

# Interventions for emergency contraception (Review)

Cheng L, Gülmezoglu AM, Piaggio G, Ezcurra E, Van Look PFA



**THE COCHRANE  
COLLABORATION®**

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2008, Issue 2

<http://www.thecochranelibrary.com>



## TABLE OF CONTENTS

ABSTRACT . . . . .	1
PLAIN LANGUAGE SUMMARY . . . . .	2
BACKGROUND . . . . .	2
OBJECTIVES . . . . .	2
CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW . . . . .	3
SEARCH METHODS FOR IDENTIFICATION OF STUDIES . . . . .	3
METHODS OF THE REVIEW . . . . .	4
DESCRIPTION OF STUDIES . . . . .	5
METHODOLOGICAL QUALITY . . . . .	6
RESULTS . . . . .	6
DISCUSSION . . . . .	9
AUTHORS' CONCLUSIONS . . . . .	11
POTENTIAL CONFLICT OF INTEREST . . . . .	11
ACKNOWLEDGEMENTS . . . . .	11
SOURCES OF SUPPORT . . . . .	12
REFERENCES . . . . .	12
TABLES . . . . .	18
Characteristics of included studies . . . . .	18
Characteristics of excluded studies . . . . .	43
Characteristics of ongoing studies . . . . .	46
ANALYSES . . . . .	46
Comparison 01. Intrauterine contraceptive device versus control . . . . .	46
Comparison 02. Levonorgestrel vs Yuzpe . . . . .	46
Comparison 03. Levonorgestrel split-dose 24 h vs.12 h . . . . .	47
Comparison 04. Levonorgestrel single vs split-dose . . . . .	47
Comparison 05. Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg) . . . . .	47
Comparison 06. Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg) . . . . .	48
Comparison 07. Levonorgestrel 1.5 mg vs CDB-2914 (all doses) . . . . .	48
Comparison 08. Levonorgestrel (all dose) vs Anordrin (all dose) . . . . .	48
Comparison 09. mifepristone low-dose 20 mg vs low-dose 10 mg . . . . .	49
Comparison 10. Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg) . . . . .	49
Comparison 11. Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg . . . . .	49
Comparison 12. Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg) . . . . .	49
Comparison 13. Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg) . . . . .	50
Comparison 14. Mifepristone (all doses) vs Yuzpe . . . . .	50
Comparison 15. Mifepristone (all doses) vs danazol (all doses) . . . . .	50
Comparison 16. Mifepristone (all doses) vs anordrin (all doses) . . . . .	50
Comparison 17. Mifepristone alone (all doses) vs mifepristone + anordrin (all doses) . . . . .	51
Comparison 18. Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses) . . . . .	51
Comparison 19. Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses) . . . . .	51
Comparison 20. Mifepristone vs mifepristone + misoprostol (all doses) . . . . .	51
Comparison 21. Mifepristone (all doses) vs Cu-IUD . . . . .	52
Comparison 22. Danazol (all doses) vs Yuzpe . . . . .	52
Comparison 23. High-dose oestrogens vs Yuzpe . . . . .	52
Comparison 24. Half-dose Yuzpe vs Standard Yuzpe . . . . .	53
Comparison 25. High risk vs low risk women (all hormonal methods) . . . . .	53
Comparison 26. Time elapsed since intercourse (Coitus-treatment interval) . . . . .	53
INDEX TERMS . . . . .	53
COVER SHEET . . . . .	53
GRAPHS AND OTHER TABLES . . . . .	55

Analysis 01.01. Comparison 01 Intrauterine contraceptive device versus control, Outcome 01 Observed number of pregnancies . . . . .	55
Analysis 02.01. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 01 Observed number of pregnancies (all women)	55
Analysis 02.02. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 02 Observed number of pregnancies (by risk status)	56
Analysis 02.03. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 03 Observed number of pregnancies (time from intercourse) . . . . .	57
Analysis 02.04. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 04 Need for extra dose . . . . .	58
Analysis 02.05. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 05 Any side-effect . . . . .	58
Analysis 02.06. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 06 Specific side-effects . . . . .	59
Analysis 02.07. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 07 Menses . . . . .	61
Analysis 03.01. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 01 Observed number of pregnancy (all women) . . . . .	61
Analysis 03.02. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 02 Observed number of pregnancy (by risk status) . . . . .	62
Analysis 03.06. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 06 Specific side-effects . . . . .	63
Analysis 03.07. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 07 Menses . . . . .	65
Analysis 04.01. Comparison 04 Levonorgestrel single vs split-dose, Outcome 01 Observed number of pregnancy (all women) . . . . .	65
Analysis 04.02. Comparison 04 Levonorgestrel single vs split-dose, Outcome 02 Observed number of pregnancy (by risk status) . . . . .	66
Analysis 04.03. Comparison 04 Levonorgestrel single vs split-dose, Outcome 03 Observed number of pregnancy (time from intercourse) . . . . .	67
Analysis 04.06. Comparison 04 Levonorgestrel single vs split-dose, Outcome 06 Specific side-effects . . . . .	68
Analysis 04.07. Comparison 04 Levonorgestrel single vs split-dose, Outcome 07 Menses . . . . .	70
Analysis 05.01. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 01 Observed number of pregnancies (all women) . . . . .	71
Analysis 05.02. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 02 Observed number of pregnancies (by risk status) . . . . .	72
Analysis 05.05. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 05 Any side-effect	73
Analysis 05.06. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 06 Specific side-effect . . . . .	74
Analysis 05.07. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 07 Menses . . . . .	76
Analysis 05.08. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife) . . . . .	77
Analysis 05.09. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife) . . . . .	78
Analysis 06.01. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 01 Observed number of pregnancies (all women) . . . . .	79
Analysis 06.02. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 02 Observed number of pregnancies (by risk status) . . . . .	80
Analysis 06.03. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 03 Observed number of pregnancies (time from intercourse) . . . . .	81
Analysis 06.05. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 05 Any side-effect	81
Analysis 06.06. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 06 Specific side-effect . . . . .	82
Analysis 06.07. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 07 Menses . . . . .	84
Analysis 06.08. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife) . . . . .	85
Analysis 06.09. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife) . . . . .	86
Analysis 07.01. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 01 Observed number of pregnancy (all women) . . . . .	86

Analysis 07.03. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 03 Observed number of pregnancy (time from intercourse) . . . . .	87
Analysis 07.06. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 06 Specific side-effects . . . . .	88
Analysis 07.07. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 07 Menses . . . . .	90
Analysis 08.01. Comparison 08 Levonorgestrel (all dose) vs Anordrin (all dose), Outcome 01 Observed number of pregnancy (all women) . . . . .	90
Analysis 08.05. Comparison 08 Levonorgestrel (all dose) vs Anordrin (all dose), Outcome 05 Any side-effect . . . . .	91
Analysis 09.01. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 01 Observed number of pregnancy (all women) . . . . .	91
Analysis 09.06. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 06 Specific side-effects . . . . .	92
Analysis 09.07. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 07 Delay of menses . . . . .	94
Analysis 10.01. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 01 Observed number of pregnancies (all women) . . . . .	95
Analysis 10.02. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 02 Observed number of pregnancies (by risk status) . . . . .	96
Analysis 10.05. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 05 Any side-effect . . . . .	97
Analysis 10.06. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 06 Specific side-effects . . . . .	98
Analysis 10.07. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 07 Menses . . . . .	101
Analysis 11.01. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 01 Observed number of pregnancies (all women) . . . . .	103
Analysis 11.03. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 03 Any side-effect . . . . .	104
Analysis 11.04. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 04 Specific side-effects . . . . .	104
Analysis 11.05. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 05 Delay in menses . . . . .	106
Analysis 12.01. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 01 Observed number of pregnancies (all women) . . . . .	107
Analysis 12.02. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 02 Observed number of pregnancies (by risk status) . . . . .	108
Analysis 12.05. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 05 Any side-effect . . . . .	108
Analysis 12.06. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 06 Specific side-effects . . . . .	109
Analysis 12.07. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 07 Menses . . . . .	111
Analysis 13.01. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 01 Observed number of pregnancies (all women) . . . . .	112
Analysis 13.05. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 05 Any side-effect . . . . .	112
Analysis 13.06. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 06 Specific side-effects . . . . .	113
Analysis 13.07. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 07 Menses . . . . .	115
Analysis 14.01. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 01 Observed number of pregnancies (all women) . . . . .	116
Analysis 14.02. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 02 Observed number of pregnancies (by risk status) . . . . .	116
Analysis 14.03. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 03 Observed number of pregnancies (time from intercourse) . . . . .	117
Analysis 14.04. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 04 Need for extra dose . . . . .	118
Analysis 14.05. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 05 Any side-effect . . . . .	118

Analysis 14.06. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 06 Specific side-effects . . . . .	119
Analysis 14.07. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 07 Menses . . . . .	121
Analysis 15.01. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 01 Observed number of pregnancies (all women) . . . . .	121
Analysis 15.05. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 05 Any side-effect . . . . .	122
Analysis 15.06. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 06 Specific side-effect . . . . .	122
Analysis 15.07. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 07 Menses . . . . .	123
Analysis 16.01. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 01 Observed number of pregnancies (all women) . . . . .	124
Analysis 16.05. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 05 Any side-effect . . . . .	124
Analysis 16.06. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 06 Specific side-effects . . . . .	125
Analysis 16.07. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 07 Menses . . . . .	126
Analysis 17.01. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 01 Observed number of pregnancies (all women) . . . . .	127
Analysis 17.05. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 05 Any side-effect . . . . .	127
Analysis 17.06. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 06 Specific side-effects . . . . .	128
Analysis 17.07. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 07 Delay in menses . . . . .	130
Analysis 18.01. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 01 Observed number of pregnancy (all women) . . . . .	130
Analysis 18.05. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 05 Any side-effect . . . . .	131
Analysis 18.07. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 07 Menses . . . . .	131
Analysis 19.01. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 01 Observed number of pregnancies (all women) . . . . .	132
Analysis 19.03. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 03 Observed number of pregnancies (time from intercourse) . . . . .	132
Analysis 19.06. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 06 Specific side-effect . . . . .	133
Analysis 19.07. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 07 Menses . . . . .	135
Analysis 20.01. Comparison 20 Mifepristone vs mifepristone + misoprostol (all doses), Outcome 01 Observed number of pregnancies (all women) . . . . .	135
Analysis 20.06. Comparison 20 Mifepristone vs mifepristone + misoprostol (all doses), Outcome 06 Specific side-effect . . . . .	136
Analysis 21.01. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 01 Observed number of pregnancy (all women) . . . . .	137
Analysis 21.05. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 05 Any side-effect . . . . .	138
Analysis 21.06. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 06 Specific side-effects . . . . .	138
Analysis 21.07. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 07 Menses . . . . .	140
Analysis 22.01. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 01 Observed number of pregnancies (all women) . . . . .	140
Analysis 22.06. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 06 Specific side-effects . . . . .	141
Analysis 22.07. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 07 Menses . . . . .	142
Analysis 23.01. Comparison 23 High-dose oestrogens vs Yuzpe, Outcome 01 Observed number of pregnancies (all women) . . . . .	143
Analysis 24.01. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 01 Observed number of pregnancies (all women) . . . . .	143
Analysis 24.02. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 02 Any side-effect . . . . .	144
Analysis 24.03. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 03 Specific side-effects . . . . .	144
Analysis 25.01. Comparison 25 High risk vs low risk women (all hormonal methods), Outcome 01 Observed number of pregnancies . . . . .	146

Analysis 26.01. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 01 =<24 hr vs > 24- 48hr . . . . .	146
Analysis 26.02. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 02 =< 24 vs >48 - 72 hr . . . . .	147
Analysis 26.03. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 03 > 24 -48 hr vs > 48 - 72 hr . . . . .	147
Analysis 26.04. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 04 < 72 vs >72	148

# Interventions for emergency contraception (Review)

Cheng L, Gülmezoglu AM, Piaggio G, Ezcurra E, Van Look PFA

## This record should be cited as:

Cheng L, Gülmezoglu AM, Piaggio G, Ezcurra E, Van Look PFA. Interventions for emergency contraception. *Cochrane Database of Systematic Reviews* 2008, Issue 2. Art. No.: CD001324. DOI: 10.1002/14651858.CD001324.pub3.

**This version first published online:** 16 April 2008 in Issue 2, 2008.

**Date of most recent substantive amendment:** 18 February 2008

## ABSTRACT

### Background

Emergency contraception is using a drug or copper intrauterine device (Cu-IUD) to prevent pregnancy shortly after unprotected intercourse. Several interventions are available for emergency contraception. Information on the comparative efficacy, safety and convenience of these methods is crucial for reproductive health care providers and the women they serve.

### Objectives

To determine which emergency contraceptive method following unprotected intercourse is the most effective, safe and convenient to prevent pregnancy.

### Search strategy

The search included the Cochrane Controlled Trials Register, Popline, MEDLINE, PubMed, Biosis/Embase, Chinese biomedical databases and UNDP/UNFPA/WHO/World Bank Special Programme on Human Reproduction (HRP) emergency contraception database (December 2006). Content experts and pharmaceutical companies were contacted.

### Selection criteria

Randomised controlled trials and controlled clinical trials including women attending services for emergency contraception following a single act of unprotected intercourse were eligible.

### Data collection and analysis

Data on outcomes and trial characteristics were extracted in duplicate and independently by two reviewers. Quality assessment was also done by two reviewers independently. Meta-analysis results are expressed as relative risk (RR) using a fixed-effects model with 95% confidence interval (CI). In the presence of statistically significant heterogeneity a random-effect model was applied.

### Main results

Eighty-one trials with 45,842 women were included. Most trials were conducted in China (70/81). There were more pregnancies with levonorgestrel compared to mid-dose (25-50 mg) (15 trials, RR: 2.01; 95% CI: 1.27 to 3.17) or low-dose mifepristone (<25 mg) (9 trials, RR: 1.43; 95% CI: 1.02 to 2.01). Low-dose mifepristone was less effective than mid-dose (20 trials, RR: 0.67; 95% CI: 0.49 to 0.92), but this effect was no longer statistically significant when only high quality trials were considered (6 trials, RR: 0.75; 95% CI: 0.50 to 1.10). Single dose levonorgestrel (1.5 mg) administration seemed to have similar effectiveness as the standard 12 hours apart split-dose (0.75 mg twice) (2 trials, 3830 women; RR: 0.77, 95% CI: 0.45 to 1.30). Levonorgestrel was more effective than the Yuzpe regimen in preventing pregnancy (2 trials, RR: 0.51; 95% CI: 0.31 to 0.83). CDB-2914 (a second-generation progesterone receptor modulator) may be as effective as levonorgestrel (1 trial, 1549 women; RR: 1.89; 95% CI: 0.75 to 4.64) but the confidence interval is wide and the result compatible with higher or lower effectiveness.

Delay in the onset of subsequent menses was the main unwanted effect of mifepristone and seemed to be dose-related.

### Authors' conclusions

Mifepristone middle dose (25-50 mg) was superior to other hormonal regimens. Mifepristone low dose (<25 mg) could be more effective than levonorgestrel 0.75 mg (two doses) but this was not conclusive. Levonorgestrel proved more effective than the Yuzpe regimen. The copper IUD was another effective emergency contraceptive that can provide ongoing contraception.

## PLAIN LANGUAGE SUMMARY

### Methods of Emergency Contraception

Emergency contraception is using a drug or copper intrauterine device (Cu-IUD) to prevent pregnancy after unprotected sex. This is for backup, not regular contraception. Mifepristone and levonorgestrel are very effective with few adverse effects, and are preferred to oestrogen and progestogen combined. Levonorgestrel could be used in a single dose (1.5 mg) instead of two split doses (0.75 mg) 12 hours apart. Another effective method for emergency contraception is Cu-IUD and it can be kept for ongoing contraception.

## BACKGROUND

Unwanted pregnancy is a common problem. Worldwide, about 50 million pregnancies are terminated each year (Van Look 1995). The standard approach to this problem has been primary prevention (contraception), backed up by induced abortion. However, for a long time, contraception in the world has meant only anticipatory contraception. The definition of the primary prevention of unintended pregnancy could and should expand to include post hoc contraception as well (Grimes 1997).

Emergency contraception is defined as the use of a drug or device as an emergency measure to prevent pregnancy after unprotected intercourse. From this definition it follows that methods of emergency contraception are used after coitus but before pregnancy occurs, and that they are intended as a back up for occasional use rather than a regular form of contraception (Van Look 1993). Although the terms 'morning after pill', and 'after-sex pill' are also used to describe the same approach, these can cause confusion regarding the timing and purpose, and should best be avoided. Emergency contraception implies something not to be used routinely (there are far more effective methods for regular contraception) but which can still prevent pregnancy if other options have failed or regular contraception was not used (Webb 1995). It must be remembered that no contraceptive method is 100 per cent reliable and few people use their method perfectly each time they have sexual intercourse. Furthermore, emergency contraception is useful in cases of sexual assault. But, except for a few Western European countries and China, emergency contraception is largely under-utilised worldwide. In many developing countries the lack of access to emergency contraception may subject women to unsafe abortions, which contribute significantly to maternal mortality and morbidity.

Although attempted throughout history, emergency contraception methods only started to become effective in the 1960s when hormonal regimens were first introduced. Following the introduction of high-dose oestrogens, the so-called Yuzpe regimen involving the combined use of oestrogen (100 mcg ethinyl oestradiol) and progestogen (0.5 mg levonorgestrel or 1 mg dl-norgestrel) repeated once 12 hours apart with the first dose given within 72 hours of unprotected intercourse, became popular in the late seventies and early eighties of last century (Yuzpe 1977).

Since 1990s, there were several different interventions available for emergency contraception (Glasier 1997). Recent interest in the development of alternative regimens has led to trials of the progestogen levonorgestrel (LNG), the antigonadotropin danazol, and the antiprogesterone mifepristone (RU 486) and CDB-2914. Like the Yuzpe regimen, these methods are recommended for use within 72 hours of unprotected intercourse although levonorgestrel and mifepristone had been tested up to 120 hours (5 days) for research purposes. The postcoital insertion of a copper IUD is an option that can be used up to 5 days after the estimated time of ovulation and can be left in the uterus as a long-term regular contraceptive method.

The main side-effects caused by hormonal emergency contraceptives are nausea and vomiting which seem to be more frequent with oestrogen-containing regimens such as Yuzpe regimen and high-dose oestrogen alone compared to progestogen or anti-progestogen treatment. Mifepristone can cause menstrual delay, while levonorgestrel may cause earlier menses. IUD insertion can cause discomfort and requires trained staff and facilities. It is generally recommended that the copper IUD be avoided in women at high risk of sexually transmitted diseases.

Information on the comparative efficacy, safety and convenience of an emergency contraceptive method is crucial for reproductive health care providers and the women they serve. The present review aims to search systematically for, and combine, all evidence from randomised controlled trials and controlled clinical trials relating to the efficacy of different emergency contraceptive methods in order to supply the best evidence currently available on which to base recommendations for clinical practice and further research.

## OBJECTIVES

To determine, from the best evidence available, which emergency contraceptive method following unprotected intercourse is the most effective, safe and convenient to prevent pregnancy.



## CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW

### Types of studies

Randomised controlled trials and controlled clinical trials comparing different emergency contraception methods, or comparing one method with expectant management or placebo were considered for inclusion. The unit of randomisation in all these studies was the individual. Only trials reporting clinical outcomes were considered for inclusion.

### Types of participants

Women with regular menses requesting emergency contraception following unprotected intercourse. Women attending clinics for 'once-a-month' contraception in the form of luteal phase contraceptives and menstrual regulation using mifepristone (RU 486) and prostaglandin analogues were not eligible for inclusion in this review.

### Types of intervention

To be included, the intervention had to be applied to women seeking emergency contraception following unprotected intercourse. Those studies in which similar interventions were used by women as regular postcoital contraception were not eligible. Comparisons of different delivery systems such as advance provision or over-the-counter delivery, and any kind of educational interventions, were not eligible for inclusion in this review.

Trials evaluating the following interventions were included in this review:

1. Any regimen vs nothing/placebo
2. Hormonal ECPs: comparison of different regimens
  - a) levonorgestrel vs Yuzpe
  - b) levonorgestrel vs mifepristone
  - c) mifepristone vs Yuzpe
  - d) mifepristone vs anodrin
  - e) mifepristone vs mifepristone + anodrin
  - f) mifepristone vs mifepristone + misoprostol
  - g) mifepristone vs mifepristone + tamoxifen
  - h) mifepristone vs danazol
  - i) Yuzpe vs high-dose oestrogen
  - j) Yuzpe vs danazol
  - k) CDB-2914 vs levonorgestrel
  - l) drug/dose comparisons
  - l) others
3. IUD comparisons to ECPs

Combination treatments and comparison of these with other treatments alone or in combination were considered for inclusion when such data are available, including different doses.

### Types of outcome measures

The review focused on clinical outcome measures. The primary outcome measure was the pregnancy rate in women receiving dif-

ferent regimens (or control). The full list of outcomes was presented below:

1. Observed number of pregnancies (all women)
2. Ectopic pregnancy
3. Side-effects
  - Any side-effect
  - Nausea
  - Vomiting
  - Headache
  - Dizziness
  - Fatigue
  - Breast tenderness
  - Diarrhoea
  - Spotting or bleeding
  - Others
4. Menses
  - Early
  - Late

Several factors may affect the success of emergency contraception and the following subgroup analyses were considered when there were sufficient data in an appropriate format to allow such analyses. These factors were:

1. Time elapsed since intercourse (Coitus-treatment interval)
  - $\leq 24$  hours
  - $> 24 - 48$  hours
  - $> 48 - 72$  hours
  - $> 72 - 120$  hours
  - $> 120$  hours
2. Risk status
  - High-risk - women who had further acts of intercourse during the same cycle in which emergency contraception was used.
  - Low-risk - women without further acts of coitus during that cycle.

## SEARCH METHODS FOR IDENTIFICATION OF STUDIES

See: Cochrane Fertility Regulation Group methods used in reviews.

The search strategy for this review included:

## 1. ELECTRONIC SEARCHES:

"Central/ Cochrane Controlled Trials Register (Cochrane Library, Issue 4 , 2006)

"PubMed: 2003 - December 2006

(contraceptives, postcoital OR contraception, postcoital OR postcoital contracept\* OR "emergency contraceptives" OR "emergency contraception" OR "morning after pill" OR "day after pill" OR Yuzpe) AND (advance\* OR home OR over the counter OR OTC OR behind the counter OR health services accessibility OR community pharmacy services OR access) limited to human and English

"Biosis/Embase: 2003 - December 2006

s postcoitus contraceptive agent  
s emergenc?( ) contracept?  
s morning( ) after( ) pill  
s Ru-486  
s Yuzpe or post( ) coital( ) insertion or unprotected( ) intercourse or mifepristone or danazol or anordrin  
s s1 or s2 or s3 or s4 or s5  
s prenatal( ) diagnosis or chromosome( ) aberration or menopause or  
infertility or neoplasm or spontaneous( ) abortion or rheumatoid( ) arthritis  
s s6 not s7  
s s8 and py=2003:2006  
s clinical study  
s clinical trial or DC=J2.40.10.25  
s double blind procedure  
s crossover procedure  
s placebo  
s s10 or s11 or s12 or s13 or s14  
s s9 and s15  
s s16/human  
reduce duplicates

"Popline: to December 2006

(emergency contracept\* / postcoital contracept\* / morning after pill\* / morning after contracept\* / morning-after pill\* / morning-after contracept\* / day after pill\* / day after contracept\* / day-after pill\* / day-after contracept\* / Yuzpe) & (advance\* prov\* / self administ\* / self-administ\* / home / over the counter / over-the-counter / otc/ behind the counter / advance prescript\*/advance prescib\* / pharmac\* prov\*/ access\*)  
limited to English

"CINAHL: to December 2006

(contraceptives or emergency contraceptive or morning after pill or Yuzpe or postcoital insertion or unprotected intercourse or mifepristone or danazol or anordrin or Ru-486 or Ru486 or Ru 486)  
AND

(clinical and (article or study or trial or studies or trials) or controlled study or randomised controlled trial or randomised controlled trial or clinical study or single blind or phase 3 clinical study or phase 4 clinical study or crossover or placebo or placebos or allocated or allocation or allocate or assign or assigned or blinded or comparative or comparison or factorial or follow up or prospective or random or randomised or randomised or masked or masking or versus or vs)

NOT

(prenatal diagnosis or chromosome aberration or menopause or infertility or neoplasm or spontaneous abortion or rheumatoid arthritis)

"LILACS: to December 2006

contraception, postcoital or anticoncepcion postcoital or anticoncepciao pos-coito or contraceptives, postcoital or anticonceptivos poscoito or anticoncepcionais pos-coito or contraceptives, postcoital, hormonal or postcoital contraceptives or postcoital contraception or postcoital contraceptive or emergency contraception or emergency contraceptives or emergency contraceptive or morning after pill or Yuzpe or postcoital insertion or unprotected intercourse or mifepristone or danazol or anordrin or Ru-486 or Ru486 or Ru 486

## 2. WHO RESOURCES (December 2006):

- We contacted HRP/WHO to seek any published or unpublished trials we had missed.

3. The Emergency Contraception World Wide Web server operated by the Office of Population Research at Princeton University, USA, was checked to identify any relevant publications (December 2006)

4. The pharmaceutical companies (Schering AG, Gedeon Richter, Beijing No.3 Pharmaceutical Co., Shenyang No. 1 Pharmaceutical Co., Xianju Pharmaceutical Co., Shanghai First Pharmaceutical Co., Laboratoire HRA Pharma, Biopharm Chemical Company, Gador SA, Duramed) that are marketing dedicated products for emergency contraception were contacted to check if they know of any unpublished trials that are eligible for inclusion in the review. All companies responded but they (excepting Laboratoire HRA Pharma) did not have information on or knowledge of other trials (December 2006)

5. The usual steps in the search of a systematic review such as searching the reference lists and contacting investigators active in this area were performed (December 2006).

## METHODS OF THE REVIEW

### Study selection

The trials identified with our search strategy were initially checked for duplicates and relevance for the review by looking at the titles and abstracts. If it was not possible to exclude a publication by

looking at the title or the abstract, the full paper was retrieved. Decisions on which trials to include were independently made by two reviewers (LC and AMG/CO). Differences were resolved by discussion and consultation of other reviewers if needed. Trials were to be excluded if the loss to follow-up rate was greater than 20%. There were no language preferences in the search or the selection of articles.

### Data extraction

Systematic data extraction was carried out for each trial for the following variables:

- Intervention, and control treatment. Because of the large variation in mifepristone doses, we categorised the doses arbitrarily (before data extraction) as high (> 50 mg), mid (25-50 mg) and low (< 25 mg). We also conducted separate meta-analyses to validate our groupings of the different doses.
- Clinical outcomes: observed number of pregnancies, ectopic pregnancies, side-effects (any, nausea, vomiting, headache, dizziness, fatigue, breast tenderness, spotting/bleeding, diarrhoea, others), timing of menses, coitus-treatment interval, high/low risk behaviour.
- Methodology: Random allocation techniques, blinding, post-randomisation exclusions, loss to follow-up.
- Demographics: Type of health care setting, city, country, total number of women included, and inclusion and exclusion criteria.

For English-written articles, data extraction was independently done by two reviewers (LC and AMG/CO). However, several Chinese trials were published locally in Chinese and data extraction from these trials was performed by one reviewer (LC) and the data entry checked by another reviewer.

### Quality assessment

Trials were given a quality score for the concealment of allocation as described in the Cochrane Handbook (Higgins 2005). Study quality was independently assessed by two reviewers (CL and AMG/CO). Disagreements were resolved by discussion with other reviewers.

### Statistics

Treatment effects were calculated using relative risk estimates (RR) with 95% confidence intervals (95% CI) with the Review Manager software. A fixed effect model was applied. In case of heterogeneity ( $p < 0.10$ ), the random effect model was used to produce summary estimates (except when heterogeneity occurred in subgroup analyses where it was not possible to conduct separate analyses). We used relative risk rather than the odds ratio because we thought that clinicians can relate to this statistic more easily. Treatment effects might be affected by the quality of allocation concealment. Furthermore, more than half of the trials in the first release of the review (in 1999) were from China, and it had been suggested that treatment effects might be

different between trials conducted in China and elsewhere (WHO 1990 and WHO 1998). Therefore, it was decided that in the second release of the review (2004) these two potential sources of heterogeneity should be investigated for the most important outcomes (observed pregnancies, any side-effects, specific side-effects: nausea, vomiting, and breast tenderness), using meta regression in STATA. Random effects meta-regression analyses were conducted to take account of both within-trial variances of treatment effects and the residual between-trial heterogeneity (data not shown) (Thompson 2002). In addition, sensitivity analyses were conducted in STATA for all comparisons pooling data from more than two trials (data not shown). Interaction tests were conducted using logistic regression with SAS software.

### Intention-to-treat analyses

All reports were scrutinised for the presence of intention-to-treat (ITT) analyses. For outcomes with loss to follow-up the number of women with outcome data was taken as the denominator (available case analysis). In the levonorgestrel versus Yuzpe comparison and levonorgestrel versus mid-dose mifepristone: outcomes for missing patients were imputed under 2 extreme scenarios (i.e. all missing in one arm had event and all missing in the other arm did not have event and vice versa).

## DESCRIPTION OF STUDIES

Eighty-one trials with 45,842 women were included. Seventy trials were conducted in China. All Chinese trials were relatively recent (earliest trial published in 1993) indicating the interest in emergency contraception research in this country. Except for the WHO 1998, WHO 1999, von Hertzen 2002 and Ellertson 2003 trials, all had been conducted in a single country, although some were multicentre trials. WHO trials were multinational involving large numbers of diverse populations.

Sixty-seven studies were excluded. Most of these were case-series, reports without a comparison group or meta-analysis. Four studies (Zhang J 1999; Li F 2005; Liu Y 2002; Tian Q 2000) compared Cu-IUDs versus mifepristone by informed choice (i.e. not randomly allocated). Only one (Mo 2004) of the excluded trials was excluded on the basis of high loss to follow-up (20%).

Two studies compared Cu-IUD either directly with an ECP (levonorgestrel, mifepristone) or allocated those women attending clinics between 72-120 hours to IUD and those attending before 72 hours to two alternative ECPs (Su 2001; Wang C 2000) randomly.

Eighteen out of eighty-one trials had more than two treatment arms. The majority of trials used mifepristone followed by those using levonorgestrel and then Yuzpe regimen. Thirty-one trials involved dose comparison studies of mifepristone in doses from 5 mg to 600 mg. Twenty-four trials compared levonorgestrel with mifepristone. Two compared levonorgestrel with Yuzpe regimen,

two trials compared a split-dose with a single dose of levonorgestrel and one trial compared 24 hr with 12 hr double-dose regimen of levonorgestrel. One trial compared CDB-2914 (a second-generation progesterone receptor modulator) with levonorgestrel. Other interventions were: high-dose oestrogen, danazol and Copper-IUD. Anordrin is a steroid hormone with weak estrogenic effects and is only used in China as a visiting-contraceptive pill. In Chinese emergency contraception trials, investigators used locally manufactured mifepristone and levonorgestrel.

Most of the trials report observed number of pregnancies in comparison to expected number of pregnancies according to estimated probability of pregnancy on the day of the menstrual cycle when unprotected intercourse took place. This information is provided in the characteristics of included trials table without a formal summary analysis.

The inclusion and exclusion criteria were similar with some minor differences. In general, women attending after 72 hours (after 120 hours in Cu-IUD, some mifepristone and levonorgestrel trials), with multiple episodes of unprotected intercourse, with irregular menstrual periods and those using hormonal contraception were excluded. All trials except that of Sang 1999 started the intervention as soon as the women came to the clinic. Sang 1999 included only women who had their unprotected intercourse 24 to 96 hours before attending the clinic.

## METHODOLOGICAL QUALITY

Twenty-two trials (Arowojolu 2002; Ashok 2002; Creinin 2006; Ellertson 2003; Glasier 1992; Hamoda 2004; He CH 2002; Ho 1993; Liu 2000; Ngai 2005; Qi 2000b; Sang 1999; Van Santen 1985a; von Hertzen 2002; Wang SZ 2001; Webb 1992; WHO 1998; WHO 1999; Wu 1999a; Wu XZ 2002; Xiao 2002; Zuo 1999) had adequate concealment of allocation. Most of the remaining trials had insufficient information on randomisation and concealment of allocation, and only used terms like 'randomly allocated'. Nineteen trials were reported as double-blinded (Arowojolu 2002; Creinin 2006; Ellertson 2003; He CH 2002; Lin 2000; Liu 2000; Ngai 2005; Qi 2000b; Van Santen 1985a; von Hertzen 2002; Wang SZ 2001; Wei RH 2002; WHO 1998; WHO 1999; Wu 1999a; Wu XZ 2002; Xiao 2002; Zhang L 2005; Zuo 1999), and one as single-blinded (Sang 1999). Intention-to-treat analysis was available (or possible) for the WHO 1998, Ho 1993, Xiao 2002, Ngai 2005, and Creinin 2006 trials and not mentioned in other studies. On average, loss to follow-up or post-randomisation exclusion was 4.2% (ranges from 0.4% to 16.9%). Although several trials did not mention post randomisation exclusions, these studies did not explicitly mention intention-to-treat analyses either. As there were only few pregnancies reported, it was possible that some pregnancies could well be excluded after randomisation (Webb 1992). In general, side-effects were assessed by women themselves on diary charts.

The trial by Askalani (1987) was included in the review because random allocation was explicitly mentioned. Unfortunately, no other methodological details were available for this trial. One trial (Webb 1992) was stopped early for efficacy reasons. Twelve trials reported appropriate power calculations for the sample size (Arowojolu 2002; Ashok 2002; Ellertson 2003; Creinin 2006; Hamoda 2004; Ngai 2005; Sang 1999; von Hertzen 2002; Webb 1992; WHO 1998; WHO 1999 and Xiao 2002).

In the current 2007 update, the authors revised the use of the allocation concealment score to be more consistent with Cochrane procedures. This score referred to the concealment of allocation before assignment, and was not an overall quality score. Studies from the initial review were recoded for consistency in the allocation concealment score. The change did not alter the results or conclusions.

## RESULTS

### 01. IUD VERSUS EXPECTANT MANAGEMENT

Askalani 1987 compared Cu-IUD (Cu-T 200) insertion with expectant management in women requesting emergency contraception within 4 days of unprotected intercourse. Notwithstanding the ethical aspects of this trial, the report was brief and only reported data on number of pregnancies. There was a significantly higher number of pregnancies in the expectant management group (RR: 0.09, 95% CI 0.03 to 0.26).

### 02. LEVONORGESTREL VERSUS YUZPE REGIMEN

Two trials (1 Chinese, 1 multinational) compared the Yuzpe regimen with levonorgestrel 0.75 mg per dose given twice 12 hours apart (Ho 1993, WHO 1998). The two trials provided data on 2878 women. Levonorgestrel was more effective in preventing pregnancy than Yuzpe (RR: 0.51, 95% CI: 0.31 to 0.83). Additional analysis of the WHO 1998 trial data indicated that the effect was not modified by whether the women abstained from further acts of intercourse or not ( $p = 0.61$  for the interaction test) nor by the time elapsed from intercourse to treatment administration ( $p = 0.58$  for the interaction test).

The need for repeat dose was less with levonorgestrel (WHO 1998, RR:0.53, 95% CI: 0.38 to 0.75). There were fewer complaints of nausea (RR: 0.43, 95% CI 0.39 to 0.48), vomiting (RR: 0.24, 95% CI 0.18 to 0.31), dizziness (RR: 0.72, 95% CI 0.61 to 0.85) and fatigue (RR: 0.61, 95% CI: 0.54 to 0.70). The difference was marginally statistically nonsignificant but nevertheless less in terms of headache (WHO 1998, RR: 0.83, 95% CI: 0.69 to 1.00), breast tenderness (RR:0.84, 95% CI: 0.69 to 1.01) and abdominal pain (WHO 1998, RR: 0.84, 95%CI: 0.70 to 1.01) with levonorgestrel. Spotting/bleeding (Ho 1993, RR:1.03, 95% CI: 0.47 to 2.28) and the time of menses resumption after treatment were similar in both groups.

### 03. LEVONORGESTREL SPLIT-DOSE 24 HOUR VERSUS 12 HOUR

One double-blind randomised multicenter trial conducted in China (Ngai 2005) compared levonorgestrel split-dose in two different regimens (24 h versus 12 h apart). The efficacy was similar with either regimen (RR: 0.98; 95% CI: 0.53 to 1.82). Additional analysis of the trial data indicated that the effect was modified by whether the women abstained from further acts of intercourse or not ( $p = 0.05$  for the interaction test), suggesting that 24 hr regimen was more protective among high-risk women compared to low-risk women.

### 04. LEVONORGESTREL SINGLE DOSE VERSUS LEVONORGESTREL SPLIT-DOSE

Two trials compared administering the total dose of levonorgestrel 1.5 mg in a single dose and the standard two doses of 0.75 mg 12 hours apart. Arowojolu 2002 included 1160 women who had a single act of unprotected intercourse within 72 h attending the clinic, whereas von Hertzen 2002 included 4136 women within 120 h attending the clinic. There were no statistically or clinically significant differences in preventing pregnancy for all women (RR: 0.77, 95% CI: 0.45 to 1.30). Additional analysis of the von Hertzen 2002 trial data indicated that the effect was not modified by whether the women abstained from further acts of intercourse or not ( $p = 0.18$  for the interaction test) nor by the time elapsed (within or after 72 hours) from intercourse to treatment administration ( $p = 0.90$  for the interaction test). There were no statistically or clinically significant differences in side-effects between the two regimens except for more cases of headache with the single-dose regimen (RR: 1.23, 95% CI 1.04 to 1.47).

### LEVONORGESTREL VERSUS MIFEPRISTONE (Comparisons 05, 06)

#### 05. Levonorgestrel versus mid-dose mifepristone (25-50 mg)

Fifteen trials (Han 1999a, Li A 2000, Sun 2000, Wang Q 2000, Xu 2000, Xu Z 2000, Zhang JQ 2000, Liang 2001, Su 2001, Hu X 2003, Liao 2003, Qi M 2003, Sun P 2003, Wang Y 2003 and Li J 2005), all conducted in China, compared levonorgestrel (1812 women, all used split-dose) to mid-dose mifepristone (1936 women). Overall, efficacy of mid-dose mifepristone was better than levonorgestrel split-dose regimen (RR: 2.01; 95% CI: 1.27 to 3.17). The results have been confirmed with simulated intention-to-treat analyses, i.e. all missing had the event with LNG regimen, but none with mifepristone (Outcome 05.08: RR: 2.01; 95%CI: 1.30 to 3.12), and all missing did not have event in LNG regimen, but had event in mifepristone (Outcome: 05.09: RR:1.75; 95%CI: 1.13 to 2.72). Total side-effects were reported in eleven trials and mifepristone was more tolerable than levonorgestrel (RR:1.67; 95% CI:1.14 to 2.45). The delay in menses was similar (8 trials, RR: 0.94; 95% CI: 0.74 to 1.20).

#### 06. Levonorgestrel versus low-dose mifepristone (< 25 mg)

Seven Chinese (Wu 1999a, Lin 2000, Liu 2000, Wang C 2000, Pei 2001, Li W 2002 and Sheng A 2002), one UK (Hamoda 2004)

and one multinational WHO trial (von Hertzen 2002) compared levonorgestrel (4,706 women) with low-dose mifepristone (3,330 women). There was a statistically significant difference in efficacy between levonorgestrel and low-dose mifepristone when all studies were included (RR: 1.43; 95% CI: 1.02 to 2.01), but the difference was not statistically significant when only high-quality studies (Hamoda 2004, Liu 2000, von Hertzen 2002, Wu 1999a) were included in the meta-analysis although the trend remained in the same direction (RR: 1.42; 95% CI: 0.99 to 2.03). Additional analysis of a trial (von Hertzen 2002) data indicated that the effect was not modified by whether the women abstained from further acts of intercourse or not ( $p = 0.14$  for the interaction test) nor (von Hertzen 2002 and Hamoda 2004) by the time elapsed (within or after 72 hours) from intercourse to treatment administration ( $p = 0.99$  for the interaction test). Side-effects were reported most comprehensively in three trials (Wu 1999a, von Hertzen 2002, and Hamoda 2004), and did not indicate any significant differences except for less delay in menses and more frequent bleeding in the first 7 days following treatment in the levonorgestrel group.

There were no trials that compared levonorgestrel with high-dose (>50 mg) of mifepristone.

### 07. LEVONORGESTREL VERSUS CDB-2914

CDB-2914 is a second-generation progesterone receptor modulator. Creinin 2006 compared levonorgestrel split-dose regimen with CDB-2914 50 mg single-dose orally within 72 hours after unprotected intercourse. The pregnancy rate was higher with levonorgestrel (RR: 1.86; 95% CI 0.75 to 4.64) but with wide confidence interval compatible with either direction of effect. Additional analysis of the trial's data showed no evidence that the time elapsed from intercourse to treatment administration modified the effect ( $p=0.11$  for the interaction test). Women who took levonorgestrel had earlier than expected return of menses compared with those who received CDB-2914 (RR: 2.06; 95% CI: 1.71 to 2.47); conversely, those who took CDB-2914 had later than expected return of next menses compared to women who received levonorgestrel (RR: 0.64; 95% CI: 0.52 to 0.78).

### 08. LEVONORGESTREL VERSUS ANORDRIN

Only one trial from China (Xu Z 2000) compared levonorgestrel split-dose regimen with anordin (7.5 mg two dose 12 hours apart, then 7.5 mg per day for 8 days). The total number of subjects was only 172 women. There were similar number of pregnancy with either regimen and, as expected wide confidence interval (RR: 0.67; 95% CI: 0.11 to 3.89).

### MIFEPRISTONE DOSE COMPARISONS (9,10,11,12,13)

#### 09. Low <25 mg versus low <=10 mg

Zhang L 2005 compared mifepristone 20 mg versus 10 mg in 220 women in China. There were similar numbers of pregnancies with either regimen (RR: 1.04; 95% CI: 0.07 to 16.37).

#### 10. Mid (25-50 mg) versus low (< 25 mg)

Twenty trials were included in this comparison. Twelve trials were two-arm comparisons of 25 mg versus 10 mg mifepristone (Du J 2002; Fan HL 2001; Han L 2001; Lai Z 2004; Sang 1999; Qi 2000b; Wang L 2004; Wang J 2006; Wang SZ 2001; Wei RH 2002; Xiao 2002; Zuo 1999). Seven trials had three arms (Cheng 1999a, Zhang Y 1998, WHO 1999, Zhang Y 2002, Tan L 2003, Zhao J 2003, Ding G 2005) and one trial had four comparisons (Cao 1999). Except for the WHO trial (WHO 1999), all of the mifepristone dose comparison trials were conducted in China. Although the overall meta-analysis showed fewer pregnancies with the mid-dose (RR: 0.67; 95% CI: 0.49 to 0.92), when the analysis was limited to the six trials with adequate allocation concealment (Qi 2000b, Wang SZ 2001, WHO 1999, Xiao 2002, Zuo 1999, Sang 1999) this effect was no longer evident (RR: 0.75; 95% CI: 0.50 to 1.10). Additional analysis of the trials (Cheng 1999a, WHO 1999 and Xiao 2002) data indicated that the effect was not modified by the women abstained from further acts of intercourse or not ( $p = 0.77$  for the interaction test). Mid-dose mifepristone caused more menstrual delay than did low-dose mifepristone (17 trials, RR:1.32; 95% CI: 1.15 to 1.51).

#### 11. Mid (50 mg) versus mid (25 mg)

Thirteen Chinese trials (Cao 1999, Cheng 1999a, Fang 2000, Han 1996, Li 2000, Li H 2000, Tan 1999, Xie 1998, Zhang JQ 2000, Chen R 2002, Lou C 2002, Yang F 2003, Zhao J 2003) included separate 50 mg- and 25 mg-mifepristone arms. The meta-analysis indicated that their relative efficacy (RR: 0.72; 95% CI: 0.41 to 1.27) was similar, and the 50 mg dose had slightly more menstrual delay (RR: 1.32; 95% CI: 1.12 to 1.56). One trial (Zhang X 1999a) compared three different regimens of mifepristone (1) mife 25mg orally two doses 12 hours apart; (2) mife 10mg daily for 5 days; (3) mife 10mg daily for 3 days. The trial was too small to show any meaningful differences among the three regimens

#### 12. High (> 50 mg) versus low (< 25 mg)

Six trials, one with two (Zheng A 2005: 600 vs 25 mg), one with four (Cao 1999: 100 vs 50 vs 25 vs 10 mg) and four with three (WHO 1999: 600 vs 50 vs 10 mg; Ding G 2005: 75 vs 50 vs 10 mg; Tan L 2003: 150 vs 50 vs 12.5 mg; Zhang Y 2002: 100 vs 50 vs 10 mg) treatment arms included a high- versus low-dose mifepristone comparison. In the Cao (Cao 1999) and Tan (Tan L 2003) trials there were fewer pregnancies with high-dose mifepristone, whereas in the WHO (WHO 1999) and Ding (Ding G 2005) trials the number of pregnancies were similar. There were more side-effects (RR: 10.44; 95% CI: 3.64 to 29.64), more spotting/bleeding problems (RR: 2.36; 95% CI: 1.89 to 2.95) and more delays of subsequent menses in the high-dose mifepristone group (4 trials, RR:1.98; 95% CI: 1.66 to 2.37).

#### 13. High (> 50 mg) versus mid (25-50 mg)

Eight Chinese (Cao 1999, Li H 2000, Qian 1999, Xie 1998, Zhang Y 1998, Tan L 2003, Ding G 2005, Zheng A 2005) and one WHO trial (WHO 1999) were included in this comparison. The WHO trial included 600 mg, 50 mg and 10 mg comparisons. The

number of pregnancies was similar in both groups (RR: 0.93; 95% CI: 0.50 to 1.72). There were more bleeding episodes following high-dose mifepristone (RR:1.32; 95% CI: 1.12 to 1.56), more side-effects (RR: 2.64, 95% CI: 1.57 to 4.43) and more delays in subsequent menses (8 trials, RR: 1.56; 95% CI: 1.37 to 1.78).

#### 14. MIFEPRISTONE VERSUS YUZPE REGIMEN

Three trials conducted in the United Kingdom compared high-dose mifepristone (100 and 600 mg) to the Yuzpe regimen (Webb 1992 [600 mg], Glasier 1992 [600 mg] and Ashok 2002 [100 mg]). The Webb 1992 trial included a third arm with danazol. This trial was stopped early because of higher efficacy of mifepristone compared to the Yuzpe regimen (0/195 vs 5/191) and to danazol (0/195 vs 9/193). Mifepristone better prevented pregnancies than the Yuzpe regimen (RR: 0.14, 95% CI: 0.05 to 0.41). One trial investigated whether efficacy was influenced by high or low risk behaviour (Glasier 1992). However, this was a small study in which no pregnancy occurred in women who abstained from further intercourse. Similar numbers of women reported 'any side-effect'. However, nausea (RR: 0.63, 95% CI: 0.53 to 0.76), vomiting (RR: 0.12, 95% CI: 0.07 to 0.20), headache (RR: 0.75, 95% CI: 0.61 to 0.91), dizziness (Ashok 2002, RR: 0.58, 95% CI: 0.42 to 0.80), fatigue (Ashok 2002, RR: 0.81, 95% CI: 0.68 to 0.95), low abdominal pain (Ashok 2002, RR: 0.76, 95% CI: 0.61 to 0.95), hot flushes (Ashok 2002, RR: 0.58, 95% CI: 0.40 to 0.83) and tiredness (Ashok 2002, RR: 0.75, 95% CI: 0.58 to 0.95) were observed less frequently in women receiving mifepristone. The delay in menses was significantly more often reported by women receiving mifepristone as compared to those who used the Yuzpe regimen.

#### 15. MIFEPRISTONE VERSUS DANAZOL

Two trials (Webb 1992; Yang 2001) compared mifepristone (600 mg or 50 mg) with danazol (400 mg or 600 mg repeated after 12 hours). Mifepristone was more effective in preventing pregnancy than danazol (RR: 0.10; 95% CI: 0.02 to 0.55) and fewer women in this group reported 'any side-effect' (RR: 0.35, 95% CI: 0.13 to 0.95). Delay of menses was more common in women using mifepristone than danazol in both trials.

#### 16. MIFEPRISTONE VERSUS ANORDRIN

Seven trials (Han 1995; Wang 1999; Yang 2001, Fu X 2000, Xu Z 2000, Chen G 2001, Liu L 2001) compared mid-dose mifepristone with anordrin in different regimens. Mifepristone was more effective in preventing pregnancy than anordrin (RR: 0.26, 95% CI: 0.11 to 0.63). Mifepristone had fewer overall side effects than did anordrin (4 trials, RR: 0.62, 95% CI: 0.43 to 0.91), but no significant differences were evidence in spotting/bleeding and delay in the onset of next menses.

#### MIFEPRISTONE VERSUS COMBINATION REGIMENS (17, 18, 19, 20)

17. Five trials (Han 1995; Han 1996; Sang 1999, Zhang YM 2002, Lou X 2005) compared low- or mid-doses of mifepristone to mifepristone combined with anordrin. There were similar number

of pregnancies with either regimen (RR: 1.32; 95% CI: 0.73 to 2.41). The combination regimen had more side-effects (RR: 1.80; 95% CI: 1.33 to 2.43) and delay of menses (RR: 0.79; 95% CI: 0.65 to 0.97).

**18.** Chen H 2002 compared mid-dose mifepristone (25 mg) to mifepristone combined with methotrexate (5 mg). One woman became pregnant in the mifepristone alone group, and none in the combination group.

**19.** One double-blind trial (He CH 2002) compared low-dose mifepristone to mifepristone combined with tamoxifen (20 mg). There were no statistically significant differences in preventing pregnancy (RR: 3.0, 95% CI: 0.31 to 28.60) and delay of next menses (RR: 1.79; 95% CI: 0.93 to 3.43) between the two regimens.

**20.** Wu XZ 2002 compared low-dose mifepristone to mifepristone combined with misoprostol (200 mcg). There were more pregnancies with mifepristone alone regimen but the difference was not statistically significant (7/300 vs. 2/299; RR: 3.49, 95% CI: 0.73 to 16.65).

## **21. MIFEPRISTONE VERSUS CU-IUD**

Liu L 2002 compared mifepristone 50 mg with Cu-IUD. One pregnancy occurred in the mifepristone group, and none in the copper IUD group (RR: 1.51; 95% CI: 0.06 to 36.67).

## **22. DANAZOL VERSUS YUZPE REGIMEN**

Danazol was compared to the Yuzpe regimen in one trial (Rowlands 1983) and to the Yuzpe regimen and mifepristone (600 mg) in a three-arm trial (Webb 1992). Both trials were relatively small. The data were scanty to conclude whether Danazol and the Yuzpe regimen did differ in efficacy (RR: 1.78; 95% CI: 0.61 to 5.22). Nausea and vomiting were statistically significantly less common with danazol (Nausea: RR: 0.38, 95% CI 0.30 to 0.47; Vomiting: RR: 0.13, 95% CI 0.06 to 0.27). No significant differences were found for complaints of breast tenderness and for delay of menses. Other side effects were not investigated.

## **23. HIGH-DOSE OESTROGEN VERSUS YUZPE REGIMEN**

One trial conducted in the early eighties compared the Yuzpe regimen with 5 mg ethinyl oestradiol daily for five days (standard treatment at that time) in a double-blind trial (Van Santen 1985a). With only three pregnancies the trial was underpowered to provide meaningful evidence (RR: 2.17; 95% CI 0.20 to 23.77).

## **24. HALF-DOSE YUZPE REGIMEN VERSUS STANDARD YUZPE REGIMEN**

Ellertson et al. (Ellertson 2003) compared the standard Yuzpe regimen (of two doses 12 hours apart) to a half dose given only once, and to a standard regimen replacing norgestrel with norethindrone in a three arm trial. There was no statistically significant difference in efficacy (23/648 versus 17/675, RR: 1.41; 95% CI: 0.76 to 2.61) between the half dose and the standard regimen. The side-effect profile was significantly improved with the single dose.

## **25. RISK STATUS**

Nine trials (Glasier 1992, Ho 1993, WHO 1998, WHO 1999, Cheng 1999a, Zhang JQ 2000, Xiao 2002, von Hertzen 2002 and Ngai 2005) reported the number of women in high risk status (4512 women had further acts of intercourse during the same cycle in which emergency contraception was used) and in low risk (10466 women without further acts of coitus during that cycle). We conducted an additional analysis in those nine hormonal emergency contraception trials by pooling the pregnancy numbers in high risk women and low risk ones regardless of the individual comparison. There was a significantly higher number of pregnancies in high risk women (RR: 2.61; 95% CI: 2.00 to 3.41).

## **26. TIME ELAPSED SINCE INTERCOURSE (Coitus-treatment interval)**

Six trials reported the time of coitus-treatment interval. Ho 1993, WHO 1998, Ashok 2002 and Creinin 2006 compared three different time elapsed since intercourse ( $\leq 24$  hours versus  $> 24 - 48$  hours versus  $> 48 - 72$  hours); He CH 2002 and von Hertzen 2002 compared two different time interval (within 72 hours versus more than 72 hours). Additional analysis was done by pooling all the data by time elapsed regardless of the comparison. Women taking emergency contraceptive pills within 24 hours after unprotected intercourse had significantly lower number of pregnancy than women taken them 24 - 48 hours (RR: 0.45; 95% CI: 0.27 to 0.74) and 48 - 72 hours (RR: 0.36; 95% CI: 0.19 to 0.66); but there was no statistically difference between 24 - 48 hours versus 48 - 72 hours (RR: 0.74; 95% CI: 0.45 to 1.22) and less than 72 hours versus more than 72 hours (RR: 0.65; 95% CI: 0.35 to 1.21).

## **ECTOPIC PREGNANCIES**

Five cases of ectopic pregnancy (WHO 1999 reported two cases after 50 mg mifepristone, Sang 1999 reported one case after 10 mg mifepristone, Su 2001 and von Hertzen 2002 reported one case each after split-dose of levonorgestrel respectively) were identified among the eight-one trials reviewed.

Eight healthy infants were reported to be delivered following the use of ECPs (Webb 1992 and Arowojolu 2002) in this review. Four of their mothers used levonorgestrel, two used Yuzpe regimen, one used danazol and one used mifepristone.

## **DISCUSSION**

Thirty-three new trials have been added to this review since its last publication in 2004. Although, as before, most trials were conducted in China, the availability of several recent large multicentre trials was helpful in increasing the power and the generalisability of the results. The available evidence indicated that safe and effective methods of emergency contraception exist. Although the risk of pregnancy following unprotected intercourse had been overestimated in previous trials (Ellertson 2003) a substantial percentage

of pregnancies that would occur without treatment were prevented with emergency contraception. Since effective agents existed the current research priority was to reduce the amount and number of times the agents were administered so that the compliance could be improved and the cost of treatment was reduced. Because of this approach, many emergency contraception trials had to be designed as equivalence trials as opposed to superiority designs (trying to show that two treatments are as good as each other rather than one is more effective than the other). Only few trials in this review based their sample size on an equivalence approach which usually required larger sample sizes. A common mistake was to claim equivalence when there was no statistically significant difference in the comparison. In such cases the confidence intervals should be looked at to reach a conclusion. When the confidence intervals were large and there was no statistical significance 'clinical equivalence' should not be claimed. Blinding of treatments was uncommon in most of these trials. However, since pregnancy was an objective outcome, less subject to bias, the lack of blinding probably had little influence on results.

Among emergency contraceptive pills the focus was on mifepristone and levonorgestrel. Both of these methods seemed to be more efficacious and better tolerated than the classical Yuzpe regimen. However, the Yuzpe regimen may still be the only available regimen in some places. The results of the Ellertson trial suggested that the half dose regimen had a more favourable side-effect profile. It was difficult to make any conclusions regarding the relative efficacy. The results were compatible with up to 24 % increased efficacy to more than two fold weaker efficacy. Until further research narrows the confidence interval i.e. increase the precision of this estimate it is probably safer to continue with the standard Yuzpe regimen where mifepristone or levonorgestrel is not available..

Two levonorgestrel trials investigated the efficacy of a single-dose of 1.5 mg compared to a split dose. Both of these trials were of good quality and their estimates of efficacy were not statistically heterogeneous. The pooled estimate of the effect (RR: 0.77; 95 % CI: 0.45 to 1.30) suggested that there was no statistically significant change in the risk of pregnancy with the single dose regimen. We can safely say that the single-dose is non-inferior (clinically equivalent) to the split-dose regimen within a margin of 1.3 on the relative scale (at most 30% less effective). Assuming a pregnancy rate of 1.6% equaled to that in the split-dose group translates into a difference in pregnancy rates of 0.49%. This implies that a minimum of 204 women will have to be treated with the replacement regimen to observe one extra pregnancy, (i.e. NNT=204) in a worst-case scenario for the single-dose regimen. One recent double-blind randomised multicenter trial conducted in China (Ngai 2005) which compared levonorgestrel split-dose in two different regimens ( 24 h versus 12 h apart) showed similar overall efficacy with either regimen (RR: 0.98; 95% CI: 0.53 to 1.82). However, the 24 hour split dose regimen was more protective for high risk women in this trial. Those findings are important because com-

pliance had been an issue with the second dose of the split-dose regimen, with both levonorgestrel and the Yuzpe regimens.

Levonorgestrel versus mid-dose mifepristone trials were not methodologically sound in terms of allocation concealment. It is therefore not clear how robust the meta-analysis results are. This updated review indicates that antiprogesterin mifepristone is the most effective hormonal emergency contraceptive. For example, the mid-dose of mifepristone (25 mg to 50 mg) proved significantly more effective than the standard levonorgestrel regimen. This trend was evident in the last version of this review (2004); with addition of new reports, the difference between mifepristone and levonorgestrel became larger and the estimate more precise. On the other hand, delay in onset of next menses, which can cause anxiety for women, was similar with mid-dose mifepristone and levonorgestrel. In addition, side effects were less common with mifepristone.

Low-dose mifepristone was less effective than mid-dose mifepristone in preventing pregnancy in the overall analysis of 12 trials (RR: 0.67; 95% CI: 0.49 to 0.92). However, limiting the meta-analysis to the six good quality trials gave a RR of 0.75 with a confidence limit compatible with a higher or lower effectiveness (0.50 to 1.10). As expected, menstrual delay was more common with the mid-dose.

We also compared mifepristone 50 mg and 25 mg or 20 mg and 10 mg. Lumping together of these two doses was decided arbitrarily in the protocol stage and this version of the review included fourteen trials for such a comparison. There were similar number of pregnancies and more importantly, similar cases of delayed menses with either dose. We think that there are no important differences between the two doses to justify handling them separately nor trials to compare these two doses.

We had woman's risk status and time elapsed after intercourse as two predetermined subgroups where the treatment effects could differ. We preferred to conduct tests of interaction to assess whether the effect of a contraceptive compared to another depends on (changes with) these two factors. We did not find any significant interaction of these two factors on the comparative efficacy of two ECPs in the trials that provided data for this comparison (levonorgestrel single vs split-dose and levonorgestrel vs Yuzpe). We also conducted intention-to-treat simulation analyses (for main comparisons) with extreme scenarios to see if post randomisation exclusions and losses to follow-up could affect the results but did not find any substantive threat to the validity of the results. In this version of review, we did two additional analyses by pooling the pregnancy number in high risk women to compare with the number in low risk ones, and the time elapsed after intercourse for using all hormonal methods . One result indicated there was a significantly higher number of pregnancies in high risk women than in low risk (RR: 2.61; 95% CI: 2.00 to 3.41). Another result indicated women taking ECPs within 24 hours after unprotected intercourse had significantly lower number of pregnancies than



women taking them 24 - 48 hours (RR: 0.45; 95% CI: 0.27 to 0.74) and 48 - 72 hours (RR: 0.36; 95% CI: 0.19 to 0.66); but there was no statistically difference between 24 - 48 hours versus 48 - 72 hours (RR: 0.74; 95% CI: 0.45 to 1.22) and less than 72 hours versus more than 72 hours (RR: 0.65; 95% CI: 0.35 to 1.21). These results should be interpreted with caution because they are not primary comparison analyses.

Other comparisons including combined regimens such as anor-drin, tamoxifen, danazol and misoprostol have been evaluated in few trials and do not seem to offer any major advantages or merit further research.

### **Ectopic pregnancy**

Van Look (Van Look 1993) reported ectopic pregnancies in about 10% of the pregnancies in emergency contraceptives with oestrogen (like Yuzpe). One explanation might be that post-coital administered oestrogen usually prevents uterine pregnancy but not ectopic implantation. For this reason, a history of ectopic pregnancy was generally considered as a contra-indication for post-coital oestrogen therapy (Van Look 1993). However, in this review five cases were reported among 45,842 women and it did not look as if ectopic pregnancy was as common as seen in previous studies and not limited to any particular regimen.

### **Intrauterine device**

The comparative effectiveness of inserting an intra-uterine device has not been adequately investigated. The review currently includes one small trial (Liu L 2002) that compared mifepristone with Cu-IUD (comparison 21.01). Only one pregnancy occurred in the mifepristone group in this trial. Although barriers to using intra-uterine devices for emergency contraception (Reuter 1999) exist, data from non randomised studies (Fan H 2001, Han Y 2001, Ban 2001, Zhang J 1999, Wang C 2000 and Wu 2003) that were all conducted in China suggest that inserting Copper-IUDs for emergency contraception could be effective in preventing unintended pregnancy (3 pregnancies/3470 women, failure rate: 0.09%), and more than 80% women kept Cu-IUD after emergency contraception for long-term method.

### **Counseling**

Counseling and good service can decrease the 'user failure' (Cheng 1999b). Additionally, other aspects of emergency contraception such as raising awareness among the general public and health care delivery systems deserve more attention, to maximise the utilisation and the efficacy of the interventions.

## **AUTHORS' CONCLUSIONS**

### **Implications for practice**

Emergency contraception should be offered to all women requesting this service. Where available, mifepristone should be the first

choice for hormonal emergency contraception. Where mifepristone is not available, single-dose levonorgestrel 1.5 mg should be offered. In places where mifepristone or levonorgestrel are not available, the Yuzpe regimen should be offered.

Women receiving mifepristone should be warned that there may be a few days' delay in onset of menses. Emergency contraception should be started as soon as possible to obtain the highest efficacy (Piaggio 1999). Cu-IUD insertion can be offered to women presenting too late for emergency contraception pills, who are not at risk of sexually transmitted diseases, and who prefer long-term contraception.

### **Implications for research**

The efficacy of levonorgestrel and mifepristone in relation to time to unprotected intercourse, and the relative efficacy of levonorgestrel and mifepristone as compared to intra-uterine devices should be evaluated. The trial protocols should clearly state when equivalence is sought and powered accordingly. Most of the trials included in this review did not have sufficiently detailed reporting to enable satisfactory methodological quality assessment. Future trials should report the methods in sufficient detail to allow this assessment.

## **POTENTIAL CONFLICT OF INTEREST**

Two reviewers (CL, GP) participated in emergency contraceptive trials included in this review. PVL, EE, MG and GP are employees of The World Health Organization which has a Memorandum of Understanding regarding levonorgestrel for emergency contraception with Gedeon Richter, one of the companies marketing this preparation. In addition, PVL is included on behalf of WHO as an inventor on a Gedeon Richter patent relating to the use of a single 1.5 mg dose of levonorgestrel for emergency contraception.

## **ACKNOWLEDGEMENTS**

We are grateful to Drs A. Glasier, J. Guillebaud, PC. Ho, S. Rowlands, A. Webb, Xiao Bilian, A. Templeton, and H. von Hertzen who responded to our requests for information about their (ongoing) trials. We are particularly indebted to Mr. A. Peregoudov for providing additional data from the WHO 1998 trial. We thank Dr. R. Guidotti for his assistance with translation, Dr. C. van Oel for her work on the initial review and Dr. H.von Hertzen for her comments on earlier drafts. In the 2007 update of the review David Grimes, Lauren Lopez and Carol Manion made substantive contributions to the review by updating the literature searches, duplicate the extraction and re-appraisal of allocation concealment scores for all trials.

