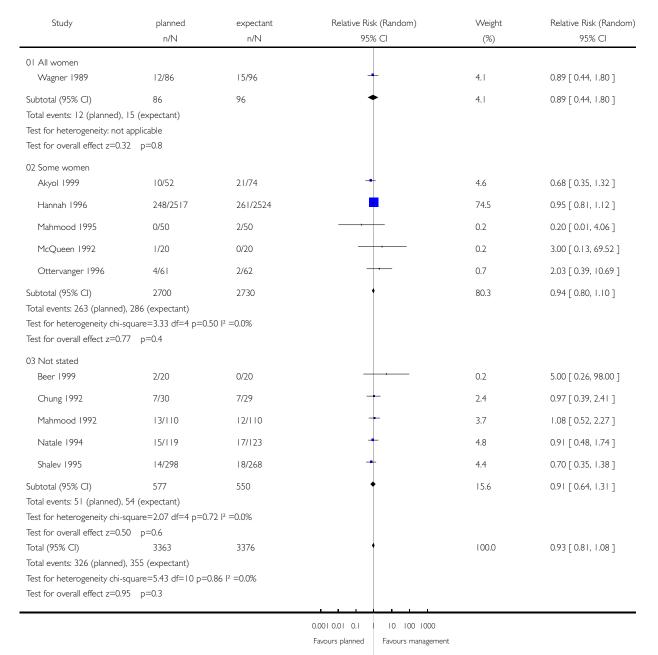
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

### Analysis 08.01. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 01 Caesarean section

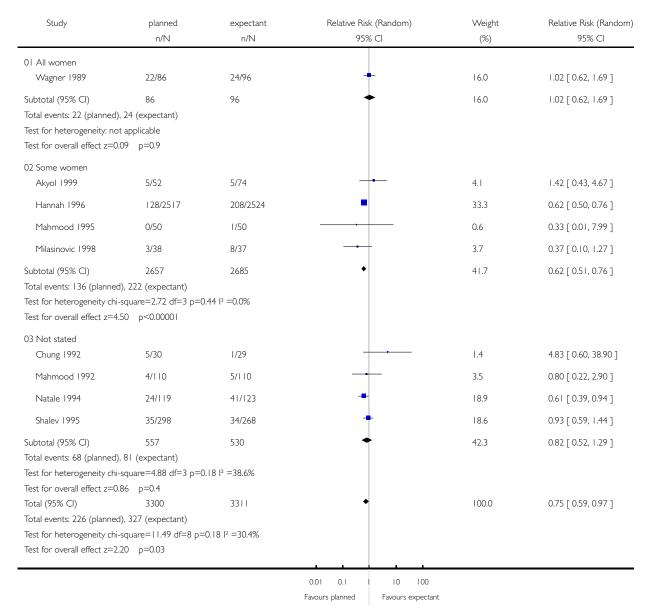


### Analysis 08.02. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 02 Chorioamnionitis



# Analysis 08.03. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 03 Endometritis

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random
	n/N	n/N	95% CI	(%)	95% CI
01 All women					
McQueen 1992	2/20	8/20	-	41.2	0.25 [ 0.06, 1.03 ]
Wagner 1989	2/86	8/96	-	35.9	0.28 [ 0.06, 1.28 ]
Subtotal (95% CI)	106	116	•	77.0	0.26 [ 0.09, 0.74 ]
Total events: 4 (planned), 1	6 (expectant)				
Test for heterogeneity chi-so	quare=0.01 df=1 p=0	.92  2 =0.0%			
Test for overall effect z=2.5	2 p=0.01				
02 Some women					
Mahmood 1995	0/50	1/50		8.2	0.33 [ 0.01, 7.99 ]
Ottervanger 1996	1/61	2/62		14.7	0.51 [ 0.05, 5.46 ]
Subtotal (95% CI)	111	112		23.0	0.44 [ 0.07, 2.93 ]
Total events: I (planned), 3	(expectant)				
Test for heterogeneity chi-se	quare=0.04 df=1 p=0	.83 I <sup>2</sup> =0.0%			
Test for overall effect z=0.8.	5 p=0.4				
03 Not stated					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect: not a	pplicable				
Total (95% CI)	217	228	•	100.0	0.30 [ 0.12, 0.74 ]
Total events: 5 (planned), 19	9 (expectant)				
Test for heterogeneity chi-se	quare=0.26 df=3 p=0	.97 I <sup>2</sup> =0.0%			
Test for overall effect z=2.6	2 p=0.009				