## SOURCES OF SUPPORT

### External sources of support

- The David and Lucile Packard Foundation, Los Altos, CA USA

### Internal sources of support

- HRP-UNDP/UNFPA/WHO/World Bank Special Programme in Human Reproduction, Geneva SWITZERLAND
- UK Cochrane Centre, NHS R&D Programme, Oxford UK
- International Peace Maternity and Child Health Hospital, Shanghai CHINA

## REFERENCES

### References to studies included in this review

- Arowojolu 2002** {published data only}  
Arowojolu AO, Okewole LA, Adekunle AO. Comparative evaluation of the effectiveness and safety of two regimens of levonorgestrel for emergency contraception in Nigerians. *Contraception* 2002;**66**:269–273.
- Ashok 2002** {published data only}  
Ashok PW, Stalder C, Wagaarachchi PT, Flett GM, Melvin L, Templeton A. A randomised study comparing a low dose of mifepristone and the Yuzpe regimen for emergency contraception. *BJOG* 2002;**109**:553–560.
- Askalani 1987** {published data only}  
Askalani AH, Al-Senitry AM, Al-Agizy HM, Salam HI, Al-Masry GI, El-Sadek SM. Evaluation of copper T-200 as a post-coital contraceptive. *Egyptian Journal of Obstetrics and Gynaecology* 1987;**13**:63–66.
- Cao 1999** {published data only}  
Cao P, Li M, Xu J, Li Q. Different doses of mifepristone for emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 1999;**15**:295–296.
- Chen G 2001** {published data only}  
Chen G. Mifepristone for emergency contraception. *Journal of Guangxi Traditional Chinese Medical University* 2001;**4**:22–24.
- Chen H 2002** {published data only}  
Chen H, Min X. Mifepristone in combination with MTX for emergency contraception. *Strait Pharmaceutical Journal* 2002;**14**:51–52.
- Chen R 2002** {published data only}  
Chen R, Li Q, Zhang Y, Huang M, Chen Y, Zhong X, Yu X. A comparative study of low-dose mifepristone for emergency contraception. *Shi Yong Yi Xue Zha zi* 2002;**18**:1028–1029.
- Cheng 1999a** {published data only}  
Cheng L, Tong Ch, Xiao Zh. Low doses of mifepristone for emergency postcoital contraception [Low doses of domestic mifepristone for emergency postcoital contraception]. *Chinese Journal of Obstetrics and Gynaecology* 1999;**34**:335–338.
- Creinin 2006** {published data only}  
Creinin MD, Schlaff W, Archer DF, Wan L, Freziers R, Tomas M, Rosenberg M, Higgins J. Progesterone receptor modulator for emergency contraception. A Randomized Controlled Trial. *Obstetrics & Gynecology* 2006;**108**:1089–1097.
- Ding G 2005** {published data only}  
Ding G. Different doses of Mifepristone for emergency contraception. *Journal of Practice Diagnosis and Treatment* 2005;**19**:226–227.
- Du J 2002** {published data only}  
Du J. Low dose of Mifepristone for emergency contraception. *Henan Yi Yao Xin Xi* 2002;**10**:14–15.
- Ellertson 2003** {published data only}  
Ellertson C, Webb A, Blanchard K, Bigrigg A, Haskell S, Shochet T, Trussell J. Modifying the Yuzpe regimen of emergency contraception: A multicenter randomized controlled trial. *Obstetrics and Gynecology* 2003;**101**:1160–7.
- Fan HL 2001** {published data only}  
Fan H, Cheng Y, Guo F, Wu S, Tan Y, Chen X, Wu X. Low dose of Mifepristone for emergency contraception. *Hubei Yu Fang Yi Xue Zha Zi* 2001;**23**:52.
- Fang 2000** {published data only}  
Fang Q, Guo X, Pan J, Xiao J, Li Y. A comparative study on different doses of mifepristone for emergency contraception. *Maternal and Child Health Care of China* 2000;**15**:48–49.
- Fu X 2000** {published data only}  
Fu X, Wang L, Jiang Q, Yang X. Anordrin and Mifepristone for emergency contraception. *Journal of Qinghai Medical College* 2000;**21**:43–44.
- Glasier 1992** {published and unpublished data}  
Glasier A, Thong KJ, Dewar M, Mackie M, Baird D. Postcoital contraception with mifepristone (letter). *Lancet* 1991;**337**:1414–1415.  
  
\*Glasier A, Thong KJ, Dewar M, Mackie M, Baird DT. Mifepristone (RU 486) compared with high-dose estrogen and progestogen for emergency postcoital contraception. *New England Journal of Medicine* 1992;**327**:1041–1044.
- Hamoda 2004** {published data only}  
Hamoda H, Ashok PW, Stalder C, Flett GMM, Kennedy E, Templeton A. A Randomized Trial of Mifepristone (10 mg) and Levonorgestrel for Emergency Contraception. *Obstetrics & Gynecology* 2004;**104**:1307–1313.

- Han 1995** {published data only}  
Han X, Weng L, Zhang L, Zeng T, Xiao B. Clinical trial of mifepristone and anordrin for emergency contraception. *Journal of Reproductive Medicine (China)* 1995;**4**:206–211.
- Han 1996** {published data only}  
\*Han X, Weng L, Xiao B. Emergency contraception with mifepristone and anordrin. *Chinese Journal of Obstetrics and Gynecology* 1996;**31**:526–529.
- Han 1999a** {published data only}  
Han X, Jin X, Weng L. A comparative study of mifepristone with levonorgestrel for emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 1999;**15**:294–296.
- Han L 2001** {published data only}  
Han L, Ma Y, Li H. Low doses of mifepristone for emergency contraception. *Fudan University Journal of Medical Sciences* 2001;**28**:176–177.
- He CH 2002** {published data only}  
He CH, Gui YL, Yang J, Wang BS, Zheng E, Gao ES, Mauck C. A randomized comparative study on mifepristone alone and in combination with tamoxifen for emergency contraception. *Contraception* 2002;**66**:221–224.
- Ho 1993** {published and unpublished data}  
\*Ho PC, Kwan MSW. A prospective randomized comparison of levonorgestrel with the Yuzpe regimen in post-coital contraception. *Human Reproduction* 1993;**8**:389–392.
- Hu X 2003** {published data only}  
Hu X, Lu C. A comparative study of Mifepristone with Levonorgestrel for emergency contraception. *Sichuan Medical Journal* 2003;**24**:F004.
- Lai Z 2004** {published data only}  
Lai Z, Wang J, Zhou Z, Lu H, Song X, Sun J. A comparative study of low-dose Mifepristone for emergency contraception. *Maternal and Child Health Care of China* 2004;**19**:36–38.
- Li 2000** {published data only}  
Li Q, Chen R, Zhang Y, Huang M, Chen RX, Zhong X. A comparative study of mifepristone 50 mg and 25 mg for emergency contraception. *Guangdong Medical Journal* 2000;**22**:884–885.
- Li A 2000** {published data only}  
Li A, Zhang Y. Low dose of Mifepristone for emergency contraception. *Journal of Guangxi Medical University* 2000;**17**:857.
- Li H 2000** {published data only}  
Li H, Chang JP, Li J. A study of low-dose mifepristone for emergency contraception. *Heilongjiang Medical Journal* 2000;**23**:90.
- Li J 2005** {published data only}  
Li J. A comparative study of mifepristone with levonorgestrel for emergency contraception. *Anthology of Medicine* 2005;**24**:754.
- Li W 2002** {published data only}  
Li W. A comparative study of mifepristone with levonorgestrel for emergency contraception. *Guizhou Journal of Medicine* 2002;**26**:457.
- Liang 2001** {published data only}  
Liang JZ, Zhou MR. A randomised comparative study on mifepristone and levonorgestrel for emergency contraception. *Heilongjiang Medical Journal* 2001;**25**:594.
- Liao 2003** {published data only}  
Liao AH, Chang CF, Zhu JW. Randomised controlled prospective studies of mifepristone in small doses and levonorgestrel for emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 2003;**19**:25–27.
- Lin 2000** {published data only}  
Lin N, Cheng W, Yang Y, Shao L. A comparative study of mifepristone and LNG for emergency contraception. *Tianjing Medical Journal* 2000;**28**:601–603.
- Liu 2000** {published data only}  
Liu JL, Liu LH, Li KZ, Liu HL. Comparative study of the efficacy of low-dose mifepristone and levonorgestrel on the emergency contraception. *Practical Preventive Medicine* 2000;**7**:126–127.
- Liu L 2001** {published data only}  
Liu L, Wang Z, Li L. Mifepristone and anordrin for emergency contraception. *Zhong Guo Yiu Sheng Yu Yi Chuan Zha Zi* 2001;**9**:108–111.
- Liu L 2002** {published data only}  
Liu L, Chen A. A comparative study of mifepristone with Cu-IUD for emergency contraception. *Journal of Changzhi Medical College* 2002;**61**:198–199.
- Lou C 2002** {published data only}  
Lou C. Low-dose Mifepristone for emergency contraception. *Xian Dai Shi Yong Yi Xue* 2002;**14**:485.
- Lou X 2005** {published data only}  
Lou X, Ma L, Yang Y. Mifepristone and C53 contraceptive in post-coital contraception. *Journal of Chinese Modern Gynaecology and Obstetrics* 2005;**2**:405–406.
- Ngai 2005** {published data only}  
Suk Wai Ngai, Susan Fan, Shiqin Li, Linan Cheng, Juhong Ding, Xiaoping Jing, Ernest Hung Yu Ng, Pak Chung Ho. A randomized trial to compare 24 h versus 12 h double dose regimen of levonorgestrel for emergency contraception. *Human Reproduction* 2005;**20**:307–311.
- Pei 2001** {published data only}  
Pei JH, Wang ZX. A randomised comparative study of mifepristone in small doses and levonorgestrel for emergency contraception. *Haerbin Medicine* 2001;**21**:32–33.
- Qi 2000b** {published data only}  
Qi Y, Zhang J, Cao Y, Zhang Z. A comparative clinical trial on two low doses of mifepristone for emergency contraception. *Maternal and Child Health Care of China* 2000;**15**:701–704.
- Qi M 2003** {published data only}  
Qi M, Wang Y, Yan L. A comparative study of low-dose Mifepristone with Levonorgestrel for emergency contraception - 288 cases report. *Journal of Qinghai Medical College* 2003;**24**:255–256.
- Qian 1999** {published data only}  
Qian L. Three doses of mifepristone for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:322–323.
- Rowlands 1983** {published and unpublished data}  
\*Rowlands S, Guillebaud J, Bounds W, Booth M. Side effects of Danazol compared with an ethinyloestradiol/norgestrel combination when used for postcoital contraception. *Contraception* 1983;**27**:39–49.

- Rowlands S, Kubba AA, Guillebaud J, Bounds W. A possible mechanism of action of danazol and an ethinylestradiol/norgestrel combination used as postcoital contraceptive agents. *Contraception* 1986;**33**:539–545.
- Sang 1999** {published and unpublished data}  
Sang GW, Shao Q, Zhang J, Zhang M, Chen S, Song S, Du M, Wu X, Ding J, Wong L. A randomized multicentre clinical trial on different doses of mifepristone alone and in combination with anordrin as emergency contraception [Mifepristone in combination with anordrin for emergency contraception: A randomized multicentre study]. *Chinese Journal of Obstetrics and Gynaecology* 1999;**34**:331–334.
- Sheng A 2002** {published data only}  
Sheng A. Clinical observation of the efficacy of mifepristone and levonorgestrel on the emergency contraception. *Academic Journal of Jiangsu University (Medicine)* 2002;**12**:246–249.
- Su 2001** {published data only}  
Su W, Chui JY, Liu P. A comparative study of IUCD with mifepristone and with levonorgestrel for emergency contraception. *Journal of Baotou Medicine* 2001;**25**:24.
- Sun 2000** {published data only}  
Sun Y, Wang X. A clinical comparative study of mifepristone with levonorgestrel for emergency contraception. *Chinese Journal of Family Planning* 2000;**8**:172–173.
- Sun P 2003** {published data only}  
Sun P. Mifepristone for emergency contraception. *Journal of Chinese Practice Medicine* 2003;**5**:92.
- Tan 1999** {published data only}  
Tan K, Mai T, He P, Lin H, Li S. Low doses of mifepristone for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:470–471.
- Tan L 2003** {published data only}  
Tan L, Zheng G, Li J. Mifepristone for emergency contraception - 150 cases report. *Wei Sheng Zhi Yie Jiao Yu* 2003;**21**:138–139.
- Van Santen 1985a** {published data only}  
\*Van Santen MR, Haspels AA. A comparison of high-dose estrogens versus low-dose ethinylestradiol and norgestrel combination in post-coital interception: a study in 493 women. *Fertility and Sterility* 1985;**43**:206–213.
- Van Santen MR, Haspels AA. Comparative randomized double-blind study of high dosage ethinylestradiol versus ethinylestradiol and norgestrel combination in postcoital contraception. *Acta Endocrinologica* 1982;**99**(suppl. 246):2.
- von Hertzen 2002** {published data only}  
von Hertzen H, Piaggio G, Ding J, Chen J, Song S, Bartfai G, et al. for the WHO Research Group on Post-ovulatory Methods of Fertility Regulation. Low dose mifepristone and two regimens of levonorgestrel for emergency contraception. *The Lancet* 2002;**360**:1803–1810.
- Wang 1999** {published data only}  
Wang Z, Liu L, Liu Q, Zhang H. A clinical comparative study of mifepristone with anordrin for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:320–321.
- Wang C 2000** {published data only}  
Wang C, Tian M, Chang Y, Shao M. A clinical comparative observation among copper IUD, lower dose mifepristone and levonorgestrel for emergency contraception. *Journal of Chinese Physician* 2000;**2**:271–273.
- Wang J 2006** {published data only}  
Wang J. A comparative study on different doses of mifepristone for emergency contraception. *Journal Huaihai Medicine* 2006;**24**:19–20.
- Wang L 2004** {published data only}  
Wang L, Lv Y, Guan D, Zhang H, Yao L. 12.5mg Mifepristone for emergency contraception. *Chinese General Practice* 2004;**7**:1477–1478.
- Wang Q 2000** {published data only}  
Wang Q, Li A. A comparative study of levonorgestrel with low dose mifepristone for emergency contraception. *Northwestern Pharmaceutical Journal* 2000;**15**:72.
- Wang SZ 2001** {published data only}  
Wang SZ, Huang ZK, Li S. Clinical trial of mifepristone in different dose for emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 2001;**17**:534–536.
- Wang Y 2003** {published data only}  
Wang Y, Liu H. A comparative study on low doses of mifepristone with levonorgestrel for emergency contraception. *Chinese Journal of Family Planning* 2003;**8**:505–506.
- Webb 1992** {published data only}  
Webb AM. Alternative treatments in oral postcoital contraception: interim results. *Advances in Contraception* 1991;**7**:271–279.
- \*Webb AMC, Russell J, Elstein M. Comparison of Yuzpe regimen, danazol, and mifepristone (RU486) in oral postcoital contraception. *BMJ* 1992;**305**:927–931.
- Wei RH 2002** {published data only}  
Wei RH. Low dose of Mifepristone for emergency contraception - 200 cases report. *Shanghai Sheng Wu Yi Xue Gong Cheng Zha Zi* 2002;**23**:39–42.
- WHO 1998** {published data only}  
WHO Task Force on Postovulatory Methods of Fertility Regulation. Randomised controlled trial of levonorgestrel versus the Yuzpe regimen of combined oral contraceptives for emergency contraception. *Lancet* 1998;**352**:428–433.
- WHO 1999** {published data only}  
WHO Task Force on Postovulatory Methods of Fertility Regulation. Comparison of three single doses of mifepristone as emergency contraception: a randomised trial. *Lancet* 1999;**353**:697–702.
- Wu 1999a** {published data only}  
Wu S, Wang C, Wang Y, Cheng W, Zuo S, Li H, et al. A randomized, double-blind, multicentre study on comparing levonorgestrel and mifepristone for emergency contraception. *Chinese Journal of Obstetrics and Gynaecology* 1999;**34**:327–330.
- Wu XZ 2002** {published data only}  
Wu XZ, Sao JY, Chen CQ, Yan Y, Fa YY, Liu JH, et al. A comparative study on methods for emergency contraception. *Reproduction & Contraception (China)* 2002;**22**:152–155.
- Xiao 2002** {published data only}  
Xiao BL, von Hertzen H, Piaggio G. A randomized double-blind comparison of two single doses of mifepristone for emergency contraception. *Human Reproduction* 2002;**17**:3084–3089.

- Xie 1998** {published data only}  
Xie X, Liu Y, Lin X. A clinical study on 600 cases of mifepristone for emergency contraception. *Reproduction & Contraception (China)* 1998;**18**:224–226.
- Xu 2000** {published data only}  
Xu L, Wang Z. A comparative study on low dose mifepristone with levonorgestrel for emergency contraception. *Chinese Journal of Family Planning* 2000;**8**:419–420.
- Xu Z 2000** {published data only}  
Xu Z. A comparative study of Mifepristone, anordrin and levonorgestrel for emergency contraception. *Journal of Yichun Medical College* 2000;**12**:248–249.
- Yang 2001** {published data only}  
Yang LJ. A comparative study on mifepristone, anordrin and danazol for emergency contraception. *Guangzhou Medical Journal* 2001;**32**:12–13.
- Yang F 2003** {published data only}  
Yang F. A comparative study on two low doses of mifepristone for emergency contraception. *J Clin Res* 2003;**20**:630–631.
- Zhang JQ 2000** {published data only}  
Zhang JQ. Emergency contraception in high-land. *Chinese Journal of Family Planning* 2000;**8**:552–554.
- Zhang L 2005** {published data only}  
Zhang L, Lai L, Deng X. Single and small dose of Mifepristone for emergency contraception of curative effect observe. *Journal of Gannan Medical College* 2005;**25**:328–330.
- Zhang X 1999a** {published data only}  
Zhang X, Gao G, Shi J, Qu C, Leng Y. A clinical study on low doses of mifepristone for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:175–176.
- Zhang Y 1998** {published data only}  
Zhang Y, Qiao G, Zhu P, Zhang S, Zhang J, Zhu N. Clinical observation of three lower doses of mifepristone for emergency contraception. *Chinese Journal of Family Planning* 1998;**6**:343–345.
- Zhang Y 2002** {published data only}  
Zhang Y, Wen L, Li S, Wang Y. Mifepristone for emergency contraception. *Henan Yi Yao Xin Xi* 2002;**10**:20–21.
- Zhang YM 2002** {published data only}  
Zhang Y, Zhang W, Wang L. Low- dose of Mifepristone and anordrin for emergency contraception: observation of 116 cases. *Journal of Qiqihar Medical College* 2002;**23**:415.
- Zhao J 2003** {published data only}  
Zhao J, Liu R, Li H, Zhang Y. Different doses of Mifepristone for emergency contraception. *Journal of Shandong University (Health Sciences)* 2003;**41**:468.
- Zheng A 2005** {published data only}  
Zheng A. Low-dose of Mifepristone for emergency contraception. *Youjiang Medical Journal* 2005;**33**:375–376.
- Zuo 1999** {published data only}  
Zuo Sh, Wu J, Liu L, Liu J, Gao Y. A clinical trial on two low doses of mifepristone for emergency contraception. *Reproduction & Contraception (China)* 1999;**19**:352–356.

## References to studies excluded from this review

- Ashok 2001**  
Ashok PW, Wagaarachchi PT, Flett GM, Templeton A. Mifepristone as a late post-coital contraceptive. *Human Reproduction* 2001;**16**:72–75.
- Ashok 2004**  
Ashok PW, Hamoda H, Flett GMM, Templeton A. Mifepristone versus the Yuzpe regimen (PC4) for emergency contraception. *International Journal of Gynecology and Obstetrics* 2004;**87**:188–193.
- Ban 2001**  
Ban X, Xiao Y, Fan H, Liu G, Liu Q, Yu L. A comparative clinical study on Tcu380A and Cu-IUD for emergency contraception. *Maternal & Child Health Care of China* 2001;**16**:498–501.
- Creinin 1997**  
Creinin MD. A reassessment of efficacy of the Yuzpe regimen of emergency contraception. *Human Reproduction* 1997;**12**:496–498.
- D'Souza 2003**  
D'Souza RE, Masters T, Bounds W, Guillebaud J. Randomised controlled trial assessing the acceptability of GyneFix versus Gyne-T389S for emergency contraception. *Journal of Family Planning and Reproductive Health Care* 2003;**29**:23–29.
- Dixon 1980**  
Dixon GW. Ethinylestradiol and conjugated estrogens as postcoital contraceptives. *JAMA* 1980;**244**:1336–1339.
- Ellertson 2003 a**  
Ellertson C, Evans M, Ferden S, Leadbetter C, Spears A, Johnstone K, Trussell J. Extending the time limit for starting the Yuzpe regimen of emergency contraception to 120 hours. *Obstetrics & Gynecology* 2003;**101**:1168–1171.
- Espinos 1999**  
Espinos JJ, Senosiain R, Vanrell C, Armengol J, Cuberas N, Calaf J. Safety and effectiveness of hormonal postcoital contraception: a prospective study. *European Journal of Contraception and Reproductive Health Care* 1999;**4**:27–33.
- Fan 1998**  
Fan Ai, Wang Y, Wang Z. Clinical study on 518 cases of emergency contraception. *Chinese Journal of Family Planning* 1998;**6**:408–409.
- Fan H 2001**  
Fan H, Zhou L. Emergency contraception with Multiload Cu 375 SL IUD: a multicentre clinical trial. *Journal of Reproductive Medicine (China)* 2001;**10**:70–77.
- Fasoli 1989**  
Fasoli M, Parazzini F, Cecchetti G, Vecchia CL. Post-coital contraception: An overview of published studies. *Contraception* 1989;**39**:459–469.
- Gan 1999**  
Gan Sh, Chang M, Hu S, Zhang P, Chang M, Xu X. A clinical study on mifepristone 10mg for emergency contraception. *Reproduction and Contraception (China)* 1999;**19**:311–313.
- Gan SX 2001**  
Gan SX, Li SS, Lu Y. Comparative study of the efficacy of mifepristone and levonorgestrel on the emergency contraception. *Chinese Journal of Family Planning* 2001;**9**:178–181.

- Gao Er 2001**  
Gao Er, Zhao Sh, Lou CH. Study on the acceptability of emergency contraception among those who underwent induced abortion. *Reproduction & Contraception (China)* 2001;**21**:104–109.
- Gottardi 1979**  
Gottardi G, Marzi MM, Pozzi S. Oestrogène postcoital ou DIU? IPPF Europe Bulletin d'information régional [Oestrogène postcoital ou DIU? IPPF Europe Bulletin d'information régional]. *journal* 1979;**8**:7–8.
- Gottardi 1986**  
Gottardi G, Spreafico A, de Orchi L. The postcoital IUD as an effective continuing contraceptive method. *Contraception* 1986;**34**:549–558.
- Gu XY 2002**  
Gu XY, Yie TF. Clinical study of the effect of Multiload 375 SL and levo-norgestrel on emergency contraception. *Chinese Journal of Family Planning* 2002;**10**:740–742.
- Guillebaud 1983**  
Guillebaud J, Kubba A, Rowlands S, White J, Elder EG. Postcoital contraception with danazol, compared with an ethinylloestradiol-norgestrel combination or insertion of an intrauterine device. *Journal of Obstetrics and Gynaecology* 1983;**suppl 1**:s64–s68.
- Han 1999b**  
Han X, Wong L, Sun J. A clinical study on mifepristone alone and in combination with anodrin for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:411–414.
- Han Y 2001**  
Han Y. The clinical observation of GyneFix IUD for emergency contraception. *Journal of Practical Obstetrics and Gynecology* 2001;**17**:171–172.
- Haspels 1976**  
Haspels AA. Interception: post-coital estrogens in 3016 women. *Contraception* 1976;**14**:375–381.
- He 1991**  
He C, Shi Y, Xu J, Van Look PFA. A multicenter clinical study on two types of levonorgestrel tablets administered for postcoital contraception. *International Journal of Gynecology and Obstetrics* 1991;**36**:43–48.
- Hoffman 1983**  
Hoffman KOK. Postcoital contraception: experiences with ethinyl oestradiol/norgestrel and levonorgestrel only. In: *Harrison RF, Bonnar J, Thompson W eds. IFFS Fertility and Sterility*, Dublin, 1983 June: 311–316.
- Jiang 2000**  
Jiang L, Duan Y, Sun Y. A comparative study of mifepristone with levonorgestrel for emergency contraception. *Chinese Journal of Family Planning* 2000;**8**:463–464.
- Jiang 2002**  
Jiang DX, Wu ER. Effects of gestrinone (R2323) on emergency contraception: a clinical observation of 120 cases. *Journal of Reproductive Medicine* 2002;**11**:326–330.
- Jin 2005**  
Jin J, Weisberg E, Fraser IS. Comparison of three single doses of mifepristone as mifepristone as emergency contraception: a randomised controlled trial. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2005;**45**:489–494.
- Kesserü 1973**  
Kesserü E, Larranaga A, Parada J. Postcoital contraception with d-norgestrel. *Contraception* 1973;**7**:367–379.
- Li XY 2001**  
Li XY, Hu LY. A study of low-dose mifepristone for emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 2001;**17**:619–620.
- Li F 2002**  
Li F, Chen YX, Tang JH. Emergency contraception by low-dose mifepristone: observation of 150 cases. *Journal of First Military Medical University* 2002;**22**:466.
- Li F 2005**  
\* Li F, Qian X, Wu W. A comparative study of mifepristone with Cu-IUD for emergency contraception. *Journal of Practice Medicine* 2005;**21**:2313–2314.
- Lippes 1976**  
Lippes J, Malik T, Tatum HJ. The postcoital copper-T. *Advances in Planned Parenthood* 1976;**11**:24–29.
- Lippes 1979**  
Lippes J, Tatum HJ, Maulid D, et al. A continuation of the study of post-coital IUDs. *Family Planning Perspectives* 1979;**11**:195–198.
- Liu Y 2002**  
Liu Y, Chen X. A comparative study of mifepristone with Cu-IUD for emergency contraception. *Journal of Qiqihar Medical College* 2002;**23**:890–891.
- Luerti 1986**  
Luerti M, Tonta A, Feria P, Molla R, Santini F. Post-coital contraception by estrogen-progestagen combination or IUD insertion. *Contraception* 1986;**33**:61–68.
- Ma 2001**  
Ma J. A study on 110 cases of emergency contraception. *Chinese Journal of Practical Gynaecology and Obstetrics* 2001;**17**:189.
- Mo 2004**  
Mo Y. A Clinical Observation on different dose of Mifepristone for Emergency Contraception. *Hainan Yi Xue* 2004;**15**:42–43.
- Mor 2005**  
Mor E, Saadat P, Kives S, White E, Reid RL, Pai, spm RJ, Stanczyk FZ. Comparison of vaginal and oral administration of emergency contraception. *Fertility and Sterility* 2005;**84**:40–45.
- Piaggio 2003**  
Piaggio G, Heng Z, von Hertzen H, Bilian X, Linan C. Combined estimates of effectiveness of mifepristone 10mg in emergency contraception. *Contraception* 2003;**68**:439–46.
- Piaggio 2003a**  
Piaggio G, von Hertzen H, Zhao H, Xiao BL, Cheng L. Meta-analyses of randomized trials comparing different doses of mifepristone in emergency contraception. *Contraception* 2003;**68**:447–452.
- Qi 2000**  
Qi Y, Zhang J, Cao Y, Yan W, Zhang Z. A clinical study on mifepristone at low dose for emergency contraception. *Chinese Journal of Family Planning* 2000;**8**:305–307.
- Qiao 2002**  
Qiao Y. A clinical trial of mifepristone in combination with MTX for emergency contraception. *Journal of Jining Medical College* 2002;**25**:44.

**Qin 2000**

Qin C. A clinical study on 137 cases of emergency contraception with mifepristone. *Zhejiang Journal of Clinical Medicine* 2000;**2**:302–303.

**Raymond 2000**

Raymond EG, Creinin MD, Barnhart KT, Lovvorn AE, Rountree RE, Trussell J. Meclizine for prevention of nausea associated with use of emergency contraceptive pills: A randomized trial. *Obstetrics and Gynecology* 2000;**95**:271–277.

**Roye 2001**

Roye CF. Routine provision of emergency contraception to teens and subsequent condom use: a preliminary study. *Journal of Adolescent Health* 2001;**28**:165–166.

**Scarduelli 1998**

Scarduelli C, Anselmino M, Caccamo A, Sezzi E, Lombroso Finzi GC. Emergency contraception: a new evaluation of effectiveness. P-159. Abstracts of the 14th Annual Meeting of the ESHRE, Göteborg. 1998:208–209.

**Schilling 1979**

Schilling LH. An alternative to the use of high dose estrogen for post-coital contraception. *Journal of American College of Health Association* 1979;**27**:247–249.

**Shochet 2004**

Shochet T, Blanchard K, King H, Henchcliffe B, Hunt J. Side effects of the Yuzpe regimen of emergency contraception and modifications. *Contraception* 2004;**69**:301–307.

**Sun 2005**

Sun Y, Che Y, Ding Y, Zhou W, Han Y, Fang K, Meirik O, Fajans P. Systematic Review of Emergency Contraception. *Chinese Journal of Family Planning* 2005;**4**:217–222.

**Tian Q 2000**

Tian Q. A comparative study of mifepristone with Cu-IUD for emergency contraception. *Journal of Henan Medical College for Staff and Workers* 2000;**12**:51.

**Van Santen 1983**

Van Santen MR, Haspels AA. Contraccezione con D.I.U. post-coitale. *Contraccezione, Fertilita, Sessualita* 1983;**10**:549–557.

**Van Santen 1985b**

Van Santen MR, Haspels AA, Interception II: Postcoital low-dose estrogens, norgestrel combination in 633 women. *Contraception. Journal* 1985;**31**:275–293.

**Virjo 1999**

Virjo I, Kirkkola AL, Isokoski M, Mattila K. Use and knowledge of hormonal emergency contraception. *Advances in Contraception* 1999;**15**:85–94.

**Wei R 2002**

Wei R. Low-dose of mifepristone for emergency contraception: observation of 309 cases. *Jiangxi Medical Journal* 2002;**37**:102–104.

**Wu 1999b**

Wu C, Zhang Y. An extend study on using single dose of mifepristone 25mg for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:358–360.

**Wu 2005**

Wu S, Zhou Y. Clinical use of emergency contraception pill. *Chinese Journal of Practical Gynaecology and Obstetrics* 2005;**21**:15–17.

**Xiao 2004**

Xiao BL. Clinical study of emergency contraception with low-dose mifepristone. *Chinese Journal of Obstetrics and Gynecology* 2004;**39**:35–38.

**Yang 2002**

Yang Y, Liang X, Liu X. Low-dose of mifepristone for emergency contraception: observation of 106 cases. *Heilongjiang Medical Journal* 2002;**26**:283.

**Yu 2001**

Yu MD. A primary discussion of the drugs for emergency contraception. *Anhui Medical and Pharmaceutical Journal* 2001;**5**:95–96.

**Yuzpe 1974**

Yuzpe AA, Thurlow HJ, Ramzy I, Leushon JL. Postcoital contraception - a pilot study. *Journal of Reproductive Medicine* 1974;**1**:53–58.

**Yuzpe 1977**

Yuzpe AA, Lancee WJ. Ethinylestradiol and dl-norgestrel as a post-coital contraceptive. *Fertility and Sterility* 1977;**28**:932–936.

**Yuzpe 1982**

Yuzpe AA, Percival Smith R, Rademaker AW. A multicentre clinical investigation employing ethinylestradiol combined with dl-norgestrel as a postcoital contraceptive agent. *Fertility and Sterility* 1982;**37**:508–513.

**Zhang J 1999**

Zhang J, Jing X, Wong L. Cu-IUD versus mifepristone for emergency contraception. *Chinese Journal of Obstetrics and Gynecology* 1999;**34**:569–570.

**Zhang M 1999**

Zhang M, Yang H, Wang Z, Liang X, Wang Y. A study on mifepristone alone and in combination with anordrin for emergency contraception. *Zhejiang Journal of Practical Medicine* 1999;**4**:1–2.

**Zhang X 1999**

Zhang X, Du M, Ying Y. A study on mifepristone alone and in combination with anordrin for emergency contraception. *Reproduction and Contraception (China)* 1999;**19**:163–168.

**Zhang X 1999b**

Zhang X, Leng Y, Shi J, Gao G, Xu Y, Sun H. A study on LNG for emergency contraception. *Chinese Journal of Family Planning* 1999;**7**:375–376.

**Zhao 2006**

Zho H, Han L. Analysis of the reason for failure of emergency contraception. *Journal of China-Japan Friendship Hospital* 2006;**20**:207–210.

**Zhao H 2001**

Zhao H, Tang JR, Wu MH, Cheng H. A comparative study of mifepristone with IUCD for emergency contraception. *Journal of Capital University of Medical Sciences* 2001;**22**:273–274.

**Zhu 1999**

Zhu P, Chai J, Wang N, Li G. An initial observation of mifepristone combined with MTX for the use of emergency contraception. *Guangdong Journal of Medicine* 1999;**20**:11–12.

**Zuliani 1990**

Colombo UF, Zuliani G, Benzi G, Bregozzo T, Viezzoli T. [Contraccezione post coitale ormonale con danazolo: Ristati di due differenti schemi posologici]. In: Pediatric and Adolescent Gynaecology. (paper presented at the III European Symposium on Pediatric

- and Adolescent Gynaecology. CIC Edizioni Internazionali. Florence, Italy: 1987, Oct 7-10;pp. 206-211.
- Zuliani G, Colombo UF, Luerti M, Casolati E, Viezzoli T. Postcoital contraception with an ethinylestradiol-norgestrel combination and two different danazol regimens. In: GenazzaniAR, PetragliaF, VolpeA, FacchinettiF, eds editor(s). *Recent Research on Gynecological Endocrinology*. New Jersey: Parthenon Publishing, 1988.
- Zuliani G, Colombo UF, Molla R. Hormonal postcoital contraception with an ethinylestradiol-norgestrel combination and two danazol regimens. *European Journal of Obstetrics Gynecology and Reproductive Biology* 1990;**37**:253-260.
- Zuliani G, Colombo UF, Molla R, Bregozzo T, Mojana G. [Confronto tra danazolo e etinilestradiolo-norgestrel utilizzati come intercettori post-coitali ormonali: studio clinico randomizzato]. 1Congresso Internazionale di Endocrinologia Ginecologica. Madonna di Campiglio, 16-22 Marzo 1986, Bologna. 1986 March 16-22;pp. 341-344.
- ## References to ongoing studies
- Glasier 2006**  
Ongoing study Fall of 2006.
- ## Additional references
- Cheng 1999b**  
Cheng L. Current situation and development of emergency contraception. *Chinese Journal of Obstetrics and Gynaecology* 1999;**34**:325-326.
- Glasier 1997**  
Glasier A. Emergency postcoital contraception. *New England Journal of Medicine* 1997;**337**:1058-1064.
- Grimes 1997**  
Grimes DA. Emergency contraception: expanding opportunities for primary prevention. *New England Journal of Medicine* 1997;**337**:1078-1079.
- Higgins 2005**  
Higgins JPT, Green S, editors. Cochrane Handbook for Systematic Reviews of Interventions 4.2.5 [updated May 2005].  
www.cochrane.dk/cochrane/handbook/hbook.htm (accessed 21 December 2006).
- Piaggio 1999**  
Piaggio P, Von Hertzen H, Grimes DA, Van Look PFA. Timing of emergency contraception with levonorgestrel or the Yuzpe regimen. *Lancet* 1999;**353**:721.
- Reuter 1999**  
Reuter S. Barriers to the use of IUDs as emergency contraception. *British Journal of Family Planning* 1999;**25**:63-68.
- STATA**  
StataCorp. Stata Statistical Software: Release 7.0. College Station, TX: Stata Corporation, 2001.
- Thompson 2002**  
Thompson SG, Higgins JPT. How should meta-regression analyses be undertaken and interpreted?. *Statistics in Medicine* 2002;**21**:1559-1573.
- Van Look 1993**  
Van Look PFA, von Hertzen H. Emergency contraception. *British Medical Bulletin* 1993;**49**:158-170.
- Van Look 1995**  
Van Look PFA, von Hertzen H. Induced abortion: a global perspective. In: GrimesDA, VanLookPFA editor(s). *Modern methods of inducing abortion*. Oxford, England: Blackwell Science, 1995:1-24.
- Webb 1995**  
Webb A. Emergency contraception. *Fertility Control Reviews* 1995;**4**:3-7.
- WHO 1990**  
WHO. The TCu380A, TCu220C, Multiload 250 and Nova T IUDs at 3, 5 and 7 years of use. *Contraception* 1990;**42**:141-158.
- Wu 2003**  
Wu S. A multicenter clinical trial on using TCu380A for emergency contraception. unpublished.
- \* Indicates the major publication for the study

## TABLES

### Characteristics of included studies

Study	Arowojolu 2002
Methods	Randomised double-blind, multicentre trial. Random number generation done centrally. Similar looking placebos were used.
Participants	1160 health women were recruited into the study from family-planning clinics, University College Hospital, Ibadan, and Planned Parenthood Federation of Nigeria (PPFN), Ikolaba, Ibadan. Included women with regular menstrual periods (21-35 days), who had a single act of unprotected intercourse within 72 h of attending the clinic. Excluded women who were not available for follow-up, were pregnant, on hormonal

Interventions for emergency contraception (Review)

Copyright © 2008 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd



## Characteristics of included studies (Continued)

	contraception in the current cycle and those had contraindications to the use of hormonal contraceptive pills. 1118 into efficacy analysis, 1062 into safety analysis.
Interventions	LNG 0.75 mg two doses 12 hours apart orally vs. LNG 1.5 mg (single dose).
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss to follow-up: split-dose 15/560 and single dose 27/600. -Observed pregnancy/total number of women: two-dose LNG 7/545, single LNG 4/573. - Of the failed cases three women in split-dose group and one in single dose group continued with their pregnancies and delivered live health babies, while the others were lost to follow-up.
Allocation concealment	A – Adequate

### Study **Ashok 2002**

Methods	Women were randomised into two groups by opening sequentially numbered, sealed opaque envelopes which were prepared using random number tables. The study was not blinded and the clinician and patient were both aware of the treatment allocated.
Participants	1000 women attending a hospital in Aberdeen, UK. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 100 mg orally vs. Yuzpe regimen (two tablets each with 50 mcg EE and 0.25 mg levonorgestrel) orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, change in menstrual pattern and patient acceptability.
Notes	-Lost to follow-up: Mifepristone 13/500, Yuzpe 29/500 -Observed pregnancy/expected pregnancy/total number of women: Mifepristone 3/39/487, Yuzpe 17/39/471.
Allocation concealment	A – Adequate

### Study **Askalani 1987**

Methods	'Randomly allocated' women to two groups. The numbers enrolled in two groups are 2:1 between treatment and control. Although 2:1 randomisation is not specifically mentioned, the trial has been included because it is explicitly stated that the allocation was random. No details of allocation concealment or other methodological aspects are mentioned.
Participants	300 women attending the family planning clinic of the Al-Azhar University, Cairo, Egypt. Included women who had unprotected intercourse around the time of ovulation and attended the clinic within 4 days of unprotected intercourse.
Interventions	Cu-T 200 versus control (no treatment).
Outcomes	Pregnancy rates
Notes	-No loss to follow-up or exclusions were reported.
Allocation concealment	C – Inadequate

### Study **Cao 1999**

Methods	Women were 'randomly allocated' to four groups. The method of random allocation was not mentioned in the paper.
Participants	543 women (aged 18-47 years old) attending the outpatient clinic of the No. 477 Military Hospital, China. Women had regular menstrual periods, and unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone (single dose) 100 mg vs. 50 mg vs. 25 mg vs. 10 mg orally.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.

## Characteristics of included studies (Continued)

Notes -No mention of postrandomisation exclusion and loss to follow-up.  
-Observed pregnancy/expected pregnancy/total number of women: mifepristone 100 mg 0/13/120; 50 mg 0/16/147; 25 mg 2/14/136; 10 mg 8/14/140.

Allocation concealment C – Inadequate

### Study **Chen G 2001**

Methods Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.

Participants 88 women attending the Gny clinic in a general hospital, Guangxi, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. Anordrin 7.5mg two-dose 12hr apart orally

Outcomes Observed number of pregnancies

Notes Observed pregnancy/total number of women:  
group I 0/4/47; group II 2/4/41.

Allocation concealment C – Inadequate

### Study **Chen H 2002**

Methods Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.

Participants 100 women attending the Gny clinic in a general hospital, Fujian, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg+ MTX 5mg vs. Mife 25mg single dose orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes -No mention of postrandomisation exclusion and loss to follow-up.  
-Observed/expected pregnancy/total number of women: group I 0/5/50; group II 1/5/50.

Allocation concealment C – Inadequate

### Study **Chen R 2002**

Methods Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.

Participants 312 women attending the clinic in 4 FP centers, Guangdong, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.

Interventions Two groups:  
Mife 50mg vs. 25mg single dose orally

Outcomes Observed number of pregnancies and changes in menstrual pattern

Notes -10 women excluded after recruitment, two loss to follow-up.  
-Observed pregnancy/total number of women:  
group I 2/154; group II 4/148.

Allocation concealment C – Inadequate

### Study **Cheng 1999a**

Methods Women were 'randomly allocated' to three groups. Random number table was used to generate the allocation sequence. There were no concealment of allocation and no blinding. Side-effects were assessed by women on a chart.

## Characteristics of included studies (Continued)

Participants	639 women in Shanghai, China, attending 17 district MCH hospitals. Women were included if they had regular menstrual periods (21-35 days), age between 18-45 years, with a single act of unprotected intercourse within 120 hours of attending the clinic. Excluded women on oral contraceptives, with contraindications to mifepristone and those that were considered difficult to follow up.
Interventions	Mifepristone single dose (Chinese domestic product): 50 mg vs 25 mg vs 10 mg.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Randomised 639 of the 657 screened cases. -No mention of postrandomisation exclusion -Loss to follow-up: 4.38% 50 mg 9/214; 25 mg 9/214; 10 mg 10/211 - Observed pregnancy/ expected pregnancy/ total number of women: 50 mg: 2/15/205; 25 mg: 1/15/205; 10 mg: 5/16/201.
Allocation concealment	C – Inadequate

### Study Creinin 2006

Methods	-A randomized, double-blinded noninferiority trial. -The study drug was supplied in sequentially numbered sealed packages containing two opaque capsules. The packages either contained a single opaque capsule with 50mg CDB-2914 plus an identical placebo capsule or two opaque capsules, each with a tablet of 0.75 mg of levonorgestrel. The identification of the contents of the capsules was unknown to the investigators and the subjects.
Participants	1672 healthy women aged at least 18 years not using any hormonal contraception who requested emergency contraception within 72 hr after unprotected intercourse as a result of using no contraception, condom breakage or slippage, or failure of another barrier method. To be eligible for enrollment, they were required to have had a recent history of regular menstrual cycles (24-42 days). At least one normal menstrual cycle (two menses) was required after delivery, abortion, or discontinuation of hormonal contraceptive.
Interventions	Participants were randomly assigned to receive a single dose of 50 mg CDB-2914 plus a placebo 12 hr later or two doses of 0.75 mg of levonorgestrel taken 12 hr apart.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss of follow-up: CDB 40/832; LNG 54/840. - Post-randomization exclusions CDB 17/832; LNG 12/840. -Observed pregnancy /expected pregnancy/total number of women: CDB 7/47/775; LNG 13/42/774
Allocation concealment	A – Adequate

### Study Ding G 2005

Methods	Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.
Participants	240 women attending the clinic in a MCH hospital, Henan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.
Interventions	Three groups: Mife 75mg vs. 50mg vs. 10mg orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.

**Characteristics of included studies (Continued)**

Notes - loss of follow: group I 2; II 3; III 6.  
 -Observed pregnancy/total number of women:  
 group I 1/78; group II 1/77; group III 1/74.

Allocation concealment C – Inadequate

**Study Du J 2002**

Methods Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.

Participants 180 women attending a general hospital, Henan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. 10mg single dose orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes -No mention of postrandomisation exclusion and loss to follow-up.  
 -Observed/expected pregnancy/total number of women: group I 1/8/90; group II 1/7/90.

Allocation concealment C – Inadequate

**Study Ellertson 2003**

Methods Randomised, double-blind controlled trial. Each dose of therapy was inserted in opaque gelatin capsules and then packaged in opaque envelopes labelled either 'first dose' or 'second dose'. Following computer generated randomisation the pairs were inserted into sequentially numbered opaque envelopes and sealed.

Participants 2041 women at five centres in the USA and the UK within 72 hours of a single, unprotected intercourse that occurred between 10 days before and 6 days after the estimated day of ovulation. Women were between 16-45 years old, willing to abstain further in the current cycle, could attend follow-ups, keep a diary of side-effects and refused the insertion of copper-IUDs. Women who had used hormonal contraception during the past 2 months, had not had two normal periods in the previous two cycles, breastfeeding and those who had a positive pregnancy test were excluded.

Interventions Standard two-dose Yuzpe regimen vs. modified Yuzpe using norethindrone (2.0 mg) instead of norgestrel (1.0 mg) vs. single dose of the standard Yuzpe regimen (followed 12 hours later by a placebo).

Outcomes Observed number of pregnancies, side-effects, changes in menstrual pattern.

Notes -Intention-to-treat analysis reported. Overall 3.3% lost to follow-up (21/696, 26/676, 21/669 in the standard Yuzpe, norethindrone and single-dose groups)

Allocation concealment A – Adequate

**Study Fan HL 2001**

Methods Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.

Participants 103 women attending a MCH hospital, Hubei, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 96 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. 10mg single dose orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern

Notes -loss to follow-up total 5 women, 6 women excluded after randomization.  
 -Observed/expected pregnancy/total number of women: group I 0/3/53; group II 1/2/39.

Allocation concealment C – Inadequate

## Characteristics of included studies (Continued)

Study	Fang 2000
Methods	Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.
Participants	200 women attending a MCH clinic in Guangzhou, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 50 mg vs. 25 mg orally single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up -Observed pregnancy/expected pregnancy/ total number of women: Mifepristone 50 mg 0/12/100, Mifepristone 25 mg 1/13/100. -No case lost to follow-up
Allocation concealment	C – Inadequate

Study	Fu X 2000
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	186 women attending the in a MCH hospital, Qinghai, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Anordrin 7.5mg Bid 12hr apart for 2 days vs. Mife 50mg
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up -Observed/expected pregnancy/total number of women: group I 3/8/90; group II 1/5/96.
Allocation concealment	C – Inadequate

Study	Glasier 1992
Methods	Randomly allocated women to two treatment groups within pre-defined age groups (16-25, 26-34, 35-45). Cards with the treatment names on were put in sealed envelopes and allocation was made by shuffling the cards. There was no blinding, placebos were not used. Side-effects were assessed by women.
Participants	800 women attending a family planning clinic and an accident and emergency department in Edinburgh, Scotland. Included women with regular menstrual periods, age between 16-45 years who had a single act of unprotected intercourse within 72 hours of coming to the clinic. Excluded women on oral contraceptives, regular prescription drugs, with medical contraindications, who were difficult to follow up and who would continue with the pregnancy in case of a failure.
Interventions	Yuzpe (100 mcg ethinyloestradiol + 1 mg norgestrel, repeated after 12 hours) vs. mifepristone 600 mg single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Loss to follow-up 26/800 (3.3 %), 3 in mifepristone and 23 in the Yuzpe regimen. -Observed/expected pregnancy rates not reported.
Allocation concealment	A – Adequate

Study	Hamoda 2004
Methods	Women presenting within 72 hours of unprotected intercourse were asked to take part in the study. Women presenting beyond 72 and up to 120 hours were offered a copper intrauterine device (IUD) insertion as the first treatment choice. Those declining IUD insertion were offered participation in the study and were randomized to receive mifepristone or levonorgestrel.

## Characteristics of included studies (Continued)

	<p>Women were randomized to receive a single tablet of mifepristone 10 mg or 2 tablets of levonorgestrel, 750 ug given 12 hours apart, by opening sequentially numbered opaque sealed envelopes prepared using random number tables. The randomization envelopes were prepared in the Family Planning Clinic in Aberdeen by a health care assistant not involved in the recruitment or data collection. The study was not blinded, and both medical staff and patients were aware of the treatment assigned.</p>
Participants	<p>Eligible participants were women over the age of 16 years with regular menstrual cycles (21-35 days), who requested emergency contraception within 120 hours of unprotected sexual intercourse. Advice was given to women to avoid further episodes of unprotected sexual intercourse within that cycle. Women with more than one episode of unprotected sexual intercourse within 120 hours of presentation were also included in the study.</p> <p>The total number of women recruited was 2065. 2043 women included in the data analysis, 1022 were in the mifepristone group and 1021 in the LNG group. Treatment outcome for women was known for 860 women (84.2%) in the mifepristone group and 858 (84.1%) in the levonorgestrel group.</p>
Interventions	<p>Two groups: Mifepristone 10 mg single dose orally vs. LNG 0.75mg two doses 12 hours apart</p>
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	<p>-Loss of follow-up: mife 162/1022; LNG 163/1021</p> <p>-Post-randomization exclusion mife 8/1030; LNG 12/1035</p> <p>-Observed pregnancy/total number of women: mife 13/860; LNG 20/858</p>
Allocation concealment	A – Adequate

### Study Han 1995

Methods	Women were 'randomly allocated' to three groups. The method of randomisation was not mentioned in the paper.
Participants	139 women attending the outpatient clinic of a hospital in Beijing, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg orally two doses 12 hours apart versus anordrin 7.5 mg orally two doses 12 hours apart versus mifepristone 25 mg + anordrin 7.5 mg orally single dose.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	<p>-No mention of postrandomisation exclusions and loss to follow-up.</p> <p>-Observed pregnancy/expected pregnancy/total women: Mifepristone 25 mg x 2: 0/4/46; Anordrin 7.5 mg x 2: 2/3/46; Mifepristone + Anordrin: 0/3/47.</p> <p>-The pregnancy rates in relation to risk factors were not mentioned.</p>
Allocation concealment	C – Inadequate

### Study Han 1996

Methods	Women were 'randomly allocated' to three groups. The method of randomisation was not mentioned in the paper.
Participants	300 healthy women in Beijing, China, with regular menstrual periods, age between 18-48 years, with a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg orally two doses 12 hours apart versus mifepristone 25 mg orally single dose, versus mifepristone 25 mg + anordrin 7.5 mg single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.

## Characteristics of included studies (Continued)

Notes -No mention of postrandomization exclusions and loss to follow-up  
-Observed pregnancy/ expected pregnancy/ total women: Mifepristone 25 mg x 2: 0/7/100; mifepristone 25 mg single dose: 1/6/99; mifepristone + anordrin: 1/7/101.

Allocation concealment C – Inadequate

### Study Han 1999a

Methods Women were 'randomly allocated' into two groups in a 2:1 ratio. The method of random allocation was not mentioned in the paper.

Participants 214 women (aged 21-45 years old) attending the Obs/Gyn clinic Chao Yang Hospital, Beijing, China. Women had regular menstrual periods, and unprotected intercourse within 72 hours of attending the clinic.

Interventions Levonorgestrel 0.75 mg two doses 12 hours apart vs. mifepristone 25 mg single dose orally.

Outcomes Observed number of pregnancies, side-effects, changes in menstrual pattern.

Notes -No mention of postrandomisation exclusions and loss to follow-up  
- Observed pregnancy/ expected pregnancy/ total women: LNG group 5/13/144; mifepristone group 1/5/70.

Allocation concealment C – Inadequate

### Study Han L 2001

Methods Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.

Participants 100 women attending a hospital clinic in Shanghai, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.

Interventions Mifepristone single dose 25 mg vs. 10 mg

Outcomes Observed number of pregnancies, side-effects, changes in menstrual pattern.

Notes -No loss to follow-up and exclusions reported.  
-No one got pregnant in two groups.

Allocation concealment C – Inadequate

### Study He CH 2002

Methods Randomised double-blind multicentre trial. Random number generation done centrally, double-blinded by use of identical placebos.

Participants 400 healthy women were recruited into the study from family-planning clinics in Shanghai, China. Included women with regular menstrual periods (24-42 days), who had a single act of unprotected intercourse within 120 h of attending the clinic, and they were willing to avoid further acts of unprotected coitus during that cycle and willing to have an induced abortion if pregnancy was diagnosed following intake of the study drug during the study period. Excluded women: current pregnancy or breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period and no contraindication to use of mifepristone or tamoxifen.

Interventions Mifepristone (single dose ) 10 mg + placebo vs. mifepristone 10 mg + tamoxifen 20 mg.

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes -Loss to follow-up: Mifepristone 10 mg 2/200, mifepristone + tamoxifen 3/200.  
-Observed pregnancy/total number of women: Mifepristone 10 mg 3/200, mifepristone + tamoxifen 1/200.

Allocation concealment A – Adequate

## Characteristics of included studies (Continued)

Study	Ho 1993
Methods	Women were 'randomly allocated' to two groups. A random number table was used to generate the allocation sequence and allocation was done by sealed envelopes. Placebos were not used. Side-effects were recorded by women.
Participants	880 healthy women attending Family Planning Association clinics in Hong Kong. Included women with regular menstrual periods (21-35 days), age between 18-45 years, with a single act of unprotected intercourse within 48 hours of attending the clinic.
Interventions	Yuzpe (100 mcg ethinylloestradiol + 1 mg norgestrel, repeated after 12 hours) vs levonorgestrel 0.75 mg, orally, two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Observed pregnancy/ expected pregnancy/ total women: Yuzpe: 15/22/424; levonorgestrel: 12/20/410. -Loss to follow-up 16/440 (3.6 %) in the Yuzpe and 30/440 (6.8 %) in the levonorgestrel group.
Allocation concealment	A – Adequate

Study	Hu X 2003
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	240 women attending the clinic in a general hospital, Zhejiang, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: LNG 0.75mg two-dose regimen vs. Mife 25mg single dose orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusions and loss to follow-up -Observed/expected pregnancy/total number of women: group I 4/13/120; group II 2/13/120.
Allocation concealment	C – Inadequate

Study	Lai Z 2004
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	300 women attending the Gny clinic in a general hospital, Qinghai, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.
Interventions	Two groups: Mife 10mg vs. 25mg single dose orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-20 women excluded after recruitment, one loss to follow-up. -Observed/expected pregnancy/total number of women: group I 2/13/149; group II 2/11/130.
Allocation concealment	C – Inadequate

Study	Li 2000
Methods	Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.
Participants	160 women attending a family planning clinic in Tianjing, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone single dose 50 mg vs. 25 mg
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.



**Characteristics of included studies (Continued)**

Notes	-No mention of postrandomisation exclusions and loss to follow-up -Observed/expected pregnancy/ total number women: Mifepristone 50 mg 0/79, Mifepristone 25 mg II 2/78.  -change in menstrual pattern: not reported
-------	---

Allocation concealment	C – Inadequate
------------------------	----------------

**Study Li A 2000**

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	234 women attending the clinic in a MCH hospital, Hainan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 25mg single dose vs. LNG 0.75mg two-dose regimen orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusions and loss to follow-up -Observed/expected pregnancy/total number of women: group I 3/13/119; group II 4/11/115.
Allocation concealment	C – Inadequate

**Study Li H 2000**

Methods	Women were 'randomly allocated' to two groups.
Participants	90 women attending a clinic in Heilongjiang, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone single dose 150 mg vs. 50 mg vs. 25 mg
Outcomes	Observed number of pregnancies, side-effects and change in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up -Observed pregnancy/ total number of women: mifepristone 150 mg 0/30, 50 mg 0/30, 25 mg 1/30.
Allocation concealment	C – Inadequate

**Study Li J 2005**

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	202 women attending the Gyn clinic in a general hospital, Guangxi, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 25mg vs. LNG 0.75mg two-dose regimen orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up -Observed pregnancy/total number of women: group I 1/100; group II 2/102.
Allocation concealment	C – Inadequate

**Study Li W 2002**

Methods	Women were 'randomly allocated' to two groups.
Participants	255 women attending the family planning clinics in Guizhou, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.

**Characteristics of included studies (Continued)**

Interventions	Mifepristone 10 mg orally single dose vs. LNG 0.75 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects and change in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported. -Observed pregnancy /total number of women: mifepristone 2/120, LNG 3/135.
Allocation concealment	C – Inadequate

**Study Liang 2001**

Methods	Women were 'randomly allocated' to two groups.
Participants	400 women attending a MCH hospital Clinic in Heilongjiang, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg orally vs. LNG 0.75 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects .
Notes	-No postrandomisation exclusions reported, loss of follow : mife 2; LNG 3. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 2/15/198LNG 4/17/197
Allocation concealment	C – Inadequate

**Study Liao 2003**

Methods	Women were 'randomly allocated' to two groups
Participants	200 women attending a Reproductive Medical Clinic in Wuhan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg orally vs. LNG 0.75 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects and change in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed pregnancy/expected pregnancy/total number of women: mifepristone 1/9/100, LNG 1/9/100
Allocation concealment	C – Inadequate

**Study Lin 2000**

Methods	Double-blind randomised trial. The method of random allocation was not mentioned in the paper.
Participants	120 women attending a family planning clinic in Tianjing, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 10 mg and a placebo 12 hours apart vs. LNG 0.75 mg two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed/expected pregnancy/total number women: Mifepristone 10 mg + placebo 0/5/60, Levonorgestrel 0.75 mg x 2 0/5/60.
Allocation concealment	B – Unclear

**Study Liu 2000**

Methods	Randomised double-blind multicentre trial. Random number generation done centrally, double-blinded by use of identical placebos.
Participants	100 health women were recruited in the study from Henan Research Institute for family-planning. Included women with regular menstrual periods, who had a single act of unprotected intercourse or had multi-

## Characteristics of included studies (Continued)

	intercourse but the first one within 72 h of attending the clinic. Excluded women who were breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.
Interventions	Mifepristone (single dose ) 10 mg vs. LNG 0.75 mg two doses 12 hours apart orally.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss to follow-up: 2 cases in mifepristone group, 2 in LNG -Observed pregnancy/expected pregnancy/total number of women: mifepristone 10mg 0/4/48; LNG 2/4/48.
Allocation concealment	A – Adequate

### Study Liu L 2001

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	142 women attending the Gny clinic in a general hospital, Sichuan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 25mg two-dose 12 hr apart vs. Anordrin 7.5mg 12 hours late repeat one dose, then 7.5 mg per night for 10 days.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed/expected pregnancy/total number of women: group I 0/10/76; group II 3/8/66.
Allocation concealment	C – Inadequate

### Study Liu L 2002

Methods	Women were "randomly allocated" into two groups in a 2:1 ratio. The method of random allocation was not mentioned in the paper.
Participants	285 women attending the Gyn clinic in a general hospital, Hubei, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 50mg orally vs Cu-IUD
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed/expected pregnancy/total number of women: group I 1/20/190; group II 0/11/95.
Allocation concealment	C – Inadequate

### Study Lou C 2002

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	283 women attending the Gny clinic in a general hospital, Zhejiang, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.
Interventions	Two groups: Mife 50mg vs. 25mg single dose orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed/expected pregnancy/total number of women: group I 1/14/147; group II 2/14/136.
Allocation concealment	C – Inadequate

## Characteristics of included studies (Continued)

Study	Lou X 2005
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	142 women attending the Gny clinic in a general hospital, Sichuan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 10mg + Anordrin 5mg vs. Mife 10mg single dose orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed pregnancy/total number of women: group I 1/66; group II 3/76.
Allocation concealment	C – Inadequate

Study	Ngai 2005
Methods	The pharmacy department in Queen Mary Hospital generated the randomization sequence by computer program. The drug package was done by the pharmacy department according to the randomization list. Both the clinicians and the participants were unaware of the drug assignment. The pharmacy kept the randomization list and it was revealed only at the final analysis. The levonorgestrel and the placebo was supplied by the World Health Organization. The placebo was identical in colour, shape and size to the levonorgestrel.
Participants	2071 health women were recruited in the study from five sites in China (Beijing, Hong Kong, Nanjing, Shanghai and Shenzhen). All participants aged >16 years with regular menstrual cycles (every 24-42 days) requesting emergency contraception within 120 h of a single act of unprotected intercourse; who were willing to abstain from further acts of unprotected intercourse; and who were available for follow-up over the next 6 weeks. Exclusion criteria included: postabortion or post-partum patients whose period had not yet returned; regular use of prescription drugs before admission to the study; intercourse during the treatment cycle >120 h before admission into the study. Women satisfying these criteria were admitted into the study after they had given written informed consent. 2060 into efficacy analysis, 2071 into safety analysis.
Interventions	Two groups: LNG 0.75mg two doses 24 hours apart orally vs. LNG 0.75mg two doses 12 hours apart
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss of follow-up: 24 hours apart LNG 24/1044 12 hours apart LNG 29/1027 -Protocol violations 24 hours apart 6/1020; 12 hours apart 5/998 -Observed pregnancy /expected pregnancy/total number of women: 24 hours apart LNG 20/71/1038 12 hours apart LNG 20/74/1022
Allocation concealment	A – Adequate

Study	Pei 2001
Methods	Women were 'randomly allocated' to two groups.

**Characteristics of included studies (Continued)**

Participants	200 women attending a hospital clinic in Shanxi, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 10 mg orally vs. LNG 0.75 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects and change in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed pregnancy/total number of women: mifepristone 1/100, LNG 2/100
Allocation concealment	C – Inadequate

**Study Qi 2000b**

Methods	Double-blind randomised multicentre trial. Random number generation done centrally. Double-blinded by use of identical placebos.
Participants	1209 women attending the family planning clinics in 11 provinces China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone single dose 25 mg vs. 10 mg
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Total of 85 cases lost to follow-up or missed data (7.03%) -Observed/expected pregnancy/ total number women: mifepristone 25 mg 5/91/579, 10 mg 12/78/545.
Allocation concealment	A – Adequate

**Study Qi M 2003**

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	288 women attending the Gny clinic in a general hospital, Qinghai, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 25mg single dose vs. LNG 0.75mg two-dose regimen orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusions and loss to follow-up reported -Observed/expected pregnancy/total number of women: group I 2/17/150; group II 9/15/138.
Allocation concealment	C – Inadequate

**Study Qian 1999**

Methods	Women were 'randomly allocated' to three groups. The method of random allocation was not mentioned in the paper.
Participants	252 women attending a family planning clinic in Shenzhen, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone (single dose) orally 150 mg vs. 50 mg vs. 25 mg
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion or loss to follow-up reported. -Observed pregnancy/ expected pregnancy/ total women: mifepristone 150 mg 1/7/86; 50 mg 0/8/82; 25 mg 1/8/84.
Allocation concealment	C – Inadequate

## Characteristics of included studies (Continued)

Study	Rowlands 1983
Methods	Randomly allocated women to two treatments. Side-effects assessed through interviews with the women.
Participants	101 healthy women attending a family planning clinic (Margaret Pyke Centre) in London, UK. Included women who had unprotected intercourse within 120 hours (included some women who had multiple acts of unprotected intercourse).
Interventions	Yuzpe (100 mcg ethinylloestradiol + 1 mg norgestrel, repeated after 12 hours) versus danazol 400 mg repeated after 12 hours.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	- Additional data provided by the authors. Six women in the danazol group and 12 in the Yuzpe group were excluded after randomisation.
Allocation concealment	C – Inadequate

Study	Sang 1999
Methods	Single-blind randomised trial. Power calculation reported.
Participants	2400 women attending urban hospital and family planning clinics in five cities in China. Excluded women who had irregular menstrual periods, multiple acts of intercourse, who had been using other oral contraceptives and whose normal menses had not resumed after an abortion or delivery. Included only women who came after 24 hours to 96 hours of unprotected intercourse.
Interventions	Mifepristone 25 mg vs. mifepristone 25 mg + anordrin 7.5 mg versus mifepristone 10 mg + anordrin 5 mg versus mifepristone 10 mg.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Postrandomisation exclusions: 2 women. -Loss to follow-up: Total of 11 cases (0.5 %): mifepristone 50 mg 1, mifepristone 25 mg + anordrin 5, mifepristone 10 mg + anordrin 6 and mifepristone 10 mg 1. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 25 mg 10/42/599; mifepristone 25 mg + anordrin 7.5 mg 9/47.5/595; mifepristone 10 mg + anordrin 5 mg 7/42.6/594; mifepristone 10 mg 17/39.7/599. one ectopic pregnancy in 10 mg mifepristone group.
Allocation concealment	A – Adequate

Study	Sheng A 2002
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	200 women attending the FP centre, Jiangsu, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 10mg single dose vs. LNG 0.75mg two-dose regimen orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion or loss to follow-up reported. -Observed/expected pregnancy/total number of women: group I 1/10/100; group II 2/11/100
Allocation concealment	C – Inadequate

Study	Su 2001
Methods	Women had unprotected intercourse within 72 hours were "randomly allocated" to mifepristone or LNG groups, and women had unprotected intercourse 72-120 hours were assigned to IUD group. Random allocation took place between two types of pills.

**Characteristics of included studies (Continued)**

Participants	315 women attending a hospital clinic, Baotou, China. Women had regular menstrual periods, and a single unprotected intercourse within 72 to 120 hours (in the case of IUDs).
Interventions	Mifepristone 25 mg single dose vs. LNG 0.75 mg X 2 orally vs Cu-IUD.
Outcomes	Observed number of pregnancies.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed pregnancy/total number of women: IUD 1/162; mifepristone 2/64; LNG 5/89 (one ectopic pregnancy).
Allocation concealment	C – Inadequate

**Study Sun 2000**

Methods	Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.
Participants	200 women attending a family planning clinic in Haerbing, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg (single dose) orally vs. LNG 0.75 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed pregnancy/total number of women: mifepristone 1/100, LNG 2/100.
Allocation concealment	C – Inadequate

**Study Sun P 2003**

Methods	Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.
Participants	60 women attending the clinic in a general hospital, Hubei, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 25mg vs. LNG 0.75 two-dose 12hr apart orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed pregnancy/total number of women: group I 2/30; group II 8/30;
Allocation concealment	C – Inadequate

**Study Tan 1999**

Methods	Women were 'randomly allocated' to two groups. The method of random allocation was not mentioned in the paper.
Participants	145 women (aged 18-47 years old) attending the family planning clinics in Guangzhou, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 12.5 mg orally two doses 12 hours apart versus 25 mg orally two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed pregnancy/expected pregnancy/total number of women: group mifepristone 12.5 mg x 2 0/6/62; mifepristone 25 mg x 2 2/5/83.
Allocation concealment	C – Inadequate

## Characteristics of included studies (Continued)

Study	Tan L 2003
Methods	Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.
Participants	150 women attending the clinic in a general hospital, Hubei, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 12.5mg vs. 25mg two-dose 12hr apart vs. 150mg orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed/expected pregnancy/total number of women: group I 1/4/50; group II 0/3/50; group III 0/3/50.
Allocation concealment	C – Inadequate

Study	Van Santen 1985a
Methods	Randomised, double-blind trial. Random number sequence generated from a random number table. A numbered strip containing the capsules given to participating women. Masking achieved by giving each woman the active and corresponding placebo treatments. Side-effects were assessed by women.
Participants	465 healthy women attending Utrecht State University Hospital. Included women with regular menstrual periods, who had a single act of unprotected intercourse. Excluded women who were breastfeeding, on medications and difficult to follow up.
Interventions	Yuzpe (100 mcg ethinyloestradiol + 1 mg norgestrel, repeated after 12 hours) on day 1 + placebo capsules for 4 days versus ethinyloestradiol 5 mg dose followed by a placebo capsule 12 hours later followed by ethinyloestradiol 5 mg single daily dose for 4 days.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Observed pregnancy/expected pregnancy/total number of women: Yuzpe: 1/11/200; high-dose ethinyloestradiol: 2/12/184. -Loss to follow-up 5.7 % altogether.
Allocation concealment	A – Adequate

Study	WHO 1998
Methods	Randomised double-blind multinational trial. Random number generation done centrally. Double-blinded by use of identical placebos. Allocation concealment achieved by sealed, sequentially numbered, tinted bottles filled and labelled by the manufacturer.
Participants	1998 healthy women at 21 centres worldwide. Included women with regular menstrual periods, age between 18-45 years, who had a single act of unprotected intercourse within 72 hours of attending the clinic. Excluded women who were breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.  1955 women into the final analysis
Interventions	Yuzpe (100 mcg ethinyloestradiol + 0.50 mg levonorgestrel, repeated after 12 hours) vs levonorgestrel 0.75 mg twice 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Loss to follow-up: Yuzpe 18/997 (1.8 %), levonorgestrel 25/1001 (2.5 %). -No postrandomisation exclusion (intention-to-treat analysis) - Observed pregnancy/expected pregnancy/total number of women: Yuzpe: 31/72/979; levonorgestrel: 11/75.3/976.
Allocation concealment	A – Adequate



## Characteristics of included studies (Continued)

Study	WHO 1999
Methods	Randomised controlled multinational trial. Randomisation sequence was generated centrally at WHO and women were randomised to three groups within centres. Sequentially numbered bottles, each containing three pills were given to women at the centre. Each bottle contained the active and placebo pills accordingly. However, 200 mg pills were slightly larger and, therefore, not all pills were identical. Power calculation was made.
Participants	1717 women attending family planning clinics in 11 centres in 6 countries. Included women with regular menstrual cycles, within 120 hours of a single act of unprotected intercourse, and who were willing to avoid intercourse for the rest of the current cycle. Excluded women who were breastfeeding, with uncertain date of last menstrual period, use of hormonal contraception in the current cycle and those with a contraindication to mifepristone use. 1684 women were included in the final analysis.
Interventions	Mifepristone 600 mg vs 50 mg vs 10 mg. All taken orally as a single dose at the time of enrolment.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-Loss to follow-up: 32/1717 (1.9 %) -Exclusion: One woman was excluded because she was pregnant at the time of enrolment. There were 15 protocol violations (cycle length outside admissible range, treatment after 120 hours, further use of emergency contraception in the same cycle) but these were included in the analysis. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 600 mg: 7/45/559; 50 mg 6/43/560; 10 mg 7/48/565. 2 ectopic pregnancies in 50 mg group.
Allocation concealment	A – Adequate

Study	Wang 1999
Methods	Women were 'randomly allocated' to two groups. The method of randomisation was not mentioned in the paper.
Participants	108 women attending the Ob/Gyn clinic in Tianjing No.1 People's Hospital, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg orally two doses 12 hours apart versus Anordrin on the first day taken 7.5 mg two doses 12 hours apart, then 7.5 mg per day for 10 days, total dosage of Anordrin was 90 mg.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 25 mg x 2 0/6/52; anordrin 3/7/56.
Allocation concealment	C – Inadequate

Study	Wang C 2000
Methods	Women were given choice for Cu-IUD or ECPs and those choosing ECPs were randomly allocated to two ECP groups. The method of random allocation was not mentioned in the paper.
Participants	150 women attending the family planning clinics in Shandong, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 120 hours of attending the clinic.
Interventions	Mifepristone 10 mg single dose vs. LNG 0.75 mg two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed/expected pregnant/ total number women: mifepristone 1/3/50, LNG 1/4/50.
Allocation concealment	C – Inadequate

## Characteristics of included studies (Continued)

Study	Wang J 2006
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	198 women attending the Gyn clinic in a general hospital, Anhui, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mifepristone 10mg vs. 25mg orally single dose
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed/expected pregnancy/total number of women: group I 1/9/98; group II 1/9/100
Allocation concealment	C – Inadequate

Study	Wang L 2004
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	1200 women attending the Gyn clinic in a general hospital, Shandong, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 12.5mg vs. 25mg single dose orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed/expected pregnancy/total number of women: group I 6/55/600; group II 6/53/600.
Allocation concealment	C – Inadequate

Study	Wang Q 2000
Methods	'Randomly allocated' women to two groups. The method of random allocation was not mentioned in the paper.
Participants	131 women attending the MCH hospital in Guangdong, China. Included women who had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	LNG 0.75 mg two doses 12 hours apart vs. mifepristone 25 mg single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported. -Observed/expected pregnancy/total number women: LNG 2/5/63, mifepristone 1/4/68.
Allocation concealment	C – Inadequate

Study	Wang SZ 2001
Methods	Randomised double-blind multicentre trial. Random number generation done centrally, double-blinded by use of identical placebos.
Participants	200 health women were recruited in the study from a Ob/Gyn clinic in Wuhan, China. Included women with regular menstrual periods, age 22-42 years old, who had a single act of unprotected intercourse within 72 h of attending the clinic. Excluded women who were on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.
Interventions	Mifepristone (single dose) 10 mg vs. 25 mg orally.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.

## Characteristics of included studies (Continued)

Notes -No postrandomisation exclusion and loss to follow-up reported  
-Observed pregnancy/expected pregnancy/total number of women: mifepristone 10mg 1/10/100, 25mg 1/10/100.

Allocation concealment A – Adequate

### Study Wang Y 2003

Methods Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.

Participants 262 women attending the clinic in a MCH hospital, Shanxi, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. LNG 0.75mg two-dose regimen orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes - loss of follow: Mife 2; LNG 1.  
-Observed/expected pregnancy/total number of women: group I 2/17/132; group II 3/13/127.

Allocation concealment C – Inadequate

### Study Webb 1992

Methods 'Randomly allocated' women to three groups. Random number generation by computer. Schedule prepared by someone not involved in recruitment and outcome assessment. No blinding or use of placebos reported. Side-effects were recorded by women.

Participants 616 healthy women attending a community family planning clinic in Liverpool, England. Included women with regular menstrual periods (21-35 days), age between 16-45 years, with a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Yuzpe (100 mcg ethinylloestradiol + 1 mg norgestrel, repeated after 12 hours) versus danazol 600 mg twice 12 hours apart versus mifepristone 600 mg single dose.

Outcomes Observed number of pregnancies, side-effects, changes in menstrual pattern.

Notes -Observed pregnancy/ expected pregnancy/total number of women: Yuzpe: 5/11/191; danazol: 9/12/193; mifepristone 0/12/195.  
-Loss to follow-up: 27/616 (4.4 %). Pregnancy outcome assessed in 94 %, side-effects in 94 %, menstrual changes in 92 % of women.  
- Trial stopped after recruitment of 616 of the 1200 initially targeted because of differences in efficacy in an interim analysis.

Allocation concealment A – Adequate

### Study Wei RH 2002

Methods Randomized double-blind clinical trial by use of identical placebos.

Participants 200 women attending the Gyn clinic in a general hospital, Hainan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. 10mg single dose orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes -No postrandomisation exclusion and loss to follow-up reported  
-Observed/expected pregnancy/total number of women: group I 2/11/100; group II 1/10/100.

Allocation concealment B – Unclear

## Characteristics of included studies (Continued)

Study	Wu 1999a
Methods	Double-blind randomised trial. Random number generation done centrally. Double-blinded by use of identical placebos. Allocation concealment achieved by sealed, sequentially numbered, tinted bottles filled and labelled by the manufacturer.
Participants	1324 women in 16 urban family planning clinics in China. Excluded women with irregular menstrual periods, with multiple acts of intercourse, on oral contraceptives and postabortal women whose menstrual periods had not returned to normal. Included only women who came within 72 hours of unprotected intercourse.
Interventions	Levonorgestrel 0.75 mg two doses 12 hours apart versus mifepristone 10 mg single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-20 women excluded altogether (reasons not stated). -Loss to follow-up 28 (2.1 %) in the two groups. -Observed pregnancy/expected pregnancy/total number of women: Levonorgestrel 20/49/643; mifepristone 9/44/633.
Allocation concealment	A – Adequate

Study	Wu XZ 2002
Methods	Randomised double-blind multicentre trial. Random number generation done centrally, double-blinded by use of identical placebos. Allocation concealment achieved by sealed, sequentially numbered, tinted bottles filled and labeled by manufacturer.
Participants	903 health women were recruited in the study from 10 clinics in Shanghai, China. Included women with regular menstrual periods (22-42 days), who had a single act of unprotected intercourse within 120 h of attending the clinic, and they were willing to avoid further acts of unprotected coitus during that cycle and willing to have an induced abortion if pregnancy was diagnosed following intake of the study drug during the study period. Excluded women: current pregnancy or breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.
Interventions	Mifepristone 25 mg, 24 hours later misoprostol 0.2 mg vs. mifepristone 10 mg , 24 hours later misoprostol 0.2 mg vs. mifepristone (single dose) 10 mg + placebo
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss to follow-up: Total 3 cases, 1 case protocol violation. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 25 mg + misoprostol 2/22/300, mifepristone 10 mg + misoprostol 2/21/299, mifepristone 10 mg 7/22/300.
Allocation concealment	A – Adequate

Study	Xiao 2002
Methods	Randomised double-blind multicentre trial. Random number generation done centrally, Double-blinded by use of identical placebos.
Participants	3052 health women were recruited in the study from the ten centres in China. Included women with regular menstrual periods, age 19-49 years old, who had a single act of unprotected intercourse within 120 h of attending the clinic. Excluded women who were breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period. 3030 into efficacy analysis, 3033 into safety analysis
Interventions	Mifepristone (single dose ) 10mg vs. 25mg orally.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss to follow-up: 10mg 11/1527, 25mg 11/1525; -Observed pregnancy/expected pregnancy/total number of women: mifepristone 10mg 17/115/1516, 25mg 17/126/1514.

## Characteristics of included studies (Continued)

Allocation concealment A – Adequate

<b>Study</b>	<b>Xie 1998</b>
Methods	Random allocation to two groups. The method of random allocation was not mentioned in the paper.
Participants	600 women attending an urban Maternal and Child Health Hospital in Fuzhou, China. Excluded women attending after 72 hours, irregular menstrual periods, and who had multiple acts of intercourse.
Interventions	Mifepristone 150 mg vs. mifepristone 50 mg vs. mifepristone 25 mg, all single dose.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion or loss to follow-up. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 150 mg 5/17/200; mifepristone 50 mg 8/15/200; mifepristone 25 mg 5/15/200.

Allocation concealment C – Inadequate

<b>Study</b>	<b>Xu 2000</b>
Methods	Random allocation to two groups. The method of random allocation was not mentioned in the paper
Participants	400 women attending the family planning clinic in Zhejiang, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg single dose vs. LNG 0.75 mg two doses 12 hours apart.
Outcomes	Observed number of pregnancies, side-effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss of follow-up reported -Observed pregnancy/expected/ total number women: mifepristone 25 mg 2/15/198; levonorgestrel 4/17/197. -side effect: mifepristone 25 mg 16/198, levonorgestrel 21/197. -Lost to follow-up: group I 2/200, group II 3/200.

Allocation concealment C – Inadequate

<b>Study</b>	<b>Xu Z 2000</b>
Methods	Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.
Participants	266 women attending a FP centre, Jianfsu, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Three groups: Mife 25mg vs. anordrin 7.5mg 12 hr late repeat one dose, then 7.5mg per night for 8 days vs. LNG 0.75mg two-dose regimen.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss of follow-up reported -Observed/expected pregnancy/total number of women: group I 2/9/94; group II 3/8/86; group III 2/8/86.

Allocation concealment C – Inadequate

<b>Study</b>	<b>Yang 2001</b>
Methods	Women were 'randomly allocated' to four groups. The method of random allocation was not mentioned in the paper.
Participants	358 health women were recruited into the study from clinics of MCH hospital in Guangzhou, China. Included women with regular menstrual periods, aged 17-46 years, who had a single act of unprotected intercourse within 72 h of attending the clinic, and they were willing to use condom for further acts of

## Characteristics of included studies (Continued)

	unprotected coitus during that cycle. Excluded women: on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.
Interventions	(1) Mifepristone 25 mg X 2, 12 hours apart (2) Anordrin 7.5 mg X 2, 12 hours apart (3) Danazol 400 mg X 2, 12 hours apart
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Loss of follow-up: not reported -Observed pregnancy/expected pregnancy/total number of women: mifepristone 1/14/121, anordrin 4/13/117, danazol 5/14/120.
Allocation concealment	C – Inadequate

### Study Yang F 2003

Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	92 women attending the clinic in a general hospital, Hunan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mifepristone 25mg vs. 50mg orally single dose
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss of follow-up reported -Observed/expected pregnancy/total number of women: group I 1/5/52; group II 0/4/40.
Allocation concealment	C – Inadequate

### Study Zhang JQ 2000

Methods	Women were 'randomly allocated' into four groups.
Participants	782 women attending a hospital clinic in Qinhai, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25 mg two doses 12 hours apart vs. LNG 0.75 mg two doses 12 hours apart vs. mifepristone 25 mg single dose vs. mifepristone 25 mg + LNG 0.75 mg
Outcomes	Observed number of pregnancies, side effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed/ expected pregnancy/total number women: mifepristone 25 mg x 2 1/15/212, levonorgestrel 1/16/205, mifepristone 25 mg 3/13/182, mifepristone 25 + levonorgestrel 4/13/183
Allocation concealment	C – Inadequate

### Study Zhang L 2005

Methods	Double-blind randomized single centre trial.
Participants	220 women attending the Gny clinic in a general hospital, Guangdong, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 10mg single dose vs. 10mg two-dose 12hr apart orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No postrandomisation exclusion and loss to follow-up reported -Observed/expected pregnancy/total number of women: group I 1/11/112; group II 1/11/108
Allocation concealment	B – Unclear

## Characteristics of included studies (Continued)

Study	Zhang X 1999a
Methods	Women were 'randomly allocated' into three groups. The method of random allocation was not mentioned in the paper.
Participants	360 women attending the family planning clinics in Chengwu (a county in Shandong), China. women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Mifepristone 25mg orally two doses 12 hours apart vs. 10mg qd. for 5 days vs. 10mg qd. for 3 days.
Outcomes	Observed number of pregnancies, side effects, changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 25 mg x 2 2/13/120, mifepristone 10 mg qid/5d 0/12/118, mifepristone 10 mg qid/3d 1/11/116.
Allocation concealment	C – Inadequate

Study	Zhang Y 1998
Methods	Randomized trial. The method of randomisation was not mentioned in the paper.
Participants	309 women attending family planning clinics in Beijing, China. Excluded women with irregular menstrual periods, who used oral contraceptives and those who had not resumed normal menses after an abortion or delivery. Included only women attending within 72 hours of an unprotected intercourse.
Interventions	Mifepristone 25 mg versus 10 mg versus 5 mg.
Outcomes	Observed number of pregnancies, side effects, changes in menstrual pattern.
Notes	-No postrandomisation exclusions reported. -Loss to follow-up 5.8 % (18/309) altogether. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 25 mg 1/6/99; mifepristone 10 mg 1/7/92; mifepristone 5 mg 2/7/100.
Allocation concealment	C – Inadequate

Study	Zhang Y 2002
Methods	Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.
Participants	135 women attending the clinic in a general hospital, Henan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Three groups: Mife 100mg vs. 50mg vs. 10mg orally
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-No mention of postrandomisation exclusion and loss to follow-up. -Observed pregnancy/total number of women: group I 0/45; group II 0/45; group III 0/45
Allocation concealment	C – Inadequate

Study	Zhang YM 2002
Methods	Women were 'randomly allocated' to two groups. The method of random was not mentioned in the paper.
Participants	116 women attending the Gny clinic in a general hospital, Sichuan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.
Interventions	Two groups: Mife 10mg +Anordrin 5mg vs. mife 25mg
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.

## Characteristics of included studies (Continued)

Notes --No mention of postrandomisation exclusion and loss to follow-up.  
-Observed pregnancy/total number of women:  
group I 0/58; group II 0/58.

Allocation concealment C – Inadequate

### Study Zhao J 2003

Methods Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.

Participants 270 women attending the Gyn clinic in a general hospital, Shandong, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 50mg vs. 25mg vs. 10mg orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes -No mention of postrandomisation exclusion and loss to follow-up.  
-Observed/expected pregnancy/total number of women: group I 1/8/90; group II 1/9/90; group III 1/9/90.

Allocation concealment C – Inadequate

### Study Zheng A 2005

Methods Women were 'randomly allocated' to three groups. The method of random was not mentioned in the paper.

Participants 200 women attending the Gyn clinic in a general hospital, Hunan, China. Women had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Two groups:  
Mife 25mg vs. 600mg single dose orally

Outcomes Observed number of pregnancies, side-effects and changes in menstrual pattern.

Notes --No mention of postrandomisation exclusion and loss to follow-up.  
-Observed/expected pregnancy/total number of women: group I 2/10/100; group II 2/10/100.

Allocation concealment C – Inadequate

### Study Zuo 1999

Methods Double-blind randomised trial.  
Random number generation done centrally. Double-blinded by use of identical placebos.

Participants 668 women were recruited from 14 family planning clinics in Changsha, China. Women aged less 40 years old had regular menstrual periods, and a single act of unprotected intercourse within 72 hours of attending the clinic.

Interventions Mifepristone (single dose) 10mg vs. 25mg orally.

Outcomes Observed number of pregnancies, side effects, changes in menstrual pattern.

Notes -Loss to follow-up 8/668.  
-Observed pregnancy/expected pregnancy/total number of women: mifepristone 10 mg 3/26/321; 25 mg 2/24/339.

Allocation concealment A – Adequate

### Study von Hertzen 2002

Methods Randomised double-blind multicentre trial. Random number generation done centrally, double-blinded by use of identical placebos. Allocation concealment achieved by sealed, sequentially numbered, treatment packs.



Participants	4136 health women were recruited in the study from 15 family-planning clinics in 10 countries. Included women with regular menstrual periods, age 14-52 years old, who had a single act of unprotected intercourse within 120 h of attending the clinic. Excluded women who were breastfeeding, on hormonal contraception in the current cycle and those with uncertain dates of last menstrual period.
Interventions	Mifepristone (single dose ) 10 mg vs. LNG 1.5 mg (single dose) vs. LNG 0.75 mg two doses 12 hours apart orally.
Outcomes	Observed number of pregnancies, side-effects and changes in menstrual pattern.
Notes	-Lost to follow-up: mifepristone 10 mg 20/1380, single LNG 22/1379 and split-dose LNG 19/1377. -Observed pregnancy/expected pregnancy/total number of women: mifepristone 10 mg 21/108/1359, single LNG 20/111/1356, split-dose LNG 24/106/1356 (1 ectopic pregnancy). -Intention-to-treat: 4071 into efficacy analysis, 4084 into safety analysis.
Allocation concealment	A – Adequate
MCH - Maternal and Child Health	
LNG - Levonorgestrel	
IUD - Intrauterine device	
Mife - mifepristone	

### Characteristics of excluded studies

Study	Reason for exclusion
Ashok 2001	Not a randomised or quasi-randomised controlled trial.
Ashok 2004	It is the same clinical trial as Ashok 2002. The objective of this paper is to compare side effects, women's acceptance and satisfaction with mifepristone(100 mg) versus the Yuzpe regimen for emergency contraception.
Ban 2001	Not a randomised controlled trial.
Creinin 1997	Meta-analysis, not a clinical trial.
D'Souza 2003	It is a randomised controlled trial in an outpatient clinic setting. But the objective is to assess insertion-linked pain and the short-term user-acceptability and safety of the GyneFix as compared with T-framed intrauterine devices. No efficacy result mentioned in this paper.
Dixon 1980	Comparative study of ethinyl oestradiol 5 mg/day and conjugated oestrogens at 30 mg/day for 5 days. The study was conducted in 5 centres, two of which prescribed the drugs alternately. In these two centres, none of the 137 women who received ethinyl oestradiol became pregnant while six out of 132 women receiving conjugated oestrogens became pregnant. No other details are available for these centres.
Ellertson 2003 a	It is an observational study, not a RCT.
Espinos 1999	Not a randomised controlled trial.
Fan 1998	Not a randomised clinic trial. 518 women used mifepristone 25 mg + anordrin 7.5 mg for emergency contraception, 1 observed pregnancy/ 40 expected pregnancies.
Fan H 2001	Not a randomised trial. 1013 women used Cu-IUD for emergency contraception, 2 women got pregnant.
Fasoli 1989	Review paper
Gan 1999	Not a randomised controlled trial. 200 women used 10 mg mifepristone for emergency contraception, 2 observed pregnancies/15 expected pregnancies.
Gan SX 2001	No mention of random allocation.
Gao Er 2001	Not a randomised controlled trial.
Gottardi 1979	Not a randomised controlled trial.

Gottardi 1986	Not an emergency contraception study.
Gu XY 2002	Not a randomised controlled trial.
Guillebaud 1983	Randomised and non-randomised groups of women analysed together. Randomised groups are published separately and included in this review (Rowlands 1983).
Han 1999b	It was a part of Sang 1999 study.
Han Y 2001	Not a randomised controlled trial. 126 women used GyneFix IUD for emergency contraception, no one got pregnancy/12 expected pregnancies.
Haspels 1976	Not a randomised controlled trial.
He 1991	Not emergency contraception; it is a study on regular postcoital use of levonorgestrel.
Hoffman 1983	Not a randomised or quasi-randomised controlled trial.
Jiang 2000	No mention of random allocation.
Jiang 2002	Not a randomised or quasi-randomised controlled trial. 120 women used R2323 5 mg as emergency contraception pill within 120 hr after intercourse.
Jin 2005	It is a part of a large WHO multicentr dose-finding study of mifepristone ( see WHO1999).
Kesserü 1973	Not a randomised trial; also it is a study on regular postcoital contraception.
Li XY 2001	Not a randomised or quasi-randomised controlled trial. 100 women used mifepristone 25 mg as ECPs within 72 hr after intercourse. 2 of them got pregnancy.
Li F 2002	Not a randomised controlled trial. 150 women used mifepristone 25 mg as ECPs within 72 hr after intercourse. 3 of them got pregnancy.
Li F 2005	Not a randomised controlled trial. 300 women were informed choice after introduction of IUD and ECPs into two groups (Cu375-IUD vs.mifepristone 25 mg single dose orally). Observed/expected pregnancy/total number of women: IUD group 0/12/150; mife group 4/13/150
Lippes 1976	Not a randomised controlled trial.
Lippes 1979	Not a randomised controlled trial.
Liu Y 2002	Not a randomised controlled trial. 160 women were informed choice after introduction of IUD and ECPs into two groups (Cu375-IUD vs.mifepristone 25 mg single dose orally). Observed/expected pregnancy/total number of women: IUD group 1/8/80; mife group 1/9/80
Luerti 1986	Not a randomised controlled trial.
Ma 2001	Not a randomised controlled trial. 110 women used mifepristone 25 mg single dose for emergency contraception, one got pregnancy.
Mo 2004	It is a randomised controlled trial, but the loss of follow was 20%.
Mor 2005	It is a prospective, open-label, crossover study. To compare the physiologic effects of vaginally and orally administered emergency contraception. They concluded the vaginal route of administration of emergency contraception regimens may be as efficacious as the oral route.
Piaggio 2003	It is a meta-analyses of 10 mg mifepristone for emergency contraception
Piaggio 2003a	It is a meta-analyses of different mifepristone for emergency contraception
Qi 2000	Not a randomised trial. 622 women used 25 mg mifepristone for emergency contraception. 5 got pregnancy, the effective rate was 91.25%.
Qiao 2002	Not a randomised controlled trial. 140 women used mifepristone 25 mg in combination with MTX 5 mg for emergency contraception. No one got pregnancy.
Qin 2000	Not a randomised controlled trial.
Raymond 2000	It is a randomised controlled trial of meclizine to prevent nausea associated with Yuzpe regimen.

Roye 2001	Not a randomised controlled trial. It is a letter to the editor.
Scarduelli 1998	Not a randomised controlled trial.
Schilling 1979	Not a randomised controlled trial.
Shochet 2004	Not a randomised controlled trial. They investigated side effects after the standard Yuzpe regimen or two modifications.
Sun 2005	It is a review.
Tian Q 2000	Not a randomised controlled trial. 160 women were informed choice after introduction of IUD and ECPs into two groups (Cu375-IUD vs.mifepristone 25 mg single dose orally). Observed/expected pregnancy/total number of women: IUD group 0/8/80; mife group 2/7/80
Van Santen 1983	Not a randomized controlled trial.
Van Santen 1985b	This study has been excluded because the report includes one group of a randomized comparison study published elsewhere and another cohort of women receiving the same treatment (Yuzpe regimen).
Virjo 1999	Not a randomised clinical trial.
Wei R 2002	Not a randomised controlled trial. 309 women used mifepristone 25 mg for emergency contraception. 209 women taken the pill within 72 hr, and 3 of them got pregnancy; 100 women taken the pill 72-120 hr and 2 of them got pregnancy.
Wu 1999b	Not a randomised controlled trial. 793 women used mifepristone 25mg (single dose), 6 observed pregnancies/ 58 expected pregnancies.
Wu 2005	It is a review.
Xiao 2004	Not a randomised controlled trial. A total of 4945 women were recruited in 31 clinical centers in 18 provinces and municipalities in China in a descriptive clinical trial with one dose (mife 10 mg) treatment. 28 cases lost to follow-up. An analysis of 4917 cases showed a pregnancy rate of 1.4% (95% CI 1.1-1.8) and a effectiveness of prevention of pregnancy 82.2% (95%CI 77.5-86.2). No trend of increase of pregnancies with delay of treatment was found, Increase of risk of pregnancy in women who had unprotected intercourse after treatment is about 11.1 time higher. Side effects were mild and in small proportion of women, such as nausea and vomiting in 9.2% and other side effects in 0.7-3.7% of women. Delay of menstruation over 7 days occurred in 6.5% of women.
Yang 2002	Not a randomised controlled trial. 106 women used mifepristone 10 mg for emergency contraception within 72 hr after intercourse. Among them, one case pregnancy and one loss of follow-up.
Yu 2001	A review.
Yuzpe 1974	No randomised comparison.
Yuzpe 1977	No randomised comparison.
Yuzpe 1982	No randomised comparison.
Zhang J 1999	Not a randomised clinic trial. 200 women were divided into two groups(mifepristone 25 mg or IUD). Women had unprotected intercourse within 72 hours given mifepristone, 72- 120 hours given IUD. No pregnancy/10 expected pregnancies in IUD group, 2 observed pregnancies/ 8 expected pregnancies in mifepristone group.
Zhang M 1999	It was a part of Sang 1999 study.
Zhang X 1999	The results have been included in Sang 1999.
Zhang X 1999b	Not a randomised controlled trial. 123 women used LNG 0.75 mg orally two doses 12 hours apart, 1 observed pregnancy/ 13 expected pregnancies.
Zhao 2006	Not a randomised controlled trial. a questionnaire survey among 301 women who had LNG emergency contraception failure and had abortion.
Zhao H 2001	Not a randomised controlled trial.

## Characteristics of excluded studies (Continued)

Zhu 1999	Not a randomised controlled trial. 17 women used mifepristone 25 mg+ MTX 5 mg for emergency contraception, no one got pregnancy.
Zuliani 1990	This is a study conducted in Milan, Italy, which started reporting in 1986. The first report refers to an ongoing randomised trial comparing ethinyl oestradiol-norgestrel combination (Yuzpe regimen) to 800 mg danazol in 835 women. Subsequently, it is reported that 1000 women were randomised in this trial and, afterwards, a third group (1200 mg danazol) comparison was added. There is no report in which the results for the 1000 women randomised to Yuzpe and danazol 800 mg can be extracted. In subsequent reports in 1988 and 1990, the results are reported with randomised and nonrandomised groups together and, therefore, this study has been excluded from analysis.

## Characteristics of ongoing studies

Study	Glasier 2006
Trial name or title	
Participants	
Interventions	CDB-2914 vs LNG
Outcomes	Observed number of pregnancies, side-effects,
Starting date	Fall of 2006
Contact information	Prof. Glasier
Notes	

## ANALYSES

### Comparison 01. Intrauterine contraceptive device versus control

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies	1	300	Relative Risk (Fixed) 95% CI	0.09 [0.03, 0.26]

### Comparison 02. Levonorgestrel vs Yuzpe

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	2	2789	Relative Risk (Fixed) 95% CI	0.51 [0.31, 0.83]
02 Observed number of pregnancies (by risk status)	4	2781	Relative Risk (Fixed) 95% CI	0.50 [0.31, 0.82]
03 Observed number of pregnancies (time from intercourse)	5	2632	Relative Risk (Fixed) 95% CI	0.48 [0.28, 0.82]
04 Need for extra dose	1	1955	Relative Risk (Fixed) 95% CI	0.53 [0.38, 0.75]
05 Any side-effect	1	1955	Relative Risk (Fixed) 95% CI	0.80 [0.75, 0.86]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	1	678	Relative Risk (Fixed) 95% CI	1.28 [0.87, 1.90]

Interventions for emergency contraception (Review)

Copyright © 2008 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd

### Comparison 03. Levonorgestrel split-dose 24 h vs.12 h

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	2060	Relative Risk (Fixed) 95% CI	0.98 [0.53, 1.82]
02 Observed number of pregnancy (by risk status)	2	2012	Relative Risk (Fixed) 95% CI	0.98 [0.53, 1.81]
03 Observed number of pregnancy (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	1	1978	Relative Risk (Fixed) 95% CI	0.79 [0.53, 1.17]

### Comparison 04. Levonorgestrel single vs split-dose

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	2	3830	Relative Risk (Fixed) 95% CI	0.77 [0.45, 1.30]
02 Observed number of pregnancy (by risk status)	2	2712	Relative Risk (Fixed) 95% CI	0.83 [0.46, 1.49]
03 Observed number of pregnancy (time from intercourse)	2	2695	Relative Risk (Fixed) 95% CI	0.84 [0.47, 1.51]
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	3	4902	Relative Risk (Fixed) 95% CI	0.91 [0.78, 1.05]

### Comparison 05. Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	15	3743	Relative Risk (Fixed) 95% CI	2.01 [1.27, 3.17]
02 Observed number of pregnancies (by risk status)	2	599	Relative Risk (Fixed) 95% CI	0.61 [0.10, 3.85]
03 Observed number of pregnancies (time from intercourse))	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	11	2811	Relative Risk (Random) 95% CI	1.67 [1.14, 2.45]
06 Specific side-effect			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	8	1860	Relative Risk (Fixed) 95% CI	0.94 [0.74, 1.20]
08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)	15	3758	Relative Risk (Fixed) 95% CI	2.01 [1.30, 3.12]
09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)	15	3758	Relative Risk (Fixed) 95% CI	1.75 [1.13, 2.72]

**Comparison 06. Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	9	8036	Relative Risk (Fixed) 95% CI	1.43 [1.02, 2.01]
02 Observed number of pregnancies (by risk status)	2	4071	Relative Risk (Fixed) 95% CI	1.09 [0.65, 1.82]
03 Observed number of pregnancies (time from intercourse))	4	6074	Relative Risk (Fixed) 95% CI	1.18 [0.78, 1.77]
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	2	455	Relative Risk (Fixed) 95% CI	4.18 [2.70, 6.45]
06 Specific side-effect			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	6	8292	Relative Risk (Fixed) 95% CI	0.80 [0.70, 0.91]
08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)	9	8429	Relative Risk (Fixed) 95% CI	1.43 [1.02, 2.00]
09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)	9	8429	Relative Risk (Fixed) 95% CI	1.12 [0.95, 1.31]

**Comparison 07. Levonorgestrel 1.5 mg vs CDB-2914 (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	1549	Relative Risk (Fixed) 95% CI	1.86 [0.75, 4.64]
02 Observed number of pregnancy (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancy (time from intercourse)	3	1549	Relative Risk (Fixed) 95% CI	1.77 [0.74, 4.20]
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	2	3098	Relative Risk (Fixed) 95% CI	1.21 [1.07, 1.38]

**Comparison 08. Levonorgestrel (all dose) vs Anordrin (all dose)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	172	Relative Risk (Fixed) 95% CI	0.67 [0.11, 3.89]
02 Observed number of pregnancy (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancy (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	1	172	Relative Risk (Fixed) 95% CI	0.75 [0.27, 2.07]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	0	0	Relative Risk (Fixed) 95% CI	Not estimable

### Comparison 09. mifepristone low-dose 20 mg vs low-dose 10 mg

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	220	Relative Risk (Fixed) 95% CI	1.04 [0.07, 16.37]
02 Observed number of pregnancy (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancy (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Delay of menses	2	440	Relative Risk (Fixed) 95% CI	1.35 [0.61, 3.00]

### Comparison 10. Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	20	11432	Relative Risk (Fixed) 95% CI	0.67 [0.49, 0.92]
02 Observed number of pregnancies (by risk status)	6	4715	Relative Risk (Fixed) 95% CI	0.83 [0.50, 1.38]
05 Any side-effect	8	2144	Relative Risk (Random) 95% CI	1.36 [0.94, 1.96]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses			Relative Risk (Random) 95% CI	Subtotals only

### Comparison 11. Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	13	3123	Relative Risk (Fixed) 95% CI	0.72 [0.41, 1.27]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Any side-effect	6	1465	Relative Risk (Fixed) 95% CI	1.79 [1.39, 2.31]
04 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
05 Delay in menses	8	1945	Relative Risk (Fixed) 95% CI	1.32 [1.12, 1.56]

### Comparison 12. Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	5	1726	Relative Risk (Fixed) 95% CI	0.52 [0.23, 1.17]
02 Observed number of pregnancies (by risk status)	1	1102	Relative Risk (Fixed) 95% CI	0.99 [0.29, 3.41]
05 Any side-effect	3	512	Relative Risk (Fixed) 95% CI	13.04 [5.13, 33.15]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	4	1574	Relative Risk (Fixed) 95% CI	1.98 [1.66, 2.37]

**Comparison 13. Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	9	3009	Relative Risk (Fixed) 95% CI	0.93 [0.50, 1.72]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	5	1310	Relative Risk (Random) 95% CI	2.64 [1.57, 4.43]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	10	3144	Relative Risk (Fixed) 95% CI	1.56 [1.37, 1.78]

**Comparison 14. Mifepristone (all doses) vs Yuzpe**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	3	2144	Relative Risk (Fixed) 95% CI	0.14 [0.05, 0.41]
02 Observed number of pregnancies (by risk status)	2	800	Relative Risk (Fixed) 95% CI	0.10 [0.01, 1.90]
03 Observed number of pregnancies (time from intercourse)	3	958	Relative Risk (Fixed) 95% CI	0.19 [0.06, 0.59]
04 Need for extra dose	1	958	Relative Risk (Fixed) 95% CI	0.11 [0.03, 0.49]
05 Any side-effect	2	1800	Relative Risk (Fixed) 95% CI	0.89 [0.83, 0.96]
06 Specific side-effects			Relative Risk (Random) 95% CI	Subtotals only
07 Menses			Relative Risk (Fixed) 95% CI	Subtotals only

**Comparison 15. Mifepristone (all doses) vs danazol (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	2	629	Relative Risk (Fixed) 95% CI	0.10 [0.02, 0.55]
05 Any side-effect	1	241	Relative Risk (Fixed) 95% CI	0.35 [0.13, 0.95]
06 Specific side-effect			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	2	621	Relative Risk (Random) 95% CI	2.39 [0.56, 10.27]

**Comparison 16. Mifepristone (all doses) vs anordrin (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	7	1035	Relative Risk (Fixed) 95% CI	0.26 [0.11, 0.63]
02 Observed number of pregnancies (by risk-status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	4	746	Relative Risk (Fixed) 95% CI	0.62 [0.43, 0.91]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	4	667	Relative Risk (Fixed) 95% CI	1.14 [0.78, 1.68]



**Comparison 17. Mifepristone alone (all doses) vs mifepristone + anordrin (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	5	3038	Relative Risk (Fixed) 95% CI	1.32 [0.73, 2.41]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	2	442	Relative Risk (Fixed) 95% CI	0.83 [0.49, 1.41]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Delay in menses	3	2781	Relative Risk (Fixed) 95% CI	0.79 [0.65, 0.97]

**Comparison 18. Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	100	Relative Risk (Fixed) 95% CI	3.00 [0.13, 71.92]
02 Observed number of pregnancy (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancy (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	1	100	Relative Risk (Fixed) 95% CI	0.67 [0.20, 2.22]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	2	200	Relative Risk (Fixed) 95% CI	1.00 [0.44, 2.27]

**Comparison 19. Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	1	400	Relative Risk (Fixed) 95% CI	3.00 [0.31, 28.60]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancies (time from intercourse)	2	400	Relative Risk (Fixed) 95% CI	2.33 [0.35, 15.56]
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effect			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	1	396	Relative Risk (Fixed) 95% CI	1.79 [0.93, 3.43]

**Comparison 20. Mifepristone vs mifepristone + misoprostol (all doses)**

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	1	599	Relative Risk (Fixed) 95% CI	3.49 [0.73, 16.65]
02 Observed number of pregnancies (by risk)	0	0	Relative Risk (Fixed) 95% CI	Not estimable

03 Observed number of pregnancies (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effect			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	0	0	Relative Risk (Fixed) 95% CI	Not estimable

### Comparison 21. Mifepristone (all doses) vs Cu-IUD

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancy (all women)	1	285	Relative Risk (Fixed) 95% CI	1.51 [0.06, 36.67]
02 Observed number of pregnancy (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
03 Observed number of pregnancy (time from intercourse)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
04 Need for extra dose	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	1	285	Relative Risk (Fixed) 95% CI	16.59 [1.01, 273.52]
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	1	284	Relative Risk (Fixed) 95% CI	4.27 [1.56, 11.69]

### Comparison 22. Danazol (all doses) vs Yuzpe

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	2	485	Relative Risk (Fixed) 95% CI	1.78 [0.61, 5.22]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	1	384	Relative Risk (Fixed) 95% CI	1.53 [0.74, 3.18]

### Comparison 23. High-dose oestrogens vs Yuzpe

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	1	384	Relative Risk (Fixed) 95% CI	2.17 [0.20, 23.77]
02 Observed number of pregnancies (by risk status)	0	0	Relative Risk (Fixed) 95% CI	Not estimable
05 Any side-effect	0	0	Relative Risk (Fixed) 95% CI	Not estimable
06 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
07 Menses	0	0	Relative Risk (Fixed) 95% CI	Not estimable

### Comparison 24. Half-dose Yuzpe vs Standard Yuzpe

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies (all women)	1	1323	Relative Risk (Fixed) 95% CI	1.41 [0.76, 2.61]
02 Any side-effect	1	1288	Relative Risk (Fixed) 95% CI	0.85 [0.77, 0.93]
03 Specific side-effects			Relative Risk (Fixed) 95% CI	Subtotals only
04 Delay in menses	0	0	Relative Risk (Fixed) 95% CI	Not estimable

### Comparison 25. High risk vs low risk women (all hormonal methods)

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 Observed number of pregnancies	9	14978	Odds Ratio (Fixed) 95% CI	2.61 [2.00, 3.41]

### Comparison 26. Time elapsed since intercourse (Coitus-treatment interval)

Outcome title	No. of studies	No. of participants	Statistical method	Effect size
01 =<24 hr vs > 24- 48hr	4	4095	Odds Ratio (Fixed) 95% CI	0.45 [0.27, 0.74]
02 =< 24 vs >48 - 72 hr	3	2758	Odds Ratio (Fixed) 95% CI	0.36 [0.19, 0.66]
03 > 24 -48 hr vs > 48 - 72 hr	3	2747	Odds Ratio (Fixed) 95% CI	0.74 [0.45, 1.22]
04 < 72 vs >72	2	4447	Odds Ratio (Fixed) 95% CI	0.65 [0.35, 1.21]

## INDEX TERMS

### Medical Subject Headings (MeSH)

Contraception, Postcoital [\*methods]; Contraceptives, Oral, Combined; \*Contraceptives, Postcoital; Levonorgestrel; Mifepristone; Randomized Controlled Trials as Topic

### MeSH check words

Female; Humans

## COVER SHEET

<b>Title</b>	Interventions for emergency contraception
<b>Authors</b>	Cheng L, Gülmezoglu AM, Piaggio G, Ezcurra E, Van Look PFA
<b>Contribution of author(s)</b>	AMG had the idea and conducted the initial version of the review with LC. LC contributed to all sections of the review in both the current update and the previous version. CO extracted data, conducted additional statistical analysis and contributed to the text of the current update. PVL read and made comments to the text. EE conducted the HRP emergency contraception database search and read the text.
<b>Issue protocol first published</b>	1998/4
<b>Review first published</b>	1999/3
<b>Date of most recent amendment</b>	18 February 2008
<b>Date of most recent SUBSTANTIVE amendment</b>	18 February 2008

<b>What's New</b>	<p>The current update of the review includes 33 new trials. The results of a RCT on the new emergency contraceptive pill, CDB-2914 (second-generation progesterone receptor modulator), was first reported by Dr. Creinin (2006) and incorporated into the review. Sensitivity analyses were performed for all comparisons that pooled data of at least three trials (mainly for allocation concealment and also trial site when possible).</p> <p>In this update, the authors revised the use of the allocation concealment score to be more consistent with Cochrane procedures. This score refers to the concealment of allocation before assignment, and is not an overall quality score. Studies from the initial review were recoded for consistency in the allocation concealment score. The change did not alter the results or conclusions.</p>
<b>Date new studies sought but none found</b>	Information not supplied by author
<b>Date new studies found but not yet included/excluded</b>	Information not supplied by author
<b>Date new studies found and included/excluded</b>	Information not supplied by author
<b>Date authors' conclusions section amended</b>	31 March 2004
<b>Contact address</b>	<p>Dr Linan Cheng          Director, Shanghai Institute of Family Planning Technical Instruction          International Peace Maternity and Child Health Hospital (IPMCH)          China Welfare Institute          145 Guangyuan Road          910 Hengshan Road          Shanghai          200030          CHINA          E-mail: linanc@online.sh.cn          Tel: +86 21 64746080          Fax: +86 21 64748015</p>
<b>DOI</b>	10.1002/14651858.CD001324.pub3
<b>Cochrane Library number</b>	CD001324
<b>Editorial group</b>	Cochrane Fertility Regulation Group
<b>Editorial group code</b>	HM-FERTILREG

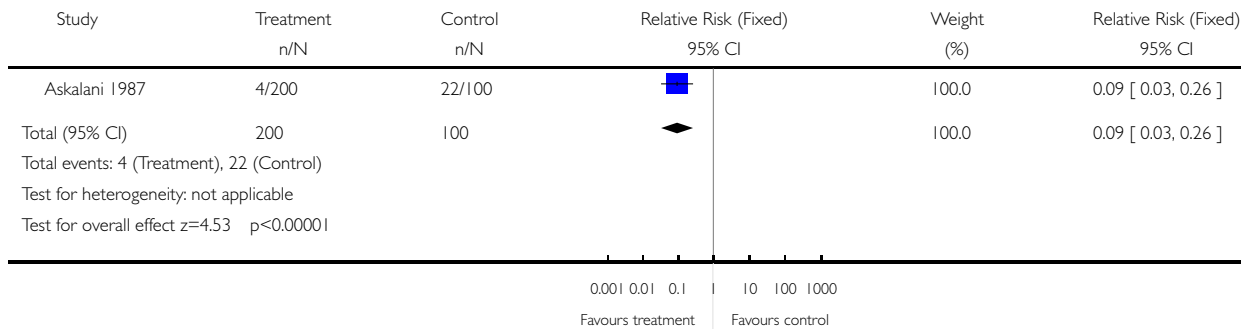
## GRAPHS AND OTHER TABLES

### Analysis 01.01. Comparison 01 Intrauterine contraceptive device versus control, Outcome 01 Observed number of pregnancies

Review: Interventions for emergency contraception

Comparison: 01 Intrauterine contraceptive device versus control

Outcome: 01 Observed number of pregnancies

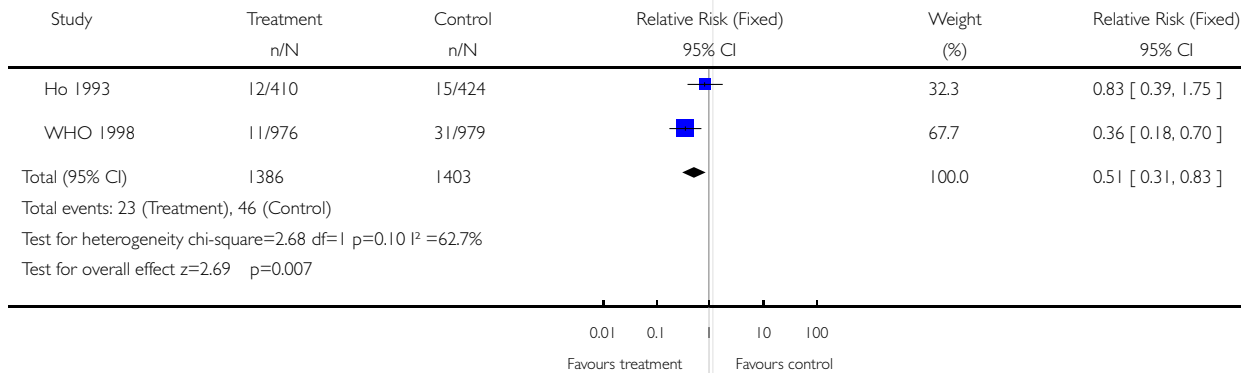


### Analysis 02.01. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 01 Observed number of pregnancies (all women)

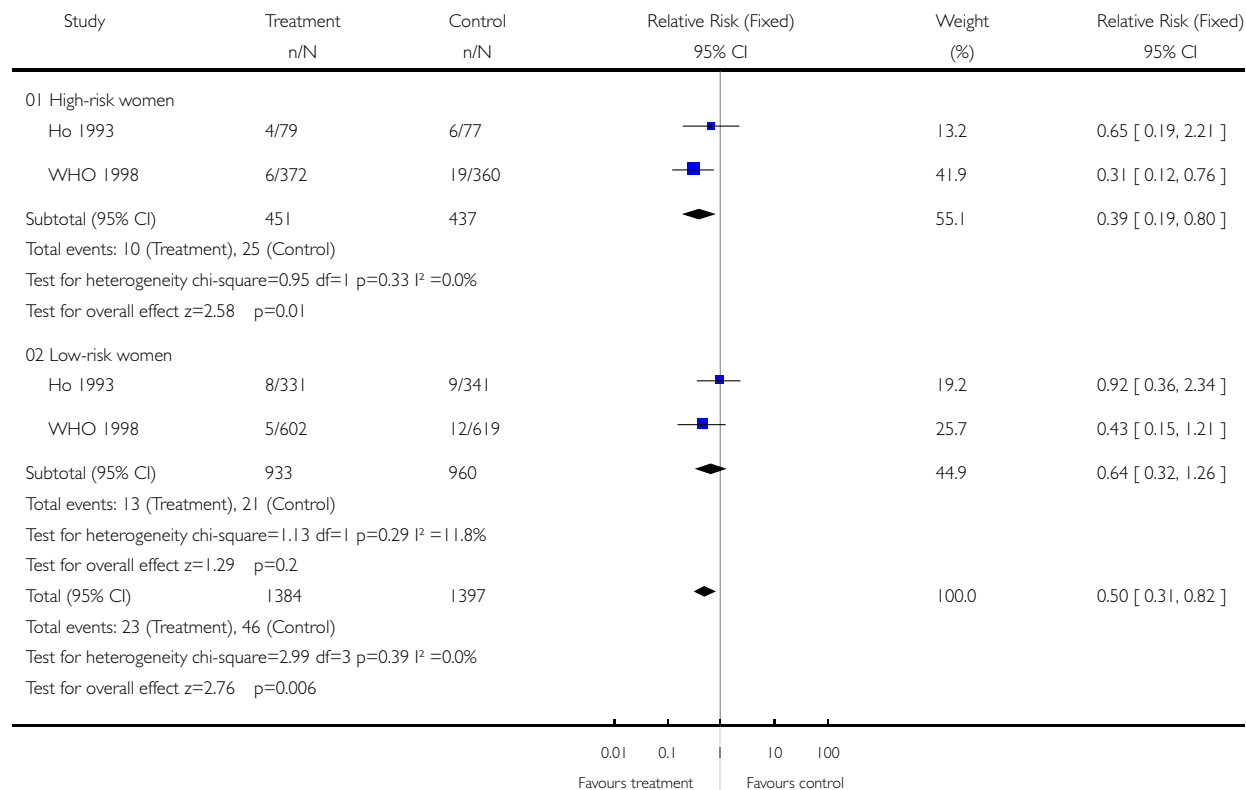


## Analysis 02.02. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 02 Observed number of pregnancies (by risk status)

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 02 Observed number of pregnancies (by risk status)

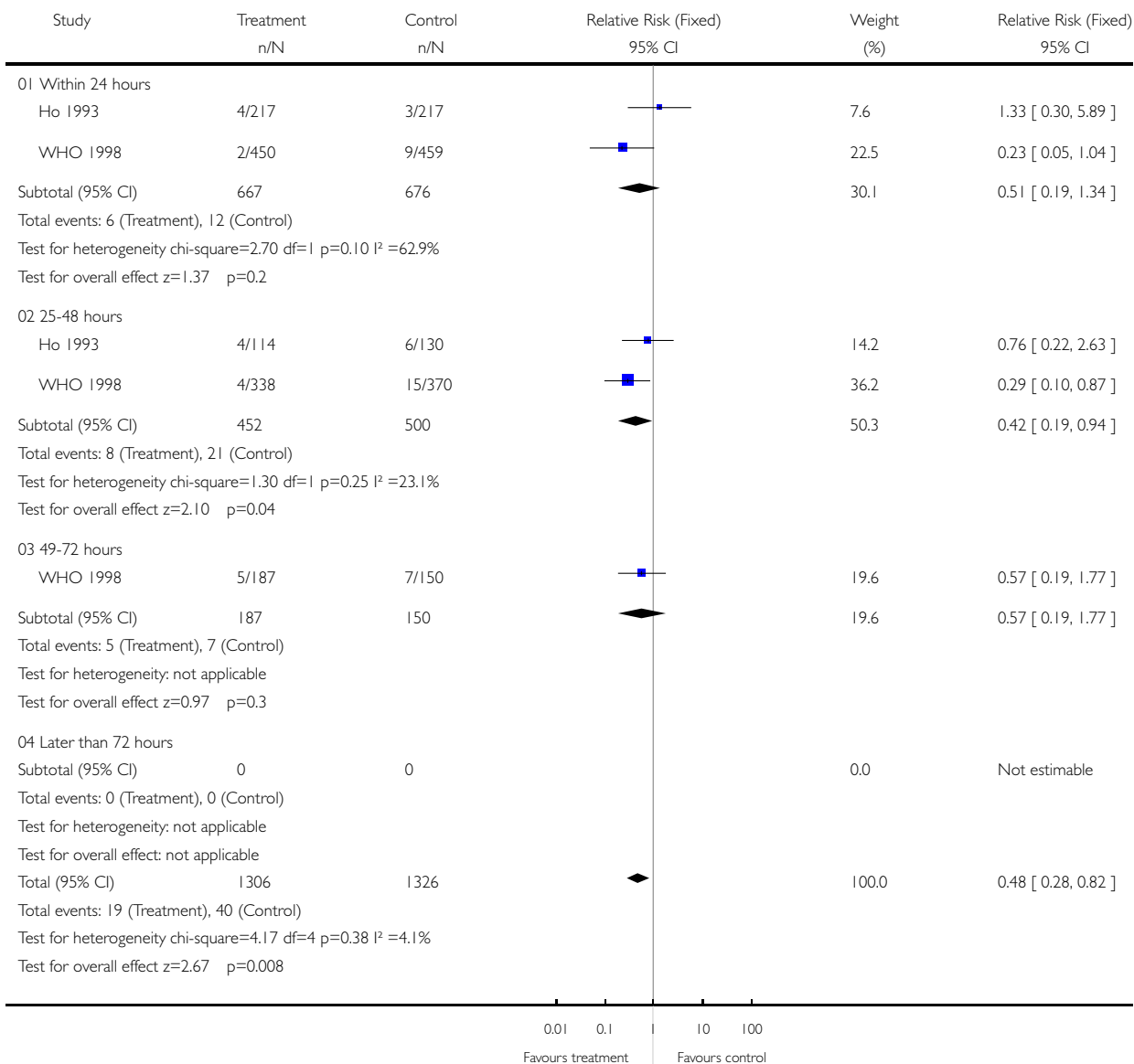


### Analysis 02.03. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 03 Observed number of pregnancies (time from intercourse)

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 03 Observed number of pregnancies (time from intercourse)

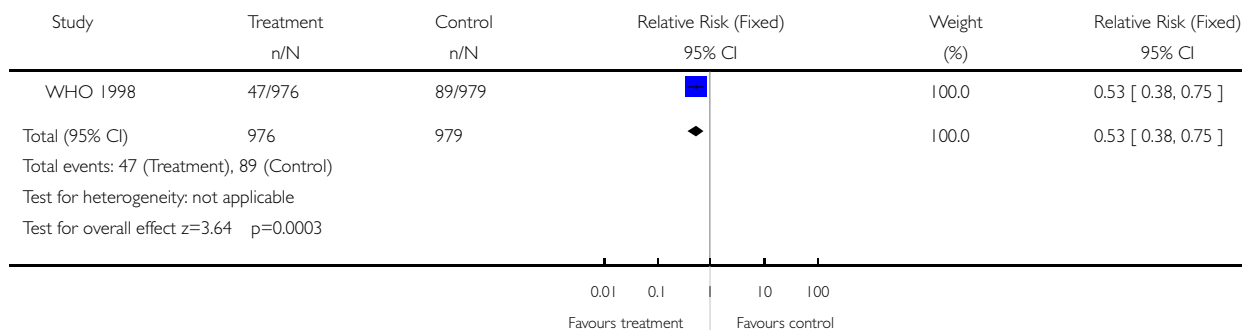


#### Analysis 02.04. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 04 Need for extra dose

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 04 Need for extra dose

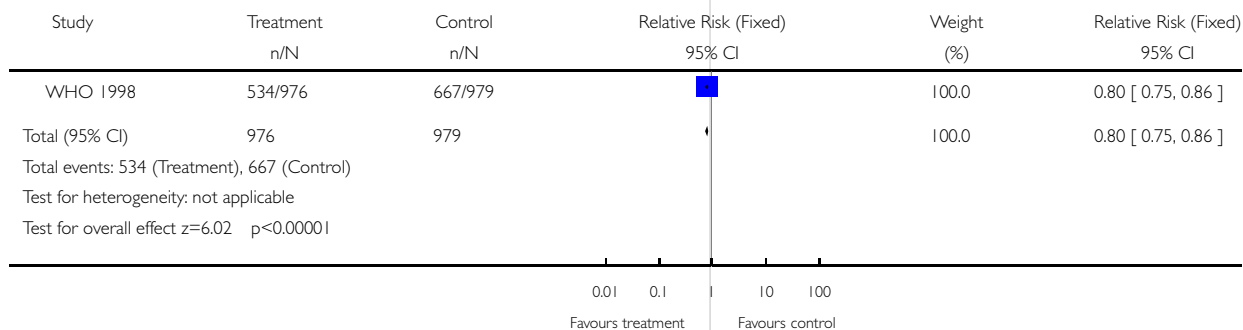


#### Analysis 02.05. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 05 Any side-effect



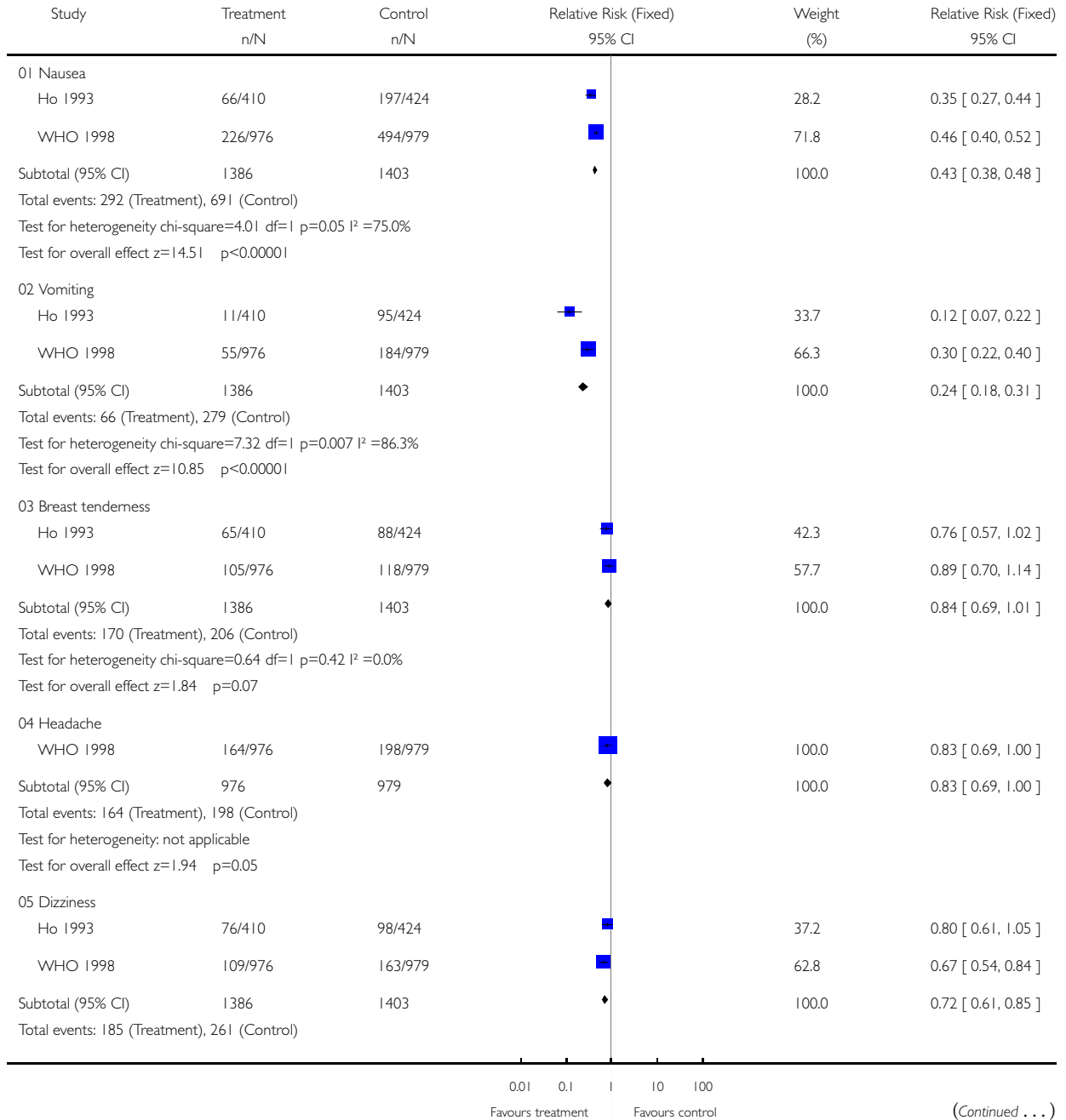


## Analysis 02.06. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 06 Specific side-effects

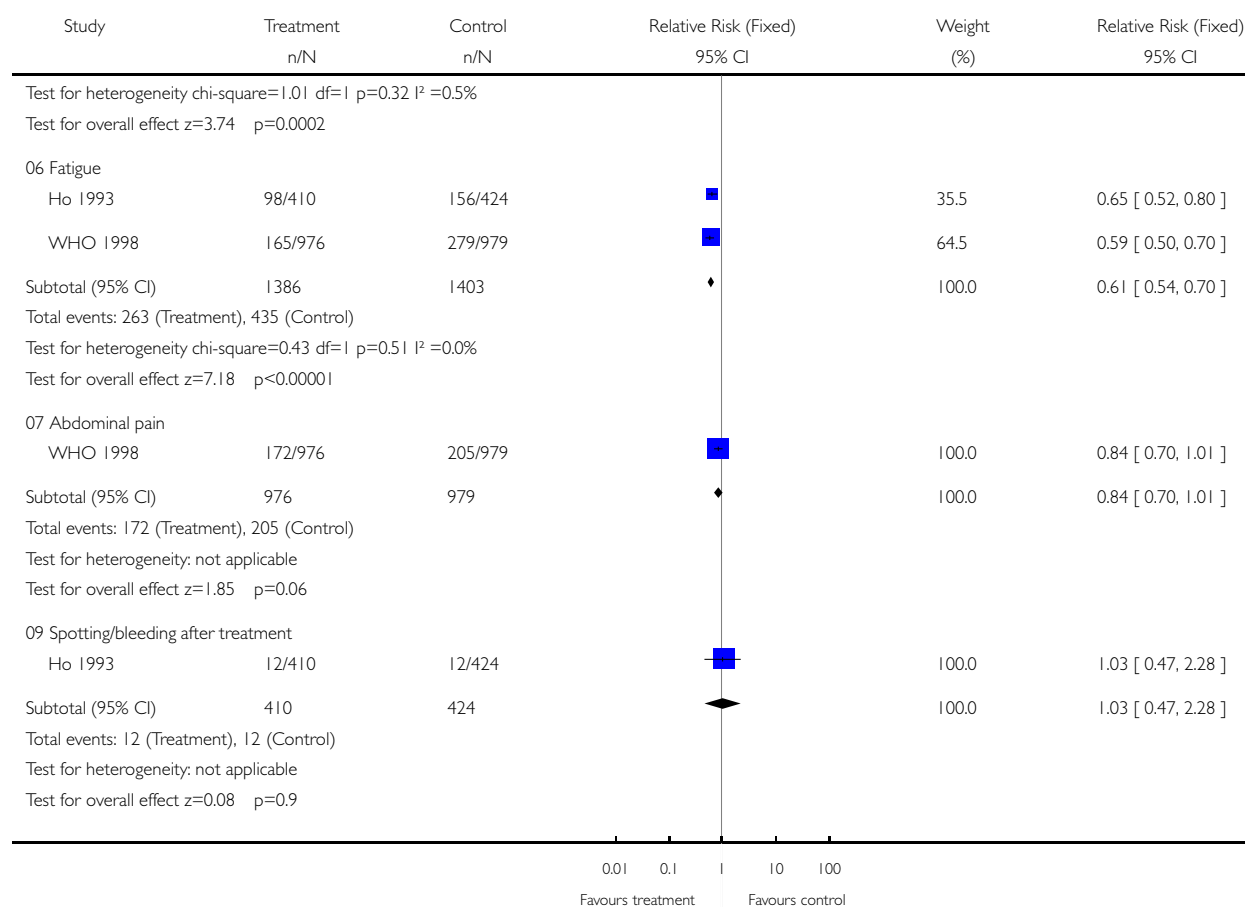
Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 06 Specific side-effects



(... Continued)

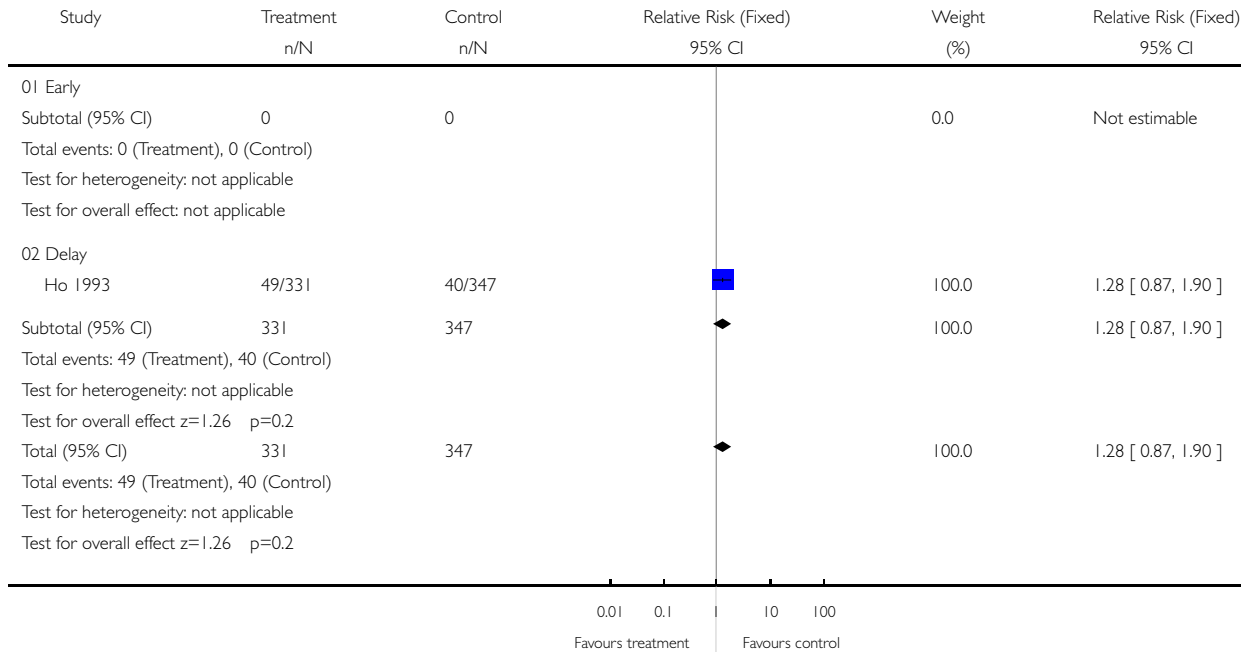


### Analysis 02.07. Comparison 02 Levonorgestrel vs Yuzpe, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 02 Levonorgestrel vs Yuzpe

Outcome: 07 Menses

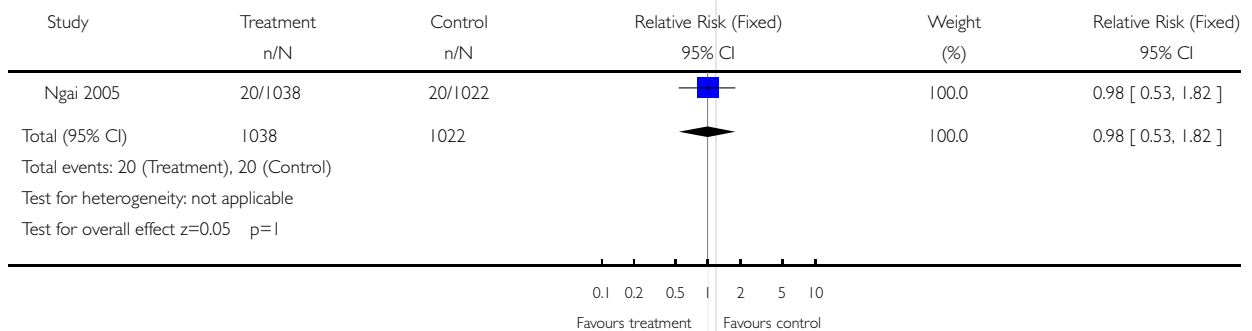


### Analysis 03.01. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 01 Observed number of pregnancy (all women)

Review: Interventions for emergency contraception

Comparison: 03 Levonorgestrel split-dose 24 h vs.12 h

Outcome: 01 Observed number of pregnancy (all women)