Favours planned

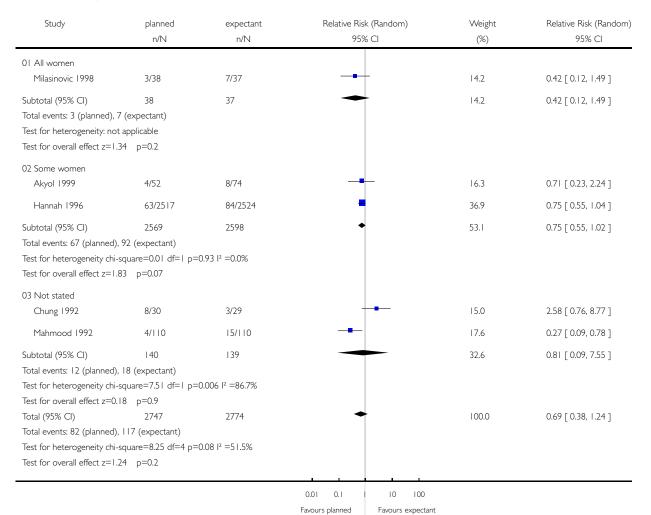
Favours expectant

### Analysis 08.04. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 04 Postpartum fever



#### Analysis 08.05. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, **Outcome 05 Induction of labour**

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 05 Induction of labour

01 All women Wagner 1989 Subtotal (95% CI) Total events: 86 (planned), 37 (	86/86 86	37/96		15.0	
Subtotal (95% CI) Total events: 86 (planned), 37 (	86		-	150	
Total events: 86 (planned), 37 (				15.0	2.59 [ 2.02, 3.34 ]
" ,	evpectant)	96	•	15.0	2.59 [ 2.02, 3.34 ]
	cyberrain)				
Test for heterogeneity: not appl	licable				
Test for overall effect z=7.40	p<0.00001				
02 Some women					
Akyol 1999	52/52	25/74	-	12.9	2.96 [ 2.15, 4.07 ]
Hannah 1996	2249/2517	554/2524	•	20.0	4.07 [ 3.78, 4.39 ]
Mahmood 1995	50/50	15/50		10.0	3.33 [ 2.18, 5.09 ]
Ottervanger 1996	61/61	12/62		8.1	5.17 [ 3.11, 8.59 ]
Subtotal (95% CI)	2680	2710	•	51.0	3.78 [ 3.12, 4.59 ]
Total events: 2412 (planned), 60	06 (expectant)				
Test for heterogeneity chi-squar	re=5.37 df=3 p=0.1	5 l <sup>2</sup> =44.2%			
Test for overall effect z=13.58	p<0.00001				
03 Not stated					
Beer 1999	20/20	9/20	-	8.6	2.22 [ 1.37, 3.61 ]
Natale 1994	101/119	23/123	-	11.2	4.54 [ 3.12, 6.61 ]
Shalev 1995	164/298	47/268	-	14.1	3.14 [ 2.37, 4.15 ]
Subtotal (95% CI)	437	411	•	34.0	3.23 [ 2.26, 4.64 ]
Total events: 285 (planned), 79	(expectant)				
Test for heterogeneity chi-squar	re=5.60 df=2 p=0.0	6 l² =64.3%			
Test for overall effect z=6.39	•				
Total (95% CI)	3203	3217	•	100.0	3.38 [ 2.81, 4.07 ]
Total events: 2783 (planned), 72	` ' /				
Test for heterogeneity chi-squar	·	001 14 = 70.8%			
Test for overall effect z=12.81	p<0.00001				

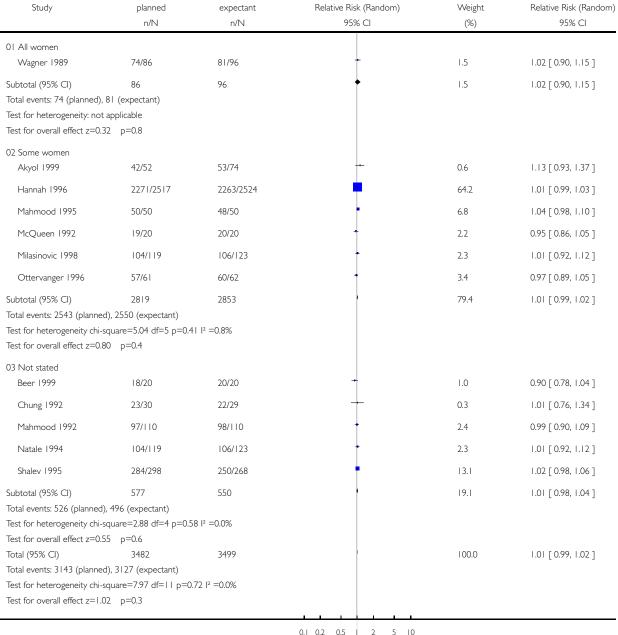
0.1 0.2 0.5 2 5 10 fewer planned fewer expectant

### Analysis 08.06. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 06 Vaginal birth



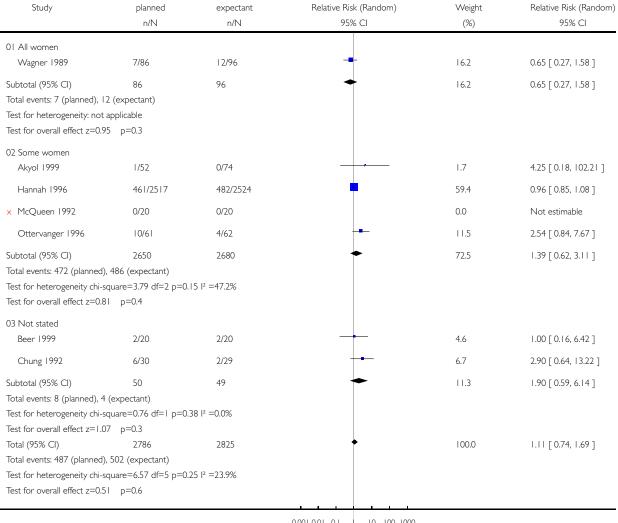
Favours expectant Favours planned

### Analysis 08.07. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 07 Operative vaginal birth



0.001 0.01 0.1 10 100 1000

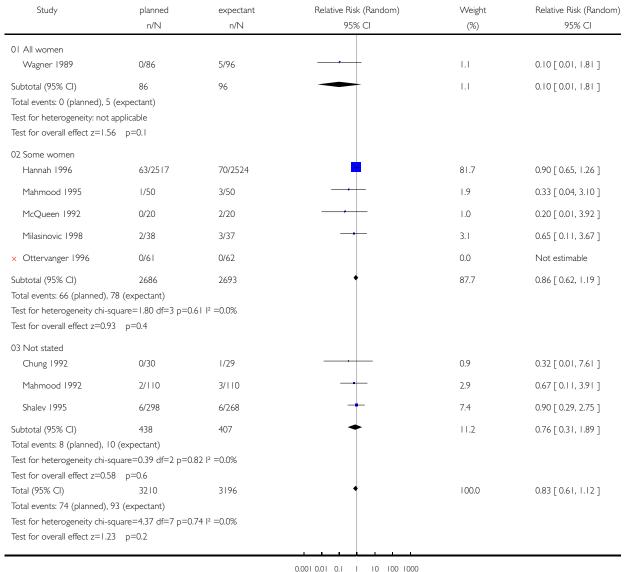
Favours planned Favours expectant

### Analysis 08.08. Comparison 08 Maternal antibiotic prophylaxis: planned versus expectant management, Outcome 08 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 08 Maternal antibiotic prophylaxis: planned versus expectant management

Outcome: 08 Neonatal infection



0.001 0.01 0.1 1 10

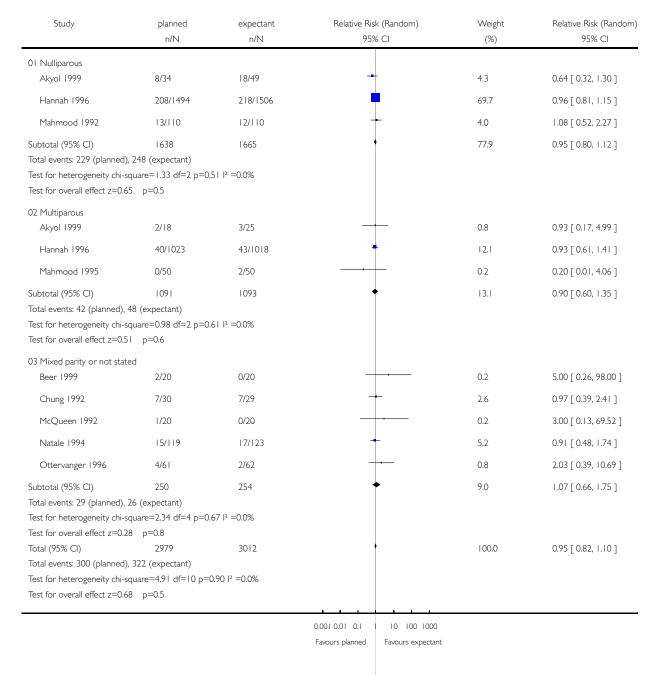
Favours planned Favour

### Analysis 09.01. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 01 Caesarean section

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 01 Caesarean section

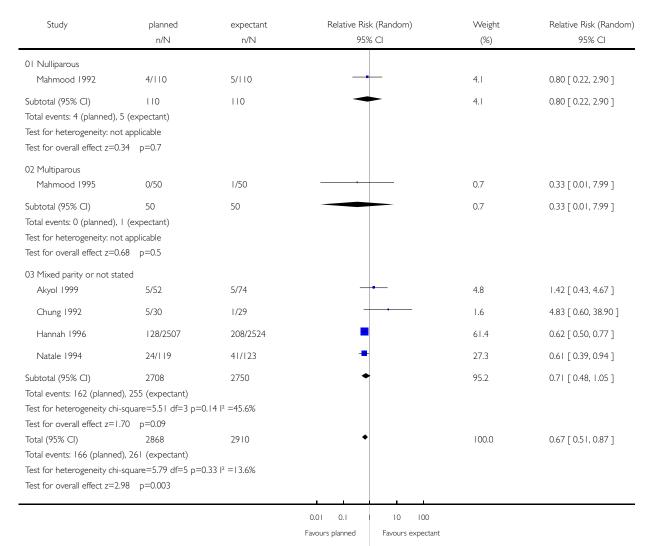


### Analysis 09.02. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 02 Chorioamnionitis



# Analysis 09.03. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 03 Endometritis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 03 Endometritis

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Nulliparous					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned), 0	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect: not a	applicable				
02 Multiparous					
Mahmood 1995	0/50	1/50		12.8	0.33 [ 0.01, 7.99 ]
Subtotal (95% CI)	50	50		12.8	0.33 [ 0.01, 7.99 ]
Total events: 0 (planned), I	(expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=0.6	68 p=0.5				
03 Mixed parity or not stat	ted				
McQueen 1992	2/20	8/20	-	64.2	0.25 [ 0.06, 1.03 ]
Ottervanger 1996	1/61	2/62		23.0	0.51 [ 0.05, 5.46 ]
Subtotal (95% CI)	81	82	•	87.2	0.30 [ 0.09, 1.02 ]
Total events: 3 (planned), I	0 (expectant)				
Test for heterogeneity chi-	square=0.25 df=1 p=	0.62  2 =0.0%			
Test for overall effect z=1.9	93 p=0.05				
Total (95% CI)	131	132	•	100.0	0.31 [ 0.10, 0.95 ]
Total events: 3 (planned), I	I (expectant)				
Test for heterogeneity chi-s	square=0.26 df=2 p=	0.88 I <sup>2</sup> =0.0%			
Test for overall effect z=2.0	04 p=0.04				
			_ , , , , , ,		
			0.01 0.1 10 100		