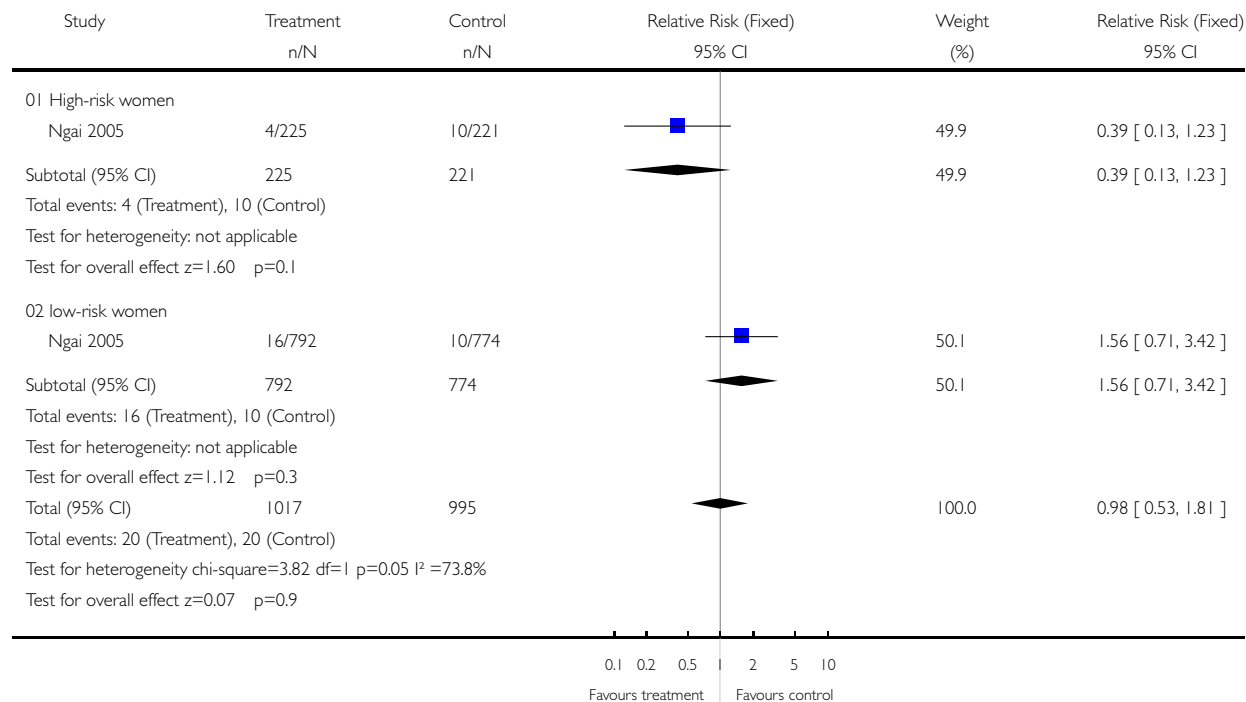


### Analysis 03.02. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 02 Observed number of pregnancy (by risk status)

Review: Interventions for emergency contraception

Comparison: 03 Levonorgestrel split-dose 24 h vs.12 h

Outcome: 02 Observed number of pregnancy (by risk status)

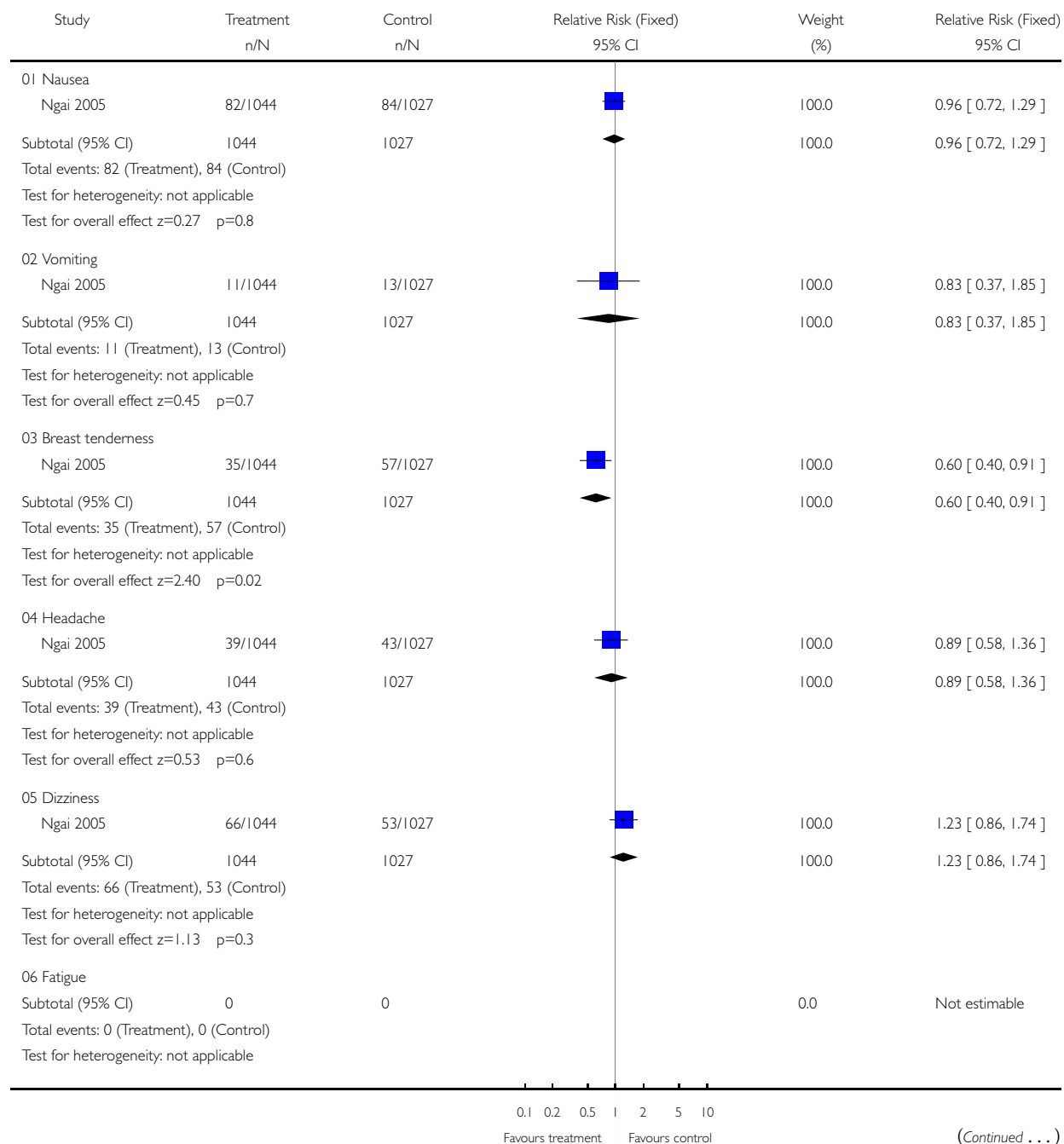


### Analysis 03.06. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 06 Specific side-effects

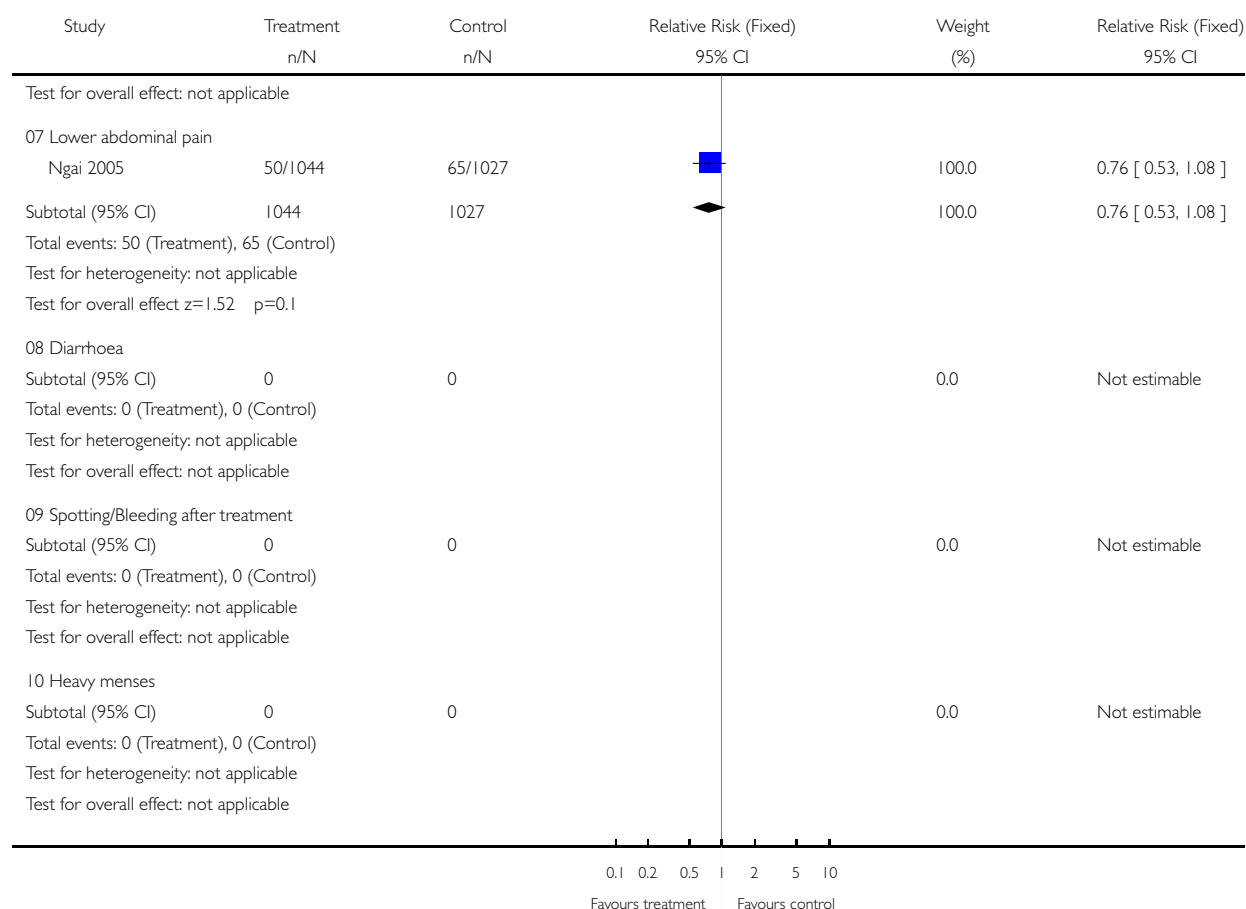
Review: Interventions for emergency contraception

Comparison: 03 Levonorgestrel split-dose 24 h vs.12 h

Outcome: 06 Specific side-effects



(... Continued)

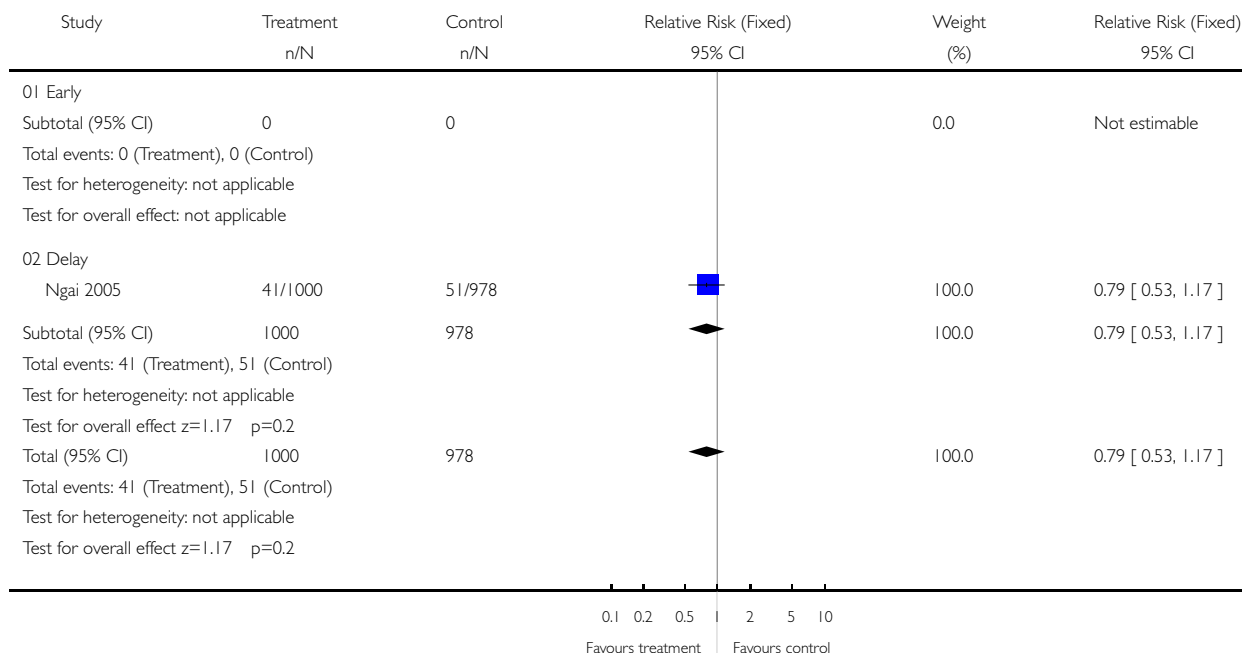


### Analysis 03.07. Comparison 03 Levonorgestrel split-dose 24 h vs.12 h, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 03 Levonorgestrel split-dose 24 h vs.12 h

Outcome: 07 Menses

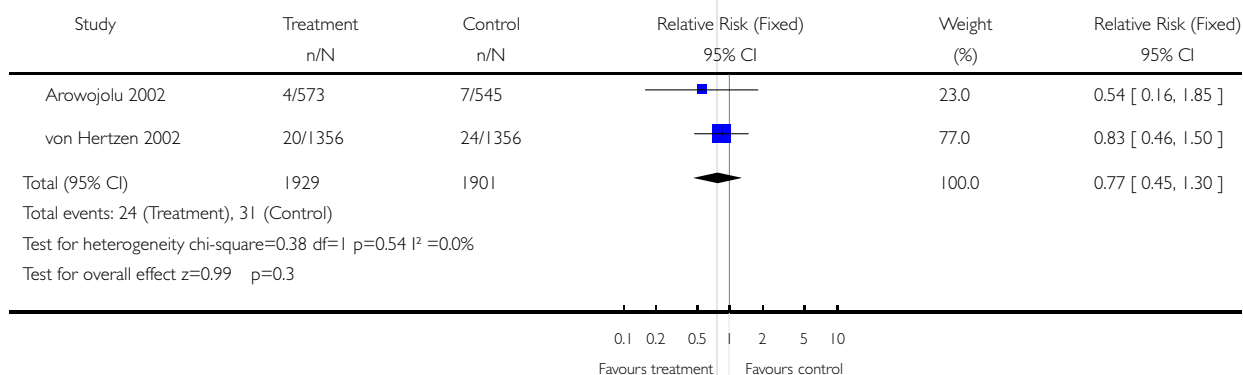


### Analysis 04.01. Comparison 04 Levonorgestrel single vs split-dose, Outcome 01 Observed number of pregnancy (all women)

Review: Interventions for emergency contraception

Comparison: 04 Levonorgestrel single vs split-dose

Outcome: 01 Observed number of pregnancy (all women)

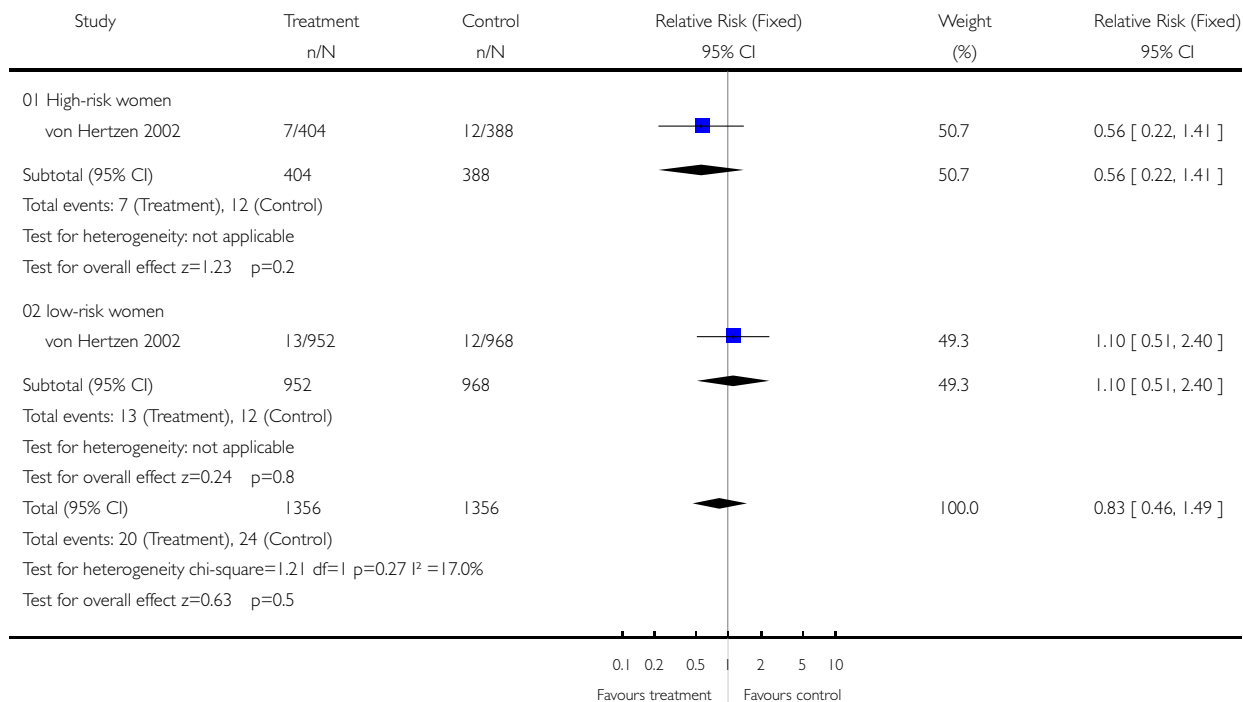


# **Analysis 04.02. Comparison 04 Levonorgestrel single vs split-dose, Outcome 02 Observed number of pregnancy (by risk status)**

Review: Interventions for emergency contraception

Comparison: 04 Levonorgestrel single vs split-dose

Outcome: 02 Observed number of pregnancy (by risk status)



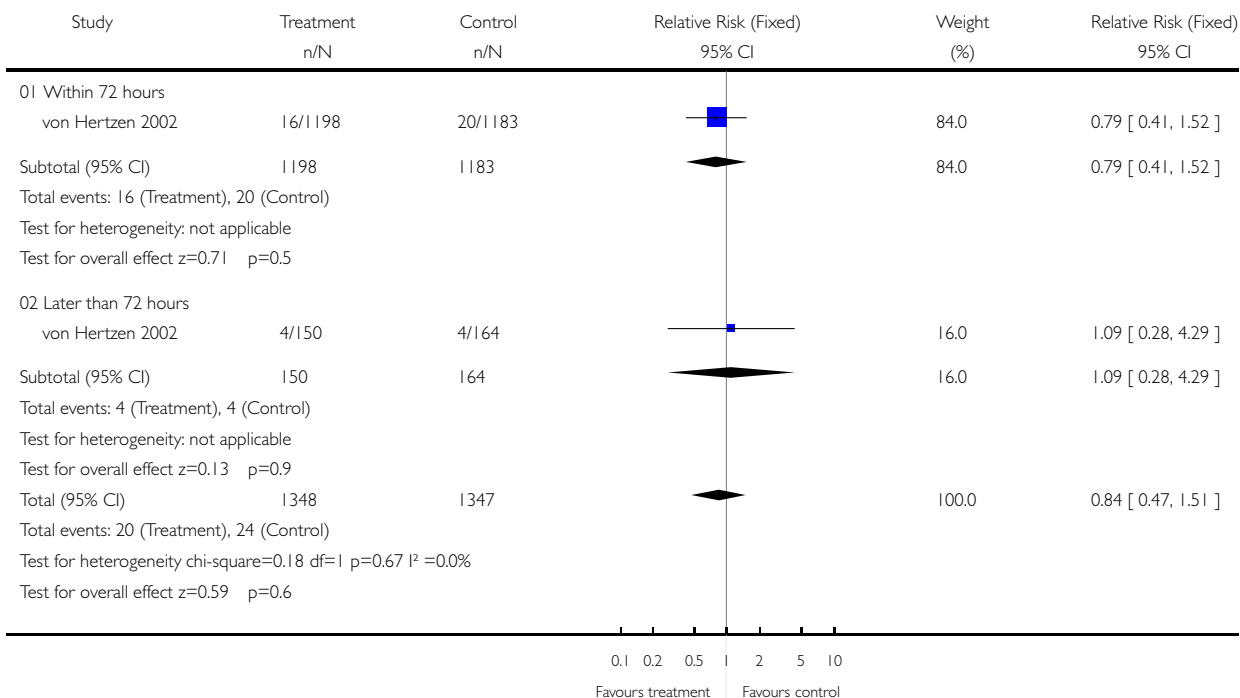


### Analysis 04.03. Comparison 04 Levonorgestrel single vs split-dose, Outcome 03 Observed number of pregnancy (time from intercourse)

Review: Interventions for emergency contraception

Comparison: 04 Levonorgestrel single vs split-dose

Outcome: 03 Observed number of pregnancy (time from intercourse)

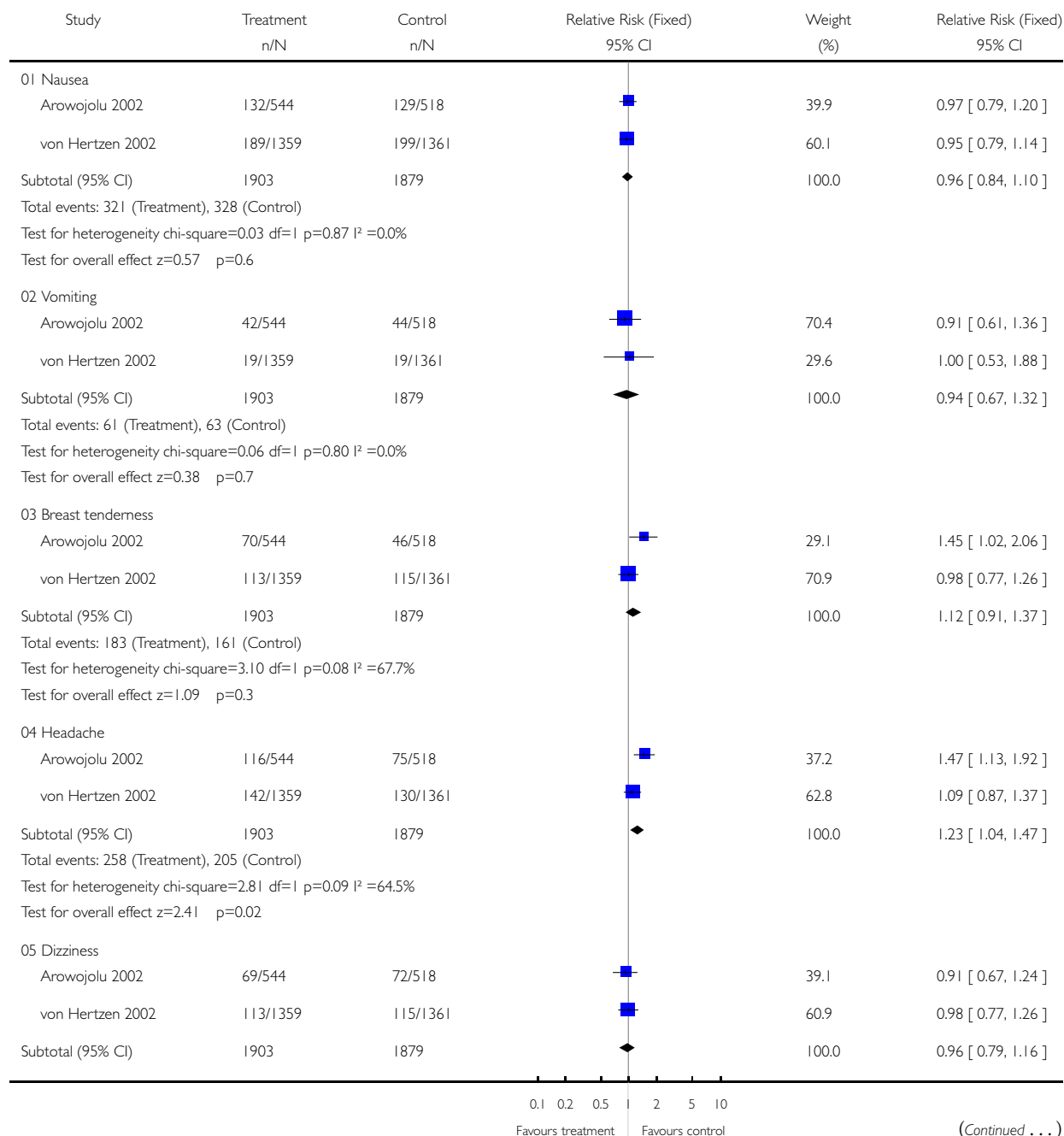


# **Analysis 04.06. Comparison 04 Levonorgestrel single vs split-dose, Outcome 06 Specific side-effects**

Review: Interventions for emergency contraception

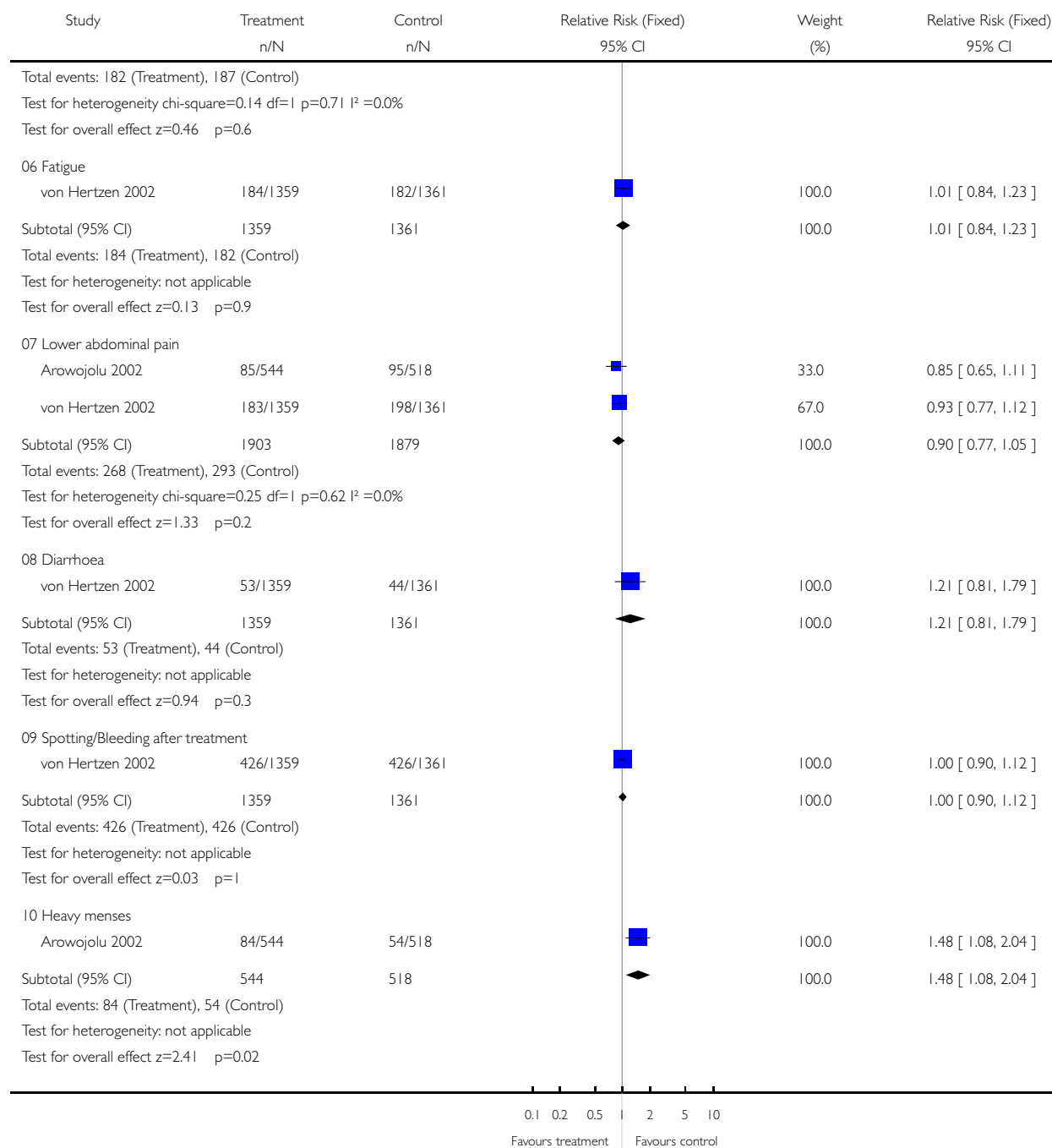
Comparison: 04 Levonorgestrel single vs split-dose

Outcome: 06 Specific side-effects



(Continued ...)

(... Continued)

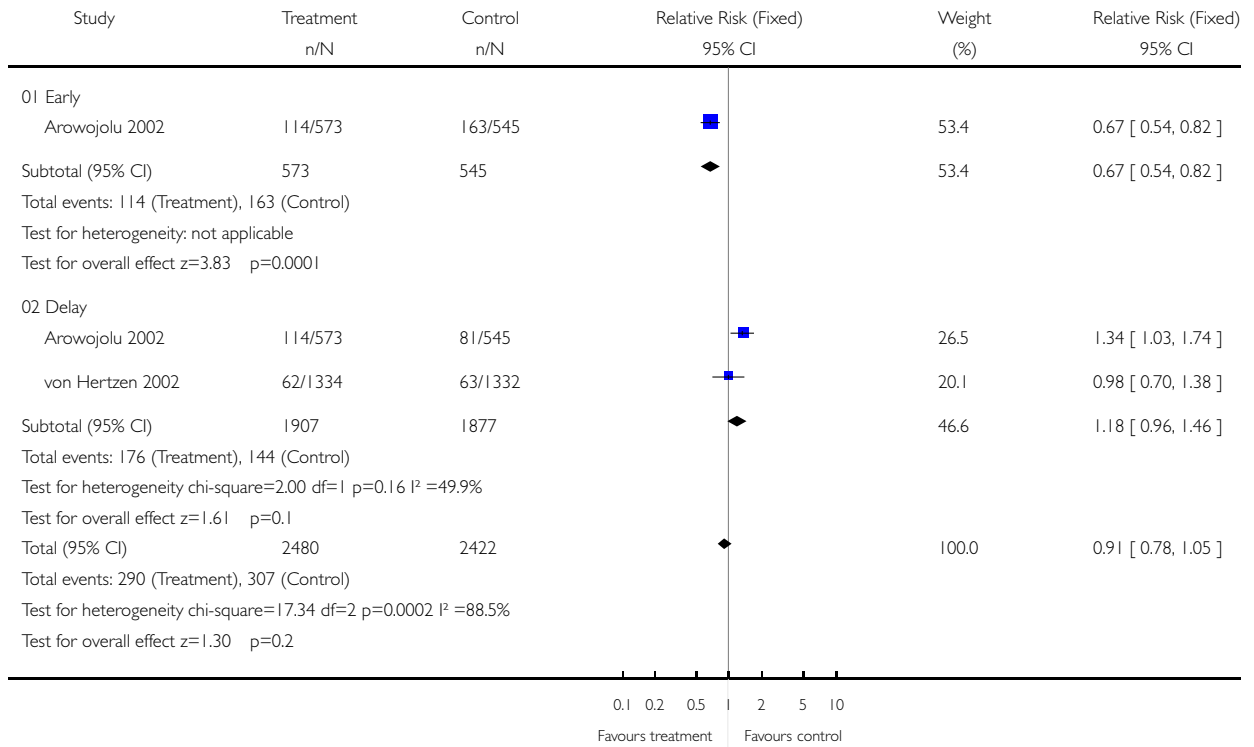


### Analysis 04.07. Comparison 04 Levonorgestrel single vs split-dose, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 04 Levonorgestrel single vs split-dose

Outcome: 07 Menses

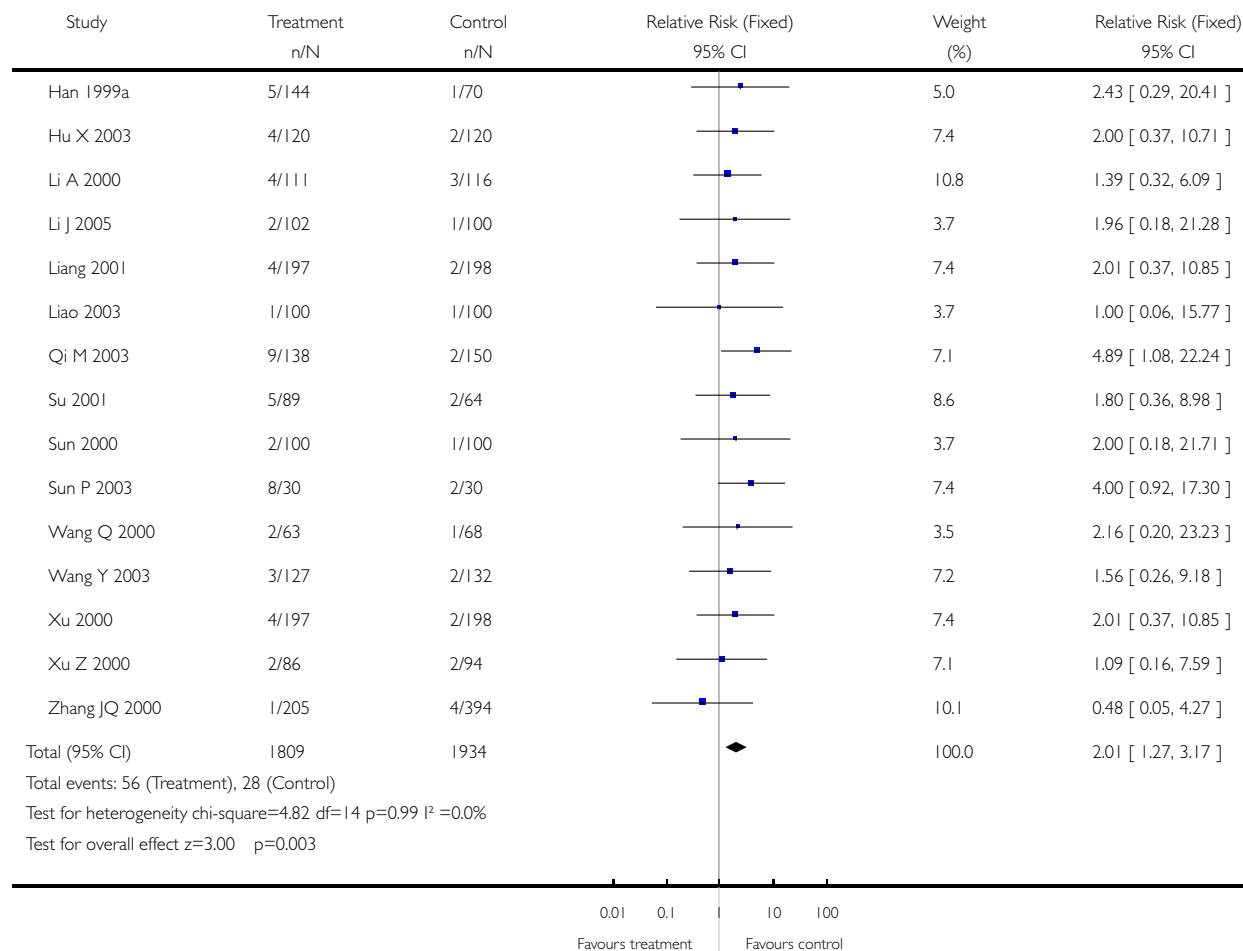


**Analysis 05.01. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 01 Observed number of pregnancies (all women)

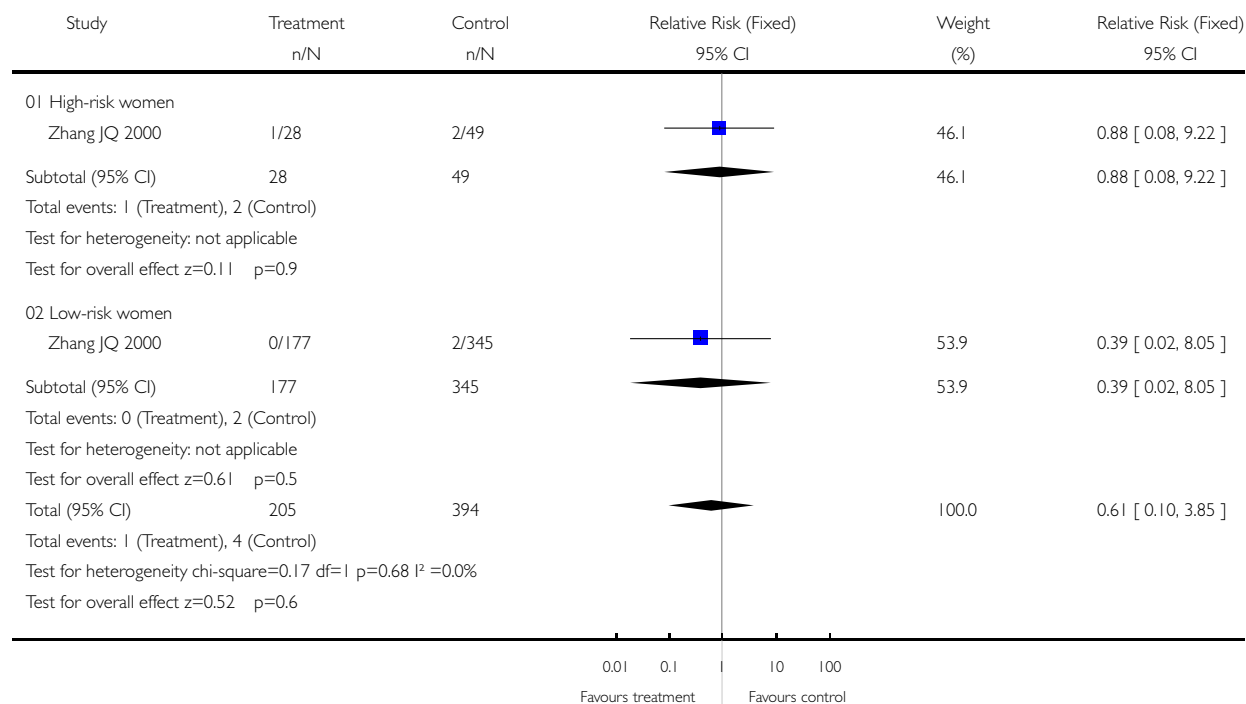


**Analysis 05.02. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 02 Observed number of pregnancies (by risk status)**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 02 Observed number of pregnancies (by risk status)

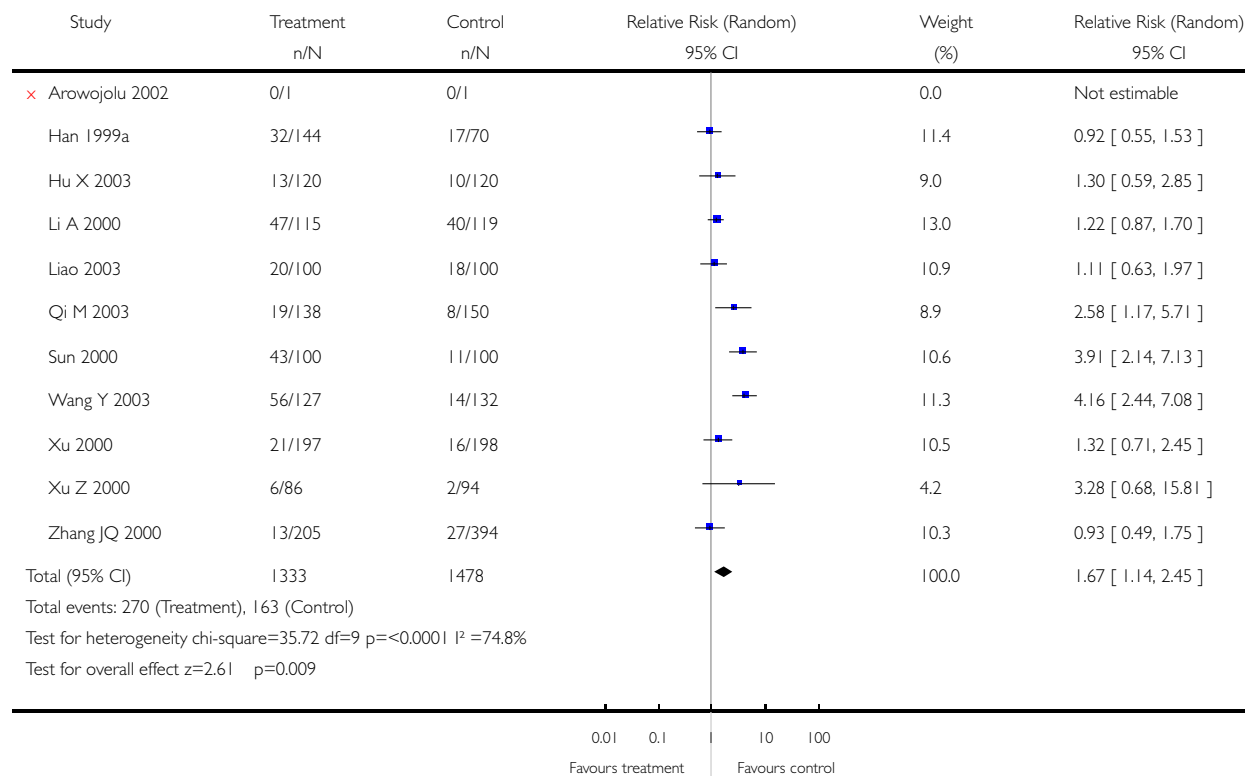


# **Analysis 05.05. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 05 Any side-effect**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 05 Any side-effect

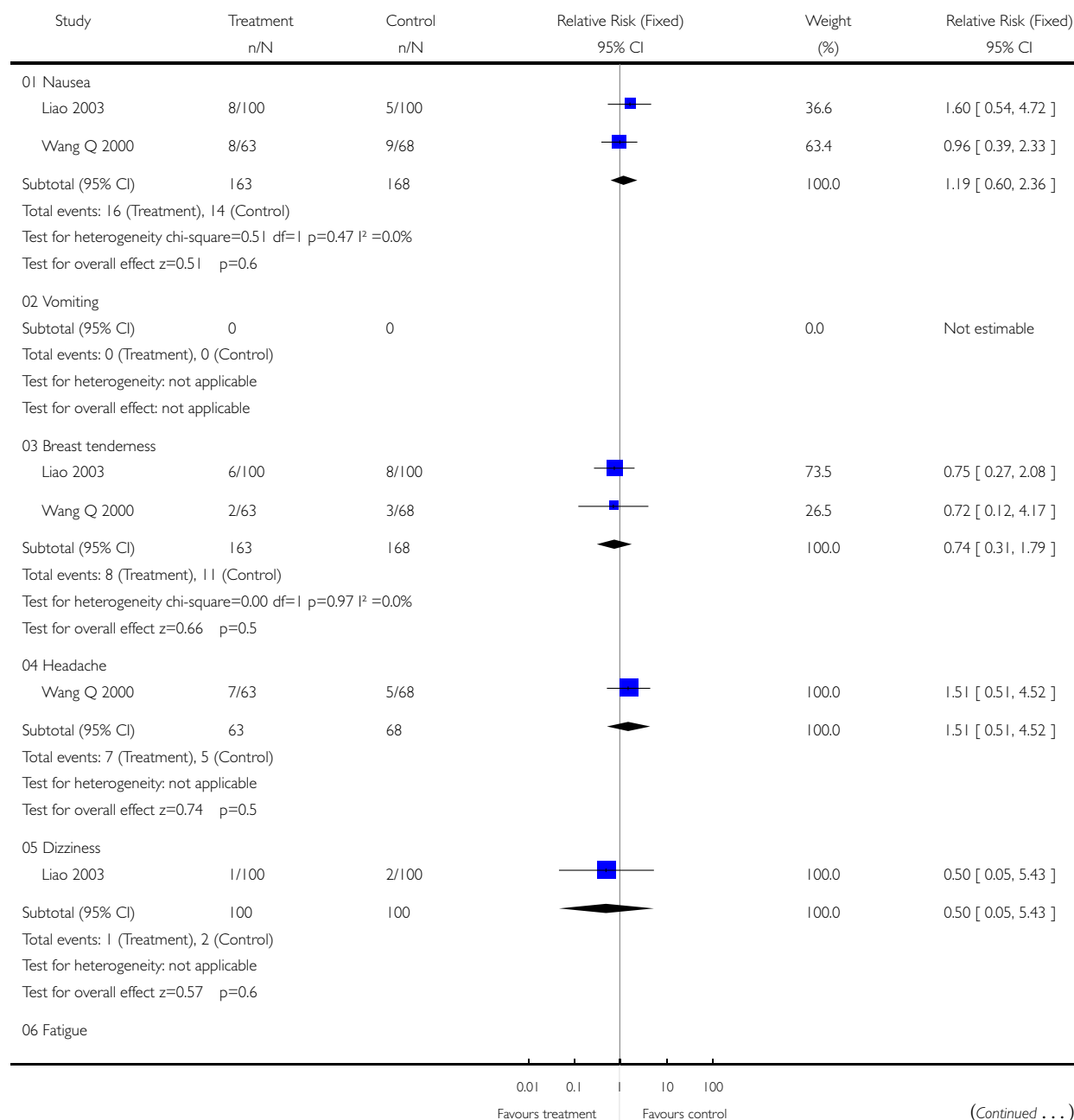


# **Analysis 05.06. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 06 Specific side-effect**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

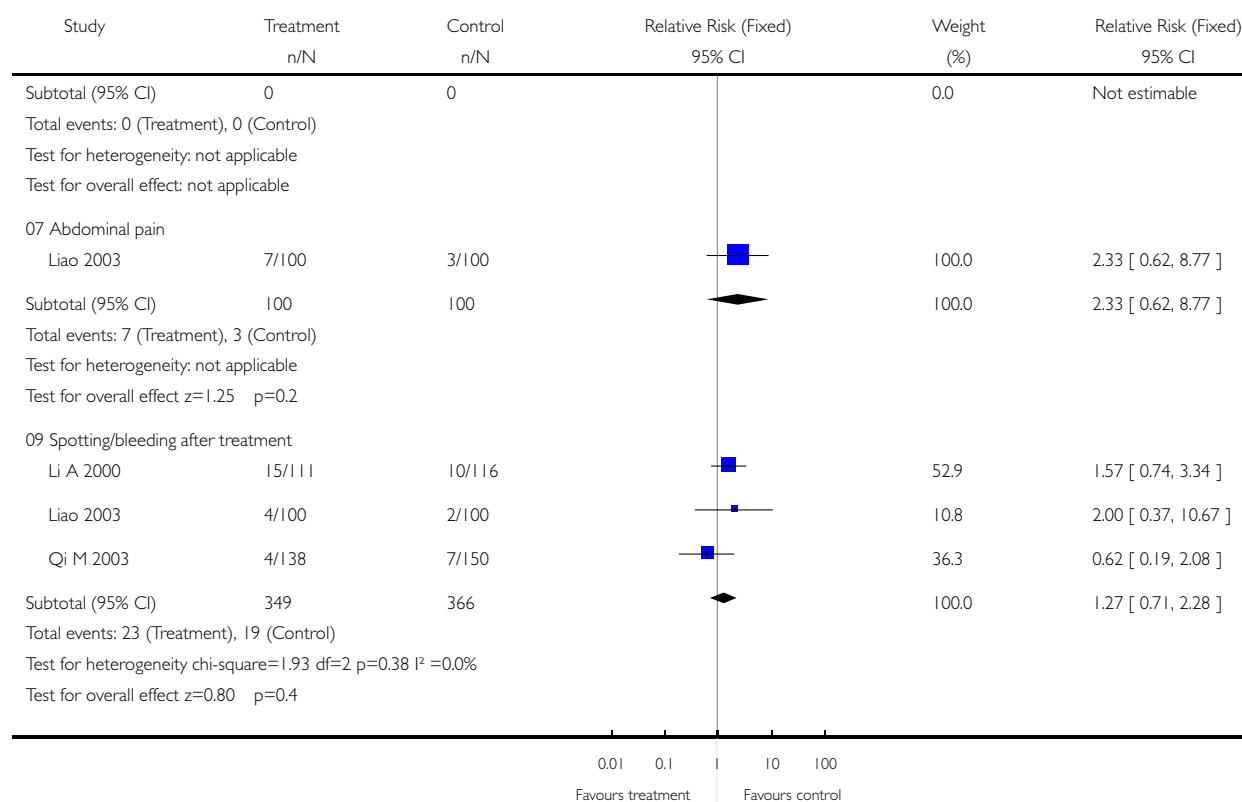
Outcome: 06 Specific side-effect



(Continued ...)



(... Continued)

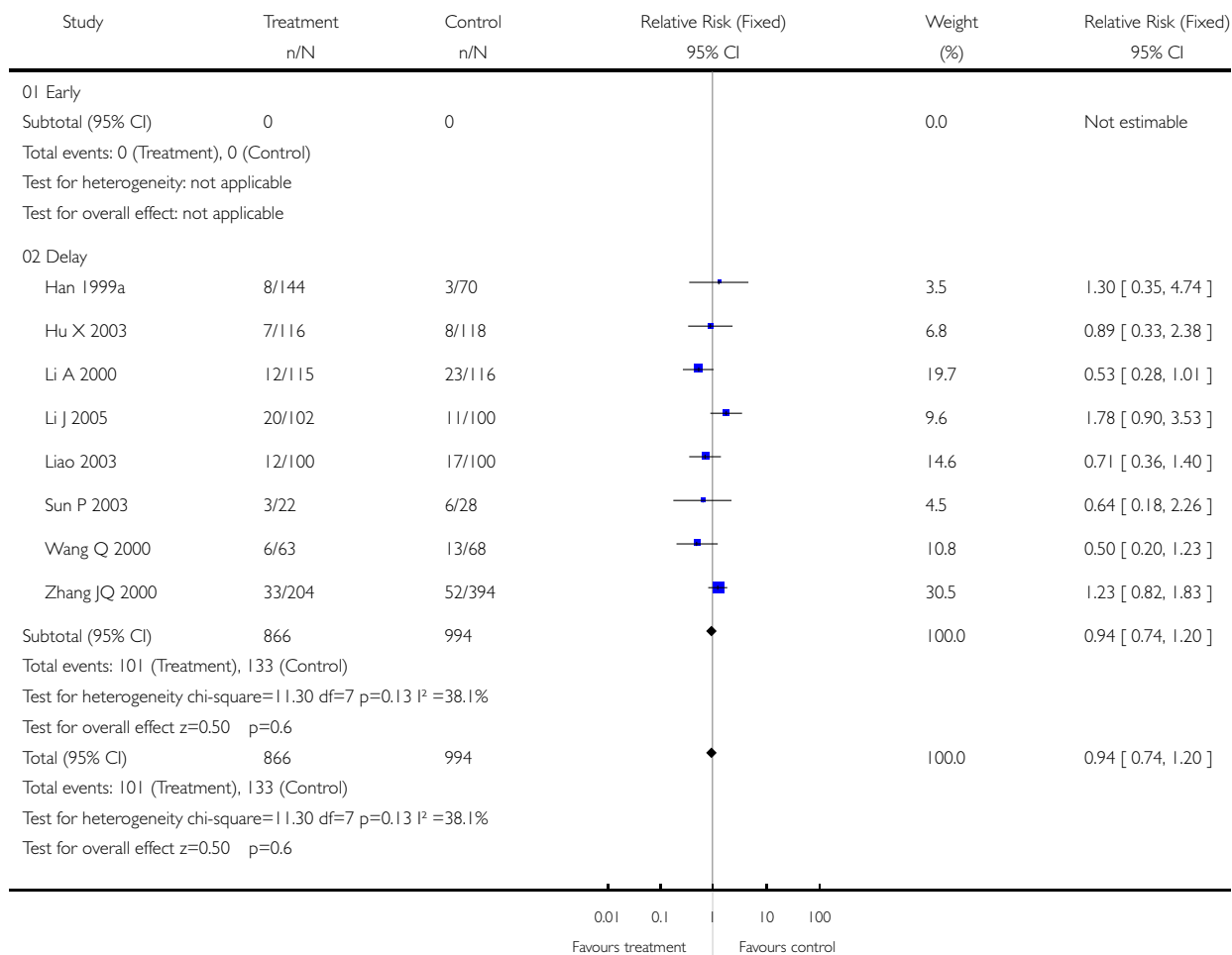


# **Analysis 05.07. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 07 Menses**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 07 Menses

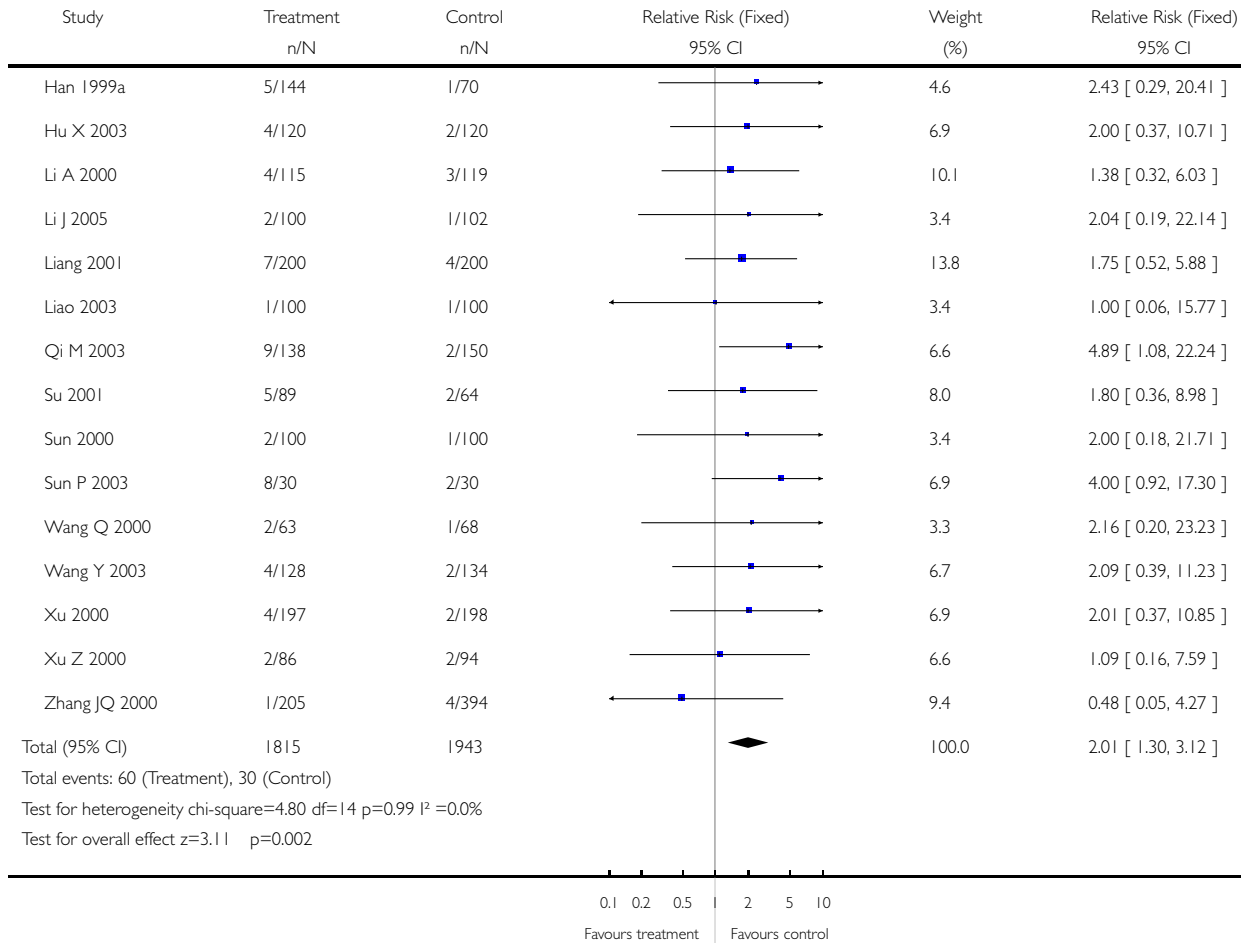


**Analysis 05.08. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)

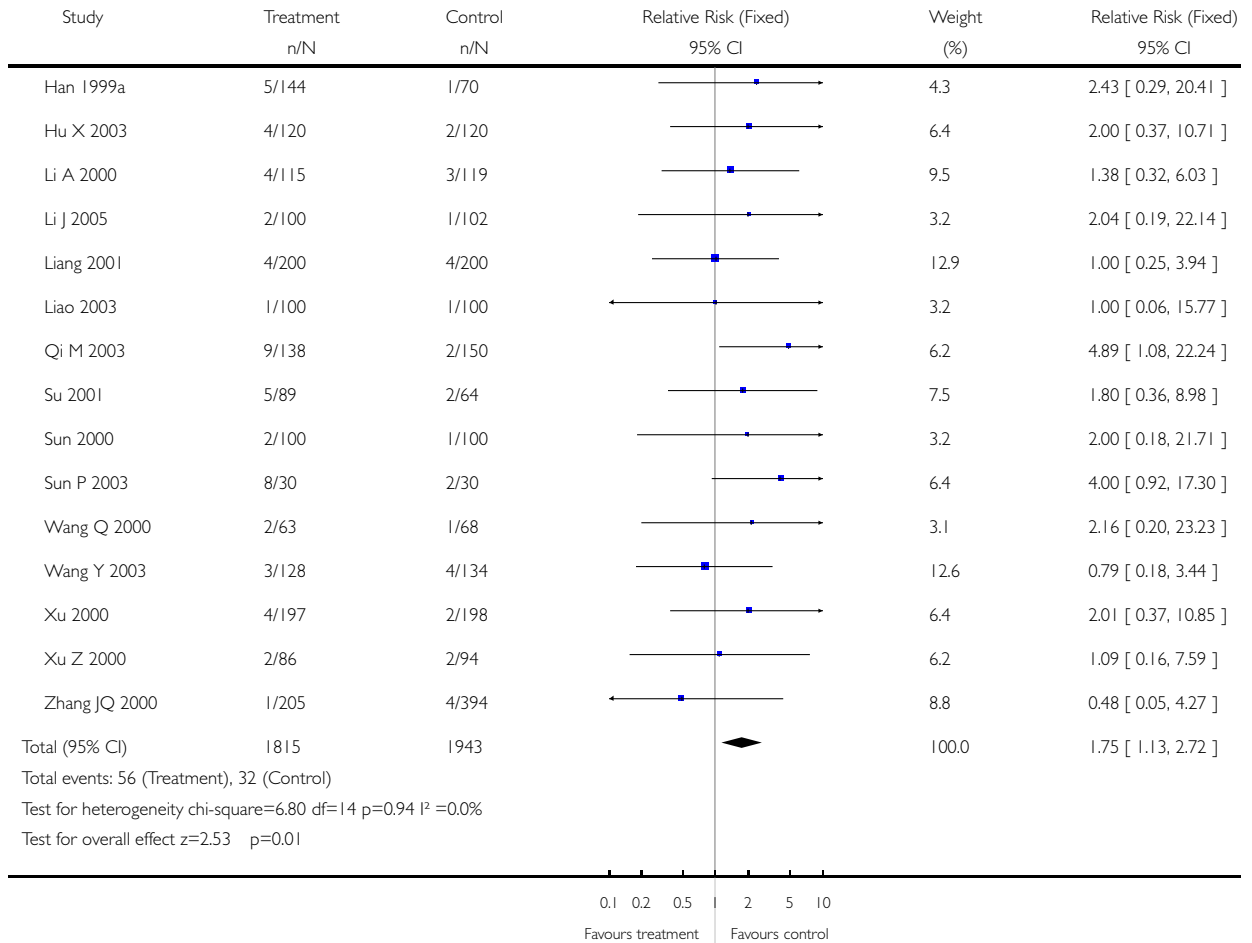


**Analysis 05.09. Comparison 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg), Outcome 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)**

Review: Interventions for emergency contraception

Comparison: 05 Levonorgestrel 1.5 mg vs mifepristone mid-dose (25-50mg)

Outcome: 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)

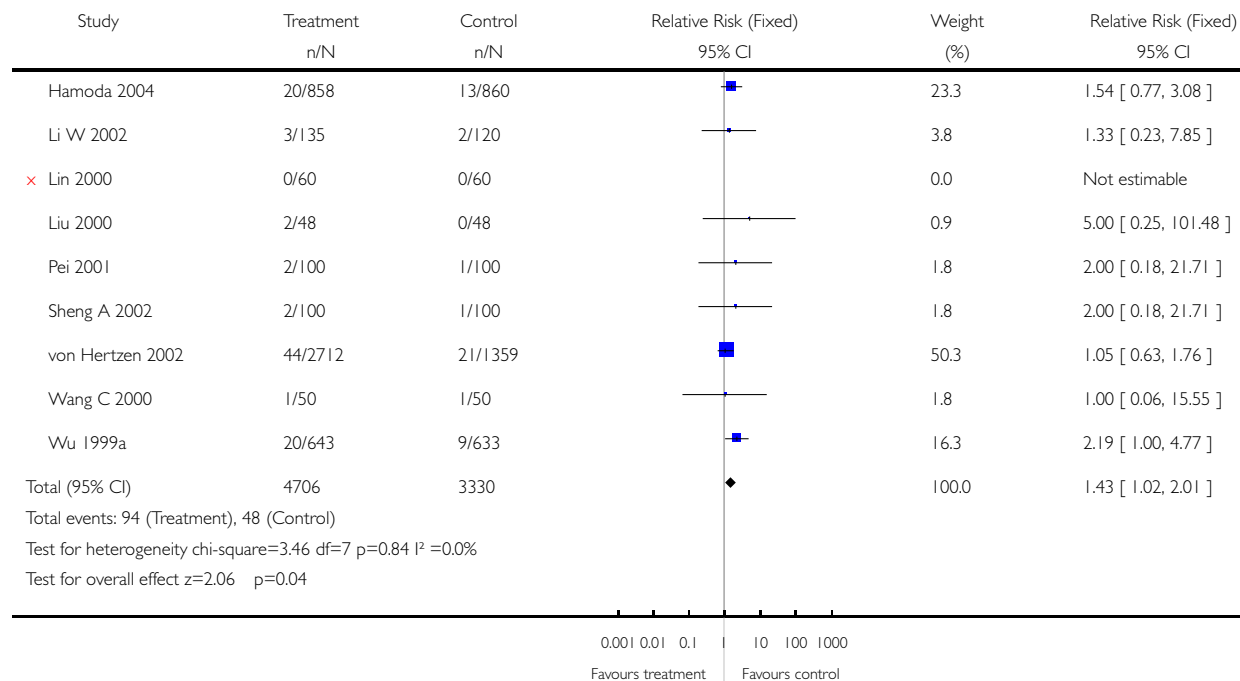


**Analysis 06.01. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 01 Observed number of pregnancies (all women)

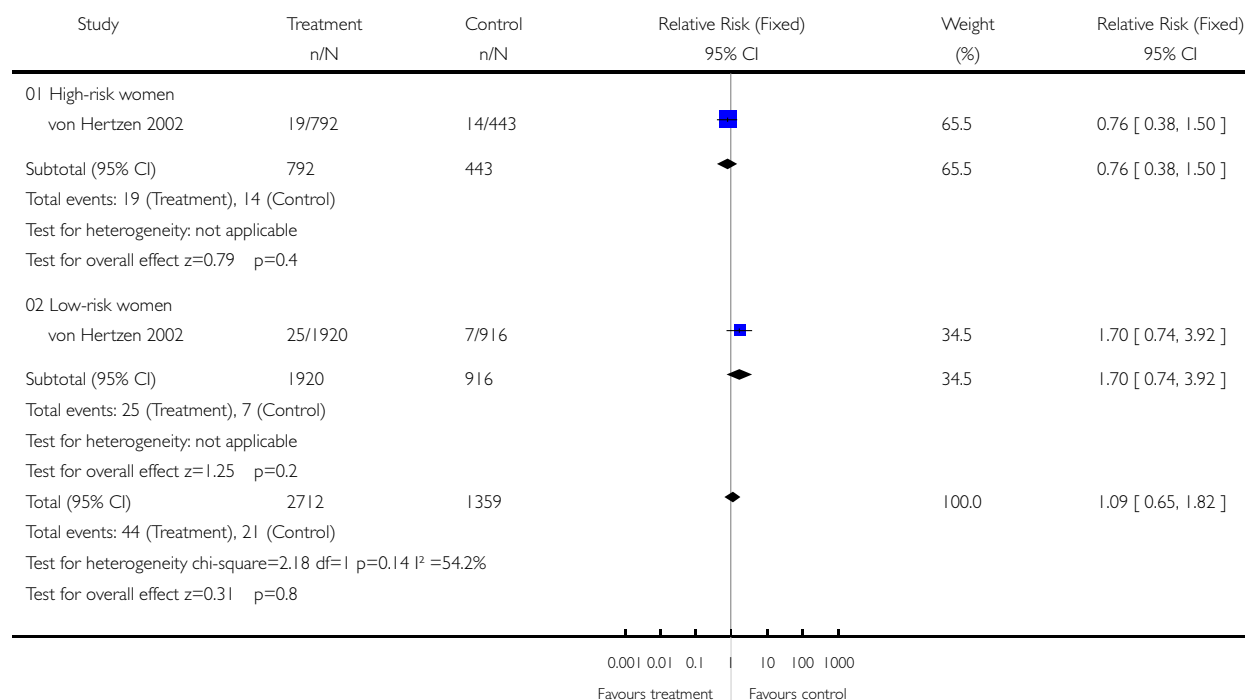


**Analysis 06.02. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 02 Observed number of pregnancies (by risk status)**