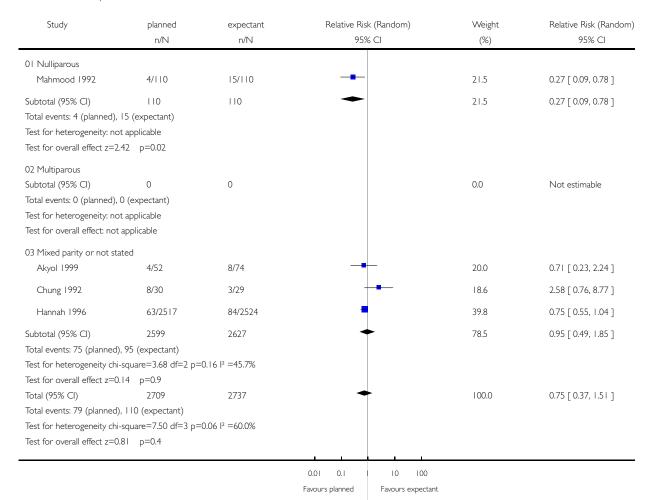
Favours planned Favours expectant

## Analysis 09.04. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 04 Postpartum fever



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

## Analysis 09.05. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 05 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 05 Induction of labour

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Immediate induction (pla	anned group): multiparo	us			
Mahmood 1995	50/50	15/50	-	13.2	3.33 [ 2.18, 5.09 ]
Subtotal (95% CI)	50	50	•	13.2	3.33 [ 2.18, 5.09 ]
Total events: 50 (planned),	15 (expectant)				
Test for heterogeneity: not	applicable				
Test for overall effect z=5.5	7 p<0.00001				
02 Immediate induction (pla	anned group): mixed pa	rity or unknown			
Akyol 1999	52/52	25/74	-	17.9	2.96 [ 2.15, 4.07 ]
Beer 1999	20/20	9/20		11.2	2.22 [ 1.37, 3.61 ]
Hannah 1996	2249/2517	554/2524	•	32.0	4.07 [ 3.78, 4.39 ]
Ottervanger 1996	61/61	12/62		10.5	5.17 [ 3.11, 8.59 ]
Subtotal (95% CI)	2650	2680	•	71.6	3.49 [ 2.61, 4.66 ]
Total events: 2382 (planned	d), 600 (expectant)				
Test for heterogeneity chi-s		02  2 =7   .0%			
Test for overall effect z=8.4	4 p<0.00001				
03 Delayed induction (8-12	hours; planned group):	mixed parity or unknow	n		
Natale 1994	101/119	23/123	-	15.2	4.54 [ 3.12, 6.61 ]
Subtotal (95% CI)	119	123	•	15.2	4.54 [ 3.12, 6.61 ]
Total events: 101 (planned)	, 23 (expectant)				
Test for heterogeneity: not					
Test for overall effect z=7.8	8 p<0.00001				
Total (95% CI)	2819	2853	•	100.0	3.65 [ 2.99, 4.45 ]
Total events: 2533 (planned					
Test for heterogeneity chi-s		04 I <sup>2</sup> =56.6%			
Test for overall effect z=12.	.80 p<0.00001				
			0.1 0.2 0.5 2 5 10		

0.1 0.2 0.5 2 5 10 fewer planned fewer expectant

# Analysis 09.06. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 06 Vaginal birth

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% CI	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Akyol 1999	26/34	31/49	+	0.2	1.21 [ 0.91, 1.60 ]
Hannah 1996	1286/1494	1288/1506	•	22.8	1.01 [ 0.98, 1.04 ]
Mahmood 1992	97/110	98/110	+	2.2	0.99 [ 0.90, 1.09 ]
Subtotal (95% CI) Total events: 1409 (planned		1665	•	25.1	1.01 [ 0.98, 1.04 ]
Test for heterogeneity chi-s Test for overall effect z=0.4		12  2 =0.0%			
02 Multiparous Akyol 1999	16/18	22/25	+	0.4	1.01 [ 0.81, 1.26 ]
Hannah 1996	983/1023	975/1018	•	60.4	1.00 [ 0.99, 1.02 ]
Mahmood 1995	50/50	48/50	•	6.0	1.04 [ 0.98, 1.10 ]
Subtotal (95% CI) Total events: 1049 (planned Test for heterogeneity chi-s	quare=1.57 df=2 p=0.4	1093 16 I <sup>2</sup> =0.0%		66.8	1.01 [ 0.99, 1.02 ]
03 Mixed parity or not stat					
Beer 1999	18/20	20/20	+	0.9	0.90 [ 0.78, 1.04 ]
Chung 1992	23/30	22/29	+	0.2	1.01 [ 0.76, 1.34 ]
McQueen 1992	19/20	20/20	+	1.9	0.95 [ 0.86, 1.05 ]
Natale 1994	104/119	106/123	+	2.0	1.01 [ 0.92, 1.12 ]
Ottervanger 1996	57/61	60/62	+	3.0	0.97 [ 0.89, 1.05 ]
Subtotal (95% CI) Total events: 221 (planned) Test for heterogeneity chi-s		254 53 I <sup>2</sup> =0.0%		8.0	0.97 [ 0.92, 1.02 ]
Test for overall effect z=1.3	3 p=0.2				
Total (95% CI) Total events: 2679 (planned Test for heterogeneity chi-s		3012 .66 I² =0.0%		100.0	1.00 [ 0.99, 1.02 ]
Test for overall effect z=0.5	0 p=0.6		01 02 05 1 2 5 10		

0.1 0.2 0.5 2 5 10

Favours expectant Favours planned

#### Analysis 09.07. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant managment, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 07 Operative vaginal birth

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Nulliparous					
Akyol 1999	1/34	0/49	<del></del>	0.7	4.29 [ 0.18, 102.17 ]
Hannah 1996	377/1286	408/1288	•	55.4	0.93 [ 0.82, 1.04 ]
Subtotal (95% CI) Total events: 378 (planned) Test for heterogeneity chi-s Test for overall effect z=1.2	quare=0.90 df=1 p=0.3	1337 34 l² =0.0%		56.1	0.93 [ 0.83, 1.04 ]
02 Multiparous	·				
× Akyol 1999	0/18	0/25		0.0	Not estimable
Hannah 1996	84/983	74/975	•	34.1	1.13 [ 0.83, 1.52 ]
Subtotal (95% CI) Total events: 84 (planned), Test for heterogeneity: not Test for overall effect z=0.7	applicable	1000	•	34.1	1.13 [ 0.83, 1.52 ]
03 Mixed parity or not state	ed				
Beer 1999	2/20	2/20		1.9	1.00 [ 0.16, 6.42 ]
Chung 1992	6/30	2/29	-	2.8	2.90 [ 0.64, 13.22 ]
× McQueen 1992	0/20	0/20		0.0	Not estimable
Ottervanger 1996	10/61	4/62	-	5.1	2.54 [ 0.84, 7.67 ]
Subtotal (95% CI) Total events: 18 (planned), Test for heterogeneity chi-s	quare=0.88 df=2 p=0.4	131 64 l² =0.0%	•	9.8	2.21 [ 0.99, 4.95 ]
Test for overall effect z=1.9 Total (95% CI) Total events: 480 (planned) Test for heterogeneity chi-s	2452 , 490 (expectant) quare=7.41 df=5 p=0.	2468 19 l² =32.5%		100.0	1.09 [ 0.84, 1.41 ]
Test for overall effect z=0.6	4 p=0.5		0001001011101001000		

0.001 0.01 0.1 10 100 1000 Favours planned

Favours expectant

# Analysis 09.08. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 08 Time from rupture of membranes until birth (hours)

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 08 Time from rupture of membranes until birth (hours)

Study		planned		expectant	Weighted Mean Difference (Random)	Weight	Weighted Mean Difference (Random)
	Ν	Mean(SD)	Ν	Mean(SD)	95% CI	(%)	95% CI
01 Nulliparous							
Mahmood 1992	110	20.05 (6.55)	110	26.88 (8.90)	•	48.6	-6.83 [ -8.90, -4.76 ]
Subtotal (95% CI)	110		110		•	48.6	-6.83 [ -8.90, -4.76 ]
Test for heterogeneity	y: not ap	plicable					
Test for overall effect	z=6.48	p<0.00001					
02 Multiparous							
Mahmood 1995	50	6.50 (8.70)	50	17.26 (10.80)	•	36.5	-10.76 [ -14.60, -6.92 ]
Subtotal (95% CI)	50		50		•	36.5	-10.76 [ -14.60, -6.92 ]
Test for heterogeneity	y: not ap	plicable					
Test for overall effect	z=5.49	p<0.00001					
03 Mixed parity or no	ot stated	d					
Beer 1999	20	23.80 (15.50)	20	24.60 (12.40)	<b>†</b>	14.9	-0.80 [ -9.50, 7.90 ]
Subtotal (95% CI)	20		20		•	14.9	-0.80 [ -9.50, 7.90 ]
Test for heterogeneity	y: not ap	plicable					
Test for overall effect	z=0.18	p=0.9					
Total (95% CI)	180		180		•	100.0	-7.36 [ -11.28, -3.45 ]
Test for heterogeneity	y chi-sqı	uare=5.44 df=2 p	=0.07 l <sup>2</sup>	=63.2%			
Test for overall effect	z=3.68	p=0.0002					

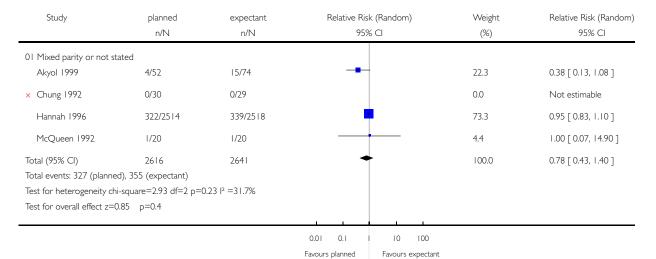
-100.0 -50.0 0 50.0 100.0 Favours planned Favours expectant

## Analysis 09.09. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 09 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 09 Apgar score < 7 at 5 minutes



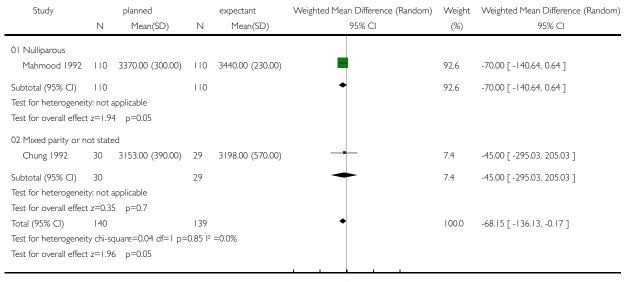
Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