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 02 Observed number of pregnancies (by risk status)

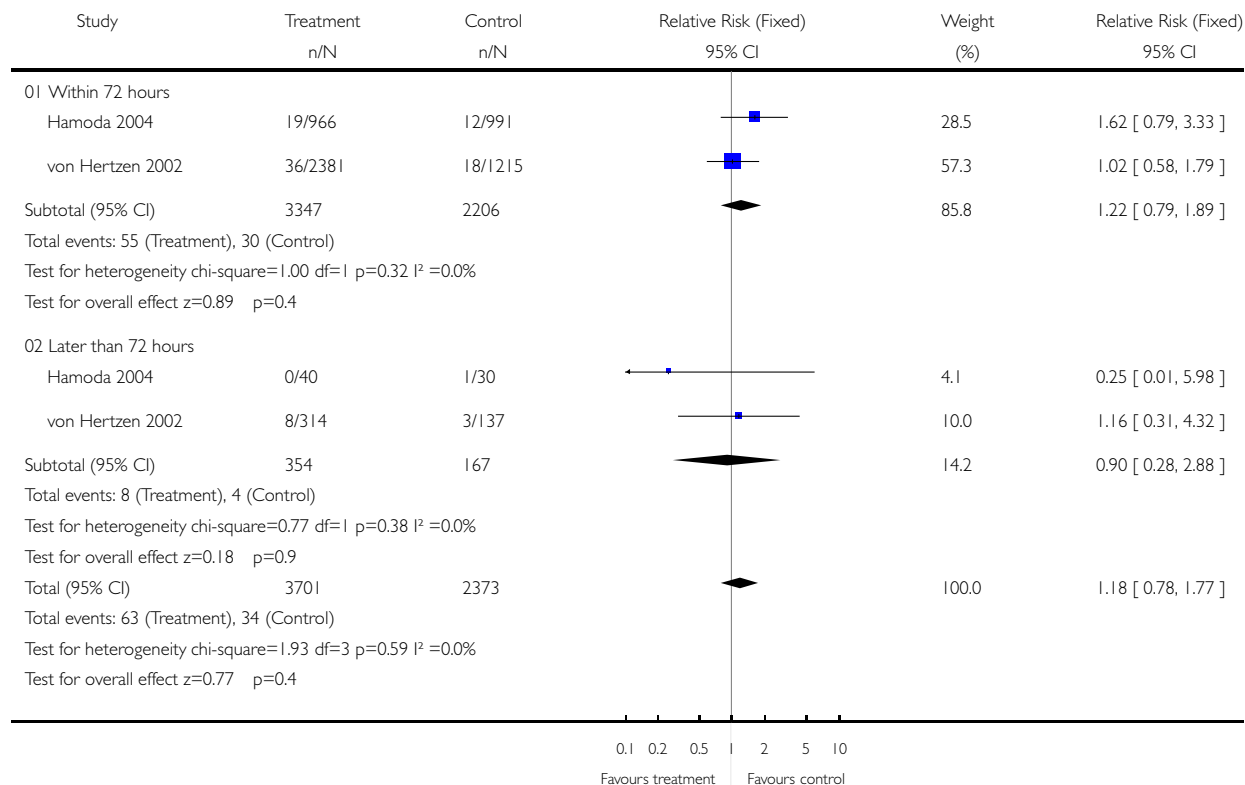


### Analysis 06.03. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 03 Observed number of pregnancies (time from intercourse))

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 03 Observed number of pregnancies (time from intercourse))

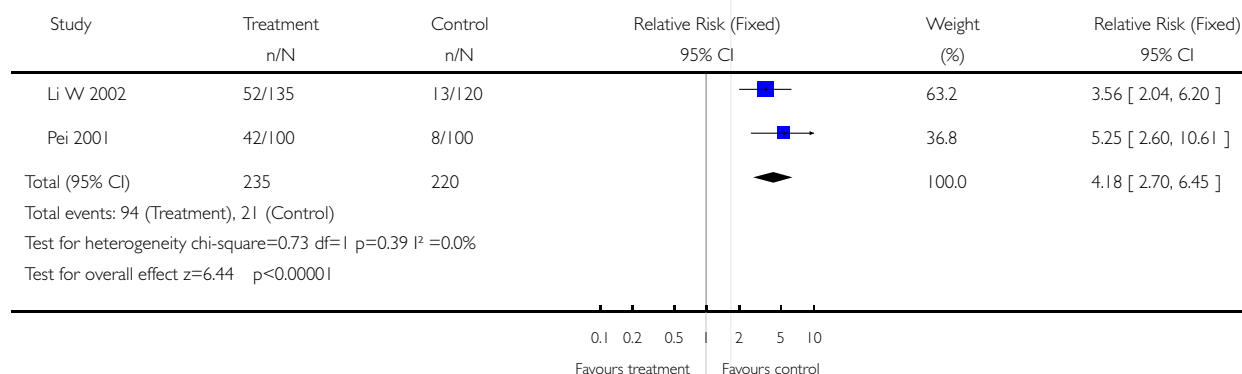


### Analysis 06.05. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 05 Any side-effect

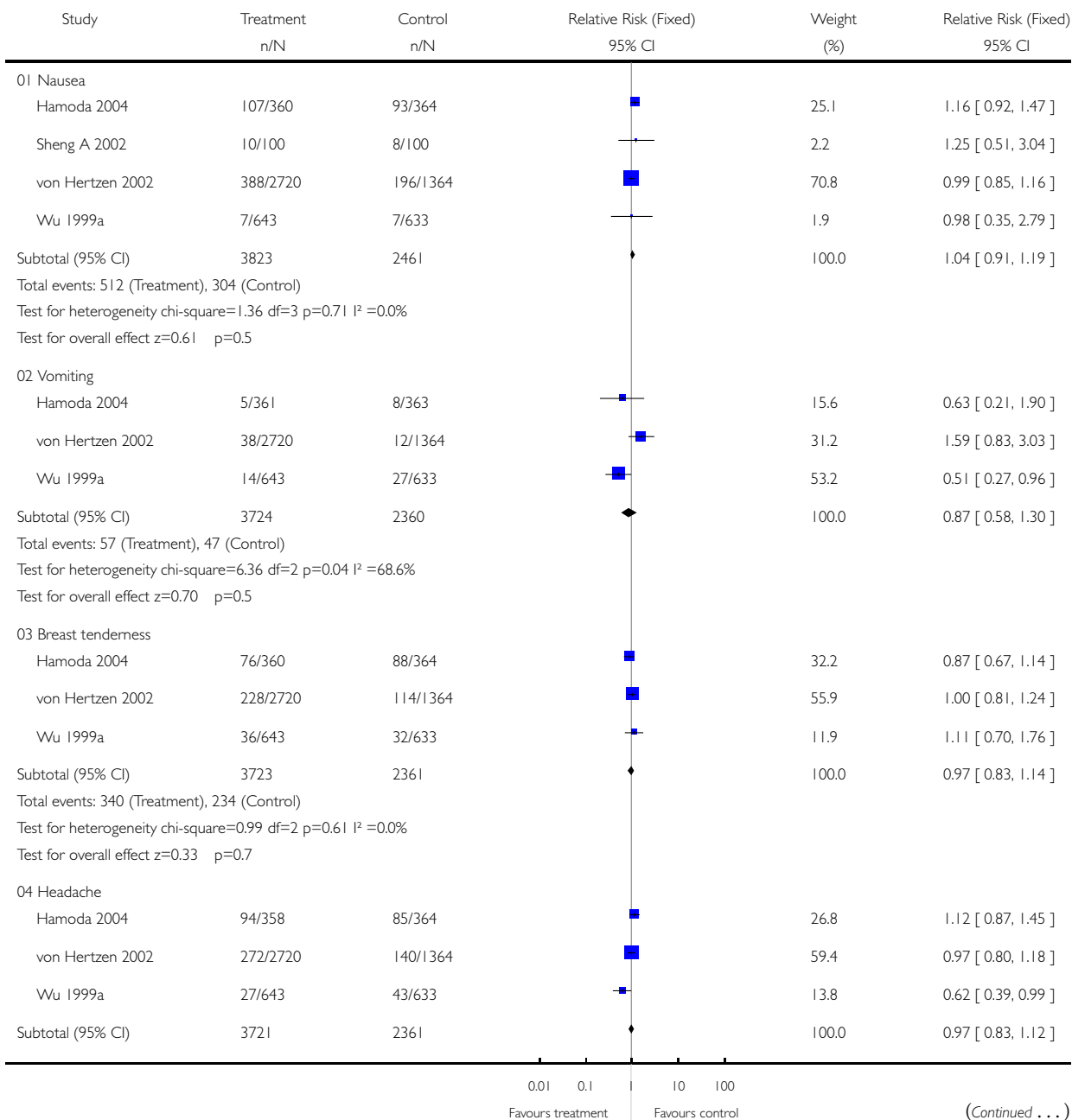


## Analysis 06.06. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 06 Specific side-effect

Review: Interventions for emergency contraception

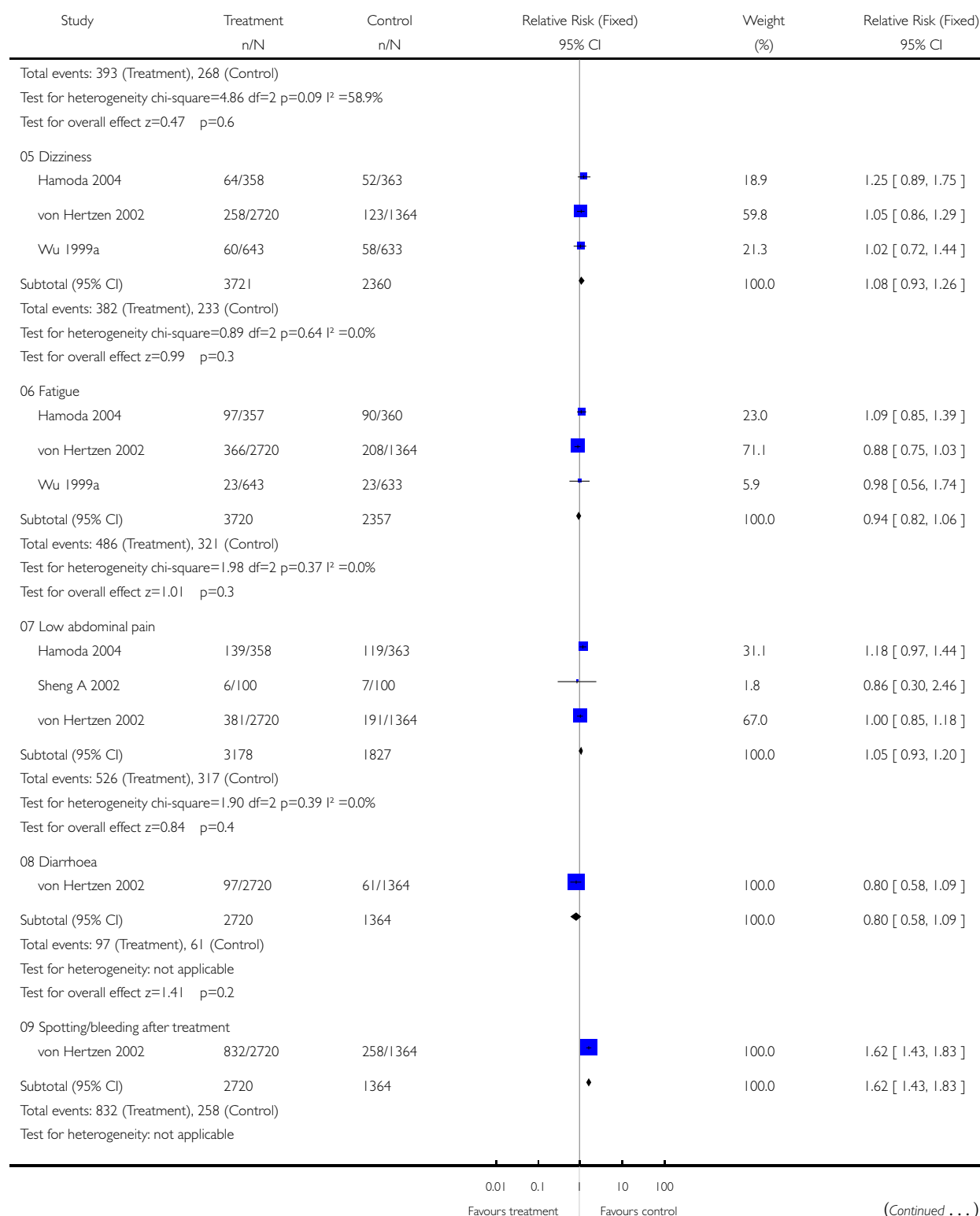
Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 06 Specific side-effect



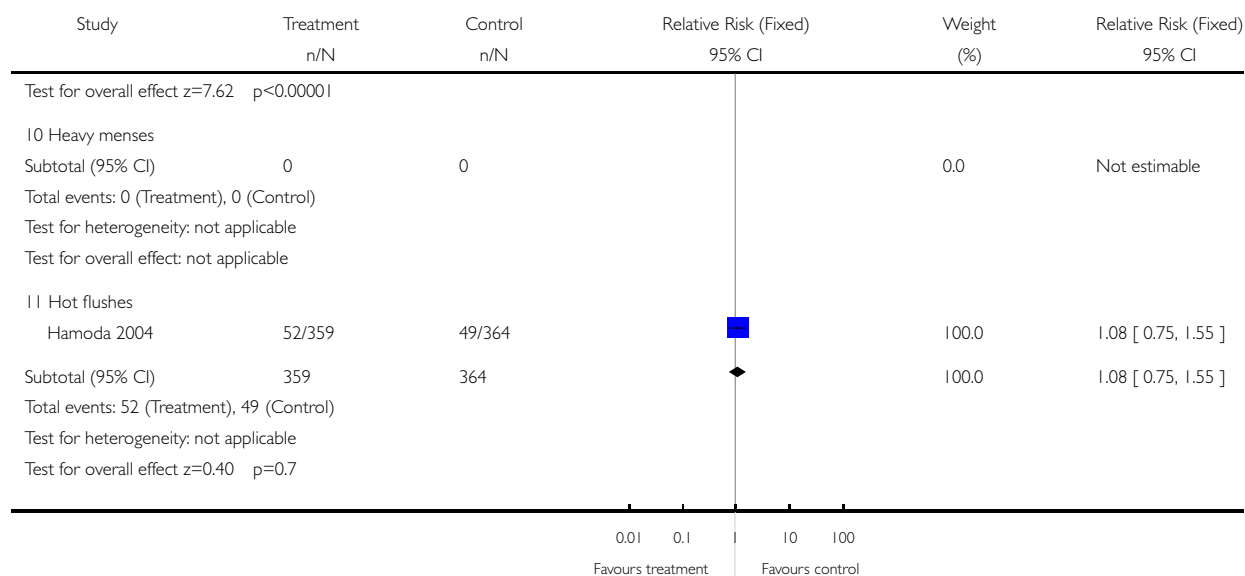


(... Continued)



(Continued ...)

(... Continued)

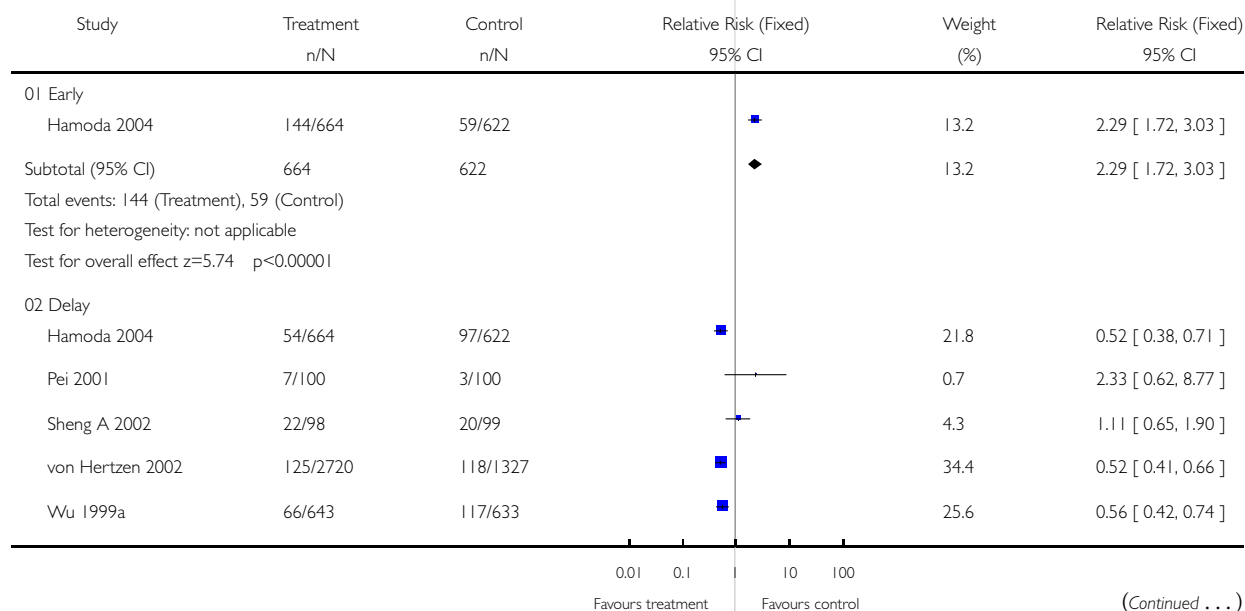


### Analysis 06.07. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 07 Menses

Review: Interventions for emergency contraception

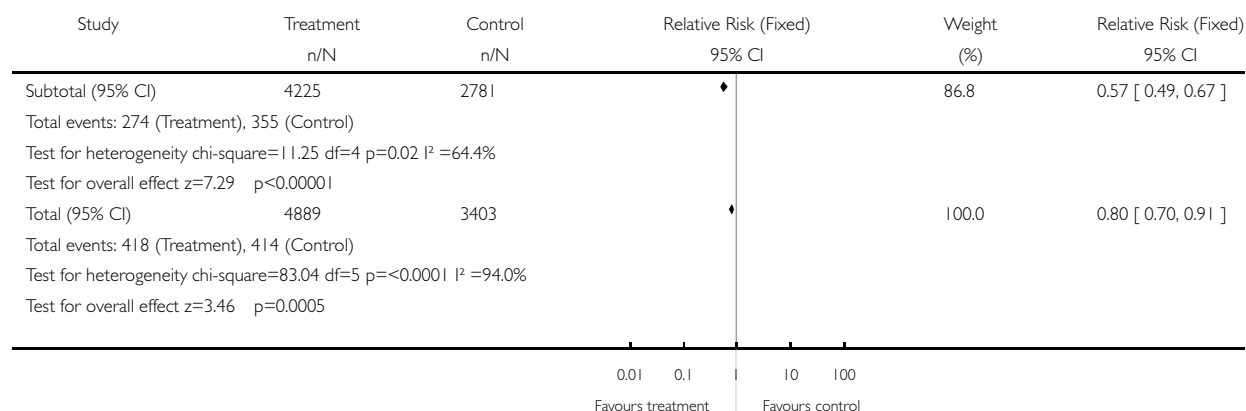
Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 07 Menses



(Continued ...)

(... Continued)

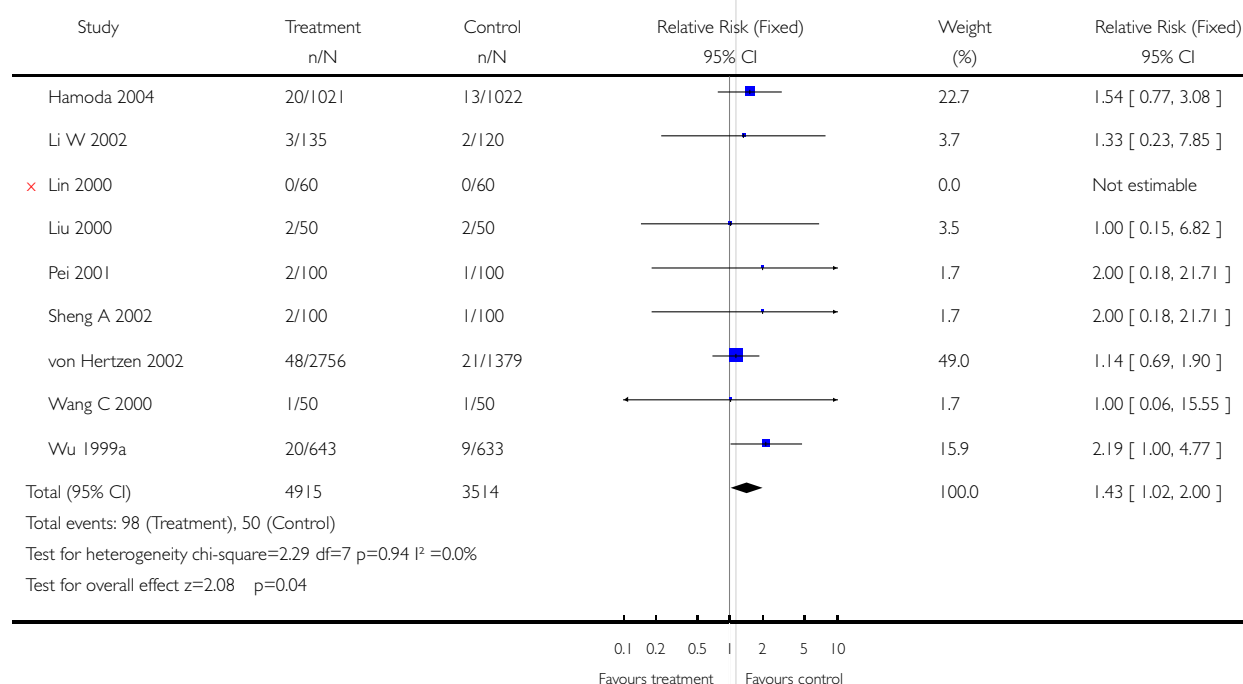


# **Analysis 06.08. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)**

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 08 ITT (all loss follow-up as pregnancy in LNG, and no preg in Mife)

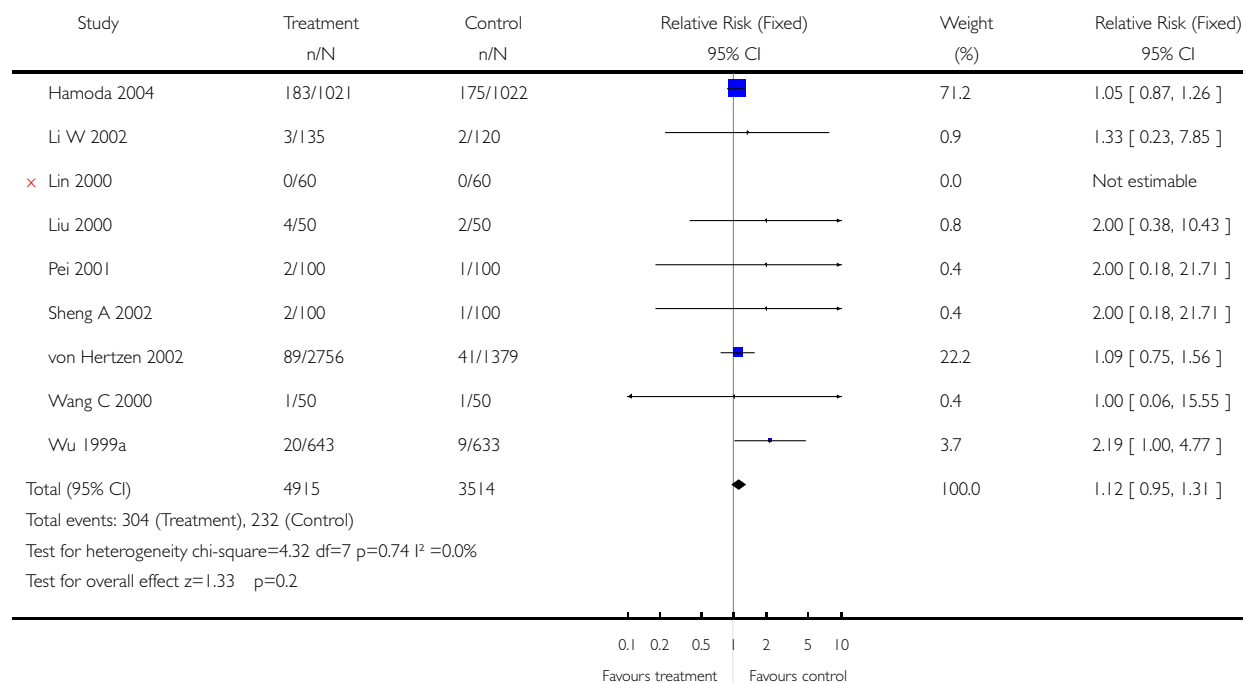


**Analysis 06.09. Comparison 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg), Outcome 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)**

Review: Interventions for emergency contraception

Comparison: 06 Levonorgestrel 1.5 mg vs mifepristone low dose (<25 mg)

Outcome: 09 ITT (all loss follow-up as no pregnancy in LNG, and preg in Mife)

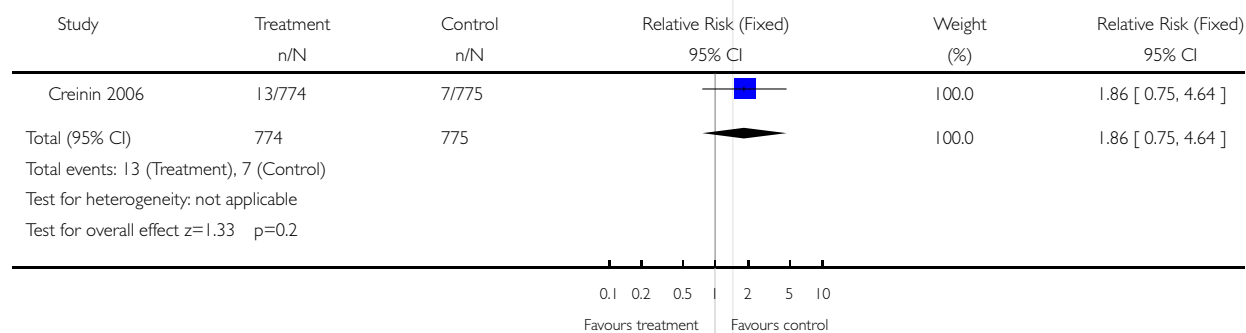


**Analysis 07.01. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 01 Observed number of pregnancy (all women)**

Review: Interventions for emergency contraception

Comparison: 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses)

Outcome: 01 Observed number of pregnancy (all women)

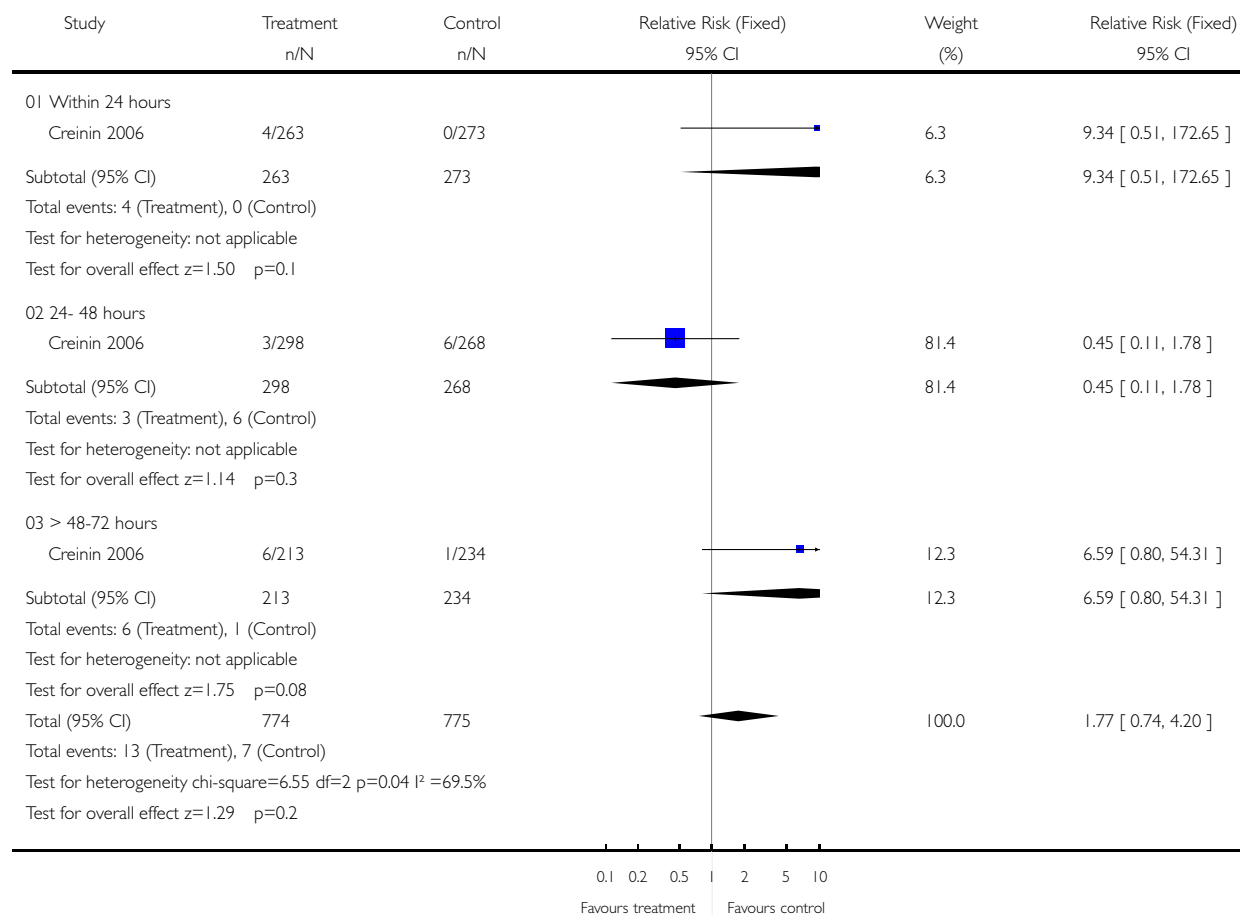


### Analysis 07.03. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 03 Observed number of pregnancy (time from intercourse)

Review: Interventions for emergency contraception

Comparison: 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses)

Outcome: 03 Observed number of pregnancy (time from intercourse)

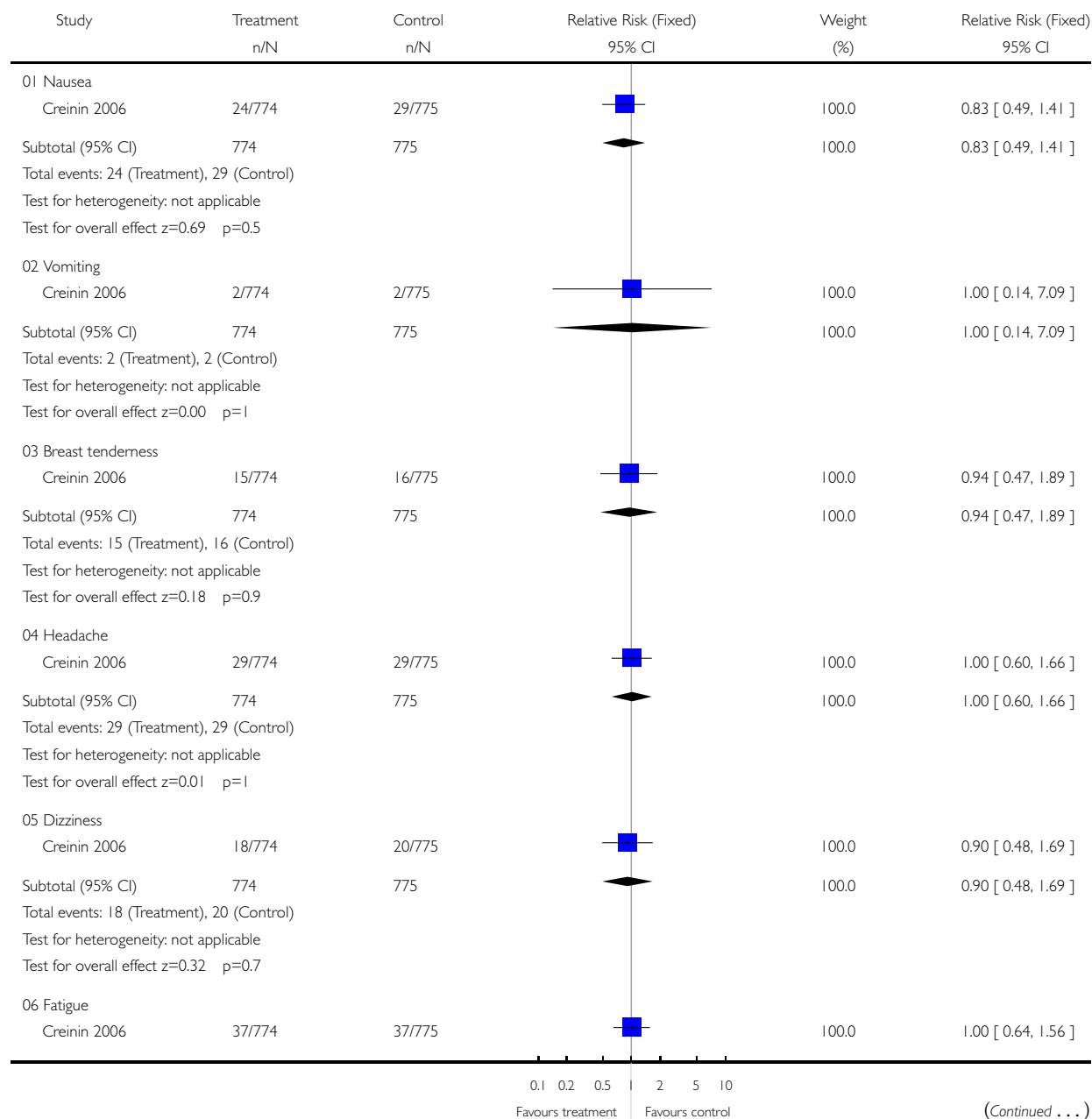


# **Analysis 07.06. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 06 Specific side-effects**

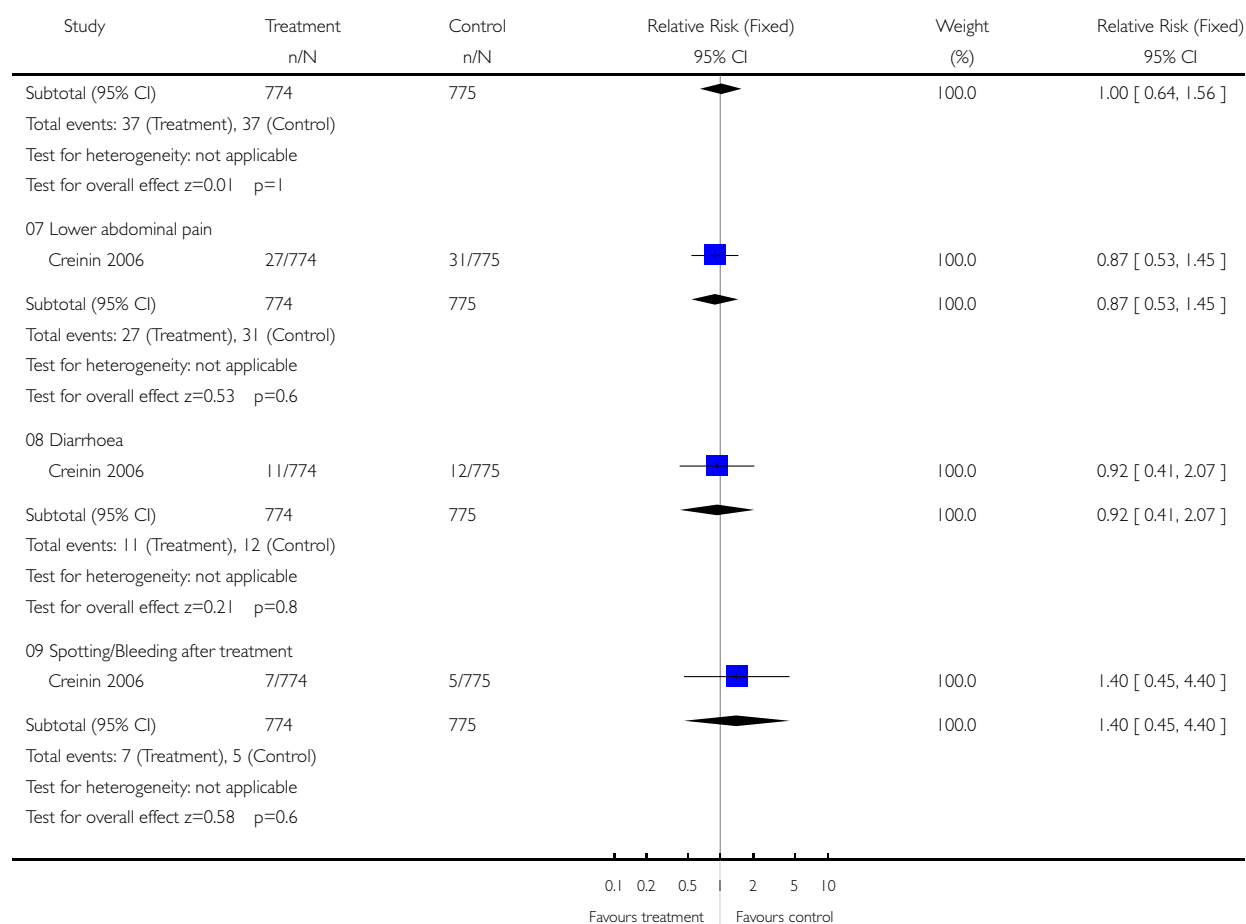
Review: Interventions for emergency contraception

Comparison: 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses)

Outcome: 06 Specific side-effects



(... Continued)

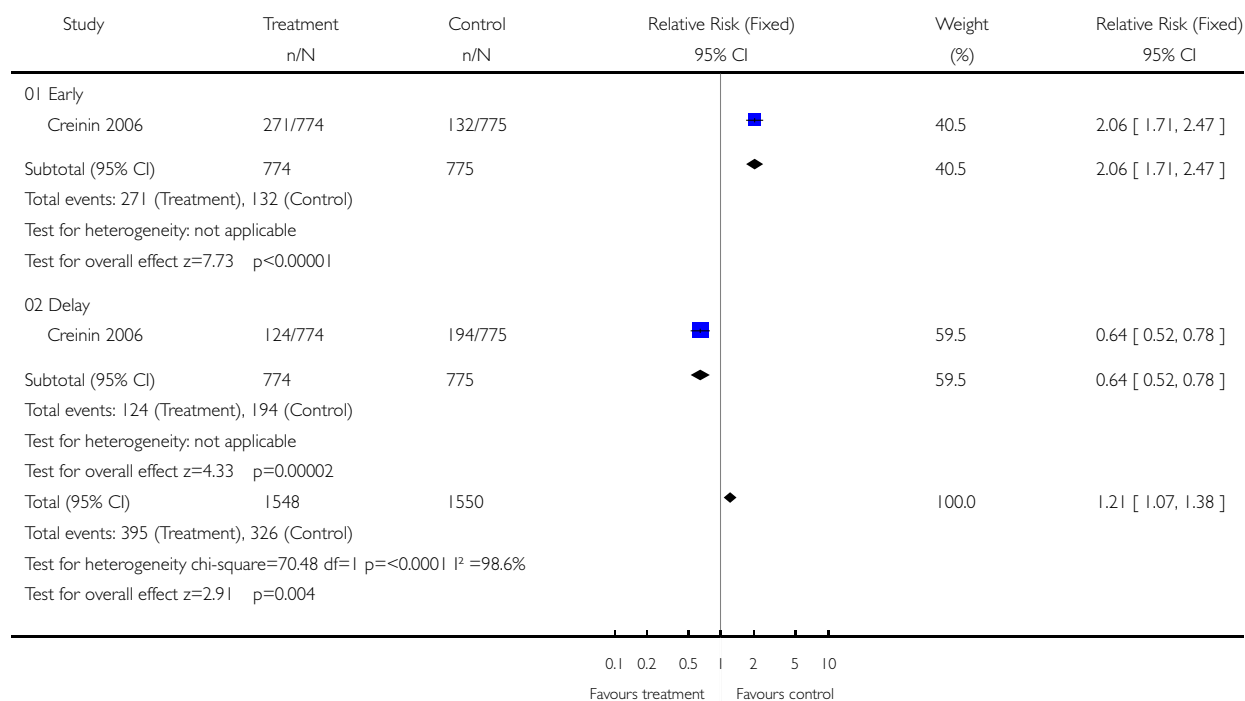


### Analysis 07.07. Comparison 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 07 Levonorgestrel 1.5 mg vs CDB-2914 (all doses)

Outcome: 07 Menses

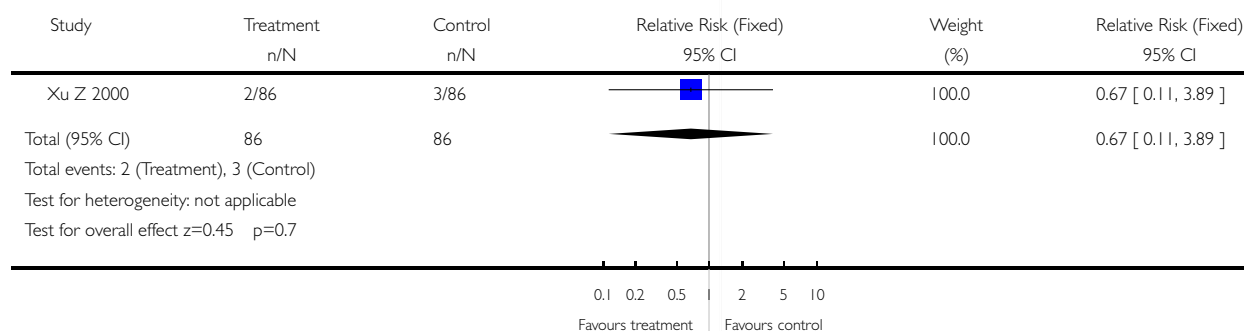


### Analysis 08.01. Comparison 08 Levonorgestrel (all dose) vs Anordrin (all dose), Outcome 01 Observed number of pregnancy (all women)

Review: Interventions for emergency contraception

Comparison: 08 Levonorgestrel (all dose) vs Anordrin (all dose)

Outcome: 01 Observed number of pregnancy (all women)



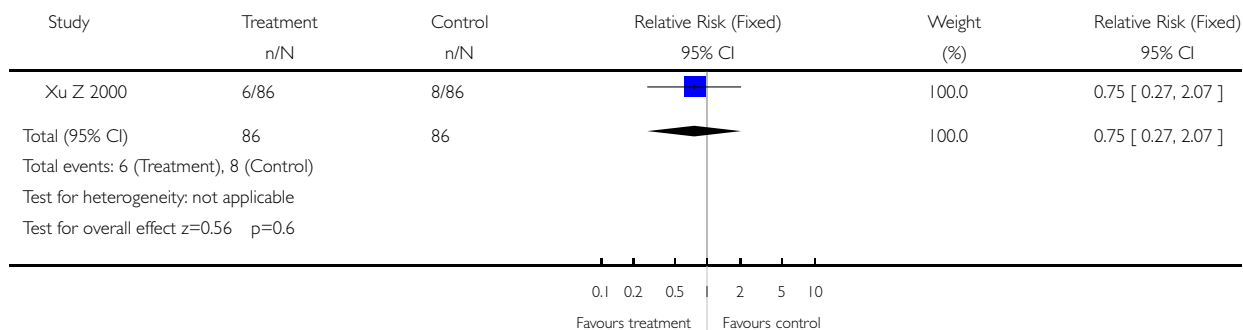


**Analysis 08.05. Comparison 08 Levonorgestrel (all dose) vs Anordrin (all dose), Outcome 05 Any side-effect**

Review: Interventions for emergency contraception

Comparison: 08 Levonorgestrel (all dose) vs Anordrin (all dose)

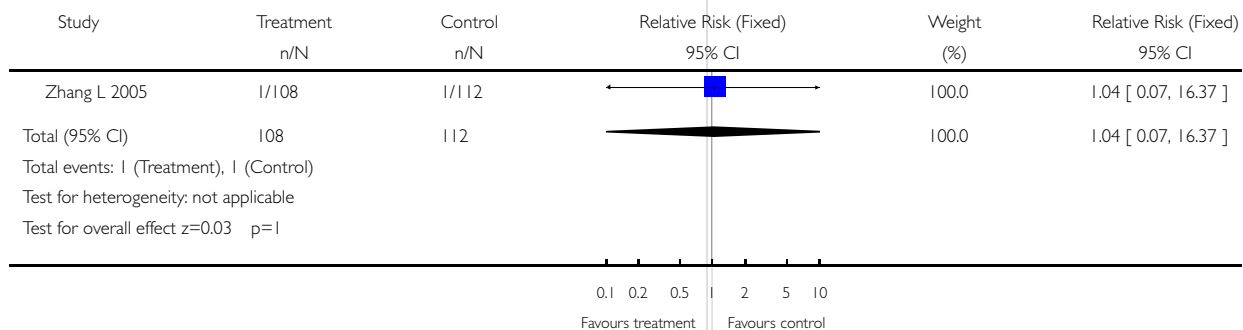
Outcome: 05 Any side-effect

**Analysis 09.01. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 01 Observed number of pregnancy (all women)**

Review: Interventions for emergency contraception

Comparison: 09 mifepristone low-dose 20 mg vs low-dose 10 mg

Outcome: 01 Observed number of pregnancy (all women)

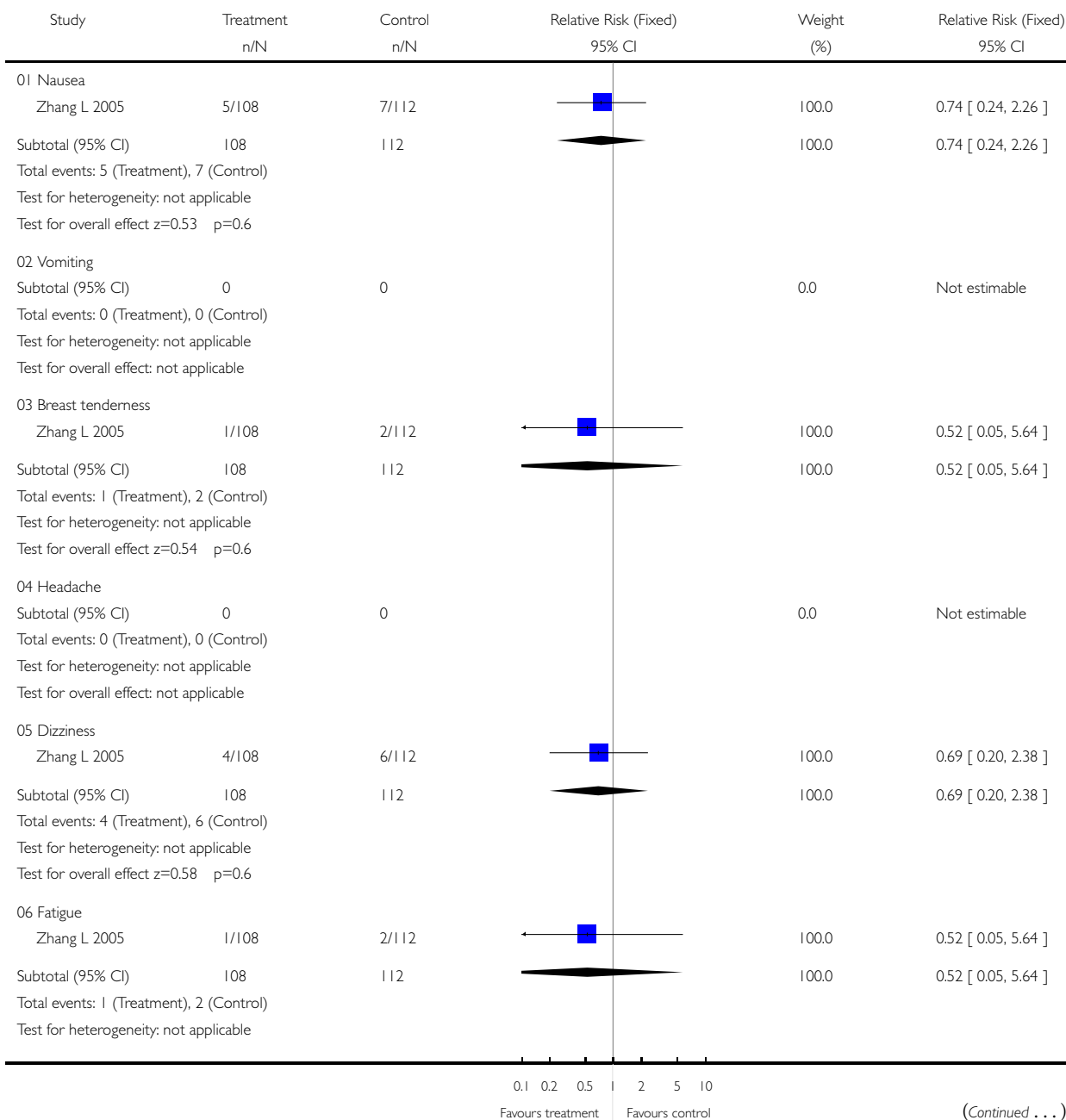


## Analysis 09.06. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 06 Specific side-effects

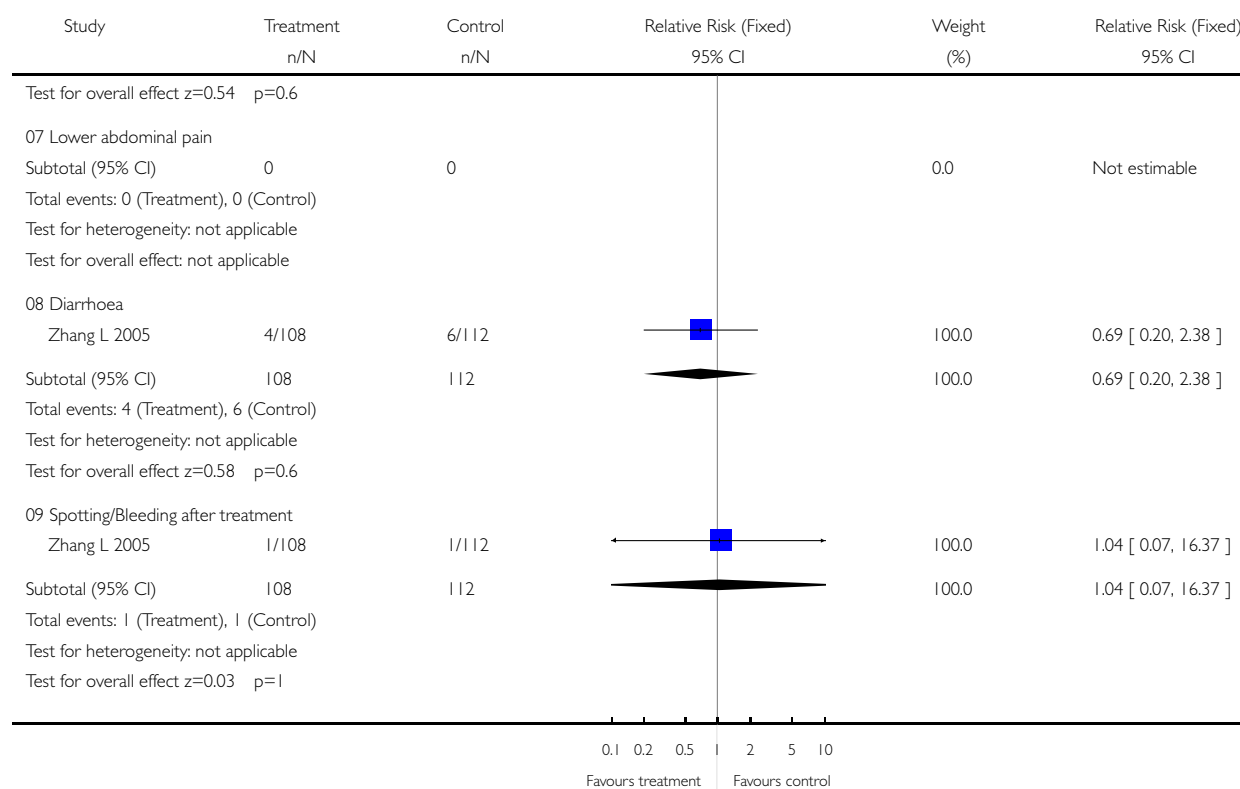
Review: Interventions for emergency contraception

Comparison: 09 mifepristone low-dose 20 mg vs low-dose 10 mg

Outcome: 06 Specific side-effects



(... Continued)

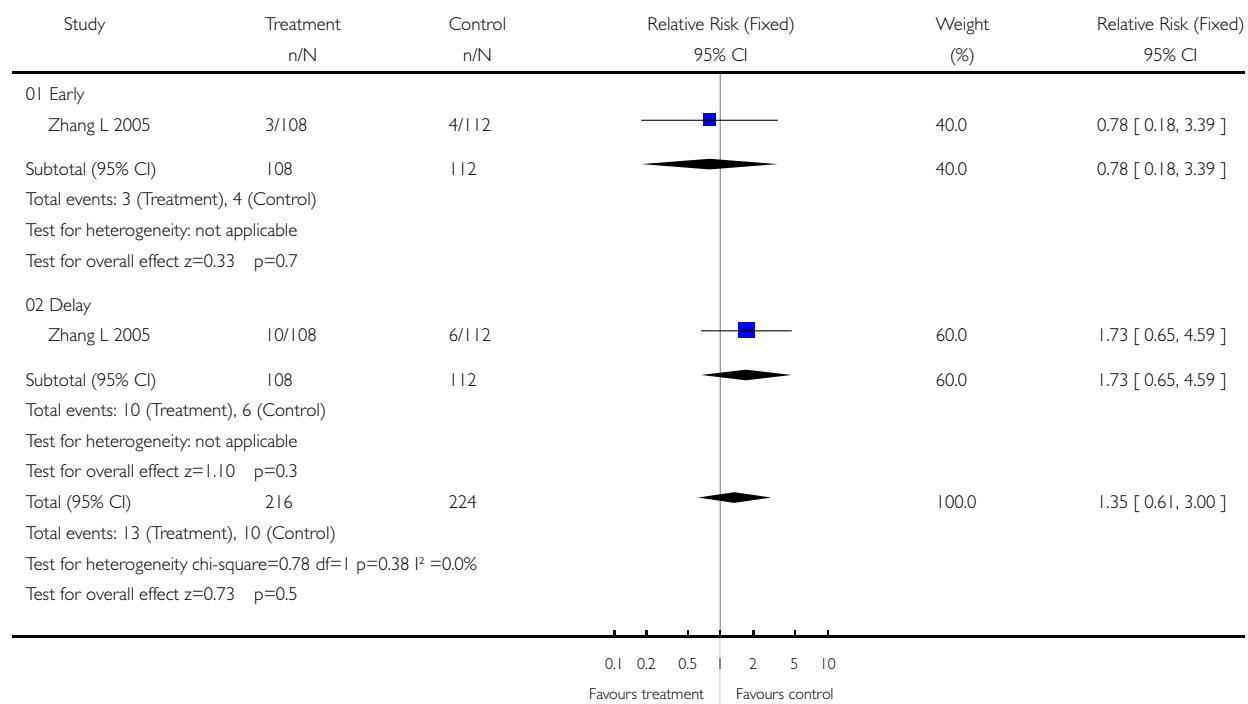


# **Analysis 09.07. Comparison 09 mifepristone low-dose 20 mg vs low-dose 10 mg, Outcome 07 Delay of menses**

Review: Interventions for emergency contraception

Comparison: 09 mifepristone low-dose 20 mg vs low-dose 10 mg

Outcome: 07 Delay of menses

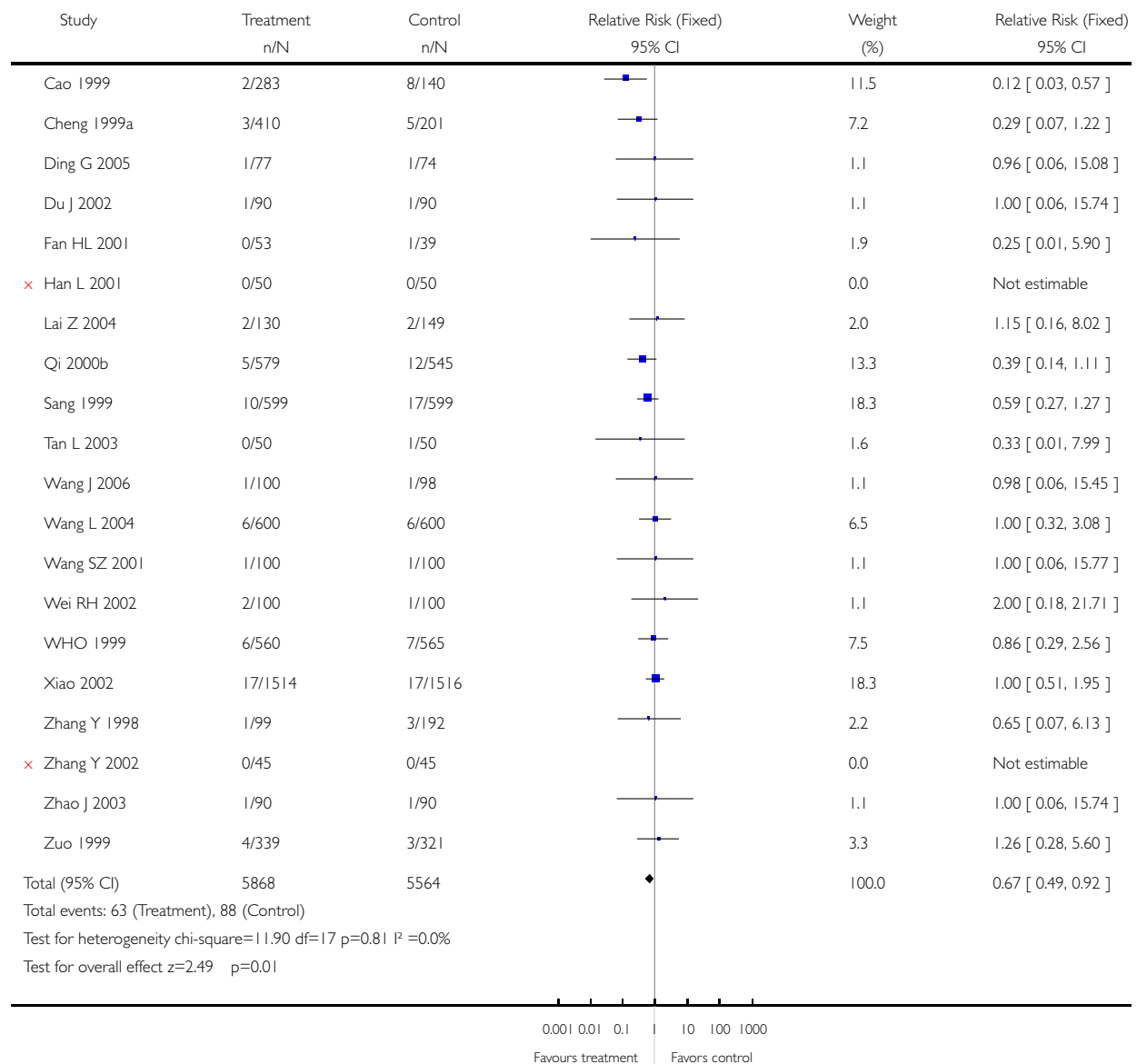


# **Analysis 10.01. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome: 01 Observed number of pregnancies (all women)

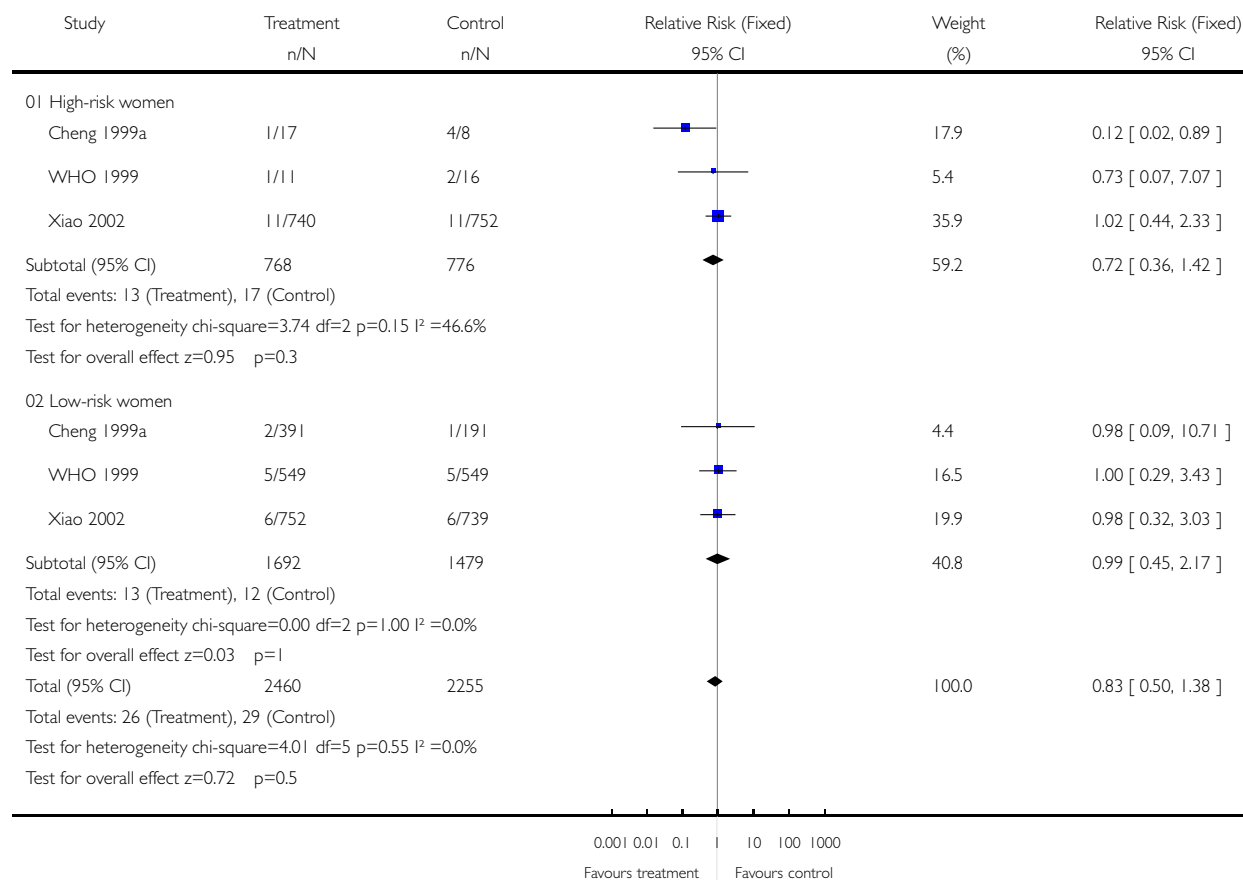


## Analysis 10.02. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 02 Observed number of pregnancies (by risk status)

Review: Interventions for emergency contraception

Comparison: 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome: 02 Observed number of pregnancies (by risk status)

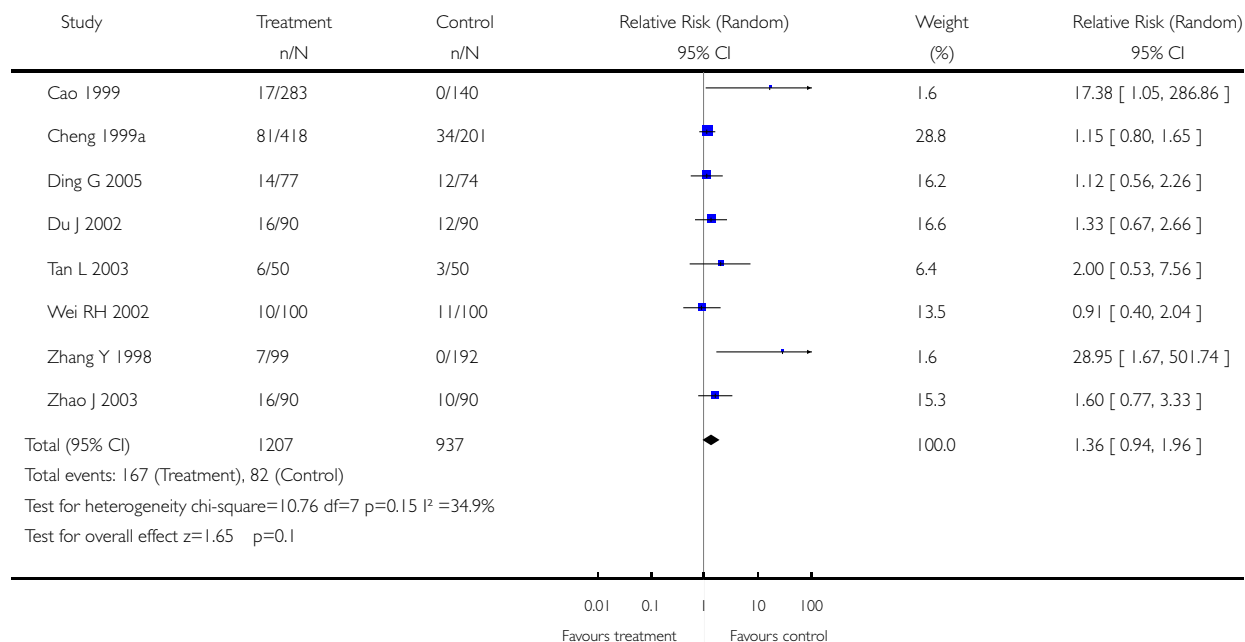


# **Analysis 10.05. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 05 Any side-effect**

Review: Interventions for emergency contraception

Comparison: 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome: 05 Any side-effect