## Analysis 09.10. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 10 Birthweight

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: 10 Birthweight



-1000.0 -500.0 Favours planned 500.0 1000.0

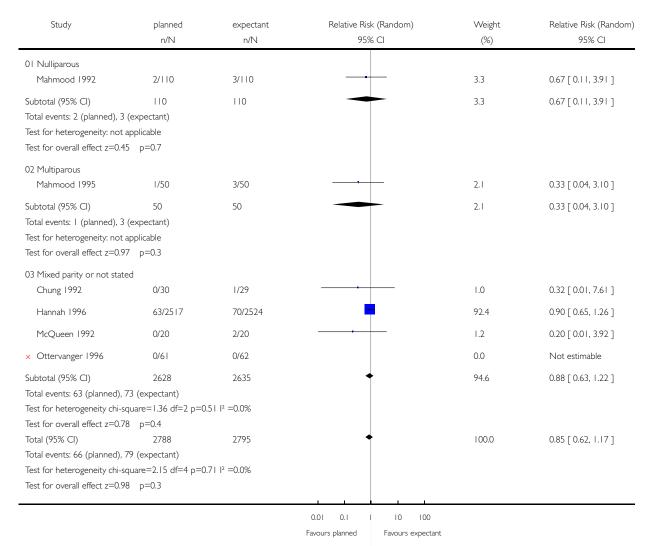
Favours expectant

## Analysis 09.11. Comparison 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management, Outcome 11 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 09 Quality (excluding trials with inadequate allocation concealment): planned versus expectant management

Outcome: II Neonatal infection



## Analysis 10.01. Comparison 10 Blinding: planned versus expectant management, Outcome 01 Caesarean

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 01 Caesarean section

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random 95% CI
01 Placebo blinding					
Beer 1999	2/20	0/20		13.1	5.00 [ 0.26, 98.00 ]
Chung 1992	7/30	7/29	+	86.9	0.97 [ 0.39, 2.41 ]
Subtotal (95% CI)	50	49	•	100.0	1.20 [ 0.39, 3.64 ]
Total events: 9 (planned),	7 (expectant)				
Test for heterogeneity chi-	-square=1.12 df=1 p=0	).29 I <sup>2</sup> = I 0.8%			
Test for overall effect z=0.	.32 p=0.7				
02 Neonatal outcomes bli	inded				
Mahmood 1992	13/110	12/110	+	43.4	1.08 [ 0.52, 2.27 ]
Natale 1994	15/119	17/123	+	56.6	0.91 [ 0.48, 1.74 ]
Subtotal (95% CI)	229	233	+	100.0	0.98 [ 0.60, 1.60 ]
Total events: 28 (planned)	, 29 (expectant)				
Test for heterogeneity chi-	-square=0.12 df=1 p=0	0.73 I <sup>2</sup> =0.0%			
Test for overall effect z=0.	.07 p=0.9				
03 Neonatal infection blin	ded				
Akyol 1999	8/34	18/49	-	12.9	0.64 [ 0.32, 1.30 ]
Hannah 1996	208/1494	218/1506	•	87.1	0.96 [ 0.81, 1.15 ]
Subtotal (95% CI)	1528	1555	•	100.0	0.91 [ 0.70, 1.19 ]
Total events: 216 (planned	d), 236 (expectant)				
Test for heterogeneity chi-	-square=1.19 df=1 p=0	0.28  2 =   6.1%			
Test for overall effect z=0.	.67 p=0.5				

Favours planned Favours expectant

#### Analysis 10.02. Comparison 10 Blinding: planned versus expectant management, Outcome 02 Chorioamnionitis

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 02 Chorioamnionitis

Study	planned	lanned expectant F	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinding					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect: not	applicable				
02 Neonatal outcomes bl	inded				
Mahmood 1992	4/110	5/110		10.3	0.80 [ 0.22, 2.90 ]
Natale 1994	24/119	41/123	-	89.7	0.61 [ 0.39, 0.94 ]
Subtotal (95% CI)	229	233	•	100.0	0.62 [ 0.41, 0.94 ]
Total events: 28 (planned)	), 46 (expectant)				
Test for heterogeneity chi	-square=0.16 df=1 p=0	).69 l <sup>2</sup> =0.0%			
Test for overall effect z=2	.25 p=0.02				
03 Neonatal infection blin	nded				
Akyol 1999	5/52	5/74		24.5	1.42 [ 0.43, 4.67 ]
Hannah 1996	128/2517	208/2524	-	75.5	0.62 [ 0.50, 0.76 ]
Subtotal (95% CI)	2569	2598	-	100.0	0.76 [ 0.37, 1.53 ]
Total events: 133 (planned	d), 213 (expectant)				
Test for heterogeneity chi	-square=1.84 df=1 p=0	).17  2 =45.7%			
Test for overall effect z=0	1.77 p=0.4				

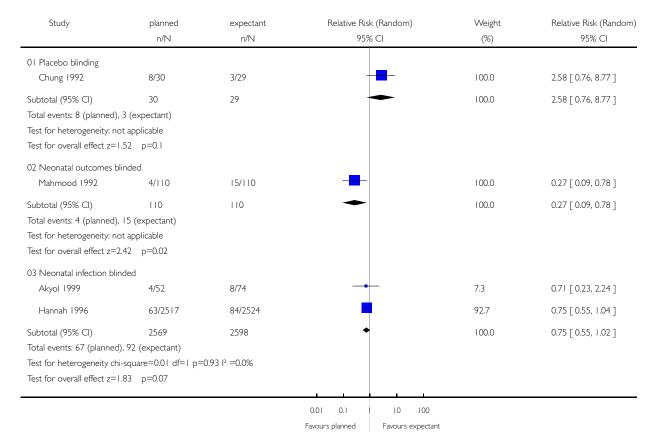
0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

### Analysis 10.04. Comparison 10 Blinding: planned versus expectant management, Outcome 04 Postpartum fever

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 04 Postpartum fever



Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

### Analysis 10.05. Comparison 10 Blinding: planned versus expectant management, Outcome 05 Induction of labour

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 05 Induction of labour

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinding					
Beer 1999	20/20	9/20	-	100.0	2.22 [ 1.37, 3.61 ]
Subtotal (95% CI)	20	20	•	100.0	2.22 [ 1.37, 3.61 ]
Total events: 20 (planned), 9	(expectant)				
Test for heterogeneity: not ap	plicable				
Test for overall effect z=3.23	p=0.001				
02 Neonatal outcomes blinde	ed				
Natale 1994	101/119	23/123	-	100.0	4.54 [ 3.12, 6.61 ]
Subtotal (95% CI)	119	123	•	100.0	4.54 [ 3.12, 6.61 ]
Total events: 101 (planned), 2	3 (expectant)				
Test for heterogeneity: not ap	plicable				
Test for overall effect z=7.88	p<0.00001				
03 Neonatal infection blinded					
Akyol 1999	52/52	25/74	-	37.8	2.96 [ 2.15, 4.07 ]
Hannah 1996	2249/2517	554/2524	•	62.2	4.07 [ 3.78, 4.39 ]
Subtotal (95% CI)	2569	2598	•	100.0	3.61 [ 2.66, 4.89 ]
Total events: 2301 (planned),	579 (expectant)				
Test for heterogeneity chi-squ	are=3.67 df=1 p=0	0.06 I <sup>2</sup> =72.7%			
Test for overall effect z=8.27	p<0.00001				

0.1 0.2 0.5 | 2 5 10

Favours planned Favours expectant

#### Analysis 10.06. Comparison 10 Blinding: planned versus expectant management, Outcome 06 Vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 06 Vaginal birth

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinded					
Beer 1999	18/20	20/20	=	79.2	0.90 [ 0.78, 1.04 ]
Chung 1992	23/30	22/29	+	20.8	1.01 [ 0.76, 1.34 ]
Subtotal (95% CI)	50	49	•	100.0	0.92 [ 0.81, 1.05 ]
Total events: 41 (planned	l), 42 (expectant)				
Test for heterogeneity ch	ii-square=0.84 df=1 p=0	.36 I <sup>2</sup> =0.0%			
Test for overall effect z=	1.22 p=0.2				
02 Neonatal outcomes b	linded				
Mahmood 1992	97/110	98/110	•	51.9	0.99 [ 0.90, 1.09 ]
Natale 1994	104/119	106/123	•	48.1	1.01 [ 0.92, 1.12 ]
Subtotal (95% CI)	229	233	•	100.0	1.00 [ 0.94, 1.07 ]
Total events: 201 (planne	ed), 204 (expectant)				
Test for heterogeneity ch	ii-square=0.12 df=1 p=0	.73 I <sup>2</sup> =0.0%			
Test for overall effect z=0	0.04 p=1				
03 Neonatal infection blin	nded				
Akyol 1999	42/52	53/74	-	13.2	1.13 [ 0.93, 1.37 ]
Hannah 1996	2269/2517	2263/2524	•	86.8	1.01 [ 0.99, 1.02 ]
Subtotal (95% CI)	2569	2598	•	100.0	1.02 [ 0.95, 1.10 ]
Total events: 2311 (plann	ed), 2316 (expectant)				
Test for heterogeneity ch	ii-square=1.33 df=1 p=0	.25 I <sup>2</sup> =25.0%			
Test for overall effect z=0	0.53 p=0.6				
			0.1 0.2 0.5   2 5 10		

Favours planned Favours expectant

#### Analysis 10.07. Comparison 10 Blinding: planned versus expectant management, Outcome 07 Operative vaginal birth

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 07 Operative vaginal birth

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinded					
Beer 1999	2/20	2/20	+	40.0	1.00 [ 0.16, 6.42 ]
Chung 1992	6/30	2/29	+	60.0	2.90 [ 0.64,   3.22 ]
Subtotal (95% CI)	50	49	•	100.0	1.90 [ 0.59, 6.14 ]
Total events: 8 (planned)	, 4 (expectant)				
Test for heterogeneity ch	ni-square=0.76 df=1 p=	0.38 I <sup>2</sup> =0.0%			
Test for overall effect z=	1.07 p=0.3				
02 Neonatal outcomes b	olinded				
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned)	, 0 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect: no	t applicable				
03 Neonatal infection bli	inded				
Akyol 1999	1/52	0/74	<del>-   -</del>	0.1	4.25 [ 0.18, 102.21 ]
Hannah 1996	462/2517	482/2524	•	99.9	0.96 [ 0.86, 1.08 ]
Subtotal (95% CI)	2569	2598	•	100.0	0.96 [ 0.86, 1.08 ]
Total events: 463 (planne	ed), 482 (expectant)				
Test for heterogeneity ch	ni-square=0.84 df=1 p=	0.36 l <sup>2</sup> =0.0%			
Test for overall effect z=	0.64 p=0.5				

0.001 0.01 0.1 10 100 1000

Favours expectant Favours planned

## Analysis 10.08. Comparison 10 Blinding: planned versus expectant management, Outcome 08 Use of epidural anaesthesia

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 08 Use of epidural anaesthesia