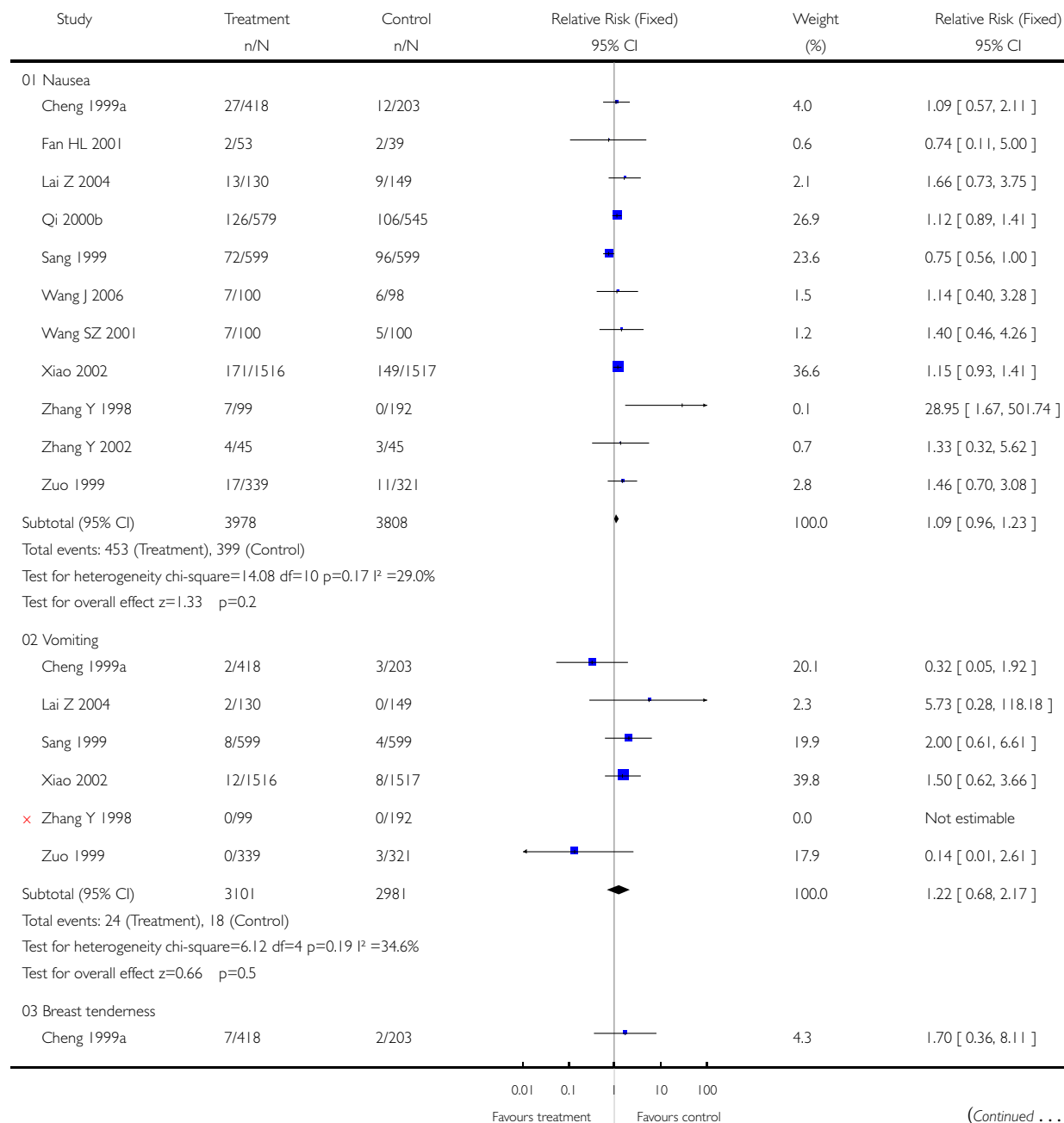


# **Analysis 10.06. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 06 Specific side-effects**

Review: Interventions for emergency contraception

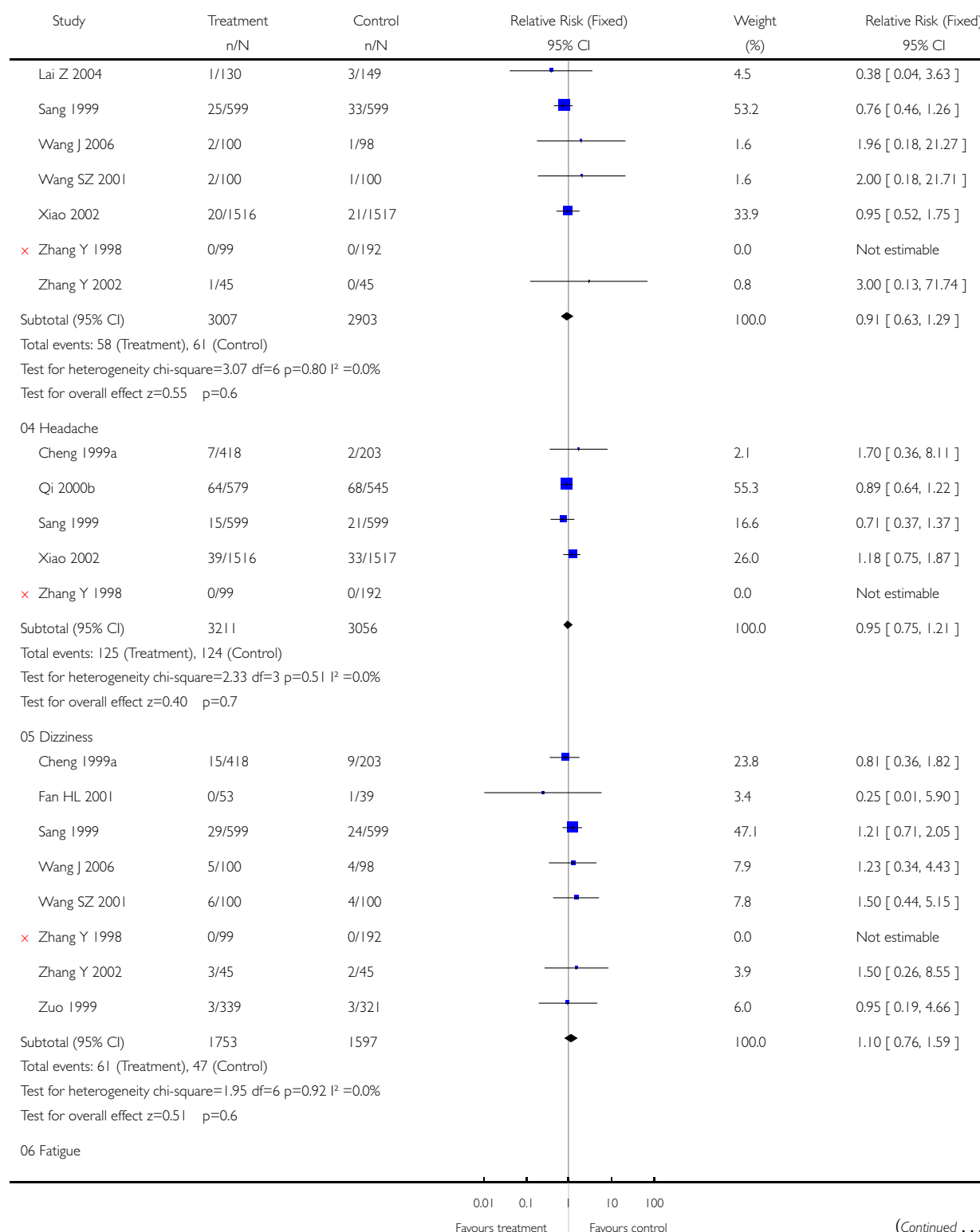
Comparison: 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome: 06 Specific side-effects

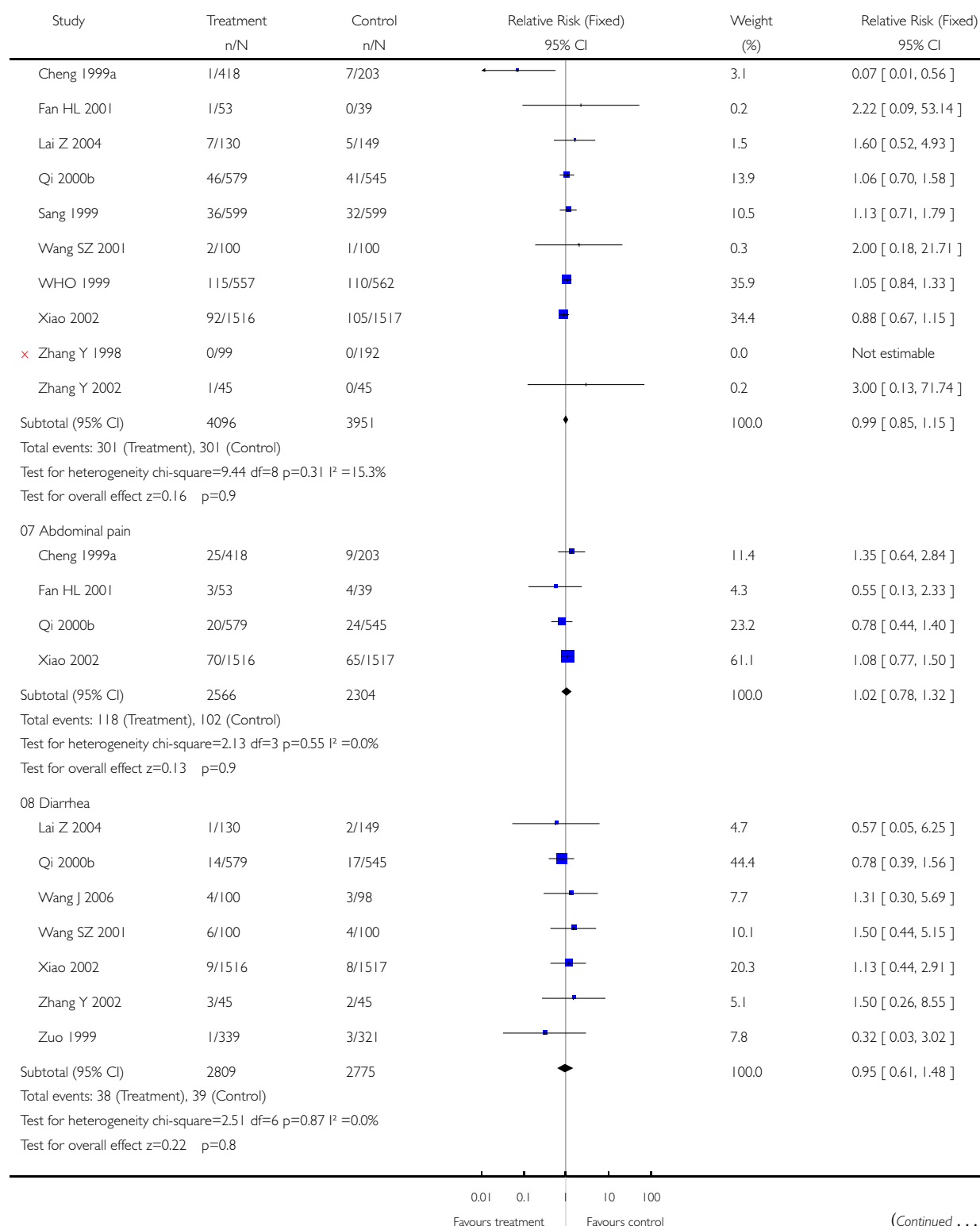




(... Continued)

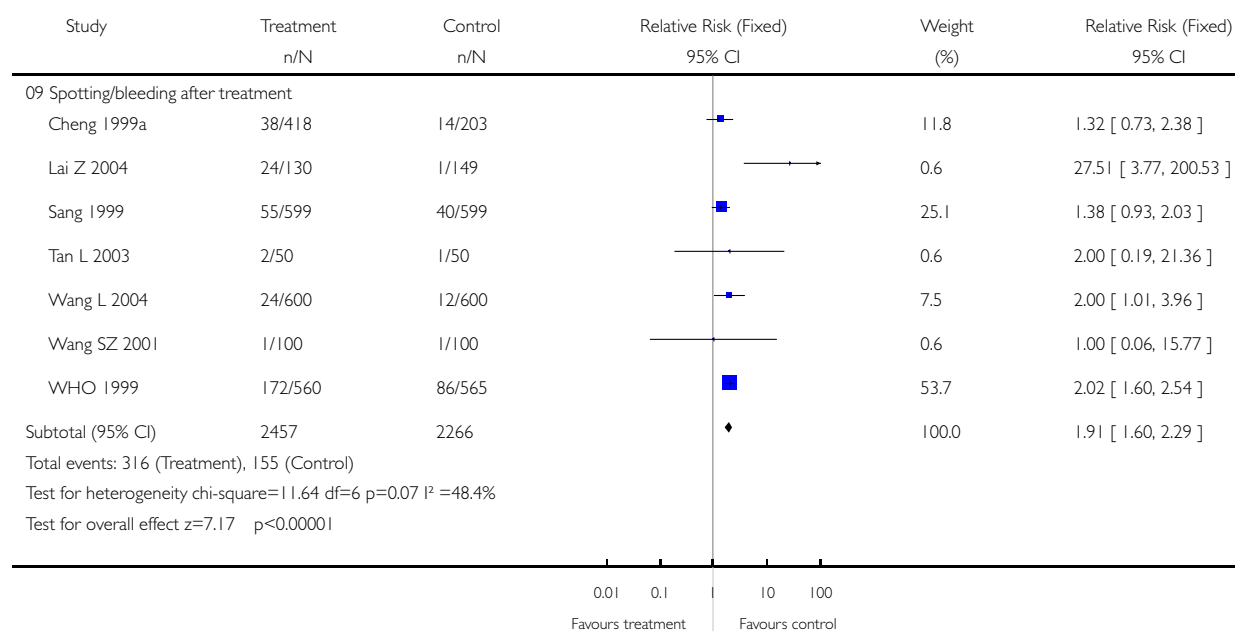


(... Continued)



(Continued ...)

(... Continued)

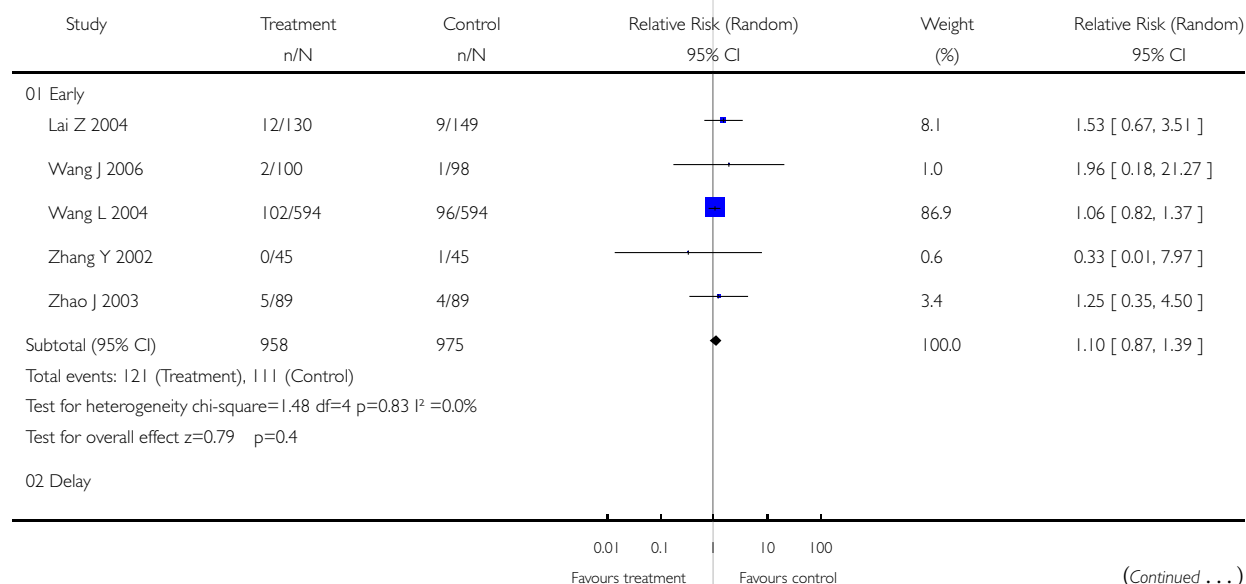


### Analysis 10.07. Comparison 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg), Outcome 07 Menses

Review: Interventions for emergency contraception

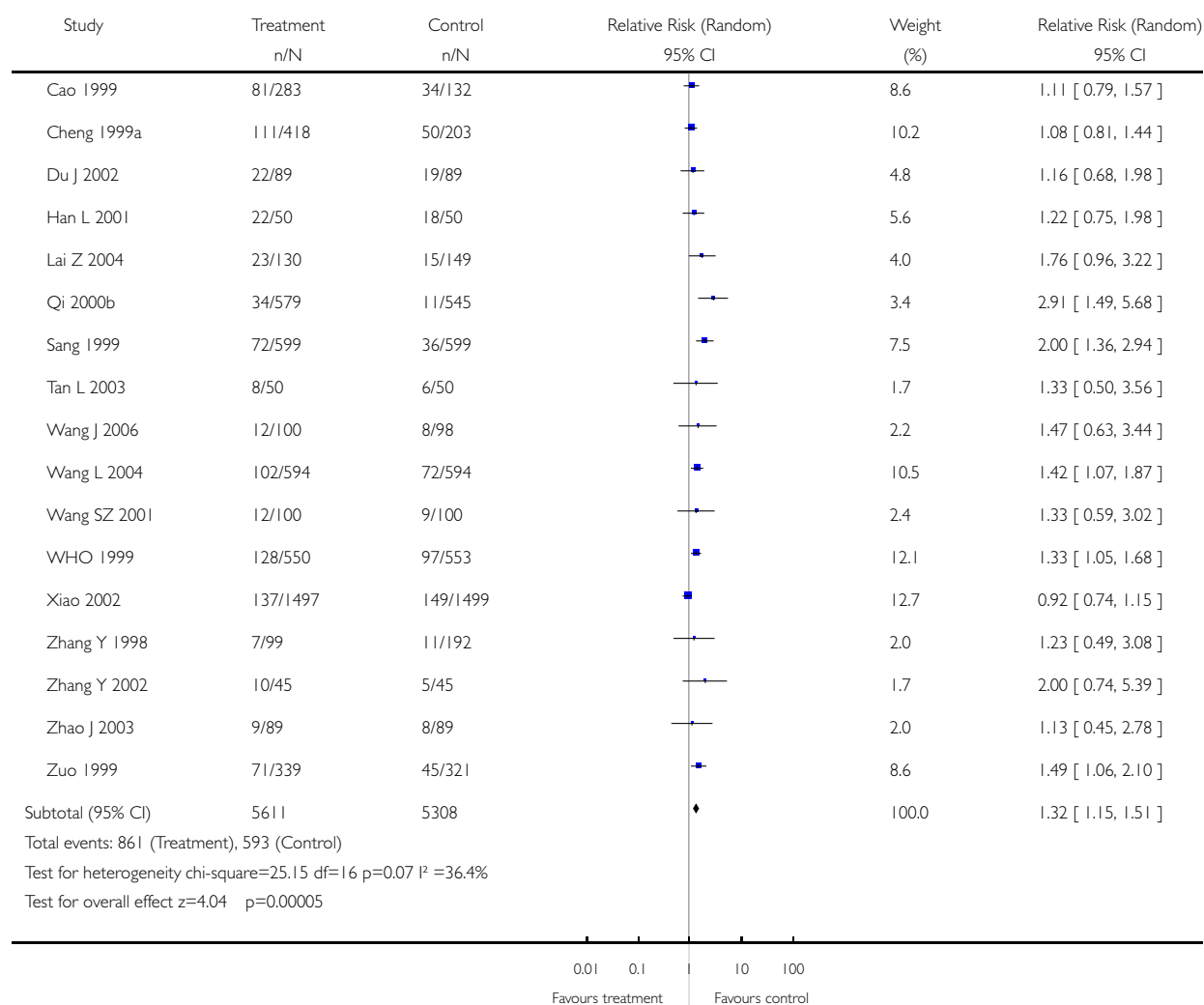
Comparison: 10 Mifepristone mid-doses (25-50mg) vs low-doses (< 25mg)

Outcome: 07 Menses



(Continued ...)

(... Continued)

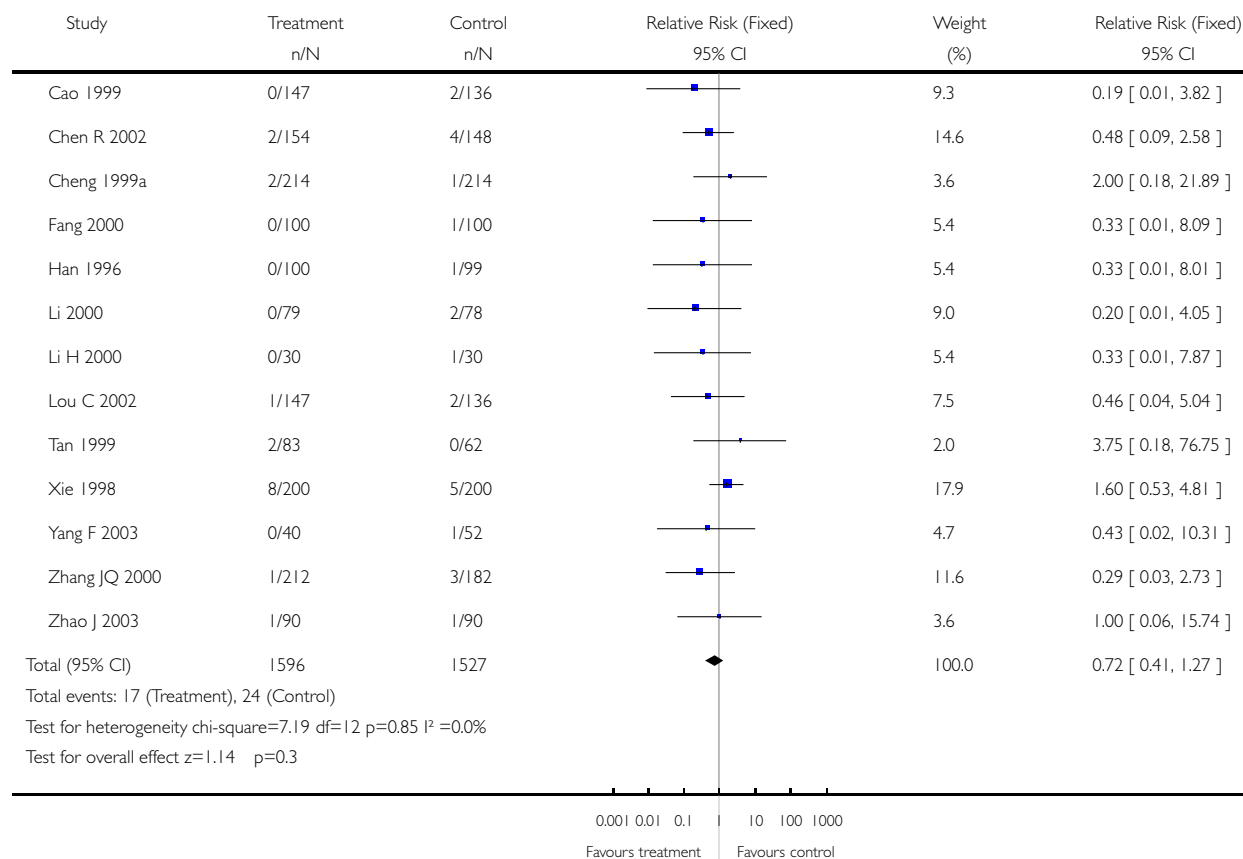


# **Analysis 11.01. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg

Outcome: 01 Observed number of pregnancies (all women)

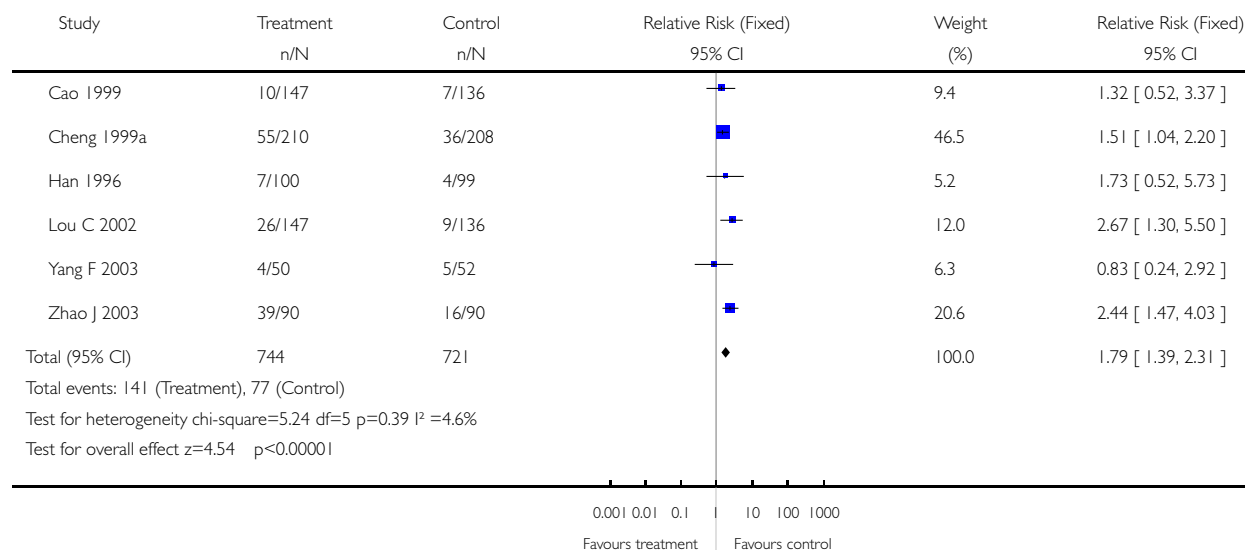


### Analysis 11.03. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 03 Any side-effect

Review: Interventions for emergency contraception

Comparison: 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg

Outcome: 03 Any side-effect

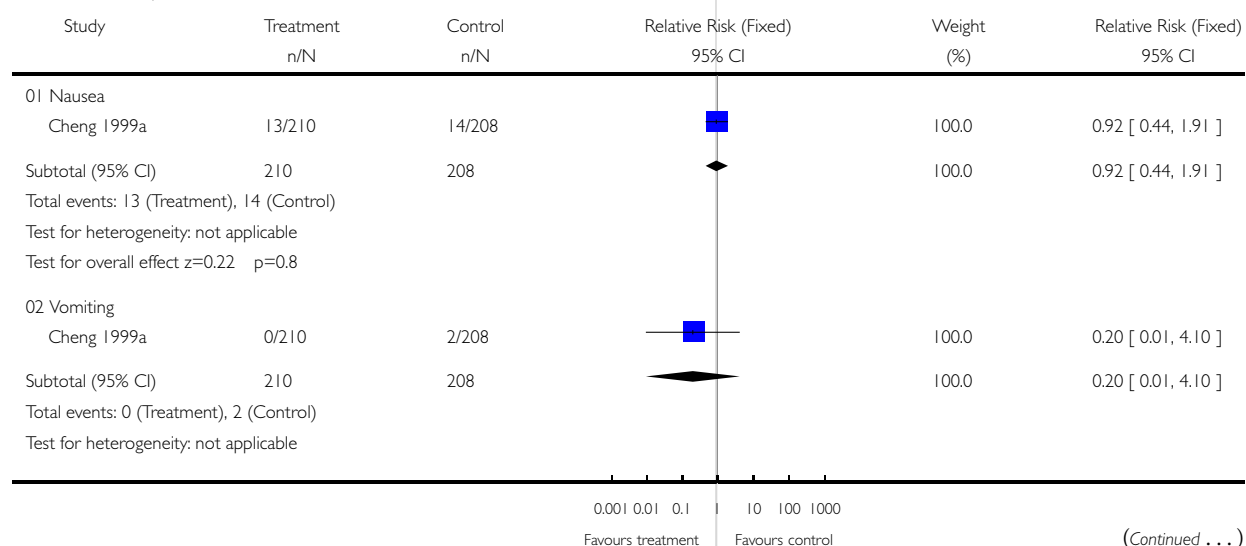


### Analysis 11.04. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 04 Specific side-effects

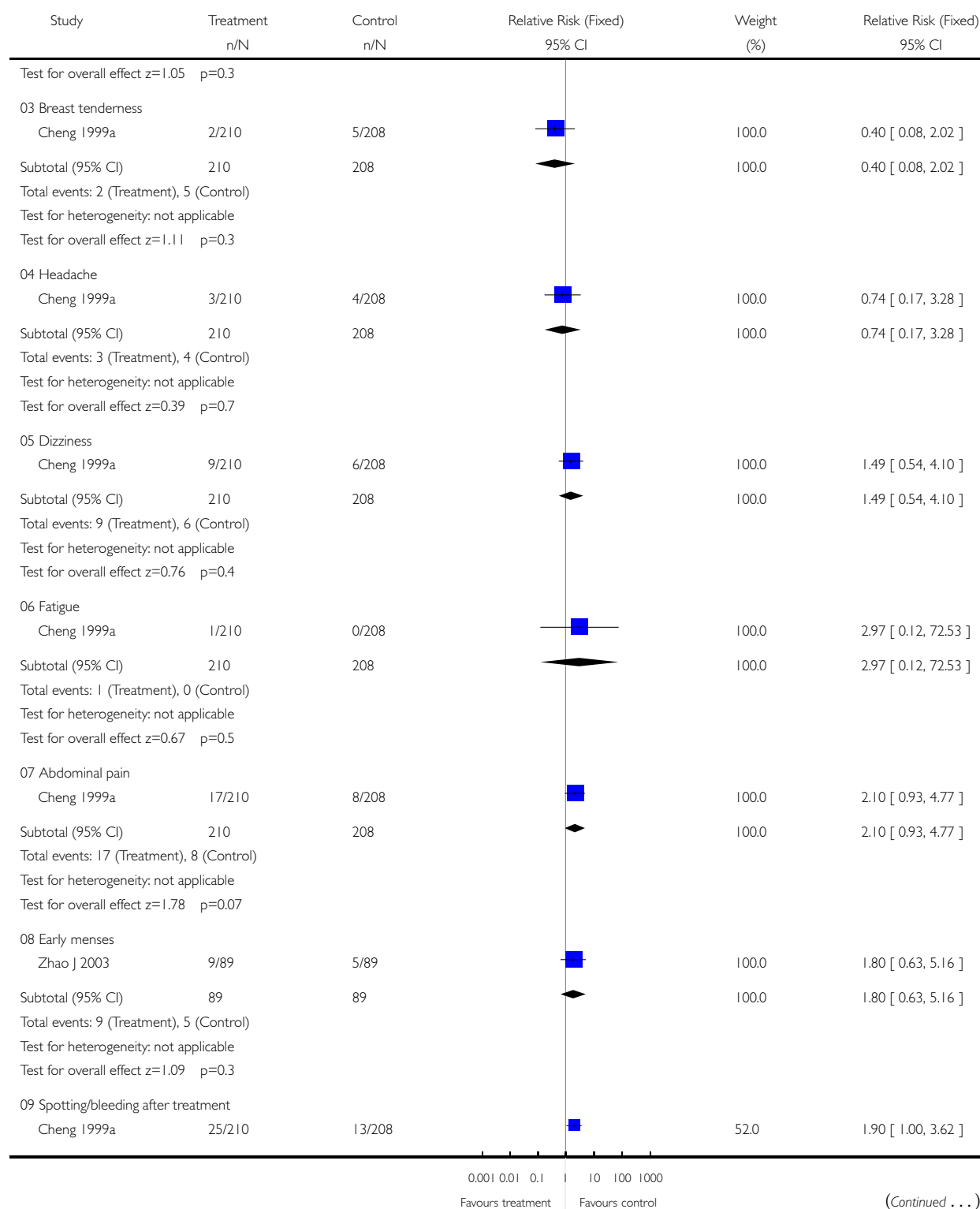
Review: Interventions for emergency contraception

Comparison: 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg

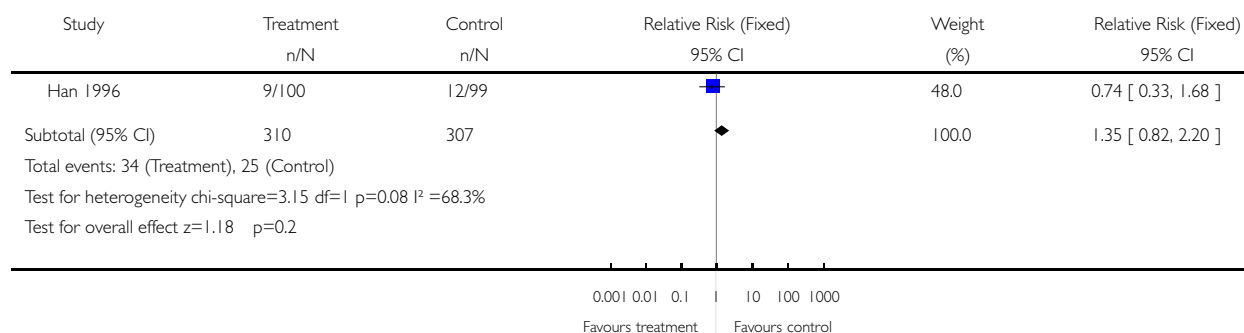
Outcome: 04 Specific side-effects



(... Continued)



(... Continued)

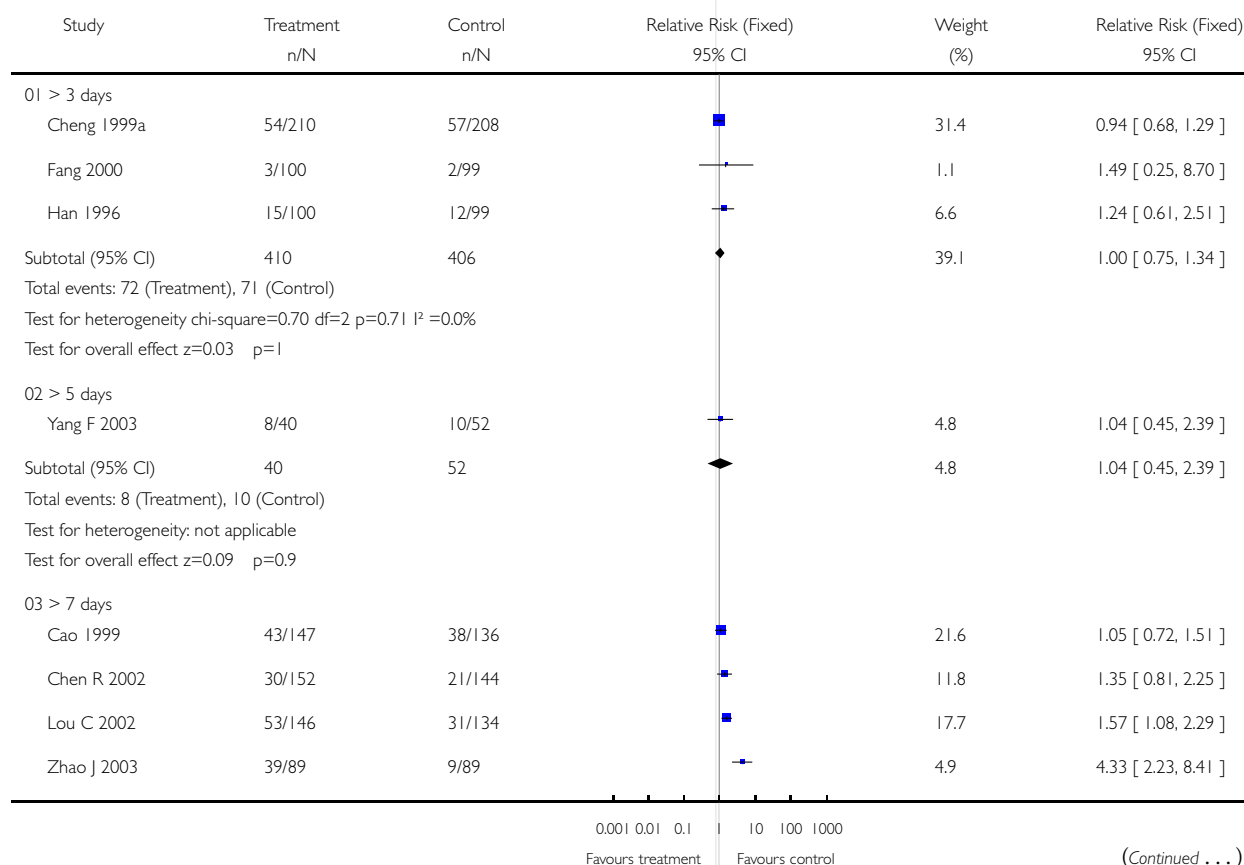


### Analysis 11.05. Comparison 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg, Outcome 05 Delay in menses

Review: Interventions for emergency contraception

Comparison: 11 Mifepristone mid-dose 50 mg vs Mifepristone mid-dose 25 mg

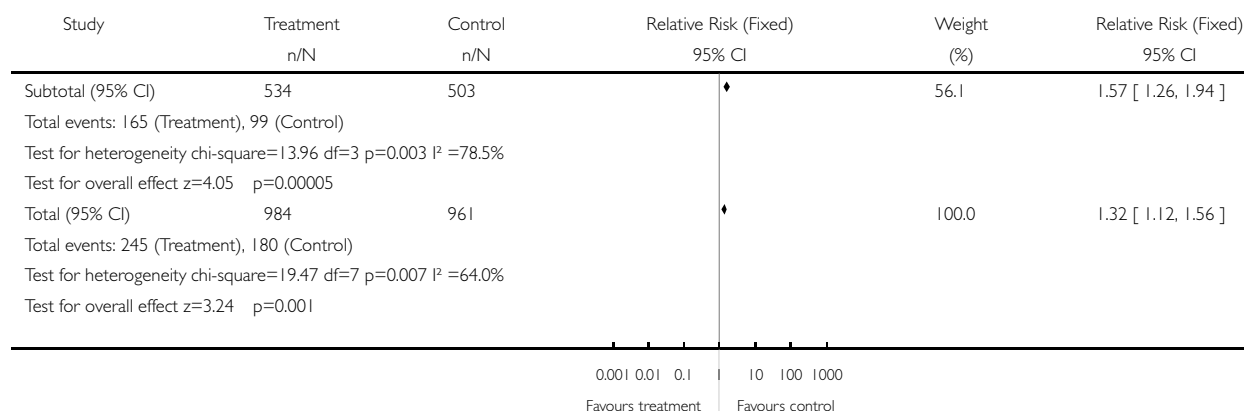
Outcome: 05 Delay in menses



(Continued ...)



(... Continued)

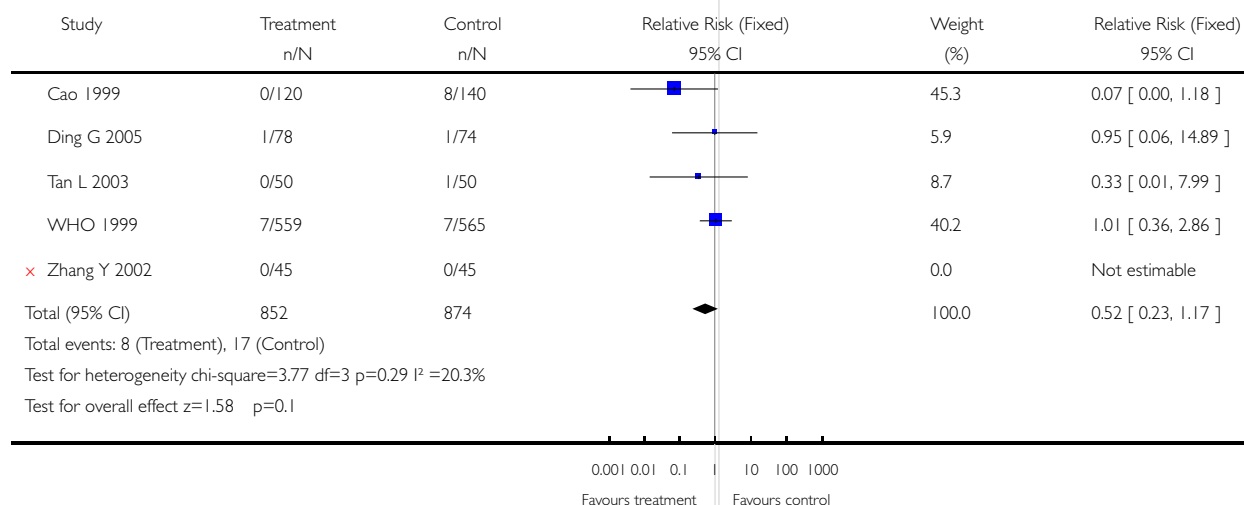


### Analysis 12.01. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome: 01 Observed number of pregnancies (all women)

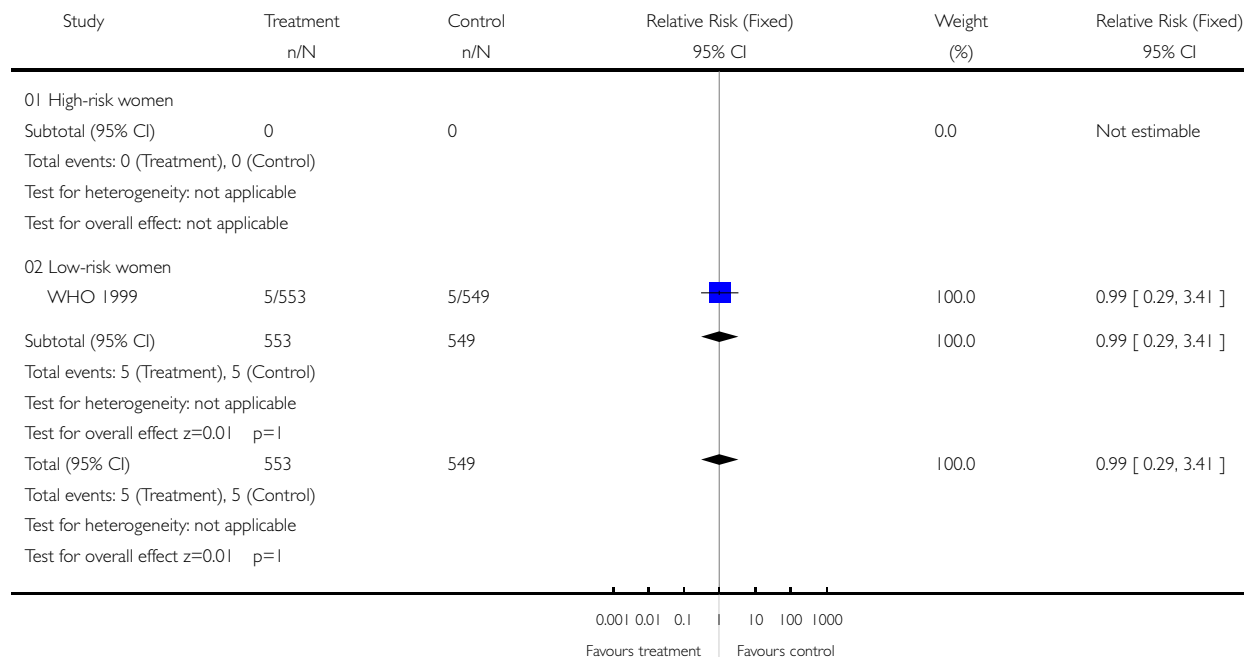


**Analysis 12.02. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 02 Observed number of pregnancies (by risk status)**

Review: Interventions for emergency contraception

Comparison: 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome: 02 Observed number of pregnancies (by risk status)

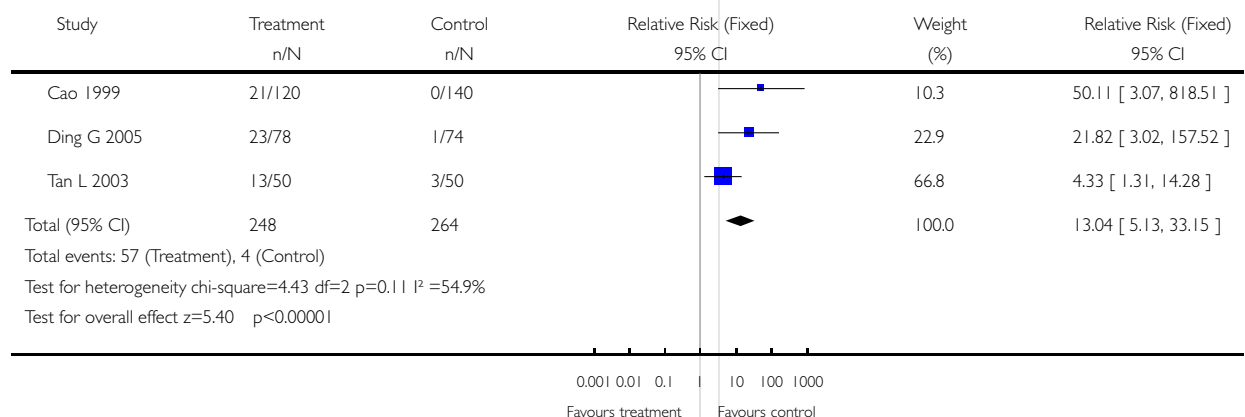


**Analysis 12.05. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 05 Any side-effect**

Review: Interventions for emergency contraception

Comparison: 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome: 05 Any side-effect

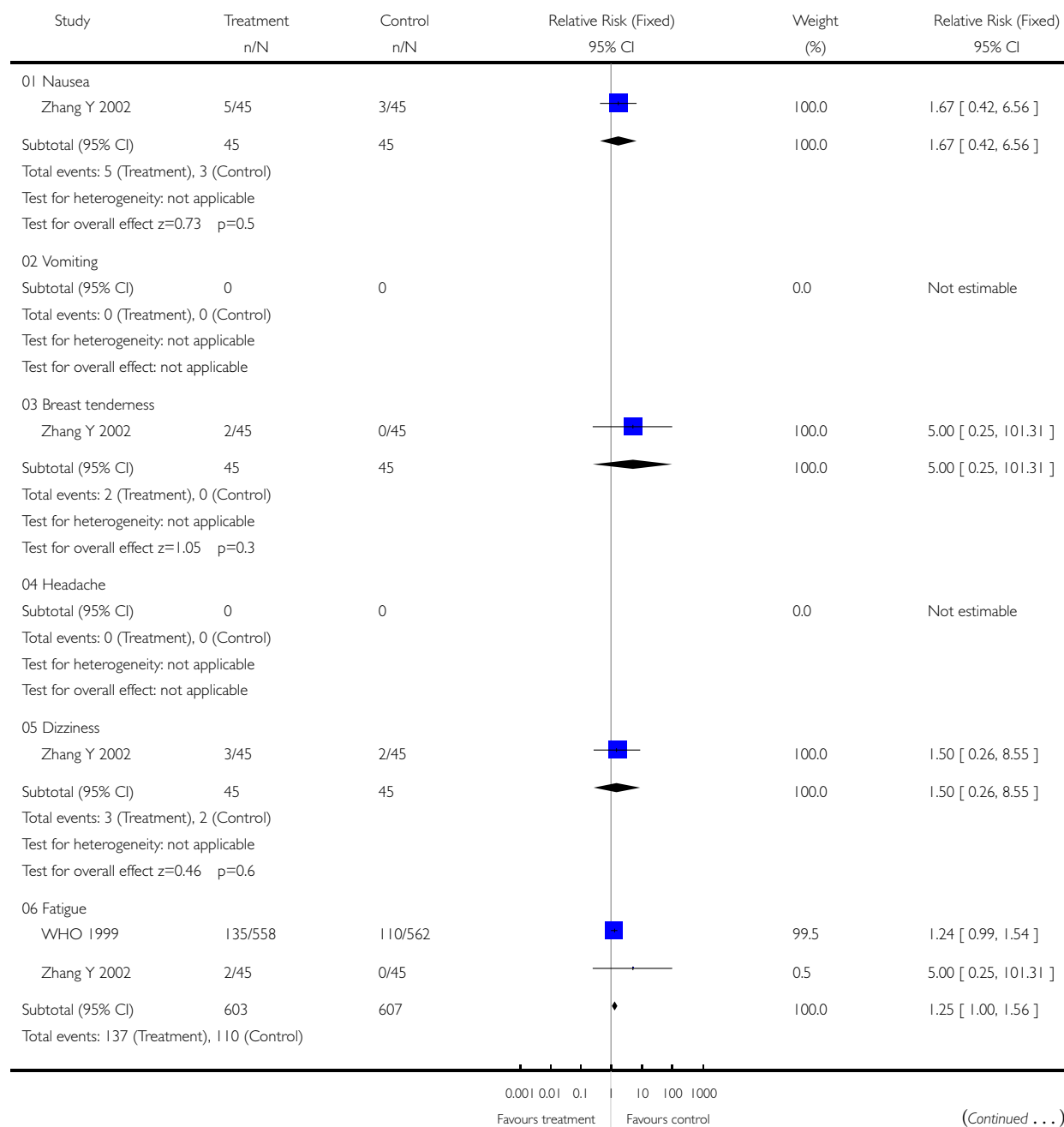


## Analysis 12.06. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 06 Specific side-effects

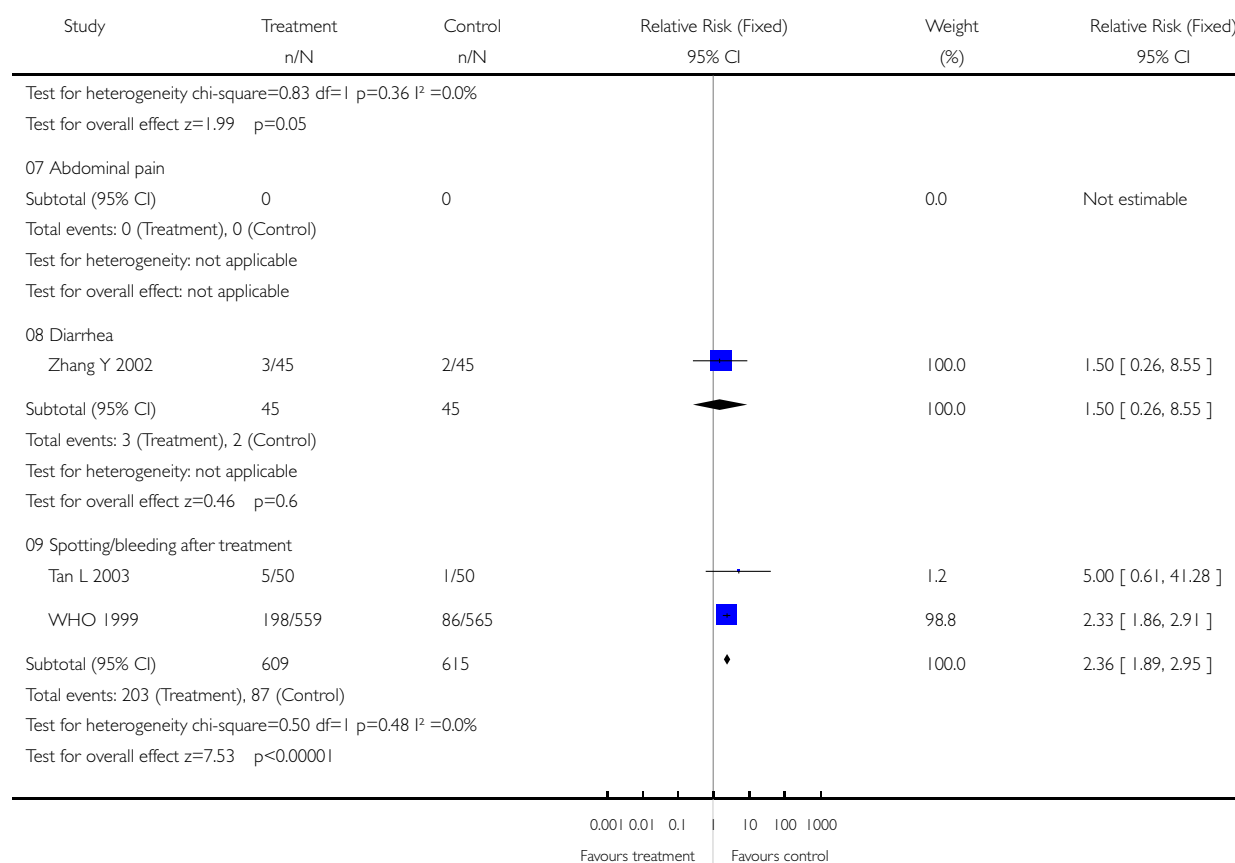
Review: Interventions for emergency contraception

Comparison: 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome: 06 Specific side-effects



(... Continued)

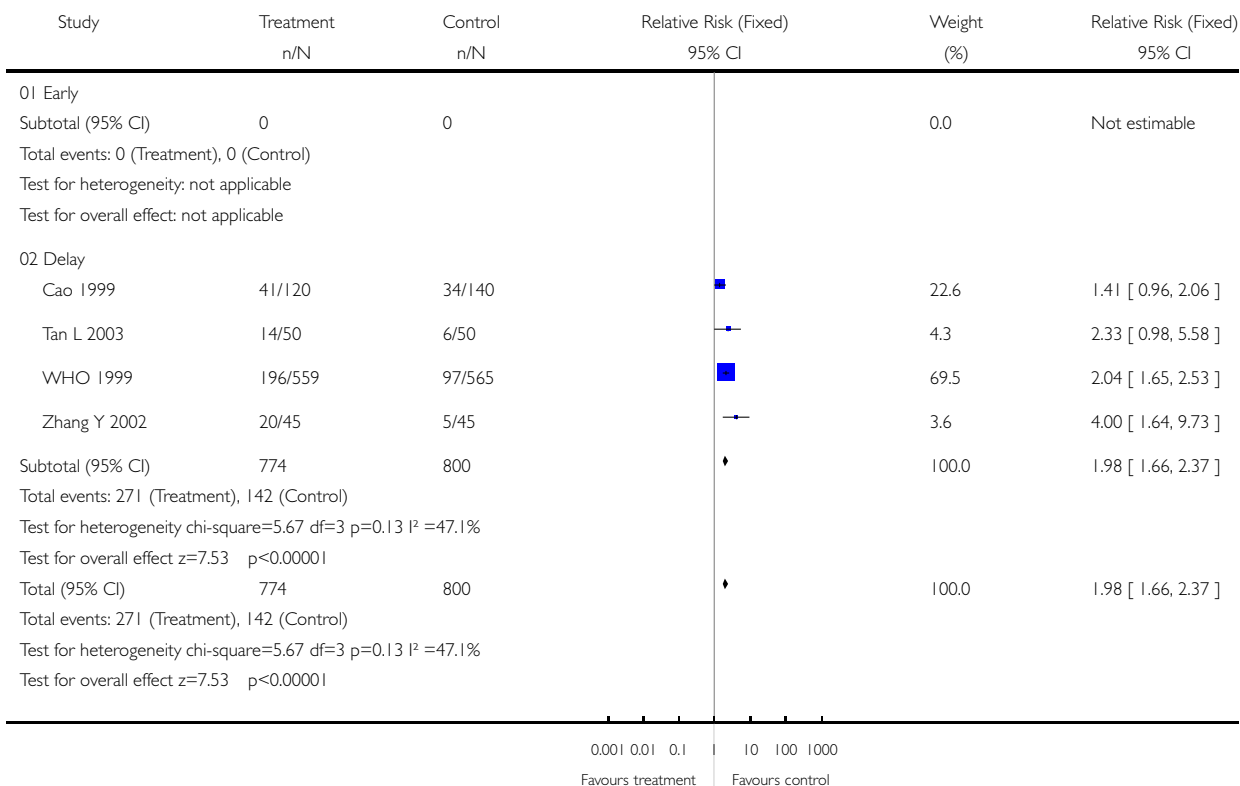


# **Analysis 12.07. Comparison 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg), Outcome 07 Menses**

Review: Interventions for emergency contraception

Comparison: 12 Mifepristone high-doses (>50mg) vs mifepristone low-doses (<25 mg)

Outcome: 07 Menses

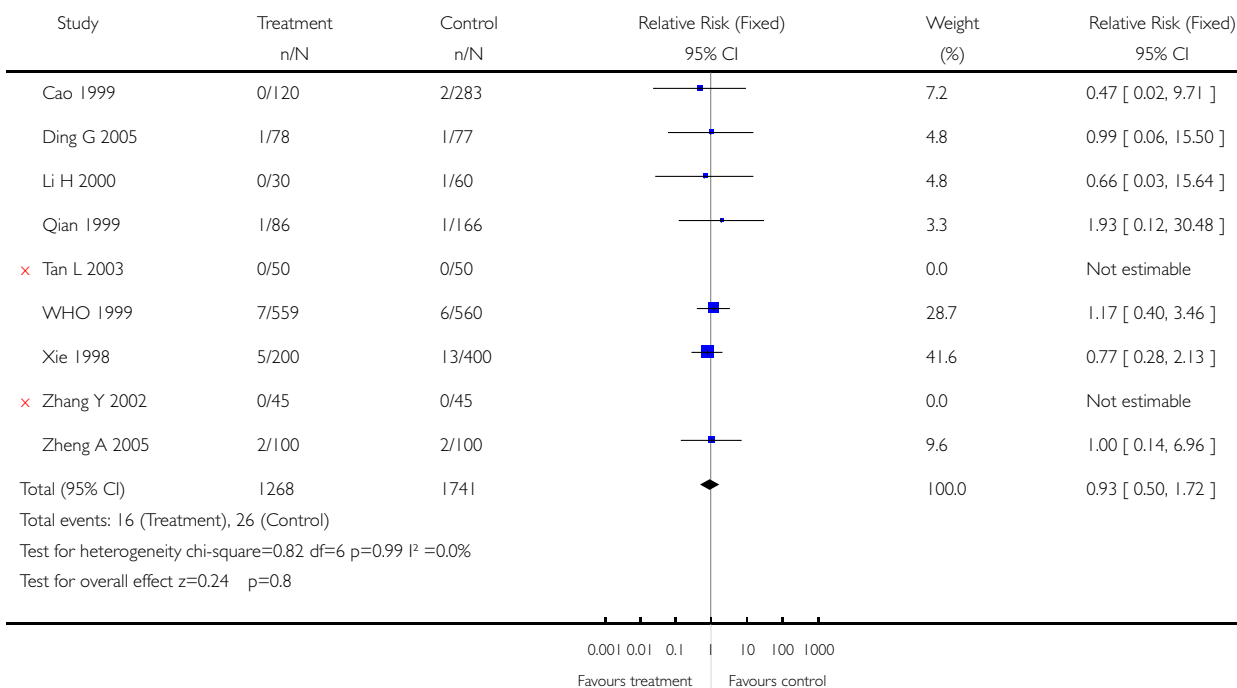


**Analysis 13.01. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg)

Outcome: 01 Observed number of pregnancies (all women)

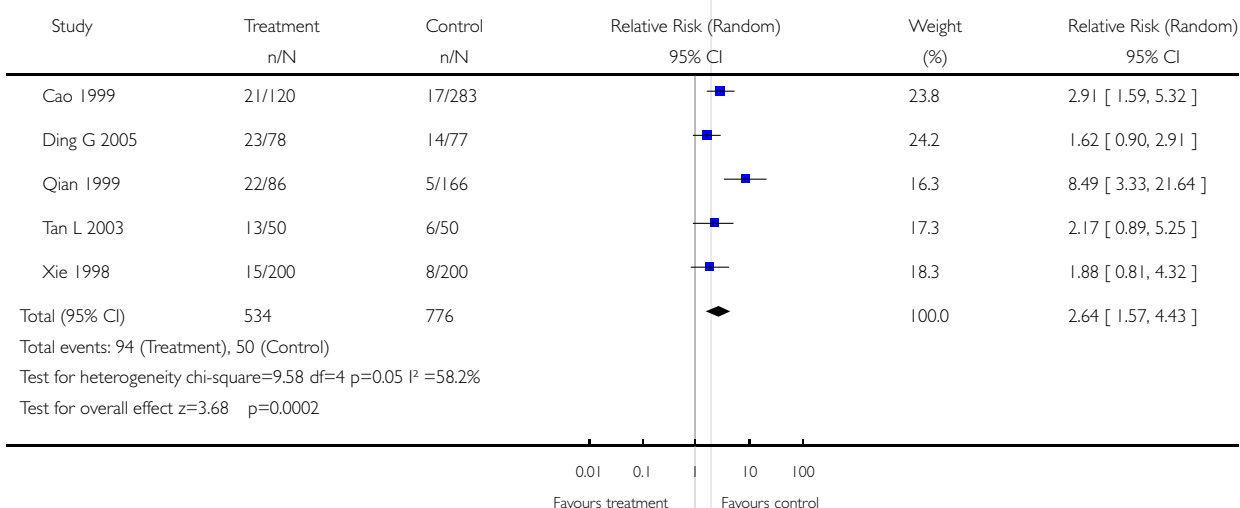


**Analysis 13.05. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 05 Any side-effect**

Review: Interventions for emergency contraception

Comparison: 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg)

Outcome: 05 Any side-effect

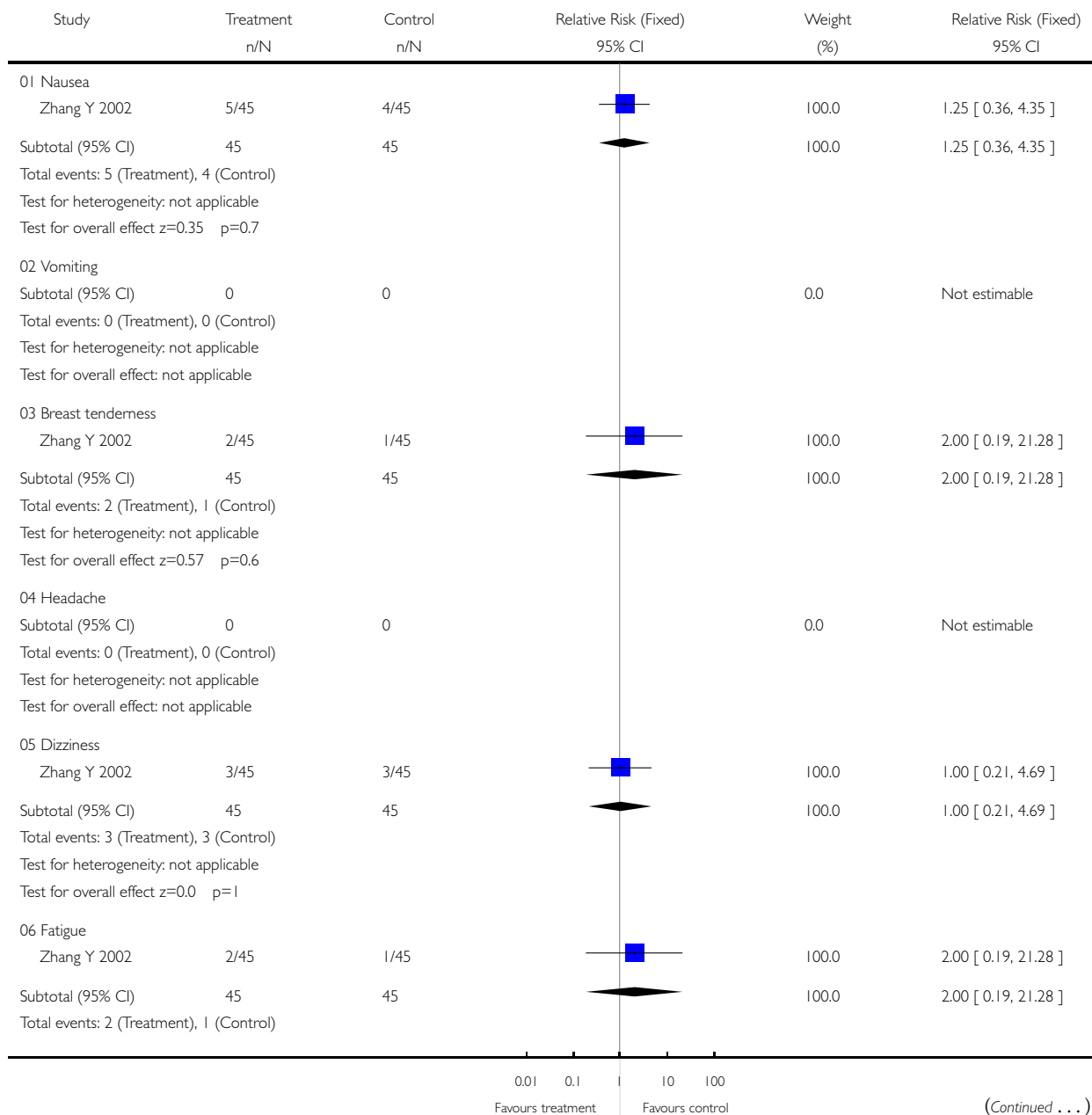


### Analysis 13.06. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 06 Specific side-effects

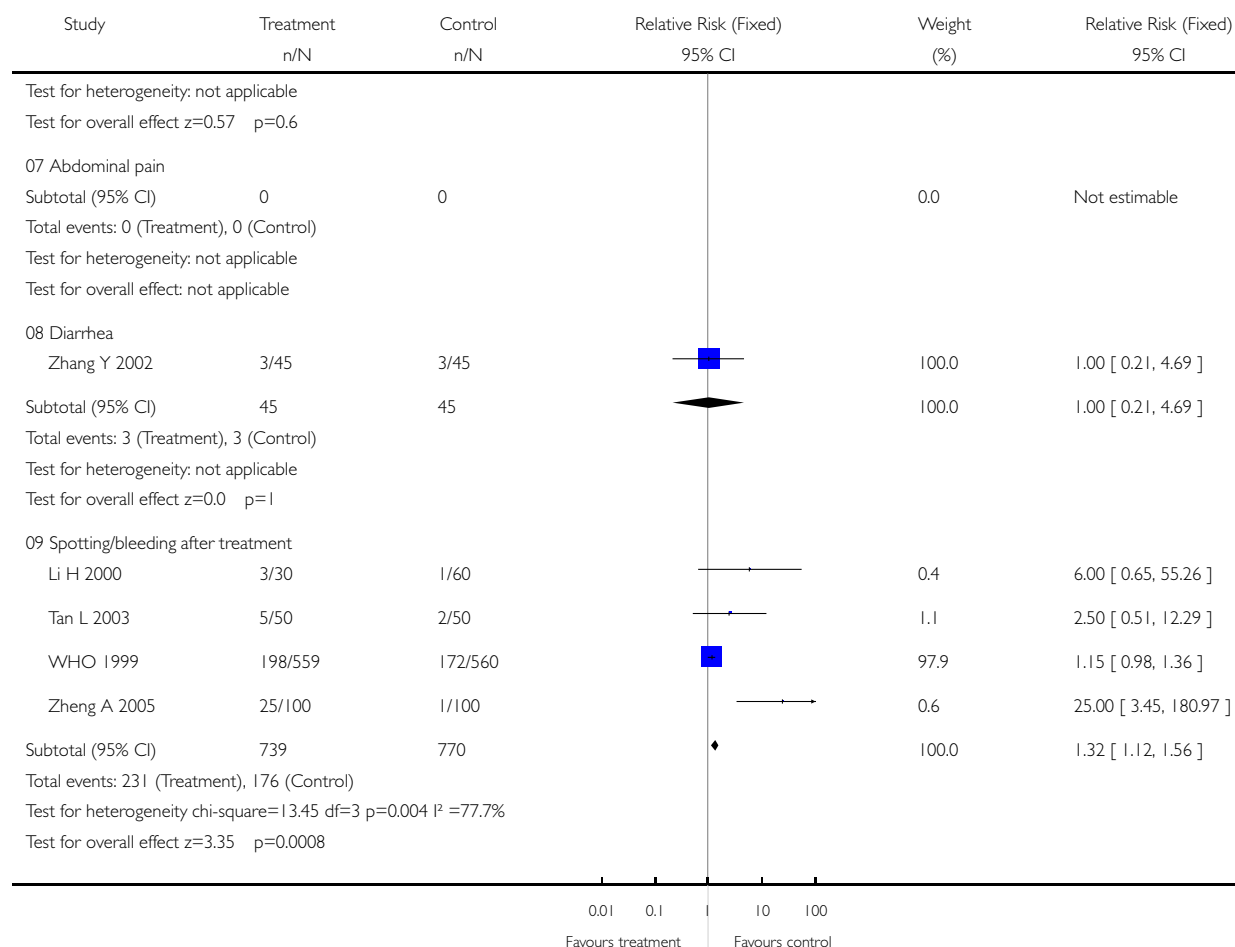
Review: Interventions for emergency contraception

Comparison: 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg)

Outcome: 06 Specific side-effects



(... Continued)



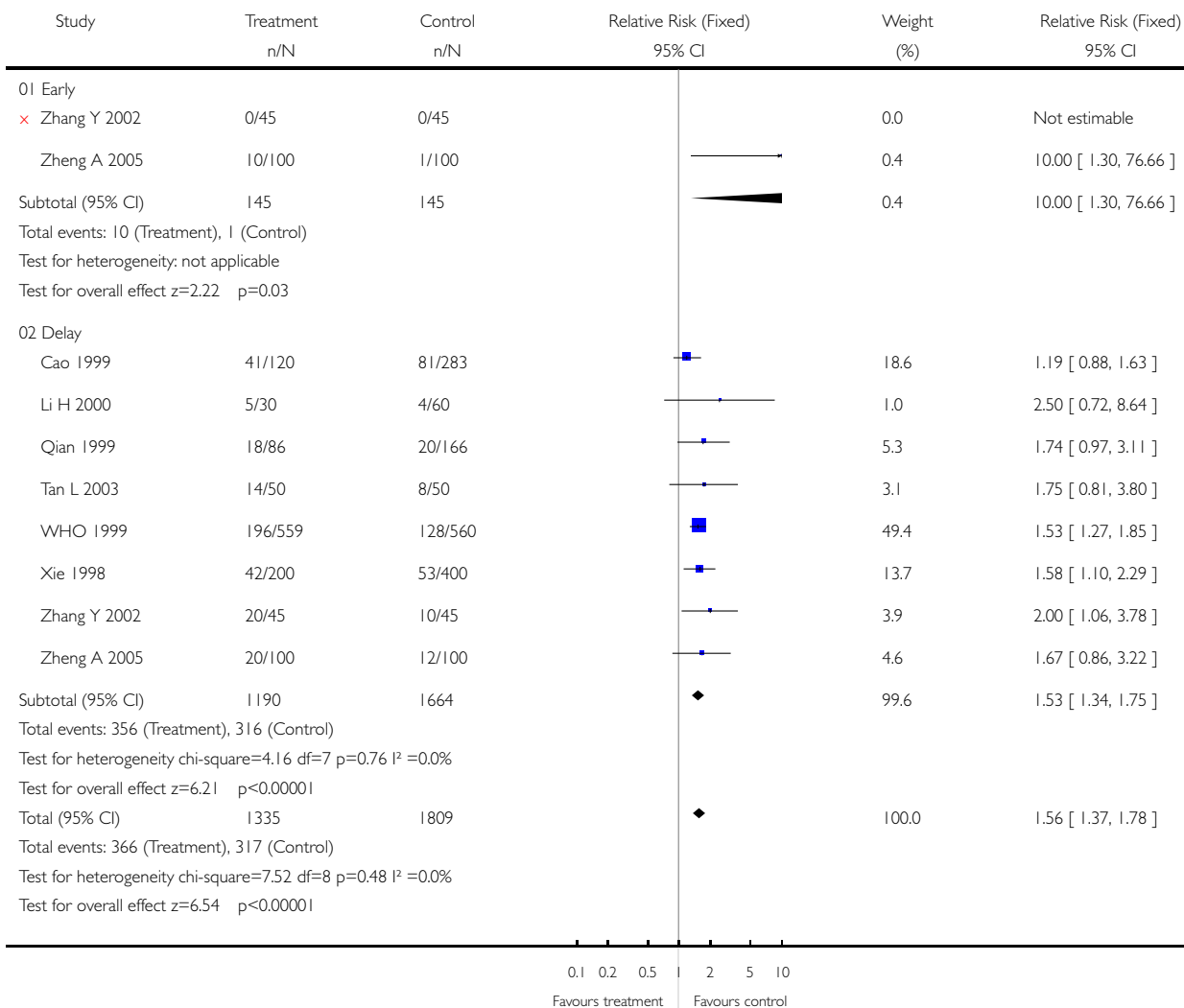


### Analysis 13.07. Comparison 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 13 Mifepristone high-dose (> 50 mg) vs mifepristone mid-doses (25-50 mg)

Outcome: 07 Menses

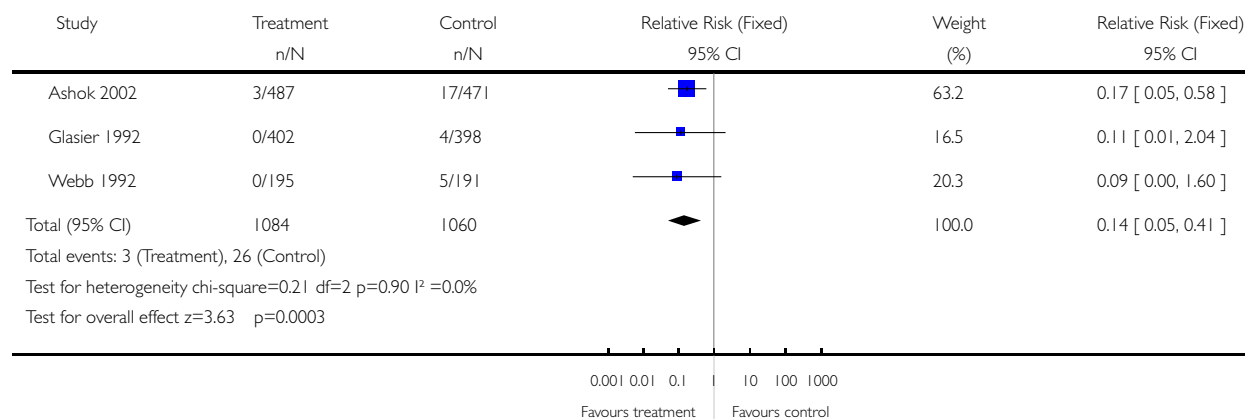


### Analysis 14.01. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 01 Observed number of pregnancies (all women)

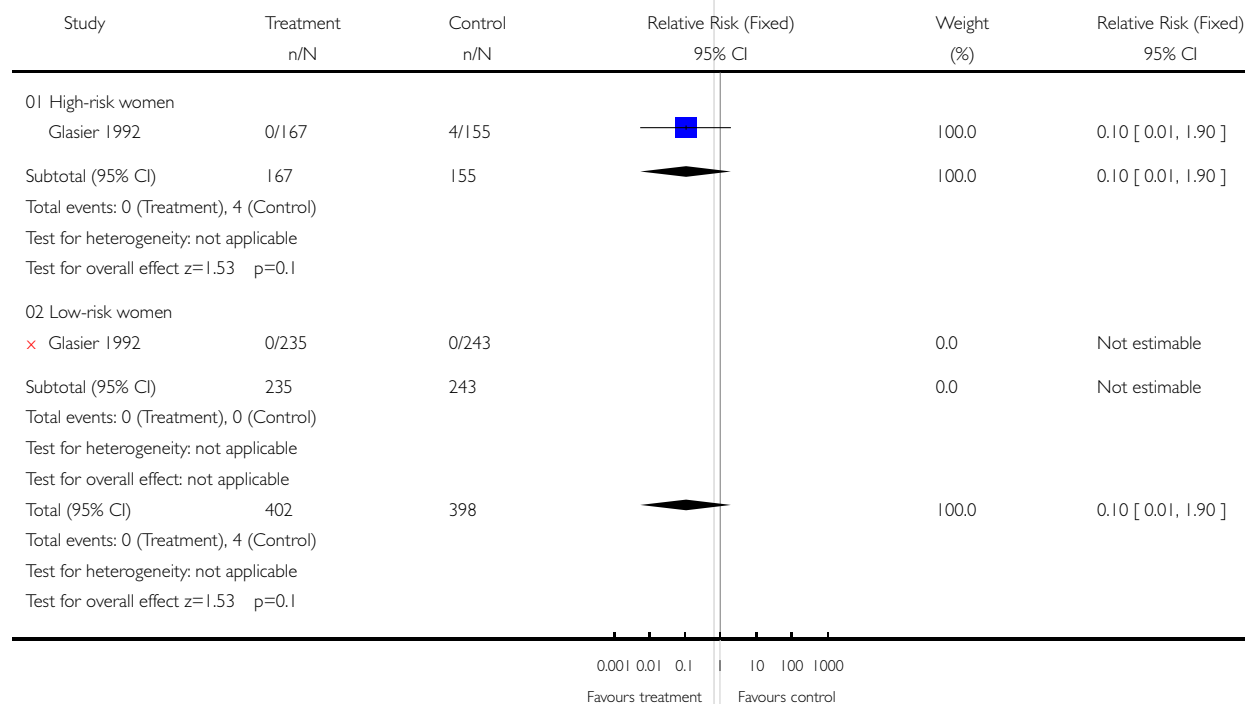


### Analysis 14.02. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 02 Observed number of pregnancies (by risk status)

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 02 Observed number of pregnancies (by risk status)

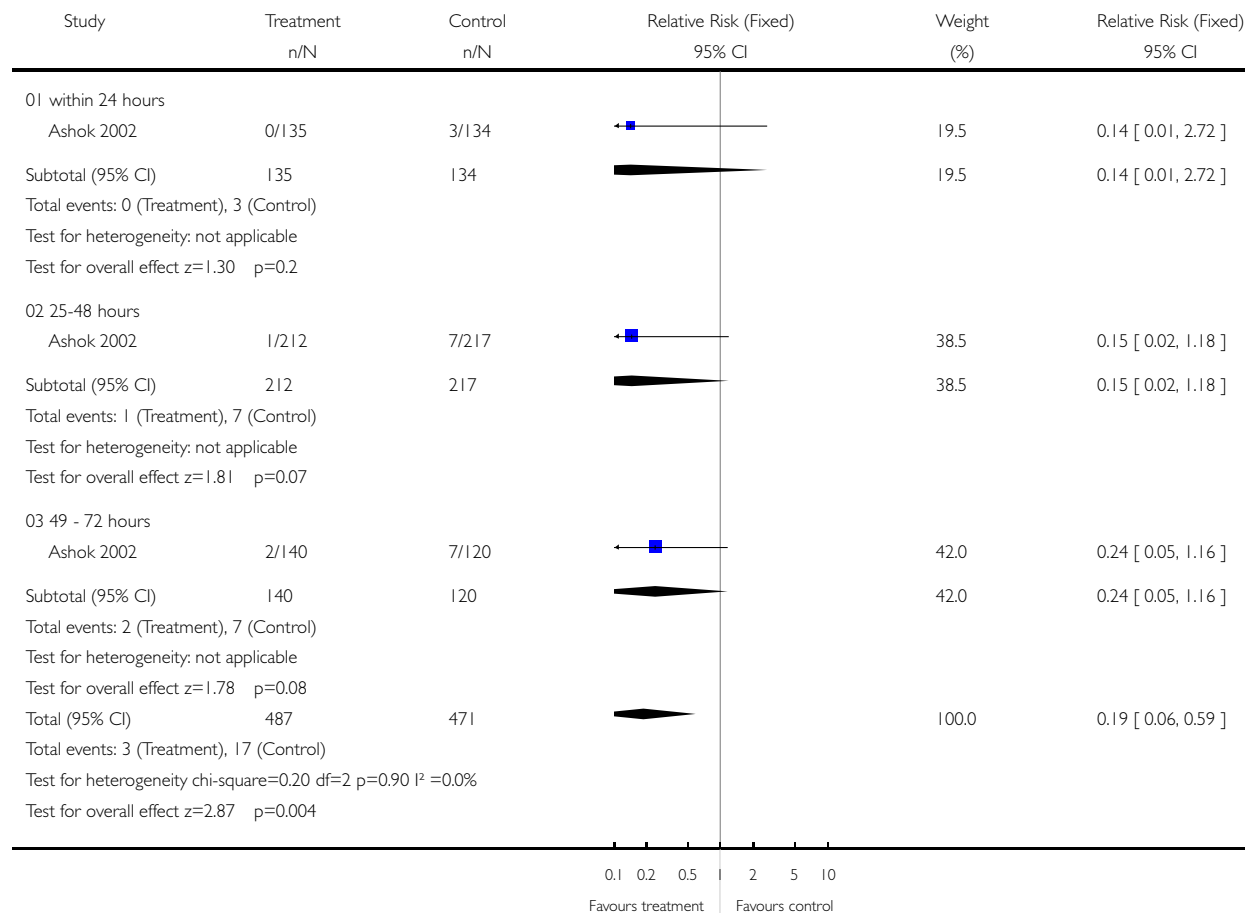


### Analysis 14.03. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 03 Observed number of pregnancies (time from intercourse)

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 03 Observed number of pregnancies (time from intercourse)

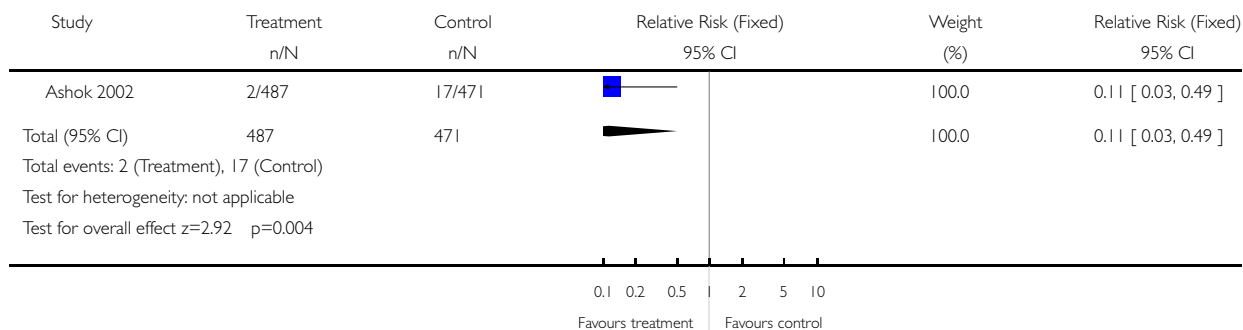


#### Analysis 14.04. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 04 Need for extra dose

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 04 Need for extra dose

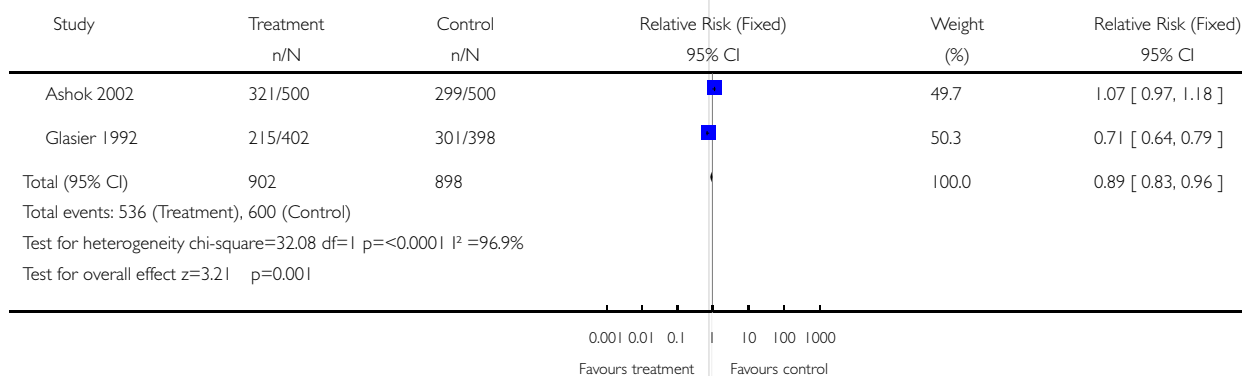


#### Analysis 14.05. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 05 Any side-effect

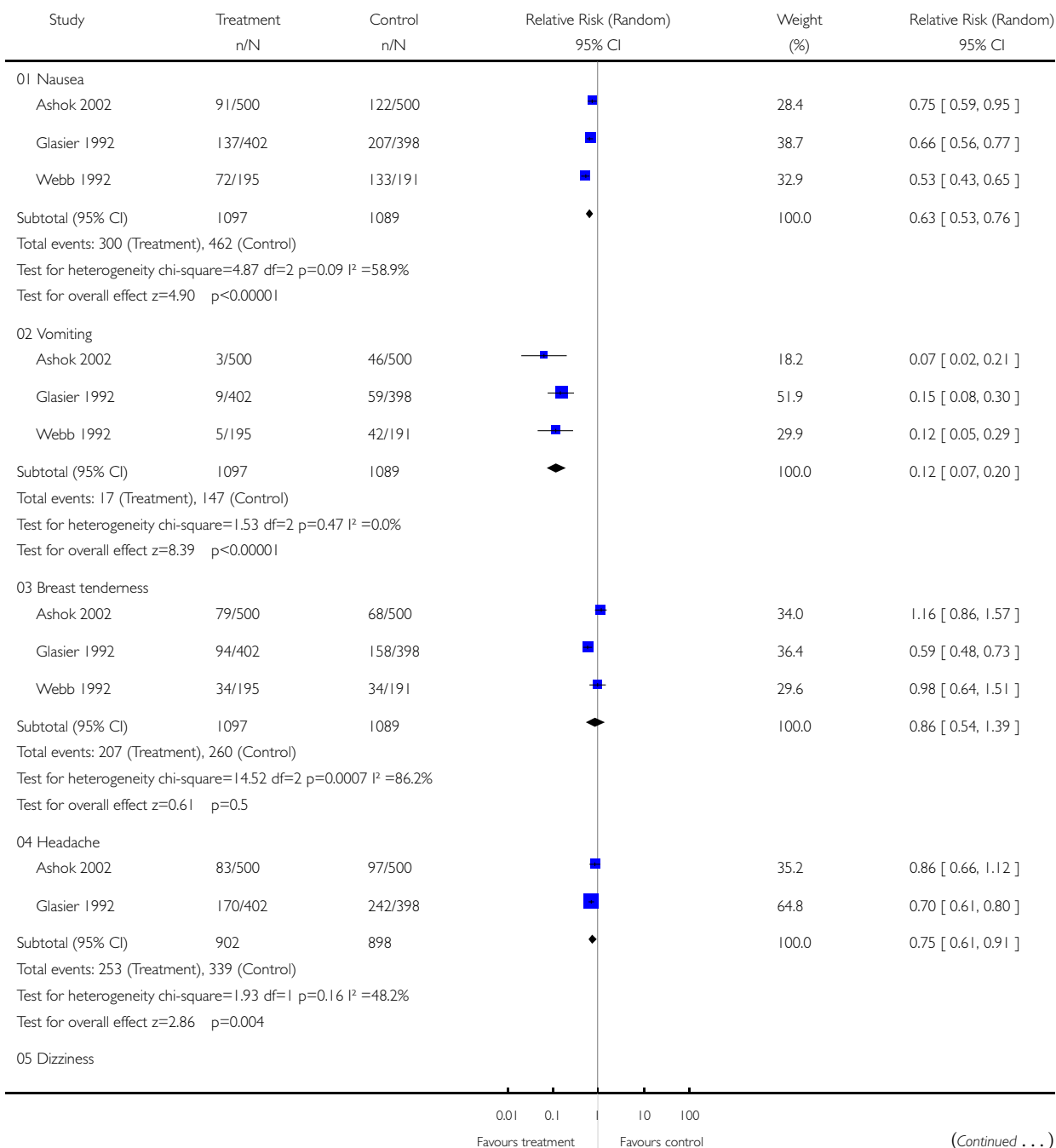


# **Analysis 14.06. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 06 Specific side-effects**

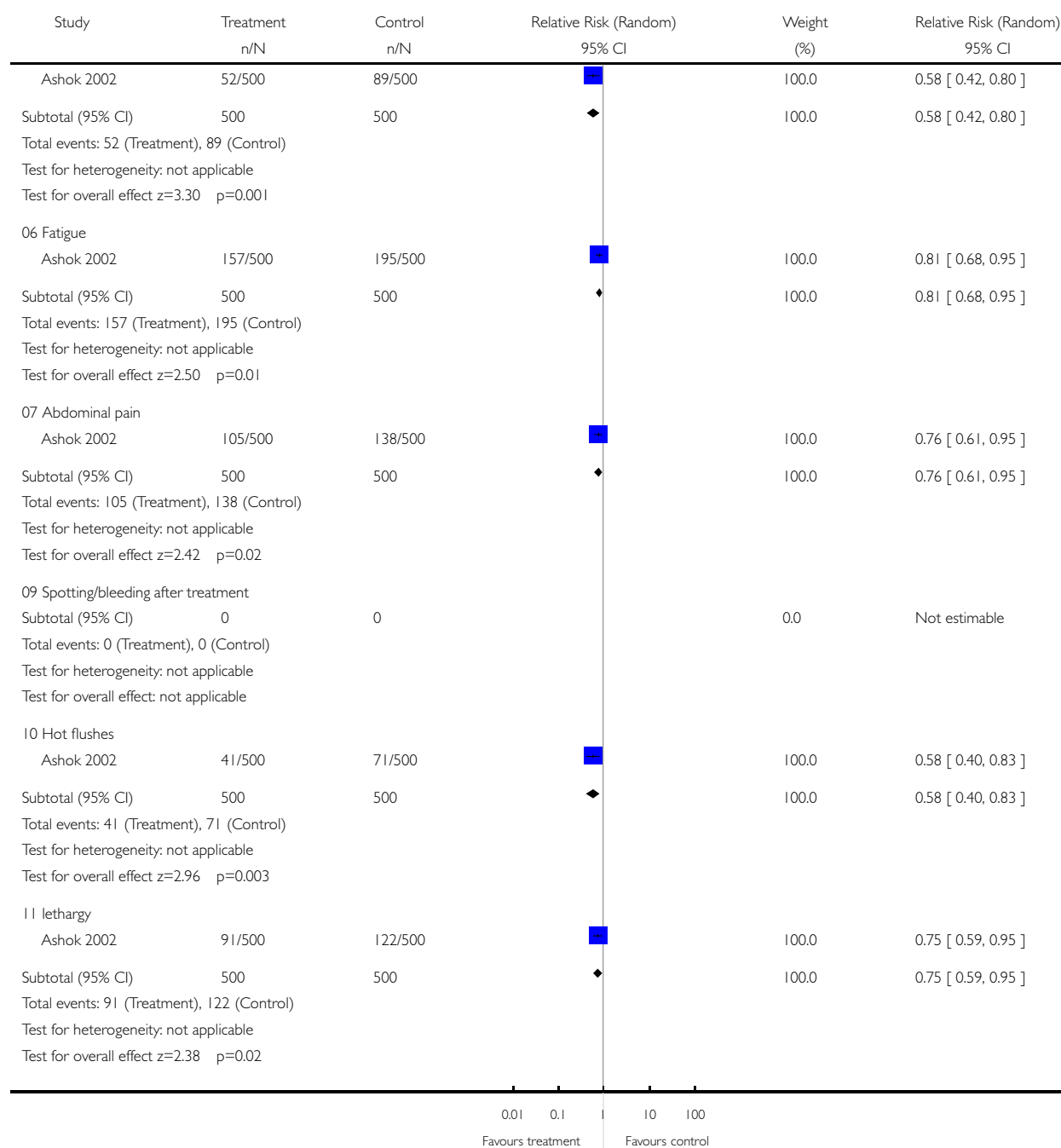
Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 06 Specific side-effects



(... Continued)

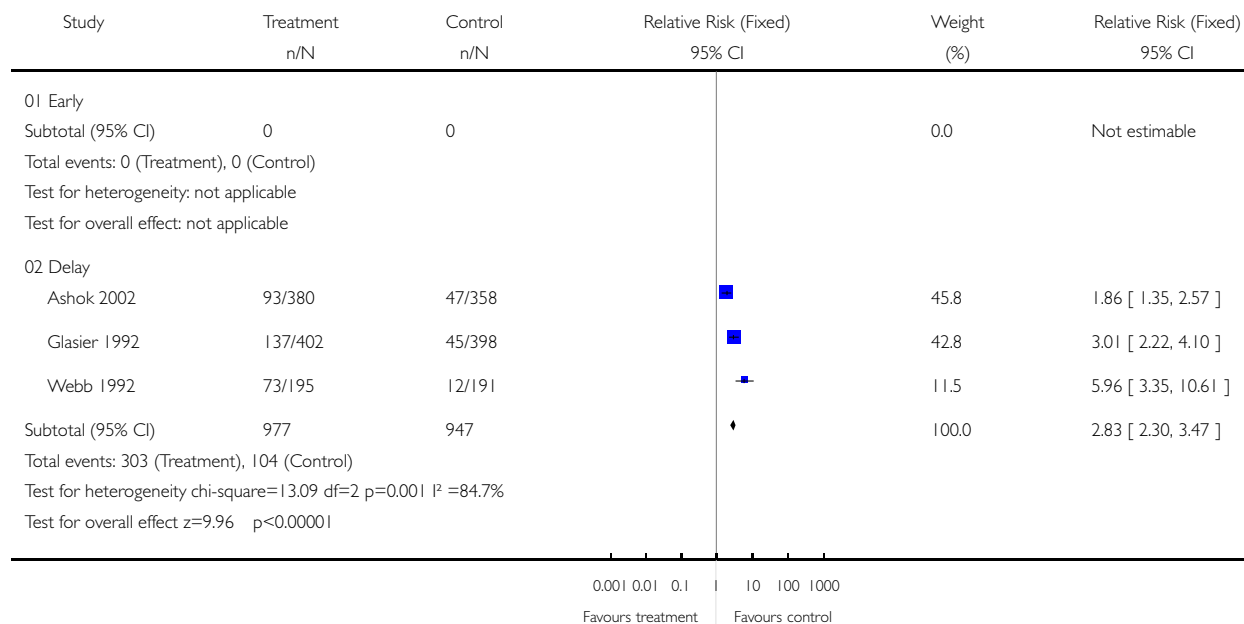


### Analysis 14.07. Comparison 14 Mifepristone (all doses) vs Yuzpe, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 14 Mifepristone (all doses) vs Yuzpe

Outcome: 07 Menses

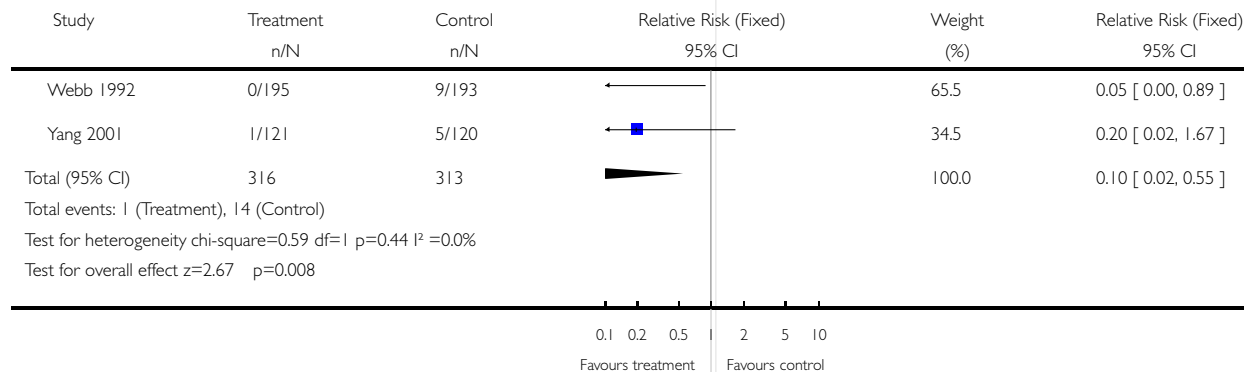


### Analysis 15.01. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 15 Mifepristone (all doses) vs danazol (all doses)

Outcome: 01 Observed number of pregnancies (all women)

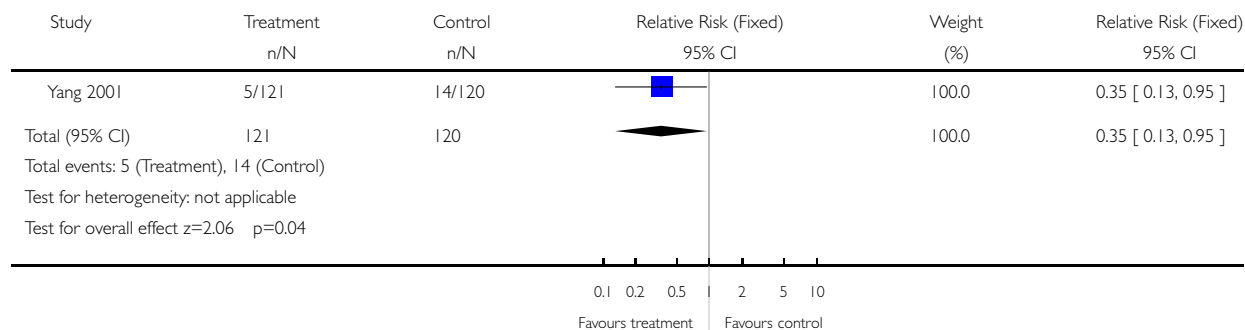


### Analysis 15.05. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 15 Mifepristone (all doses) vs danazol (all doses)

Outcome: 05 Any side-effect

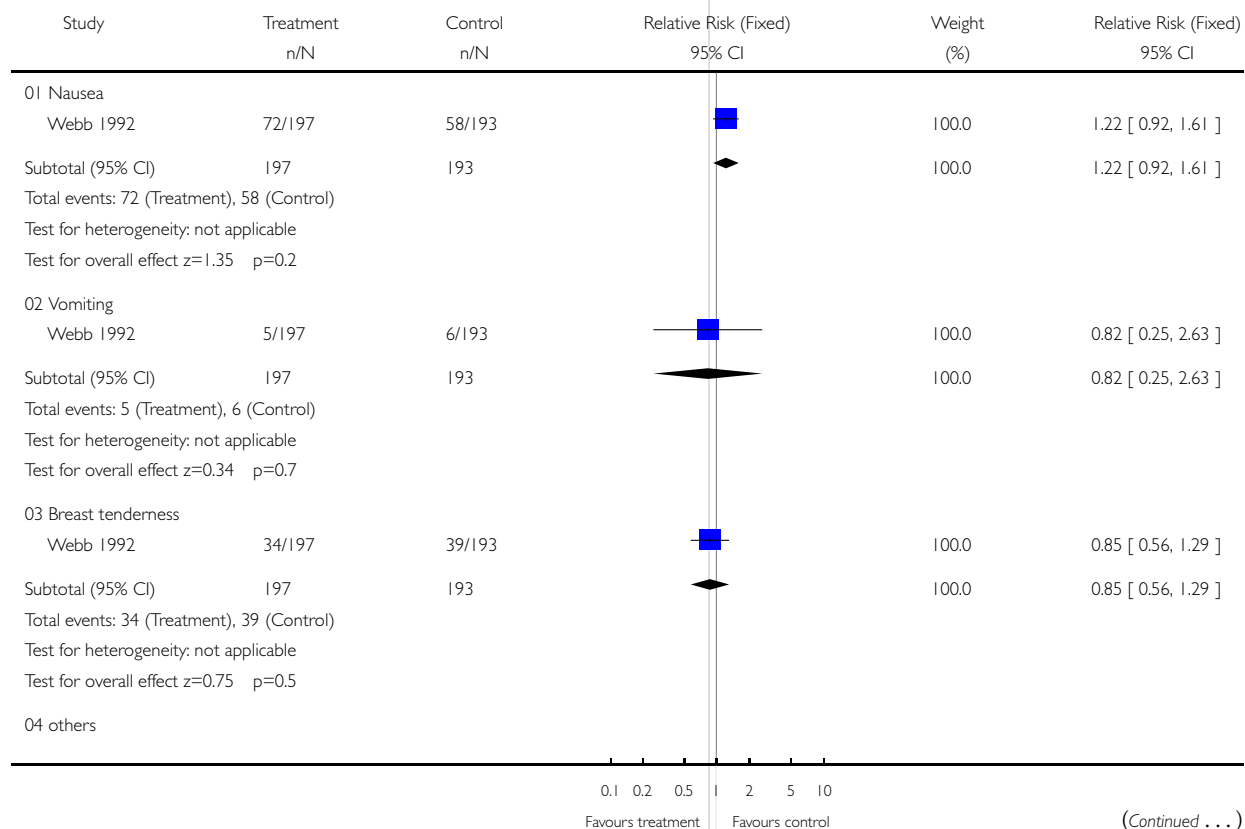


### Analysis 15.06. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 06 Specific side-effect

Review: Interventions for emergency contraception

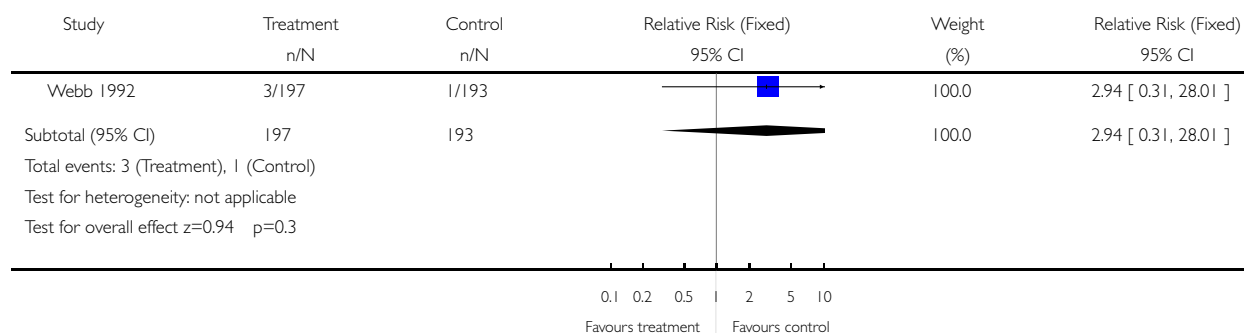
Comparison: 15 Mifepristone (all doses) vs danazol (all doses)

Outcome: 06 Specific side-effect





(... Continued)

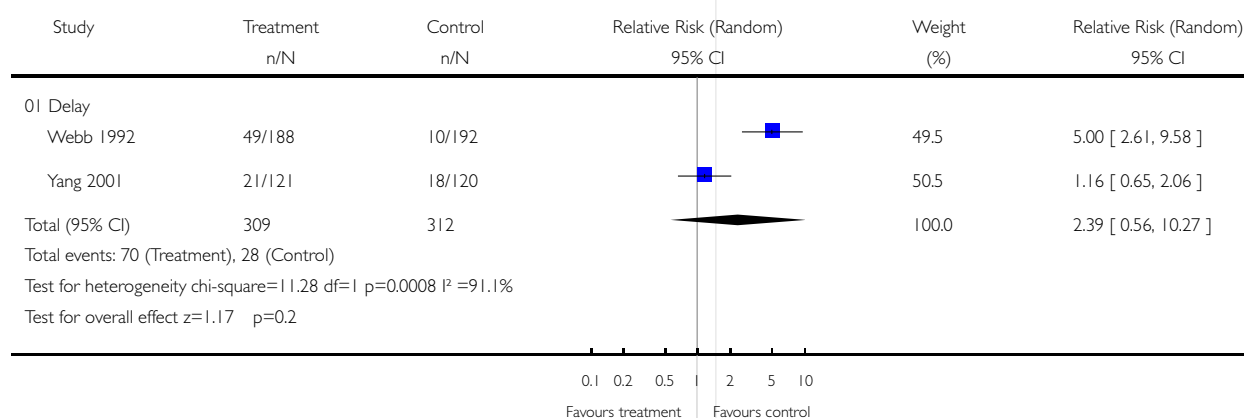


### Analysis 15.07. Comparison 15 Mifepristone (all doses) vs danazol (all doses), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 15 Mifepristone (all doses) vs danazol (all doses)

Outcome: 07 Menses

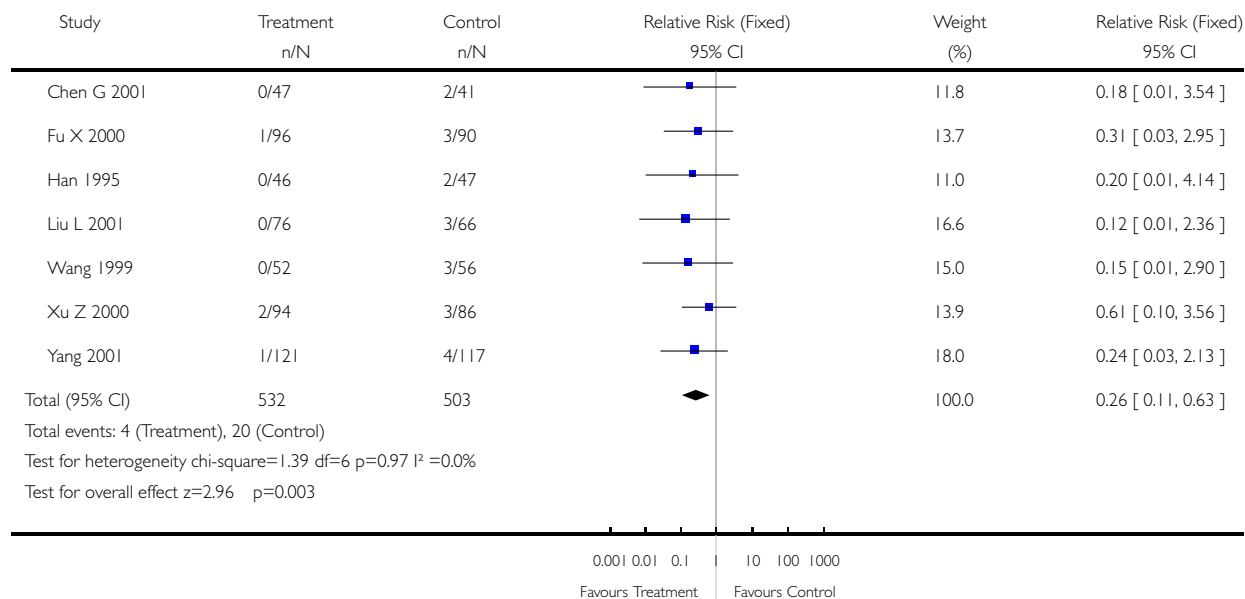


### Analysis 16.01. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 16 Mifepristone (all doses) vs anordrin (all doses)

Outcome: 01 Observed number of pregnancies (all women)

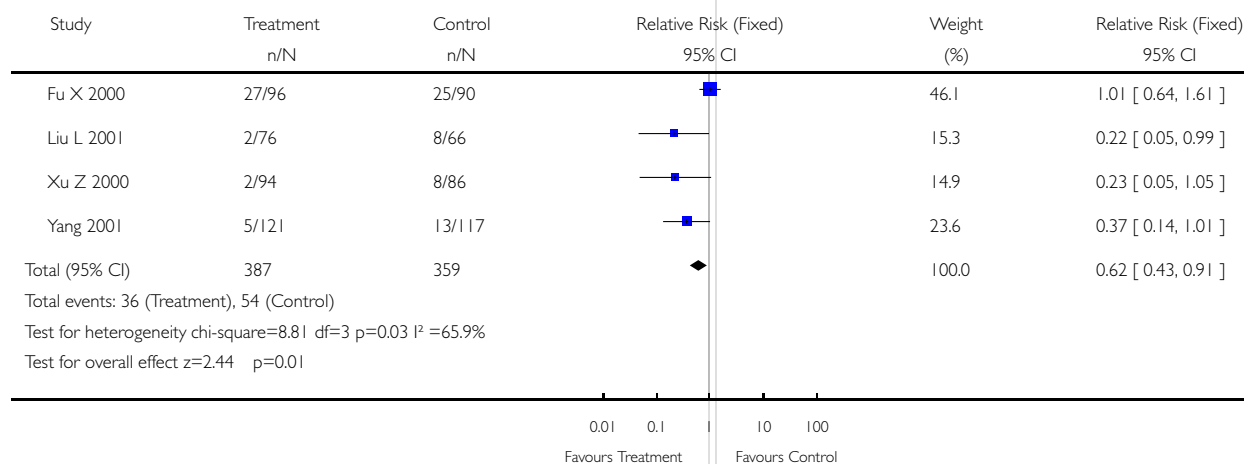


### Analysis 16.05. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 16 Mifepristone (all doses) vs anordrin (all doses)

Outcome: 05 Any side-effect



# **Analysis 16.06. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 06 Specific side-effects**

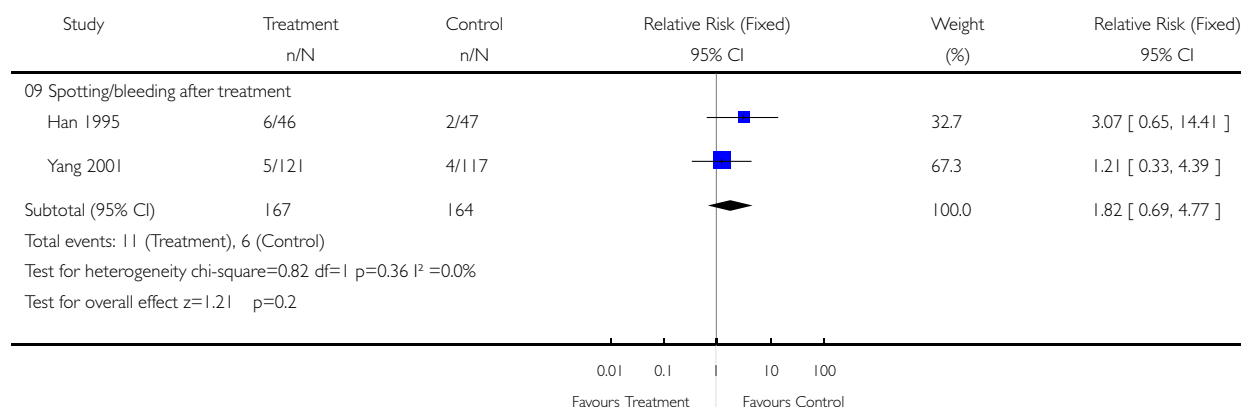
Review: Interventions for emergency contraception

Comparison: 16 Mifepristone (all doses) vs anordrin (all doses)

Outcome: 06 Specific side-effects

Study	Treatment n/N	Control n/N	Relative Risk (Fixed) 95% CI	Weight (%)	Relative Risk (Fixed) 95% CI
01 Nausea					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
02 Vomiting					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
03 Breast tenderness					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
04 Headache					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
05 Dizziness					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
06 Fatigue					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
07 Abdominal pain					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
			0.01 0.1 1 10 100		
			Favours Treatment Favours Control	(Continued ...)	

(... Continued)

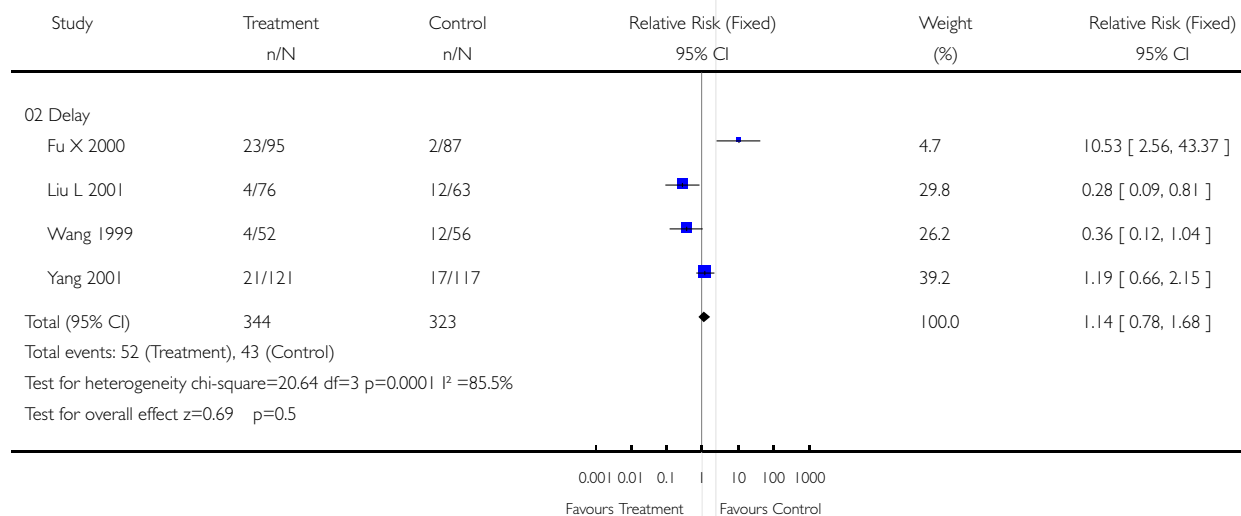


### Analysis 16.07. Comparison 16 Mifepristone (all doses) vs anordrin (all doses), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 16 Mifepristone (all doses) vs anordrin (all doses)

Outcome: 07 Menses

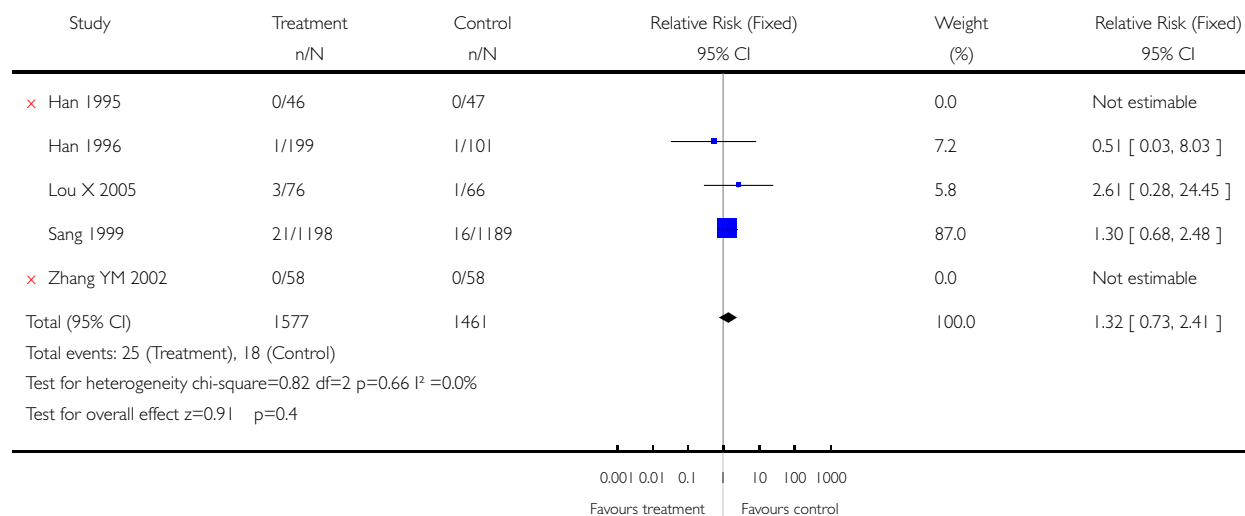


### Analysis 17.01. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses)

Outcome: 01 Observed number of pregnancies (all women)

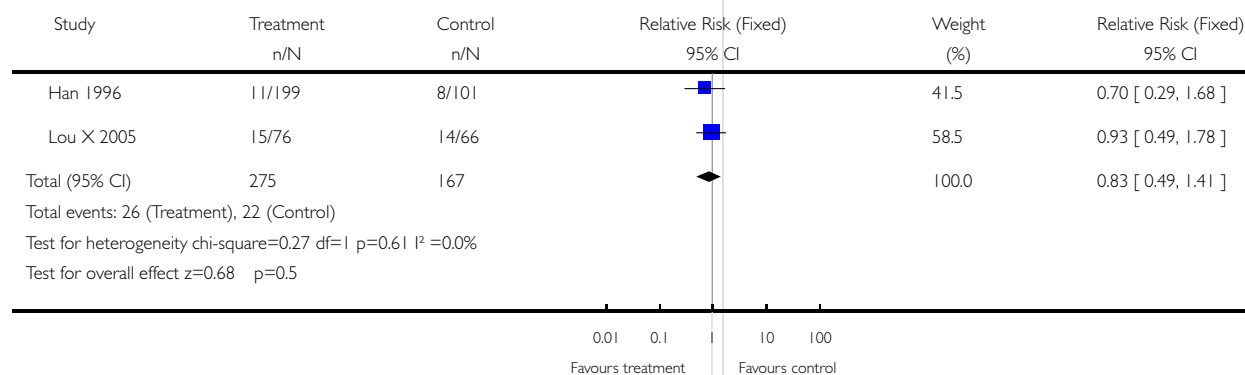


### Analysis 17.05. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses)

Outcome: 05 Any side-effect

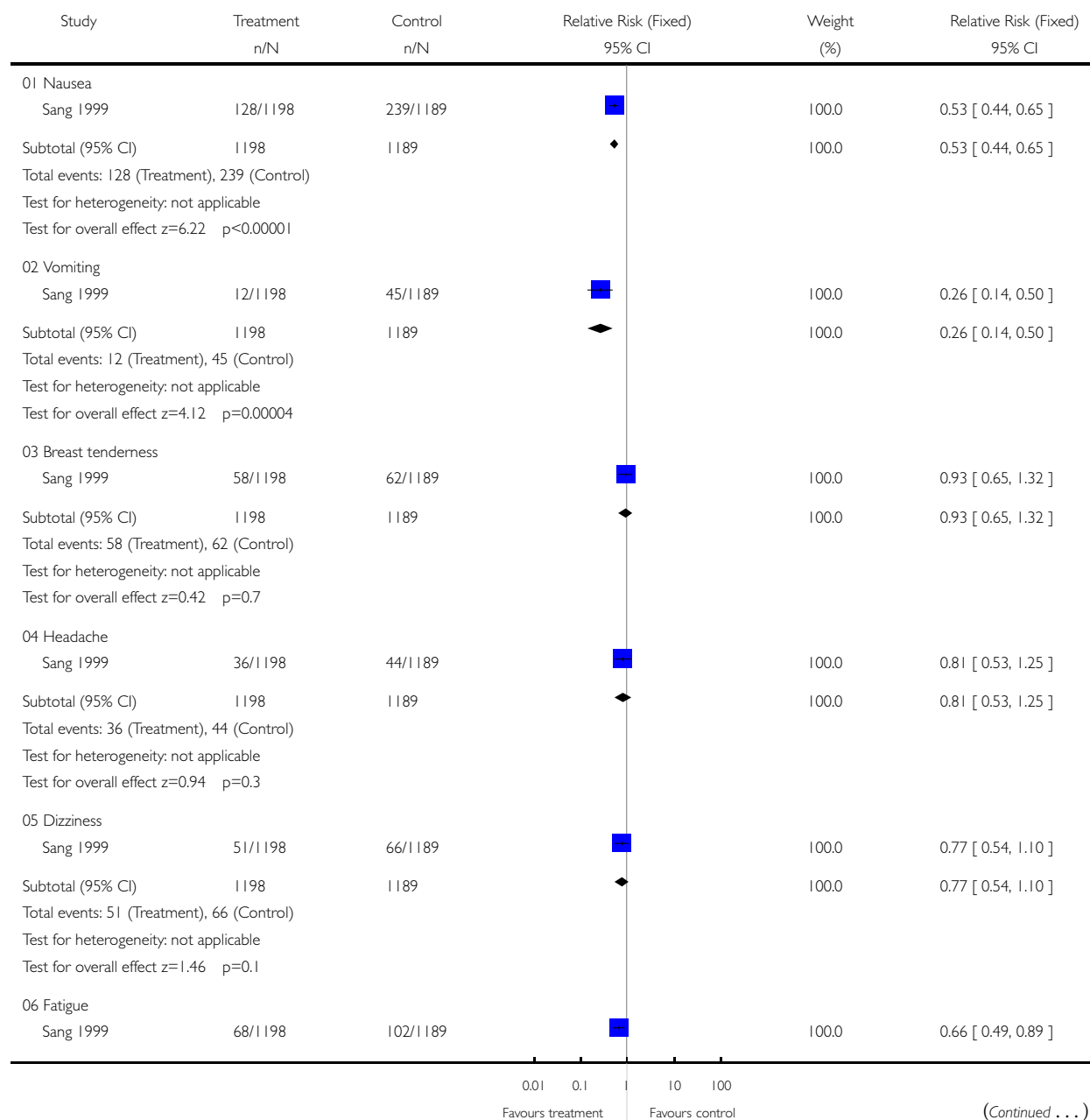


## Analysis 17.06. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 06 Specific side-effects

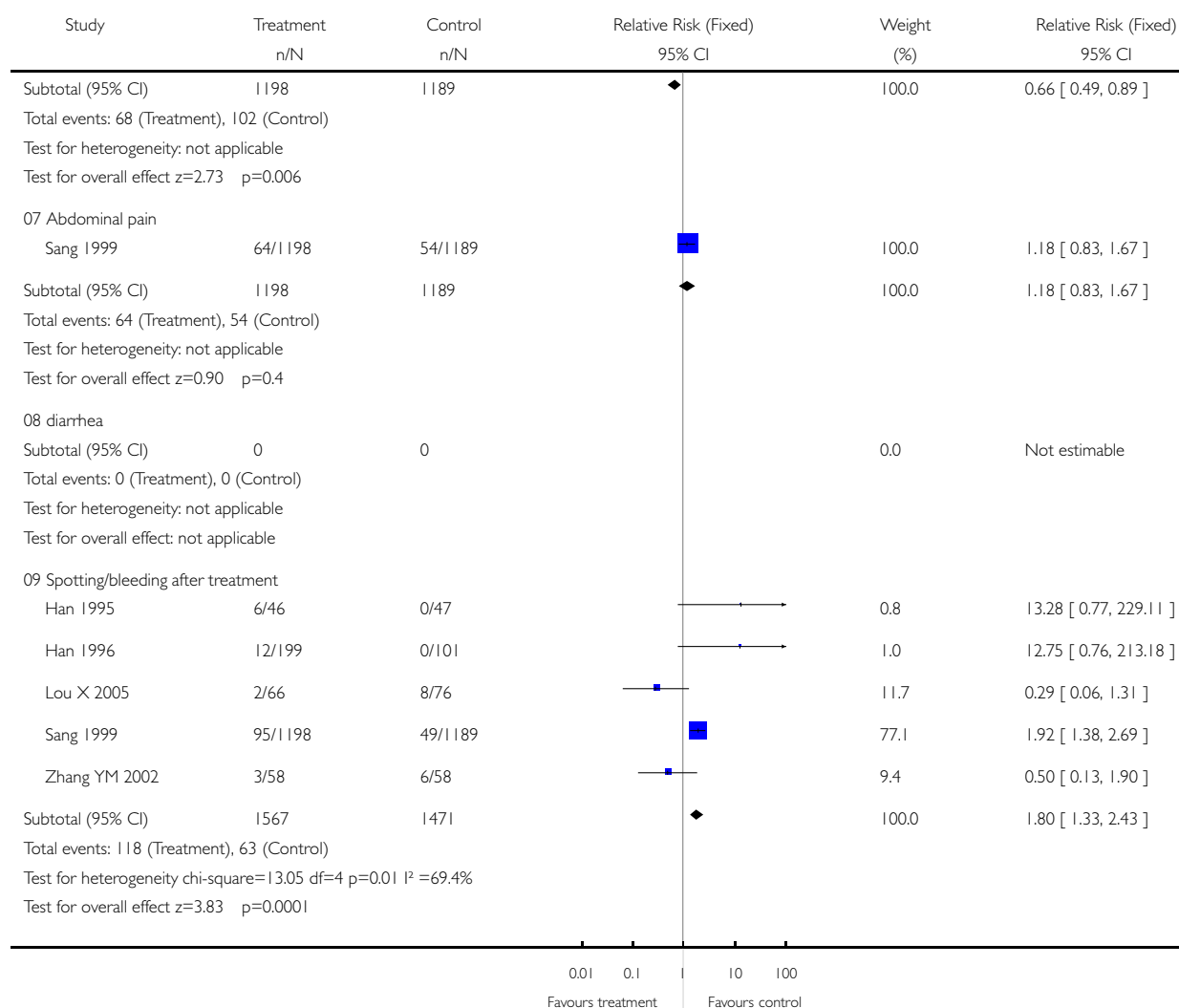
Review: Interventions for emergency contraception

Comparison: 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses)

Outcome: 06 Specific side-effects



(... Continued)

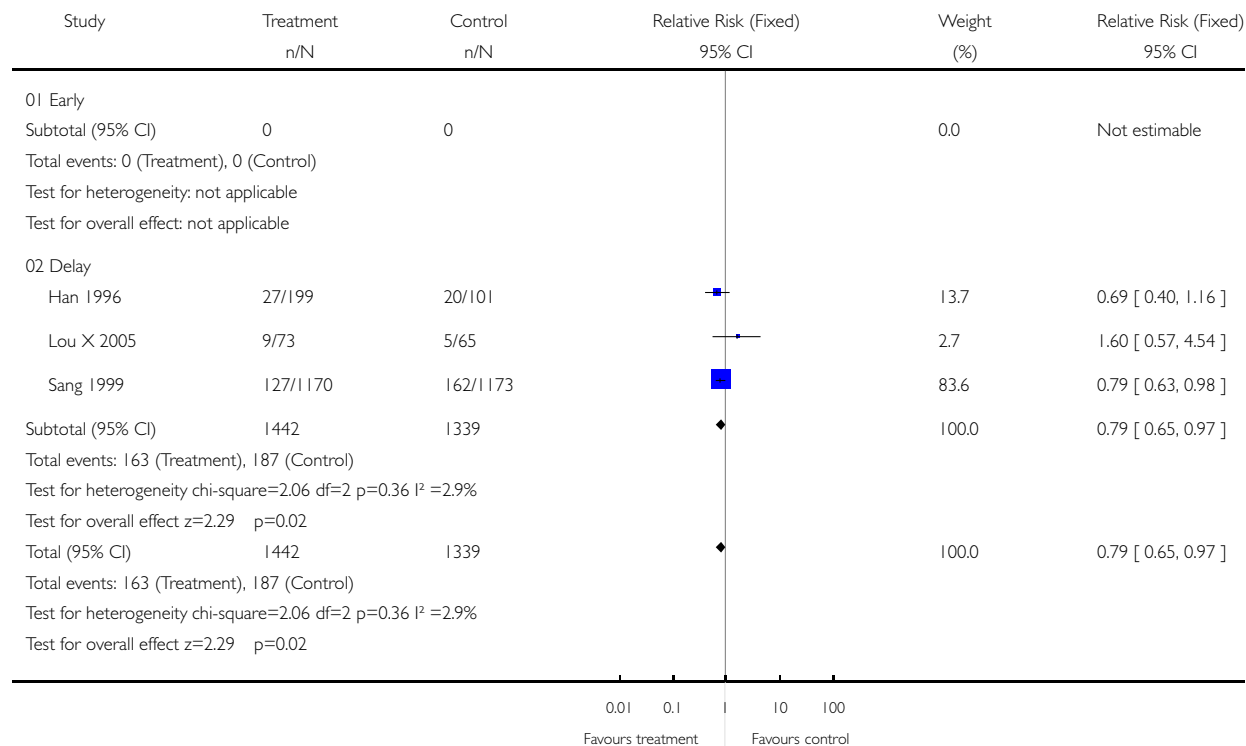


### Analysis 17.07. Comparison 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses), Outcome 07 Delay in menses

Review: Interventions for emergency contraception

Comparison: 17 Mifepristone alone (all doses) vs mifepristone + anordrin (all doses)

Outcome: 07 Delay in menses

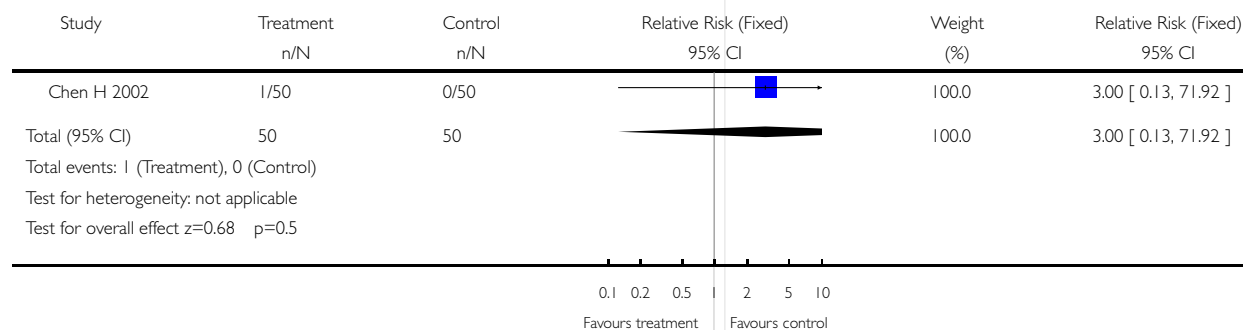


### Analysis 18.01. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 01 Observed number of pregnancy (all women)

Review: Interventions for emergency contraception

Comparison: 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses)

Outcome: 01 Observed number of pregnancy (all women)



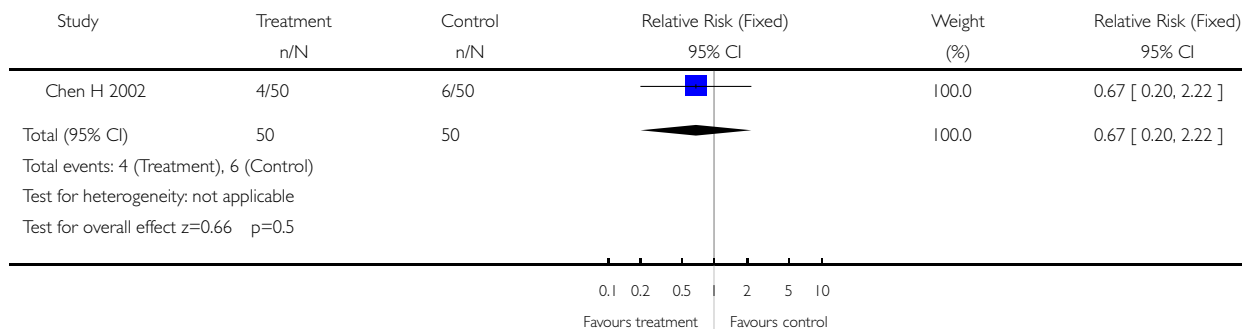


### Analysis 18.05. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses)

Outcome: 05 Any side-effect

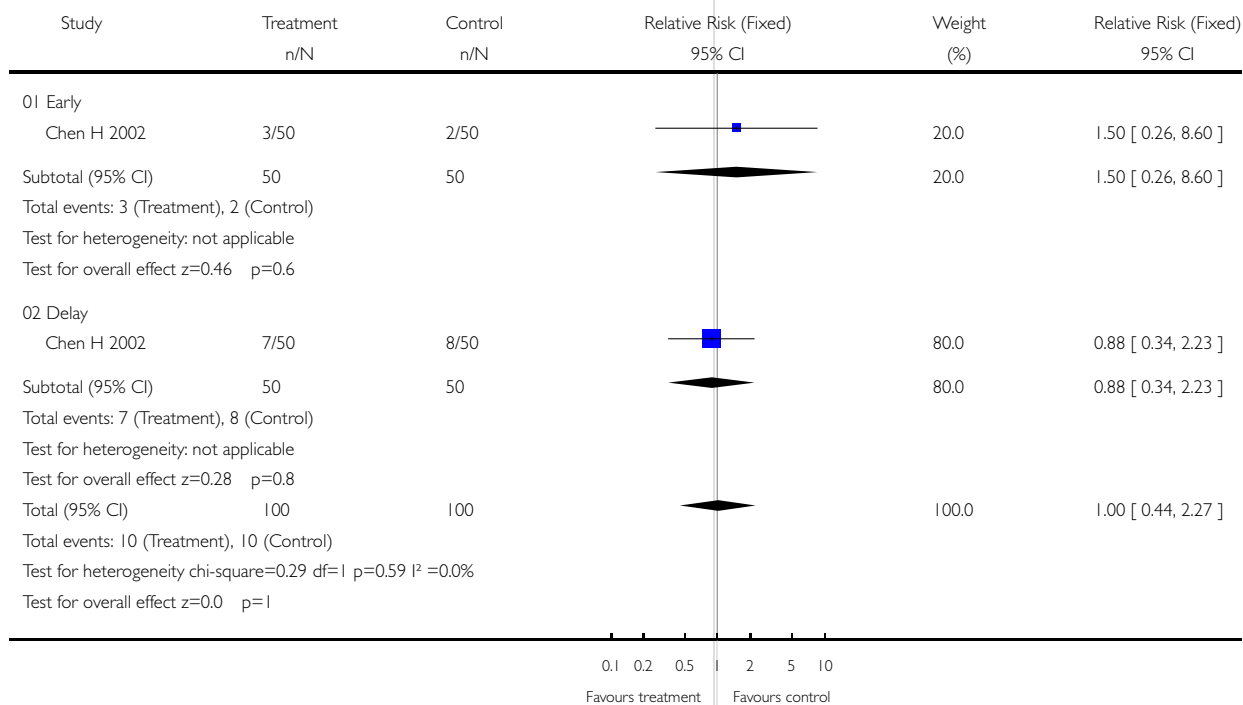


### Analysis 18.07. Comparison 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 18 Mifepristone alone (all doses ) vs. mifepristone + MTX (all doses)