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinded					
Beer 1999	4/20	2/20		100.0	2.00 [ 0.41, 9.71 ]
Subtotal (95% CI)	20	20		100.0	2.00 [ 0.41, 9.71 ]
Total events: 4 (planned),	2 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect z=0	).86 p=0.4				
02 Neonatal outcomes b	linded				
Mahmood 1992	33/110	32/110	#	100.0	1.03 [ 0.69, 1.55 ]
Subtotal (95% CI)	110	110	<b>+</b>	100.0	1.03 [ 0.69, 1.55 ]
Total events: 33 (planned	), 32 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect z=0	).15 p=0.9				
03 Neonatal infection blir	nded				
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned),	0 (expectant)				
Test for heterogeneity: no	ot applicable				
Test for overall effect: not	t applicable				

0.1 0.2 0.5 2 5 10

Favours planned Favours expectant

#### Analysis 10.09. Comparison 10 Blinding: planned versus expectant management, Outcome 09 Apgar score < 7 at 5 minutes

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 09 Apgar score < 7 at 5 minutes

Study	planned	expectant	Relative Risk (Random)	Weight	Relative Risk (Random)
	n/N	n/N	95% CI	(%)	95% CI
01 Placebo blinded					
× Chung 1992	0/30	0/29		0.0	Not estimable
Subtotal (95% CI)	30	29		0.0	Not estimable
Total events: 0 (planned)	), 0 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect: no	ot applicable				
02 Neonatal outcomes b	olinded				
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (planned)	), 0 (expectant)				
Test for heterogeneity: n	ot applicable				
Test for overall effect: no	ot applicable				
03 Neonatal infection bli	inded				
Akyol 1999	4/52	15/74		33.5	0.38 [ 0.13, 1.08 ]
Hannah 1996	322/2514	339/2518	•	66.5	0.95 [ 0.83, 1.10 ]
Subtotal (95% CI)	2566	2592		100.0	0.70 [ 0.30, 1.64 ]
Total events: 326 (planne	ed), 354 (expectant)				
Test for heterogeneity ch	ni-square=2.93 df=1 p=	0.09 l <sup>2</sup> =65.8%			
Test for overall effect z=	0.82 p=0.4				

0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant

# Analysis 10.10. Comparison 10 Blinding: planned versus expectant management, Outcome 10 Neonatal infection

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: 10 Neonatal infection

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
Chung 1992	0/30	1/29	<del></del>	100.0	0.32 [ 0.01, 7.61 ]
Subtotal (95% CI)	30	29		100.0	0.32 [ 0.01, 7.61 ]
Total events: 0 (planned),	I (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0.	.70 p=0.5				
02 Neonatal outcomes bli	inded				
Mahmood 1992	2/110	3/110	<del></del>	100.0	0.67 [ 0.11, 3.91 ]
Subtotal (95% CI)	110	110		100.0	0.67 [ 0.11, 3.91 ]
Total events: 2 (planned),	3 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0.	.45 p=0.7				
03 Neonatal infection blin	ded				
Hannah 1996	63/2517	70/2524	=	100.0	0.90 [ 0.65, 1.26 ]
Subtotal (95% CI)	2517	2524	+	100.0	0.90 [ 0.65, 1.26 ]
Total events: 63 (planned)	, 70 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0.	.60 p=0.5				
			0.01 0.1 1 10 100		

Favours planned

Favours expectant

Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more) (Review) 156 Copyright © 2007 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

## Analysis 10.11. Comparison 10 Blinding: planned versus expectant management, Outcome 11 Neonatal intensive care unit or special care nursery admission

Review: Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)

Comparison: 10 Blinding: planned versus expectant management

Outcome: II Neonatal intensive care unit or special care nursery admission

Study	planned n/N	expectant n/N	Relative Risk (Random) 95% Cl	Weight (%)	Relative Risk (Random) 95% CI
01 Placebo control					
Chung 1992	9/30	9/29	_	100.0	0.97 [ 0.45, 2.09 ]
Subtotal (95% CI)	30	29	-	100.0	0.97 [ 0.45, 2.09 ]
Total events: 9 (planned),	9 (expectant)				
Test for heterogeneity: no	t applicable				
Test for overall effect z=0	.09 p=0.9				
02 Neonatal outcomes bl	inded				
Mahmood 1992	7/110	8/110		49.7	0.88 [ 0.33, 2.33 ]
Natale 1994	5/119	17/123	<del></del>	50.3	0.30 [ 0.12, 0.80 ]
Subtotal (95% CI)	229	233		100.0	0.51 [ 0.18, 1.45 ]
Total events: 12 (planned)	), 25 (expectant)				
Test for heterogeneity chi	-square=2.29 df=1 p=0	).   3   <sup>2</sup> =56.3%			
Test for overall effect z=1	.25 p=0.2				
03 Neonatal infection blir	nded				
Akyol 1999	5/52	14/74		1.9	0.51 [ 0.20, 1.32 ]
Hannah 1996	330/2514	436/2518	-	98.1	0.76 [ 0.66, 0.86 ]
Subtotal (95% CI)	2566	2592	•	100.0	0.75 [ 0.66, 0.86 ]
Total events: 335 (planned	d), 450 (expectant)				
Test for heterogeneity chi	-square=0.66 df=1 p=0	).42 I <sup>2</sup> =0.0%			
Test for overall effect z=4	.27 p=0.00002				

0.1 0.2 0.5 | 2 5 10 Favours planned Favours expectant