Outcome: 07 Menses

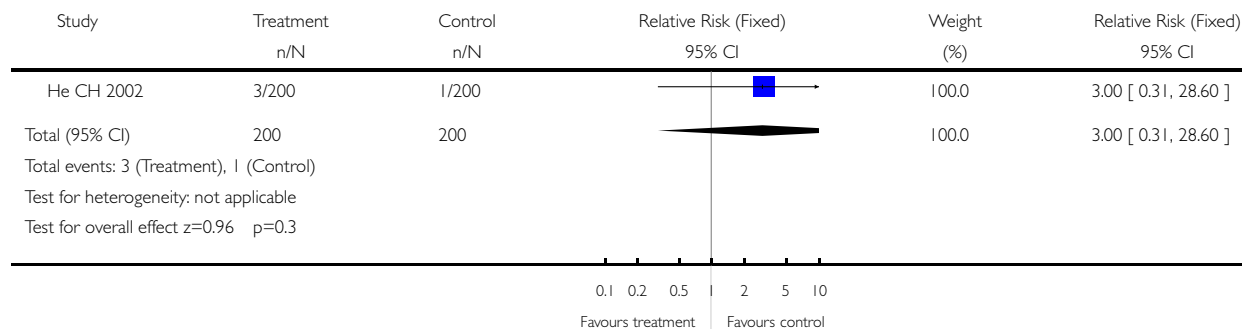


**Analysis 19.01. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 01 Observed number of pregnancies (all women)**

Review: Interventions for emergency contraception

Comparison: 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses)

Outcome: 01 Observed number of pregnancies (all women)

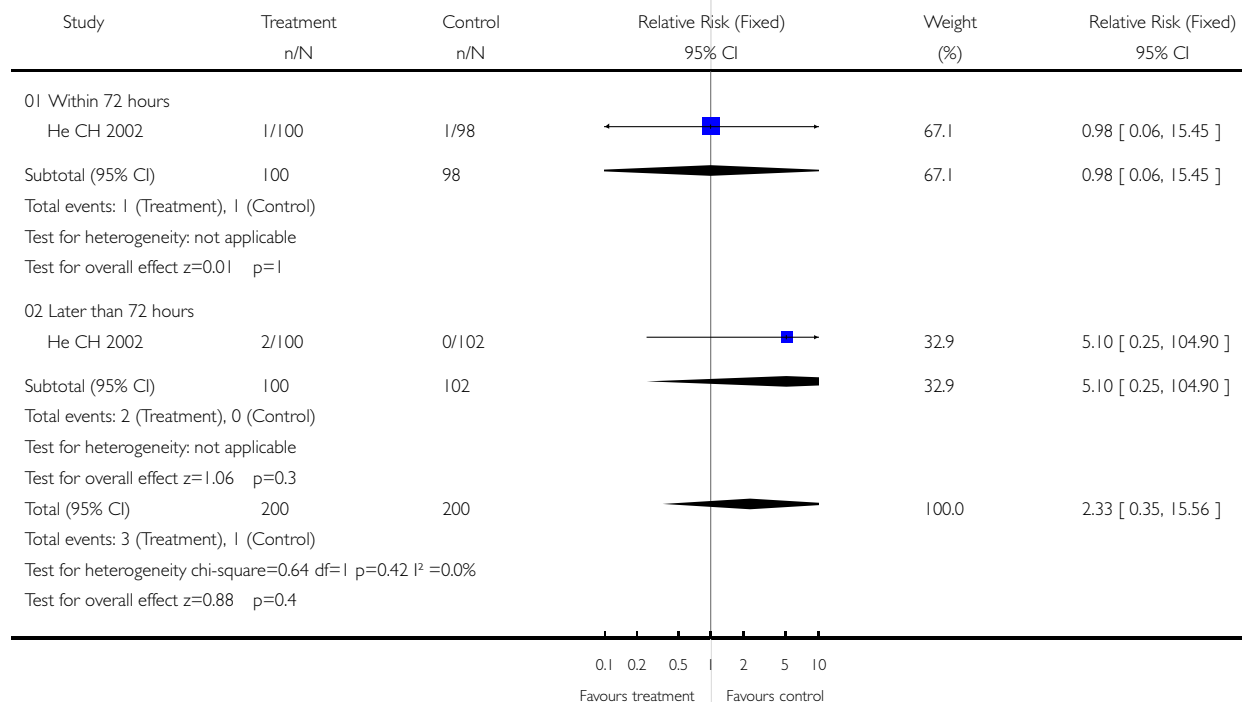


**Analysis 19.03. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 03 Observed number of pregnancies (time from intercourse)**

Review: Interventions for emergency contraception

Comparison: 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses)

Outcome: 03 Observed number of pregnancies (time from intercourse)

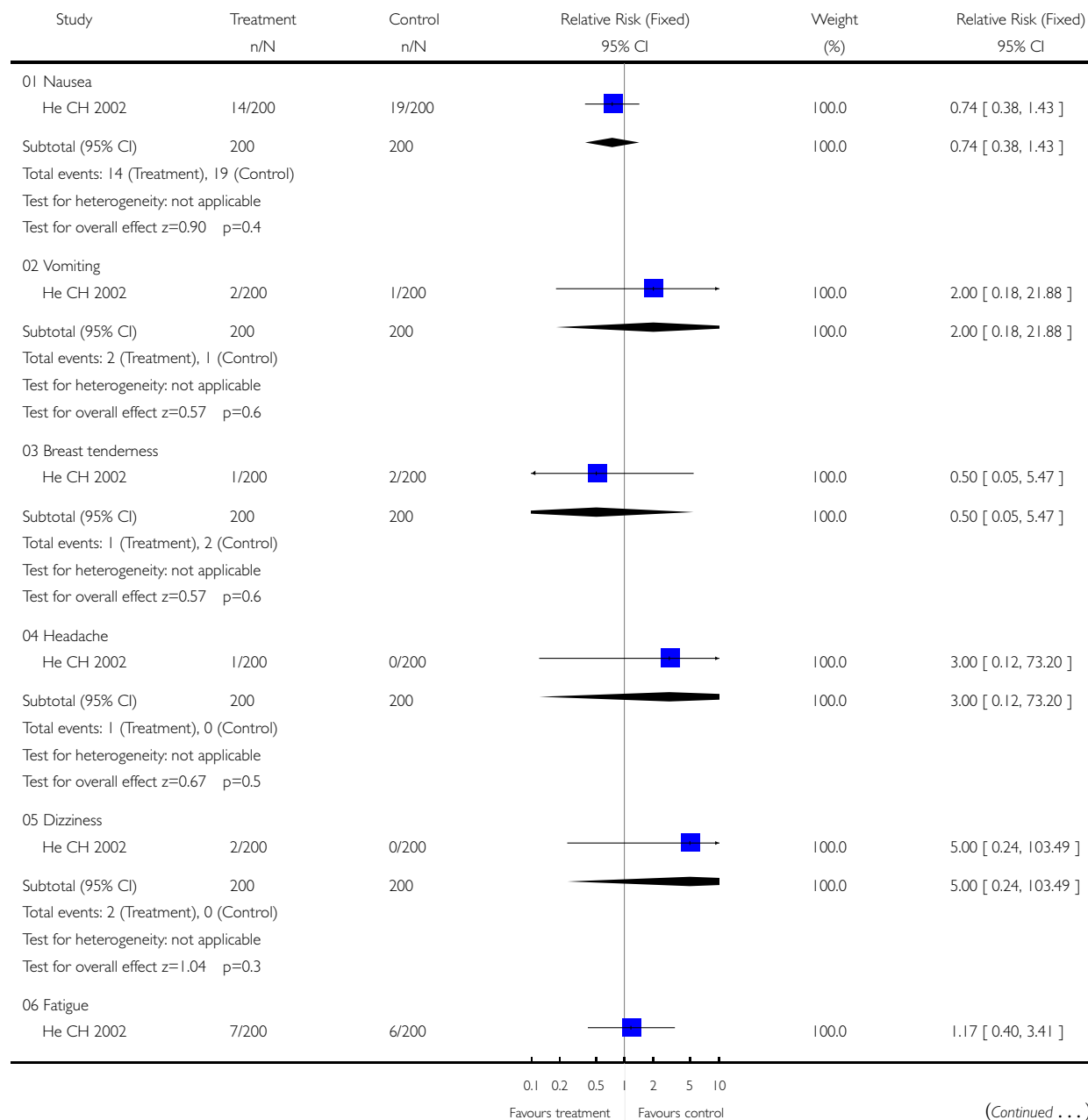


# **Analysis 19.06. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 06 Specific side-effect**

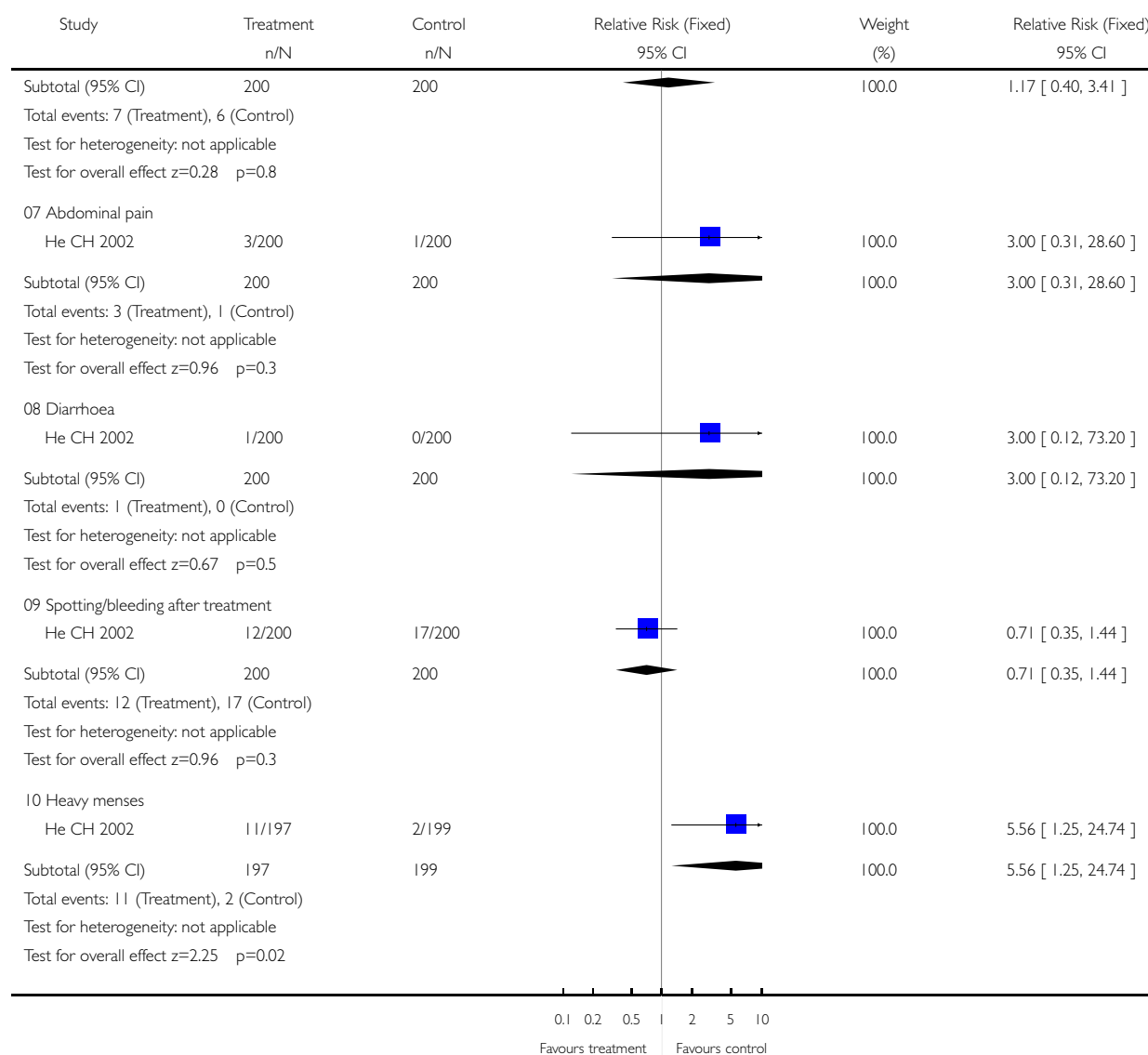
Review: Interventions for emergency contraception

Comparison: 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses)

Outcome: 06 Specific side-effect



(... Continued)

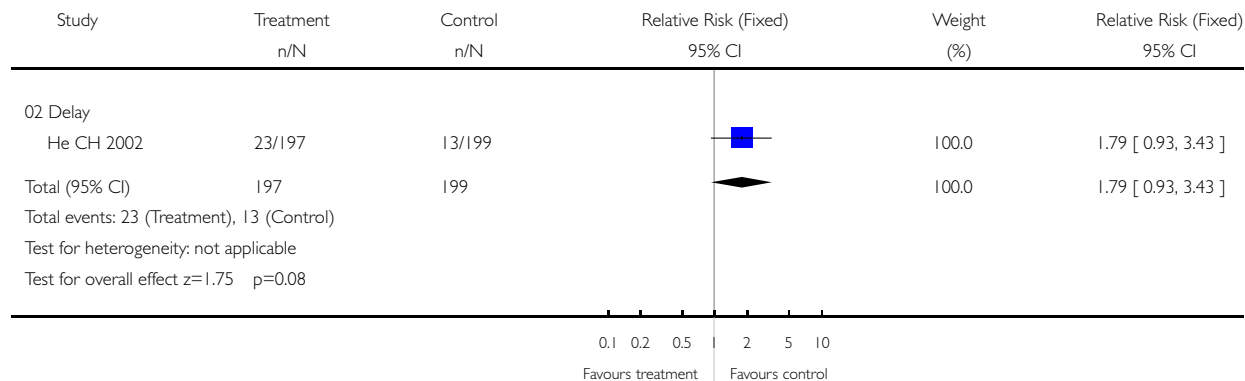


### Analysis 19.07. Comparison 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses), Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 19 Mifepristone alone (all doses) vs mifepristone + tamoxifen (all doses)

Outcome: 07 Menses

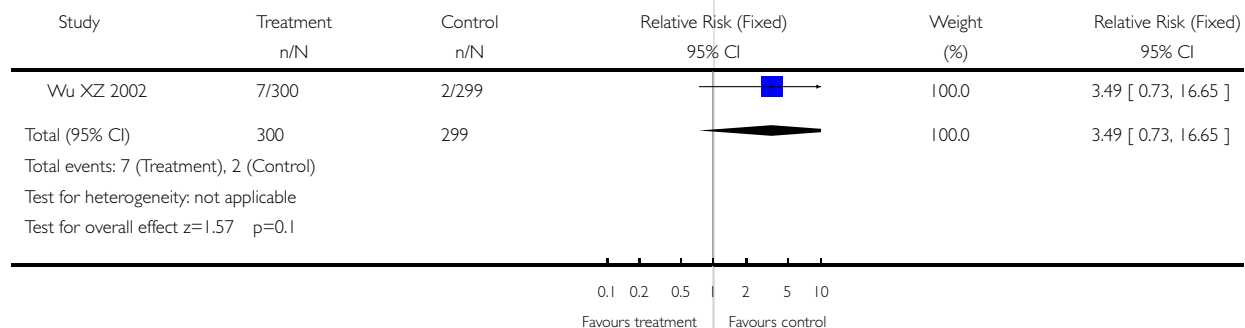


### Analysis 20.01. Comparison 20 Mifepristone vs mifepristone + misoprostol (all doses), Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 20 Mifepristone vs mifepristone + misoprostol (all doses)

Outcome: 01 Observed number of pregnancies (all women)

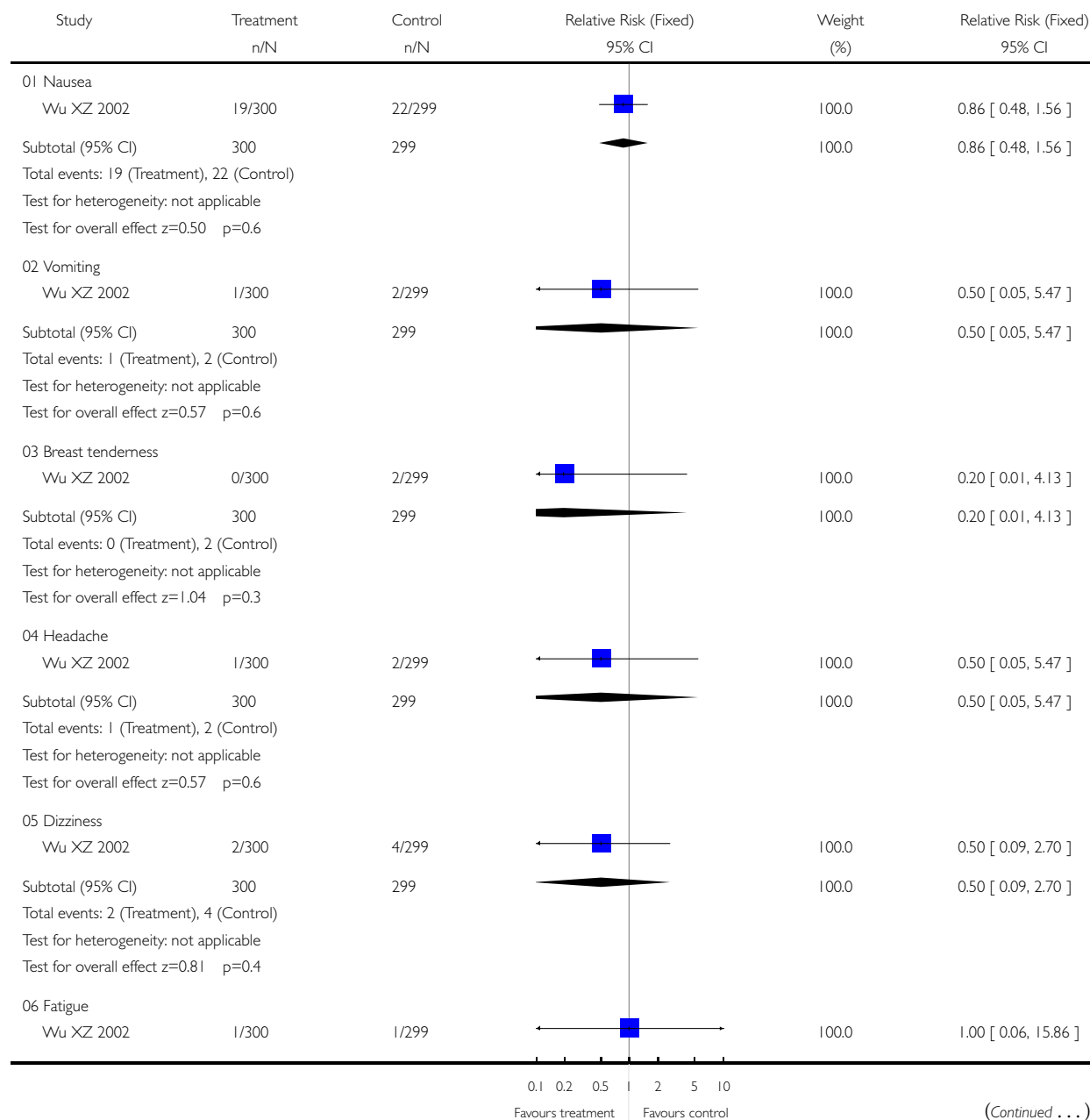


## Analysis 20.06. Comparison 20 Mifepristone vs mifepristone + misoprostol (all doses), Outcome 06 Specific side-effect

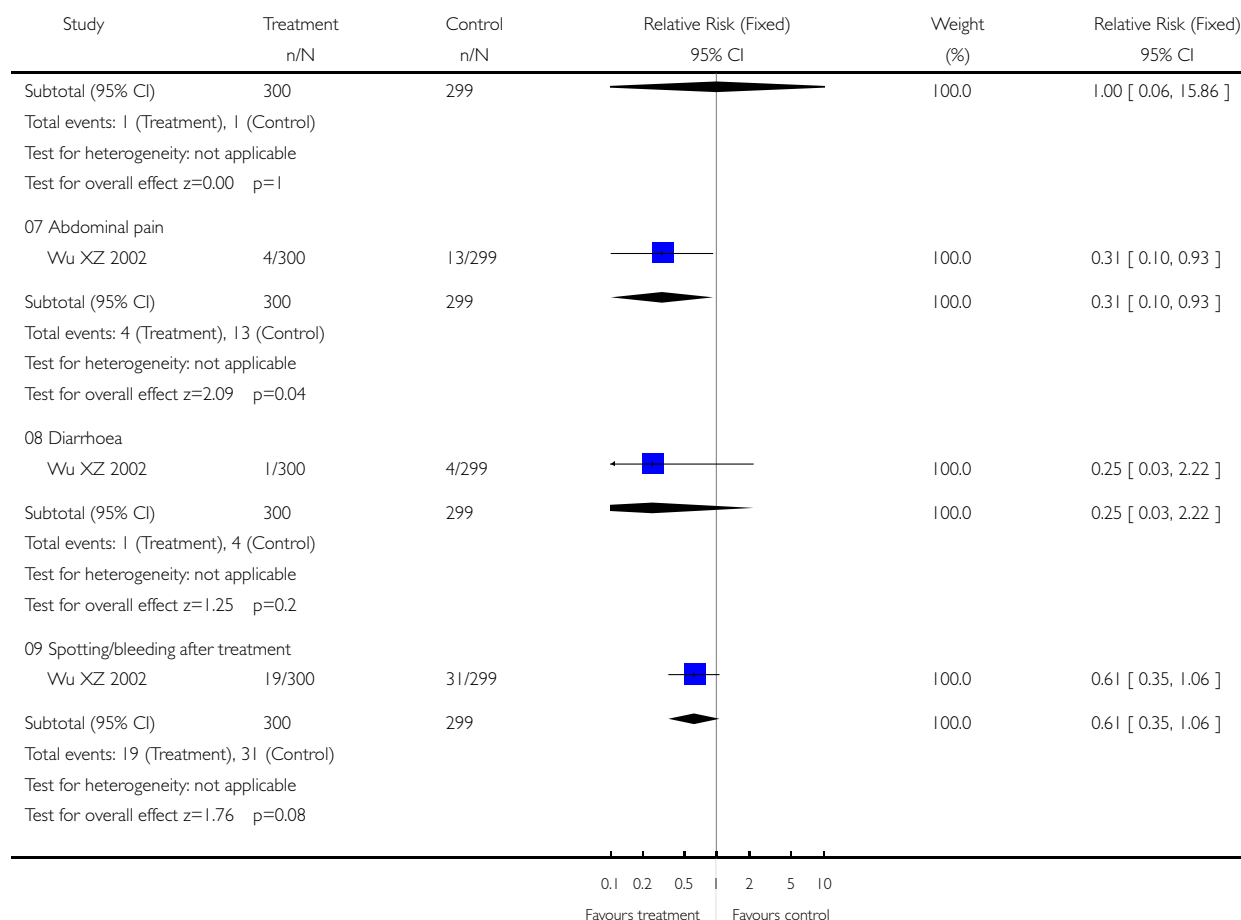
Review: Interventions for emergency contraception

Comparison: 20 Mifepristone vs mifepristone + misoprostol (all doses)

Outcome: 06 Specific side-effect



(... Continued)

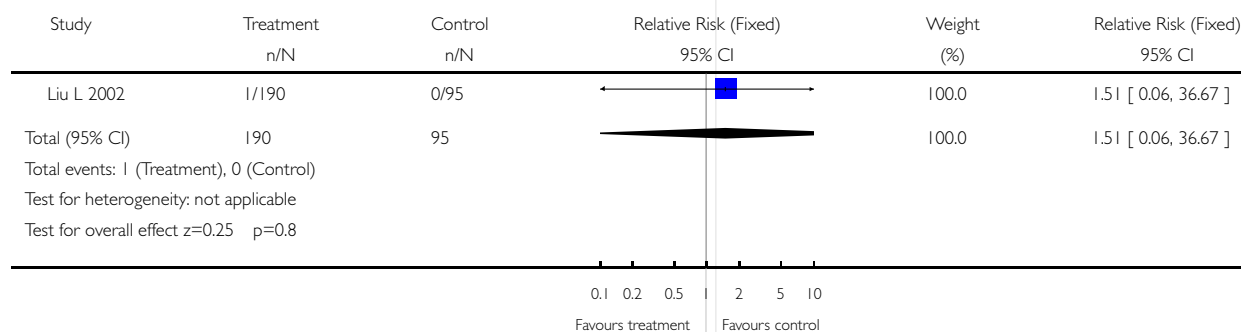


### Analysis 21.01. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 01 Observed number of pregnancy (all women)

Review: Interventions for emergency contraception

Comparison: 21 Mifepristone (all doses) vs Cu-IUD

Outcome: 01 Observed number of pregnancy (all women)

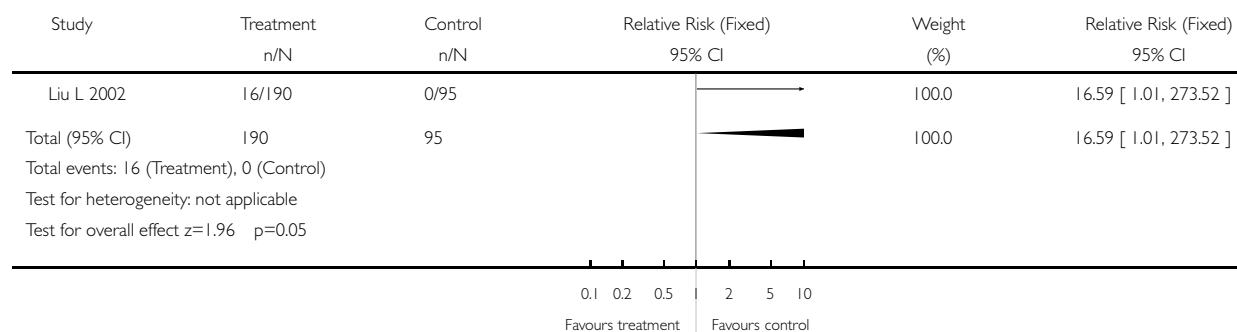


### Analysis 21.05. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 05 Any side-effect

Review: Interventions for emergency contraception

Comparison: 21 Mifepristone (all doses) vs Cu-IUD

Outcome: 05 Any side-effect

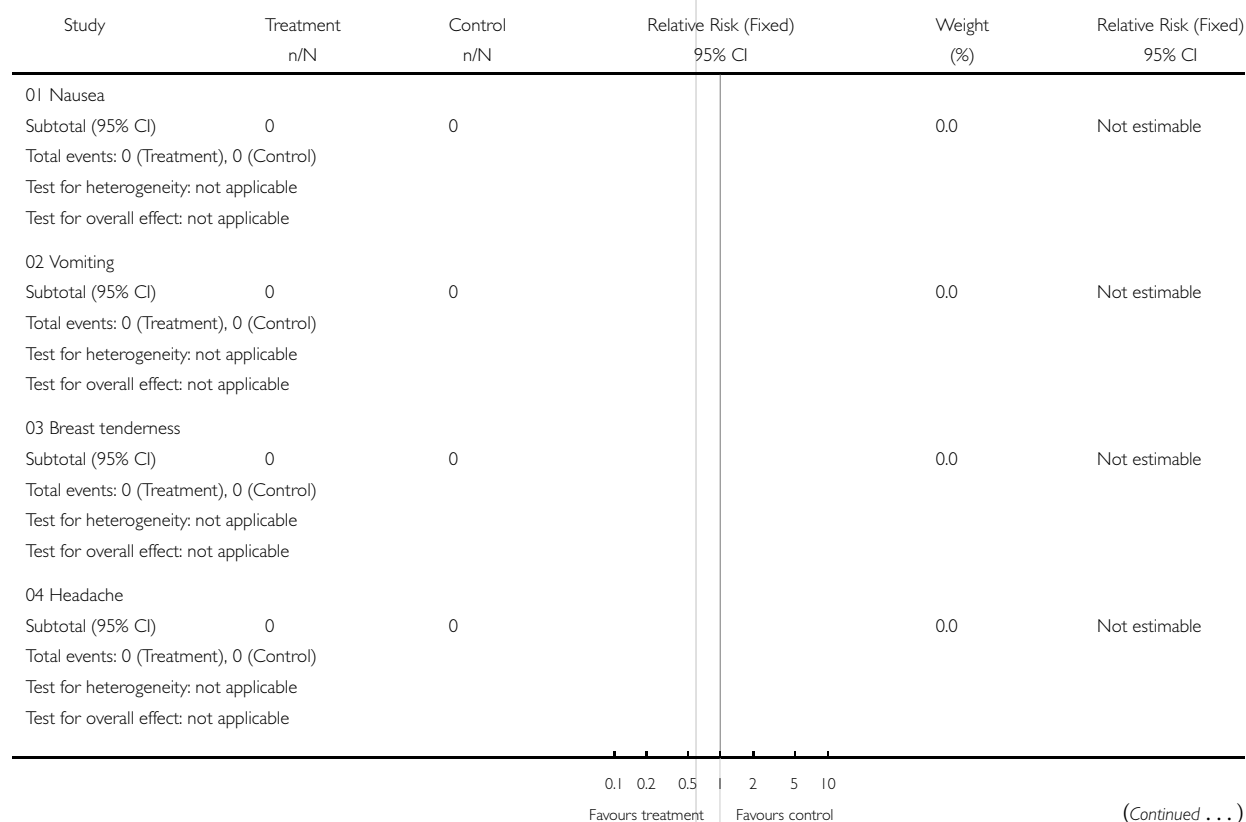


### Analysis 21.06. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 06 Specific side-effects

Review: Interventions for emergency contraception

Comparison: 21 Mifepristone (all doses) vs Cu-IUD

Outcome: 06 Specific side-effects



(Continued ...)



(... Continued)

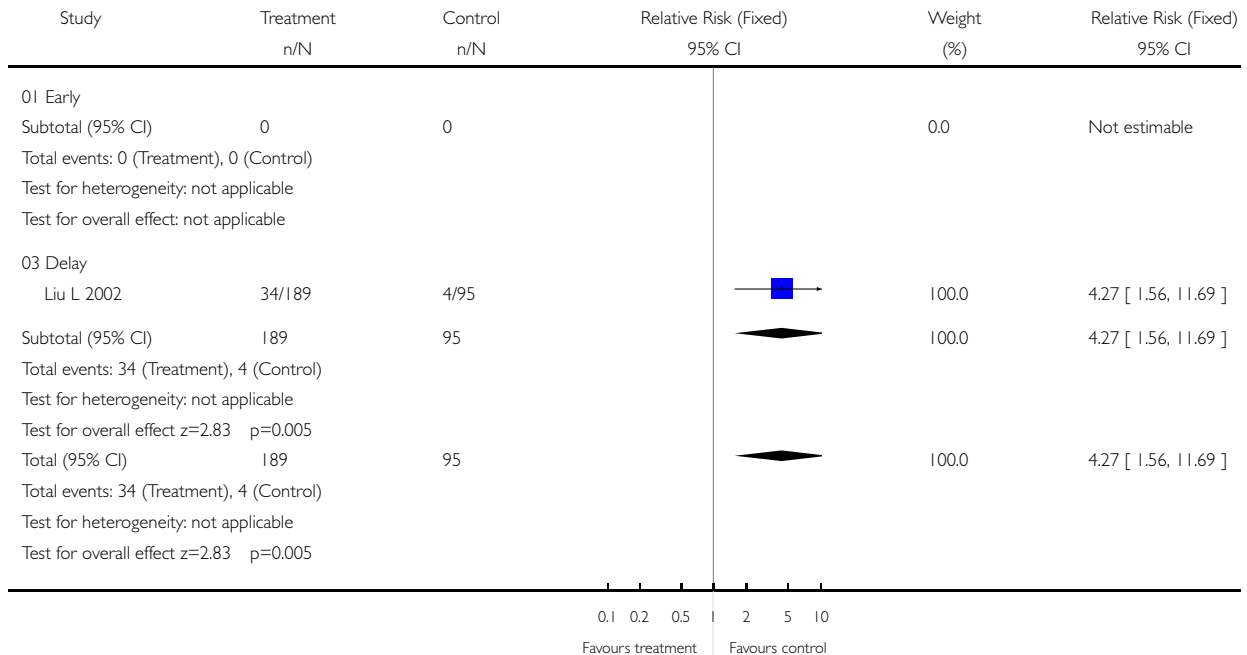
Study	Treatment n/N	Control n/N	Relative Risk (Fixed) 95% CI	Weight (%)	Relative Risk (Fixed) 95% CI
05 Dizziness					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
06 Fatigue					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
07 Lower abdominal pain					
Liu L 2002	0/190	18/95	←	100.0	0.01 [ 0.00, 0.22 ]
Subtotal (95% CI)	190	95	—	100.0	0.01 [ 0.00, 0.22 ]
Total events: 0 (Treatment), 18 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: z=3.01 p=0.003					
08 Diarrhoea					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
09 Spotting/Bleeding after treatment					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
10 Heavy menses					
Subtotal (95% CI)	0	0		0.0	Not estimable
Total events: 0 (Treatment), 0 (Control)					
Test for heterogeneity: not applicable					
Test for overall effect: not applicable					
			0.1 0.2 0.5   2 5 10		
			Favours treatment Favours control		

### Analysis 21.07. Comparison 21 Mifepristone (all doses) vs Cu-IUD, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 21 Mifepristone (all doses) vs Cu-IUD

Outcome: 07 Menses

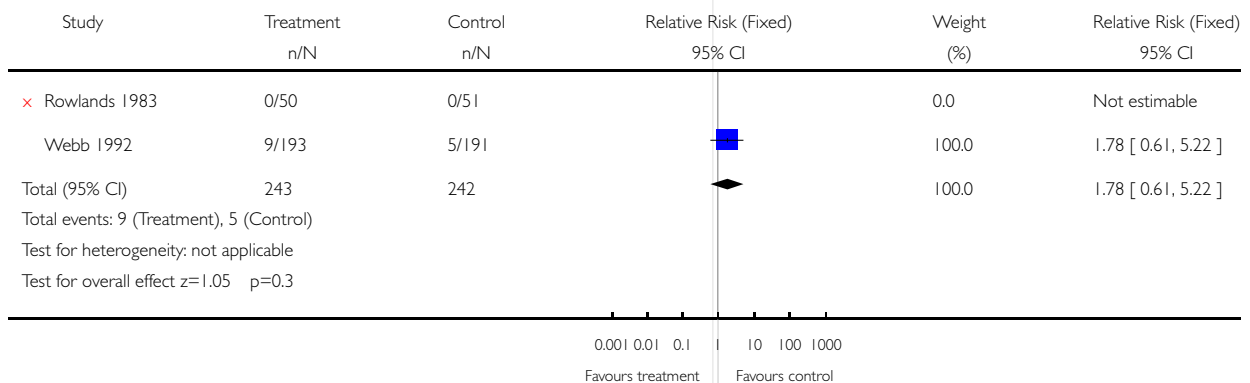


### Analysis 22.01. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 22 Danazol (all doses) vs Yuzpe

Outcome: 01 Observed number of pregnancies (all women)

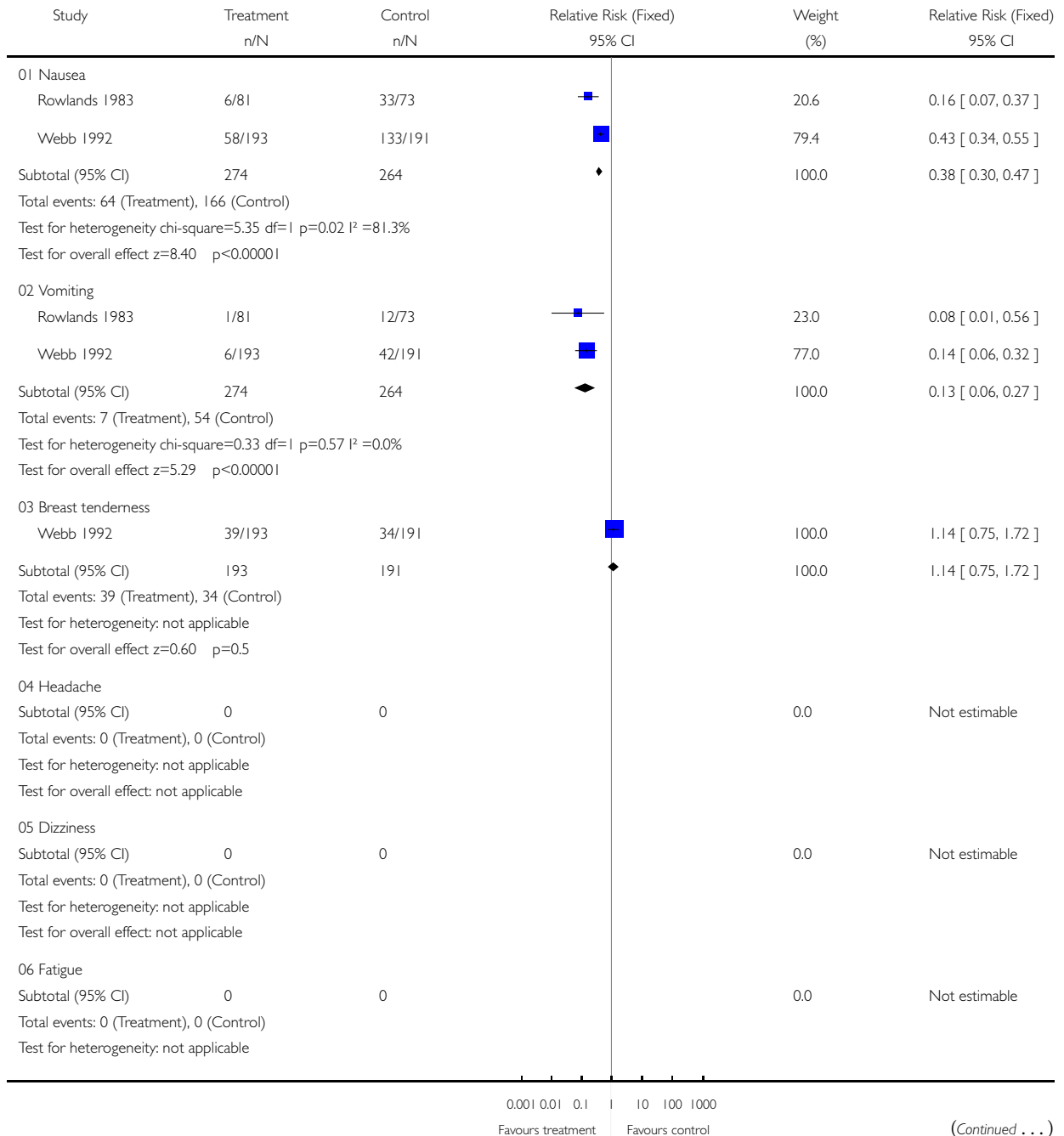


## Analysis 22.06. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 06 Specific side-effects

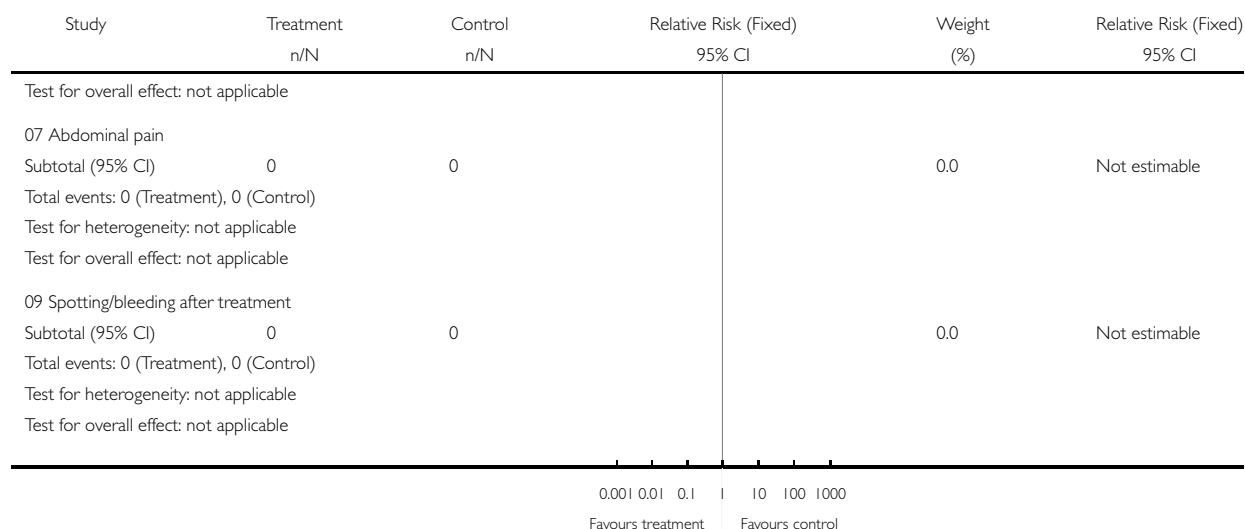
Review: Interventions for emergency contraception

Comparison: 22 Danazol (all doses) vs Yuzpe

Outcome: 06 Specific side-effects



(... Continued)

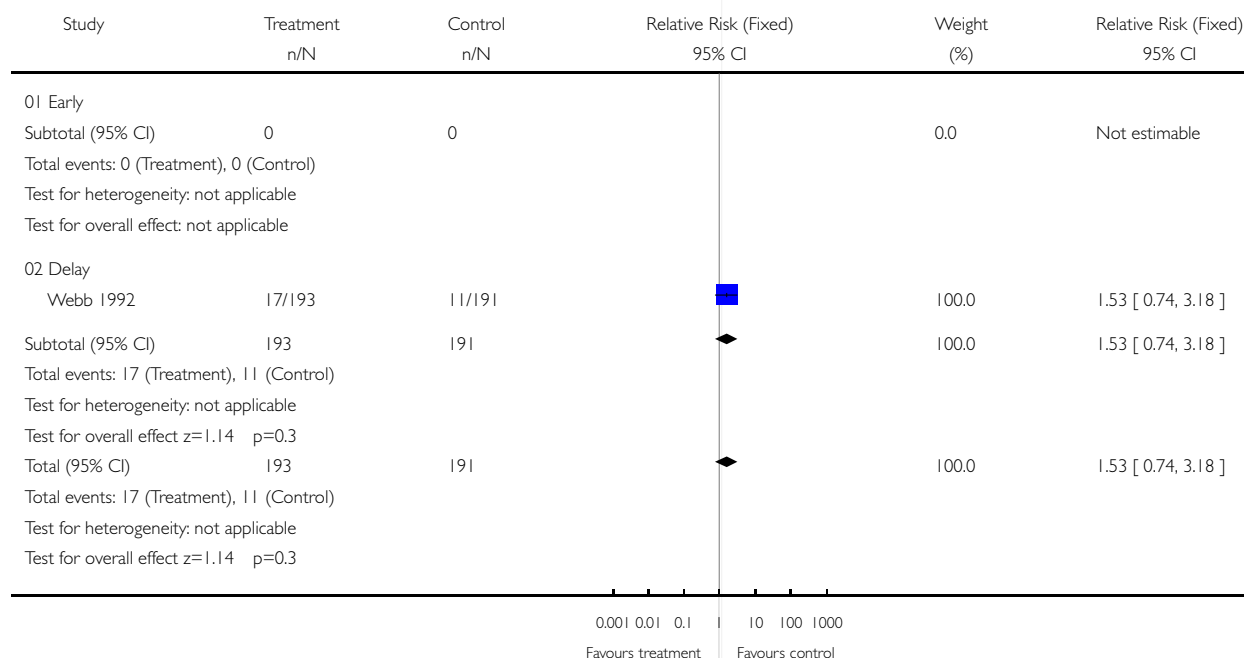


## Analysis 22.07. Comparison 22 Danazol (all doses) vs Yuzpe, Outcome 07 Menses

Review: Interventions for emergency contraception

Comparison: 22 Danazol (all doses) vs Yuzpe

Outcome: 07 Menses

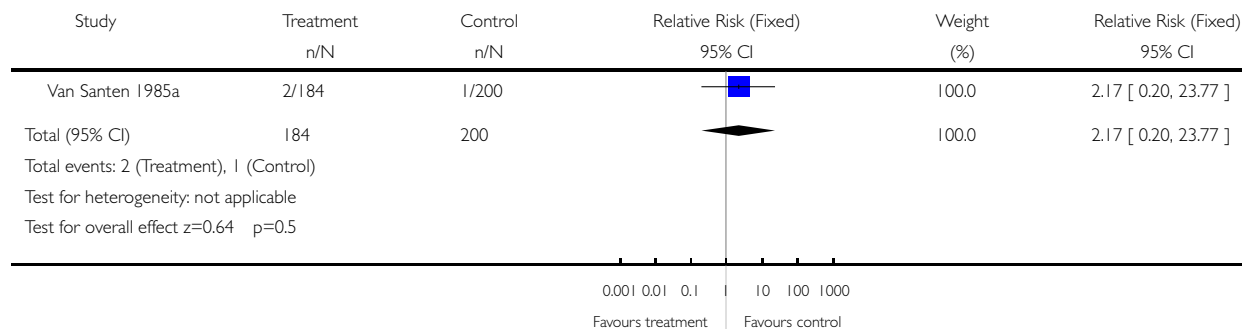


### Analysis 23.01. Comparison 23 High-dose oestrogens vs Yuzpe, Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 23 High-dose oestrogens vs Yuzpe

Outcome: 01 Observed number of pregnancies (all women)

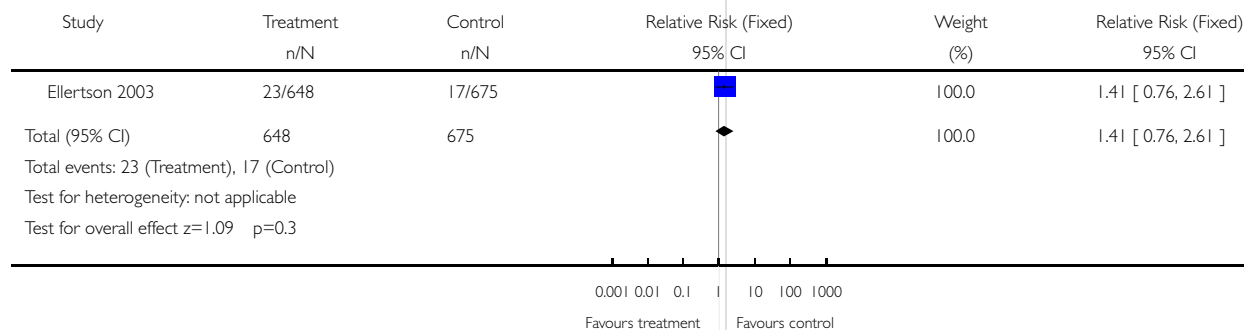


### Analysis 24.01. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 01 Observed number of pregnancies (all women)

Review: Interventions for emergency contraception

Comparison: 24 Half-dose Yuzpe vs Standard Yuzpe

Outcome: 01 Observed number of pregnancies (all women)

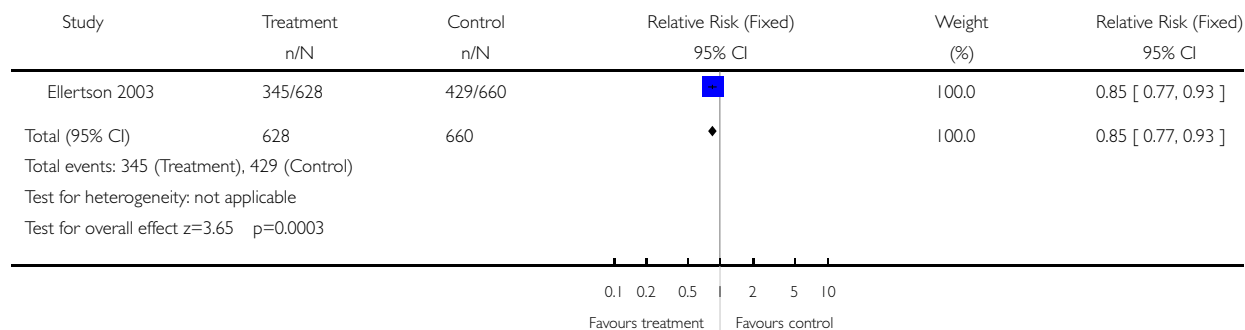


## Analysis 24.02. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 02 Any side-effect

Review: Interventions for emergency contraception

Comparison: 24 Half-dose Yuzpe vs Standard Yuzpe

Outcome: 02 Any side-effect

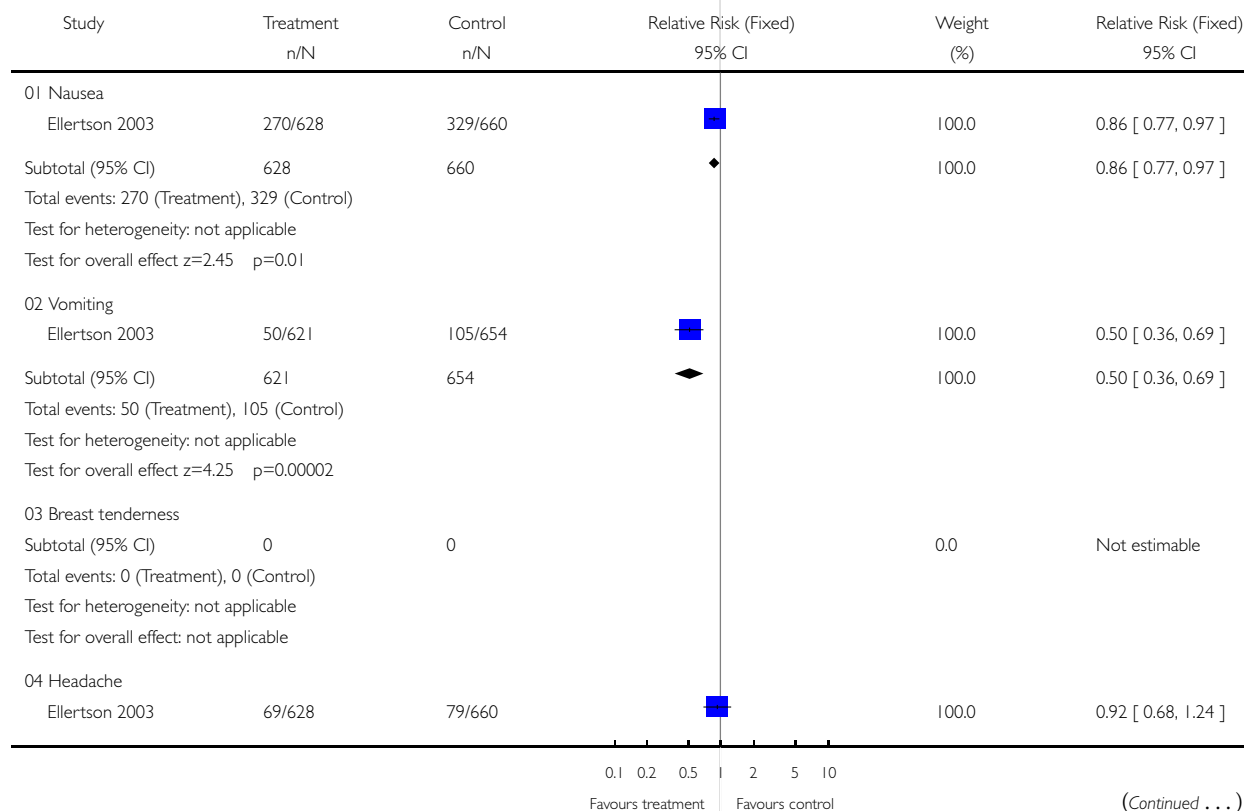


## Analysis 24.03. Comparison 24 Half-dose Yuzpe vs Standard Yuzpe, Outcome 03 Specific side-effects

Review: Interventions for emergency contraception

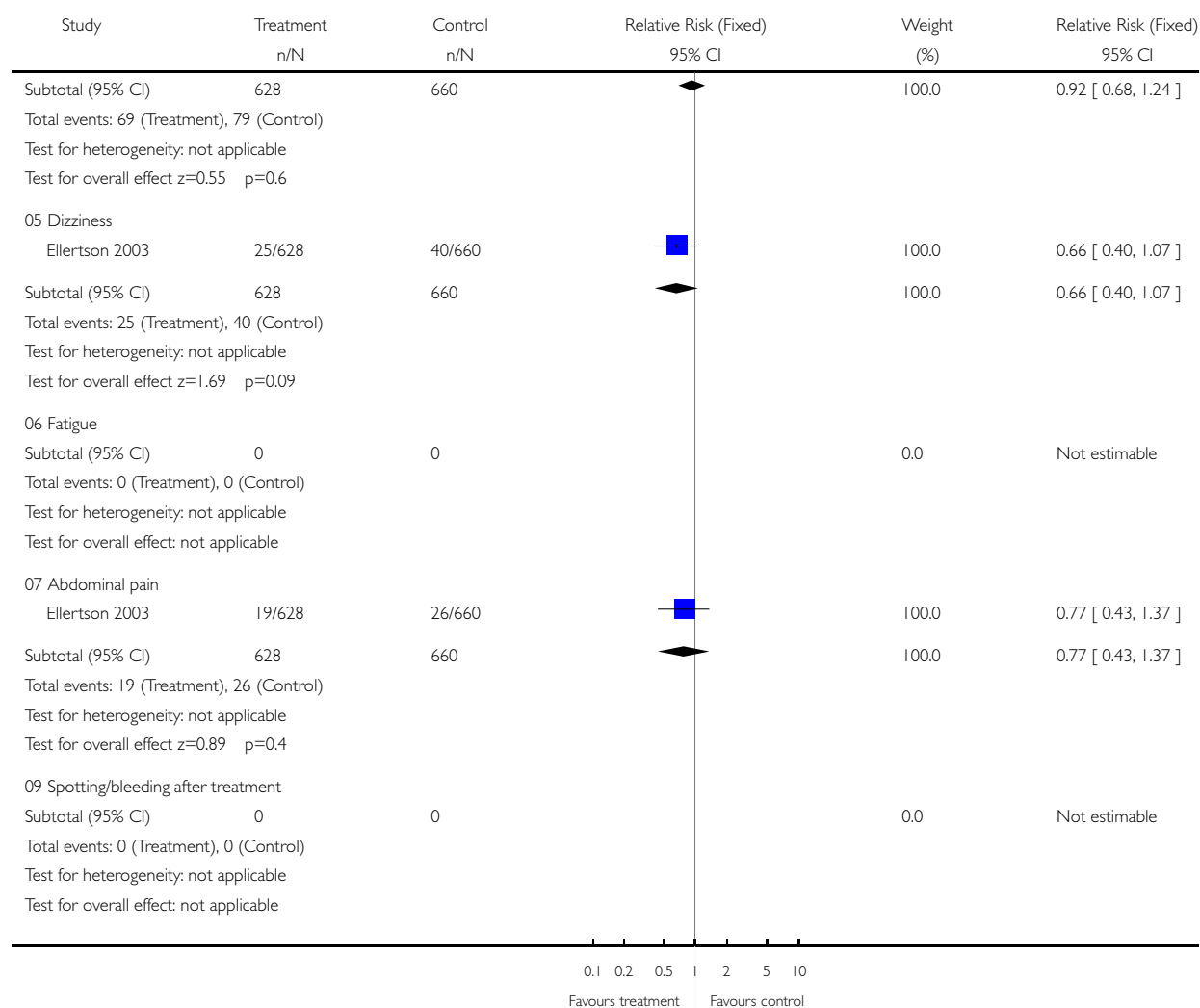
Comparison: 24 Half-dose Yuzpe vs Standard Yuzpe

Outcome: 03 Specific side-effects



(Continued ...)

(... Continued)

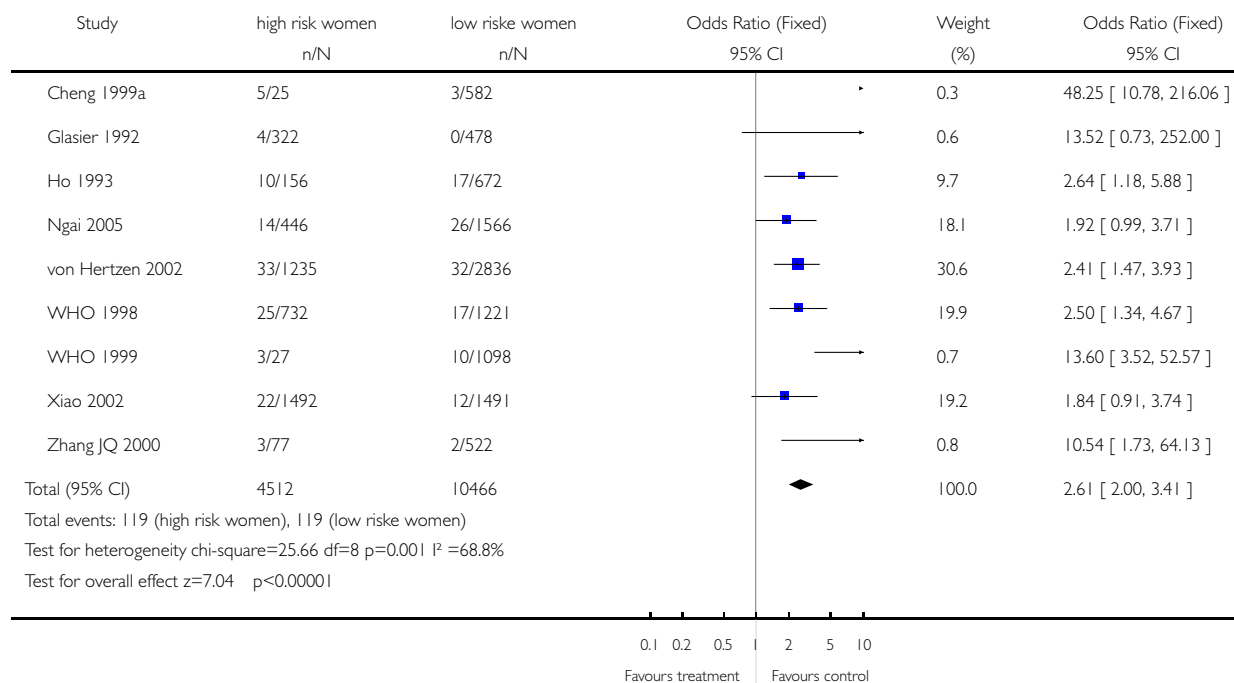


### Analysis 25.01. Comparison 25 High risk vs low risk women (all hormonal methods), Outcome 01 Observed number of pregnancies

Review: Interventions for emergency contraception

Comparison: 25 High risk vs low risk women (all hormonal methods)

Outcome: 01 Observed number of pregnancies

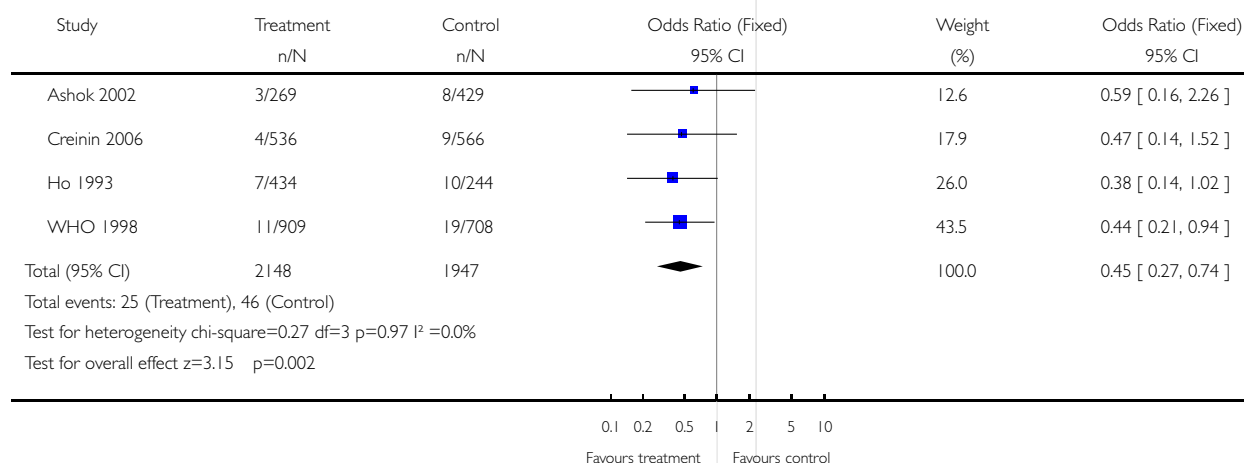


### Analysis 26.01. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 01 $\leq 24$ hr vs $> 24-48$ hr

Review: Interventions for emergency contraception

Comparison: 26 Time elapsed since intercourse (Coitus-treatment interval)

Outcome: 01  $\leq 24$  hr vs  $> 24-48$  hr



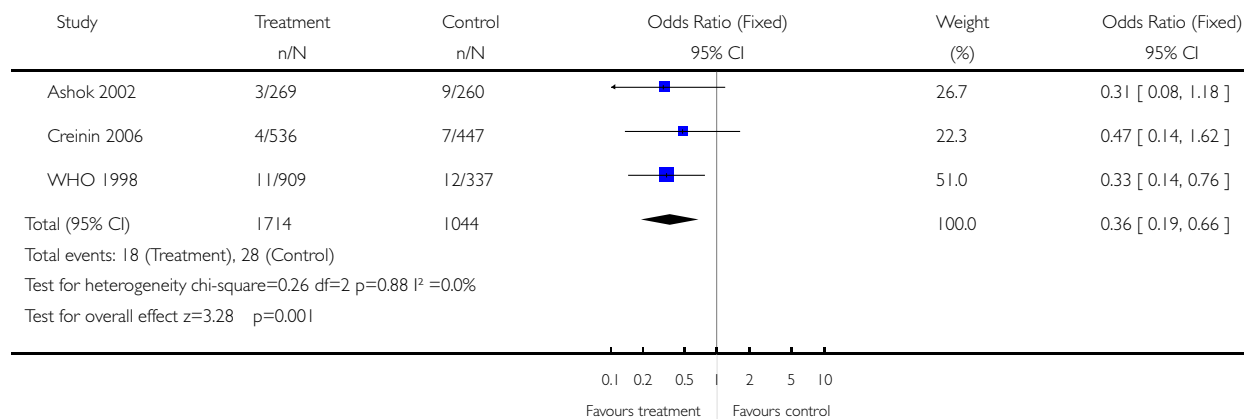


### Analysis 26.02. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 02 =< 24 vs >48 - 72 hr

Review: Interventions for emergency contraception

Comparison: 26 Time elapsed since intercourse (Coitus-treatment interval)

Outcome: 02 =< 24 vs >48 - 72 hr

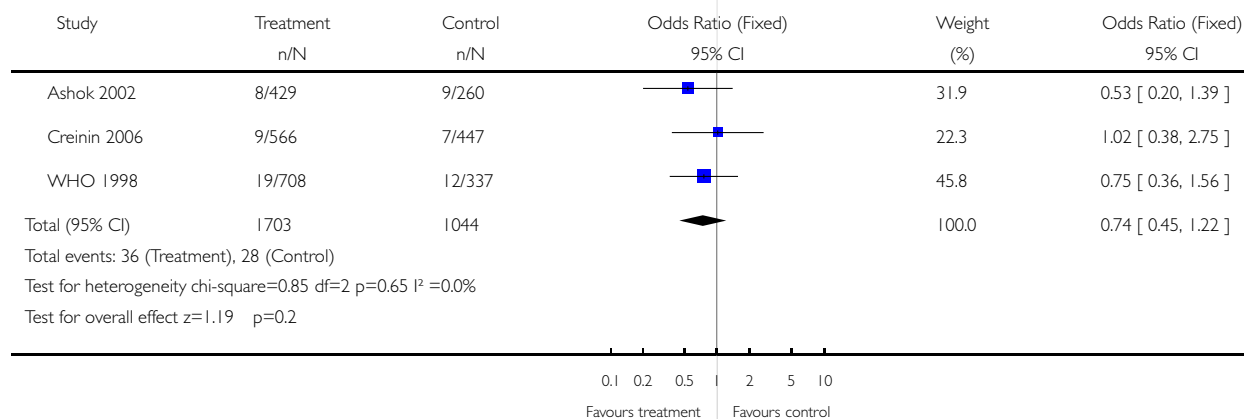


### Analysis 26.03. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 03 > 24 -48 hr vs > 48 - 72 hr

Review: Interventions for emergency contraception

Comparison: 26 Time elapsed since intercourse (Coitus-treatment interval)

Outcome: 03 > 24 -48 hr vs > 48 - 72 hr



# **Analysis 26.04. Comparison 26 Time elapsed since intercourse (Coitus-treatment interval), Outcome 04 < 72 vs >72**

Review: Interventions for emergency contraception

Comparison: 26 Time elapsed since intercourse (Coitus-treatment interval)

Outcome: 04 < 72 vs >72

