

Reproductive failure

First trimester miscarriage

- Ralph 1999 < 6 weeks RR 2.7
- Hay 2000 10-16 weeks RR 2.2

2nd. trimester miscarriage

- McGregor 1994 OR 3.1 (1.4-6.9)
- Hay 1995 OR 5.5 (2.3-13.3)
- Llahi-Camp 1996 OR 2.0

Recurrent 2nd. trimester miscarriage

- Stray-Pedersen 2000 OR 2.0 (1.0-4.0)

Risk of preterm birth and BV

22-36 weeks n = 21 000

		n	RR	95% CI
Eschenbach (US)	1984	171	3.1	(1.6-6.0)
Kurki (F)	1992	736	6.9	(2.5-18.8)
Hay (UK)	1994	78	2.8	(1.1-7.4)
Holst (S)	1994	87	2.1	(1.2-3.7)
Hillier (US)	1995	10 397	1.4	(1.1-1.8)
McGregor (US)	1995	1 260	1.9	(1.2-3.0)
Meis (US)	1995	2 929	1.8	(1.2-3.0)
Thorsen (DK)	1997	2 927	1.4	(0.8-1.8)
Jacobsson (S)	2002	852	2.1	(0.9-4.9)

Conclusion: Risk for preterm birth doubled

Morales et al 1994

Metronidazole

250 mg x 3 for 7 days vs placebo

Previous preterm delivery

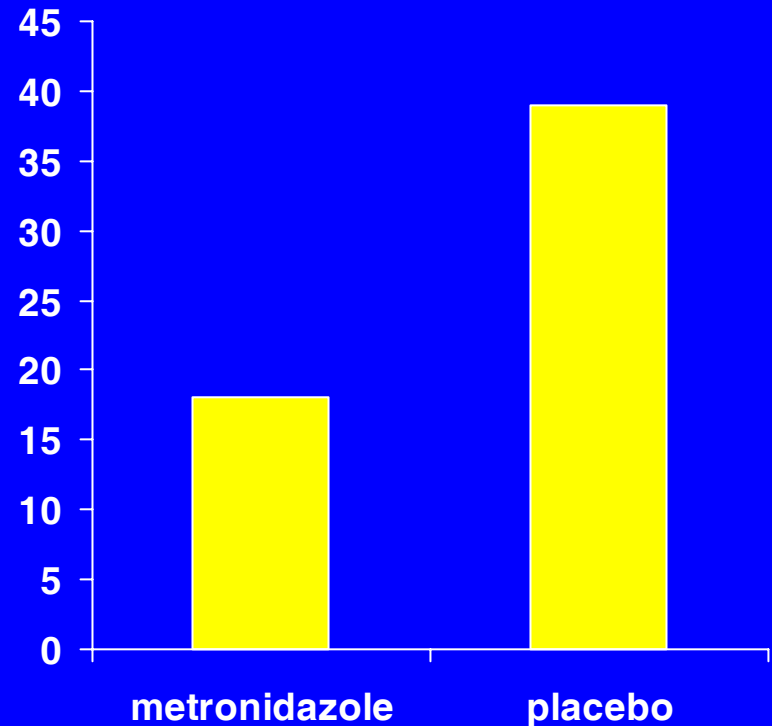
screened for BV

13-20 week

80 women

$p < 0.05$

preterm birth < 37 w



Haut et al 1995

Metronidazole/erythromycin

250 mg x 3 (7 days)

vs placebo

Previous preterm delivery

or < 50 kg

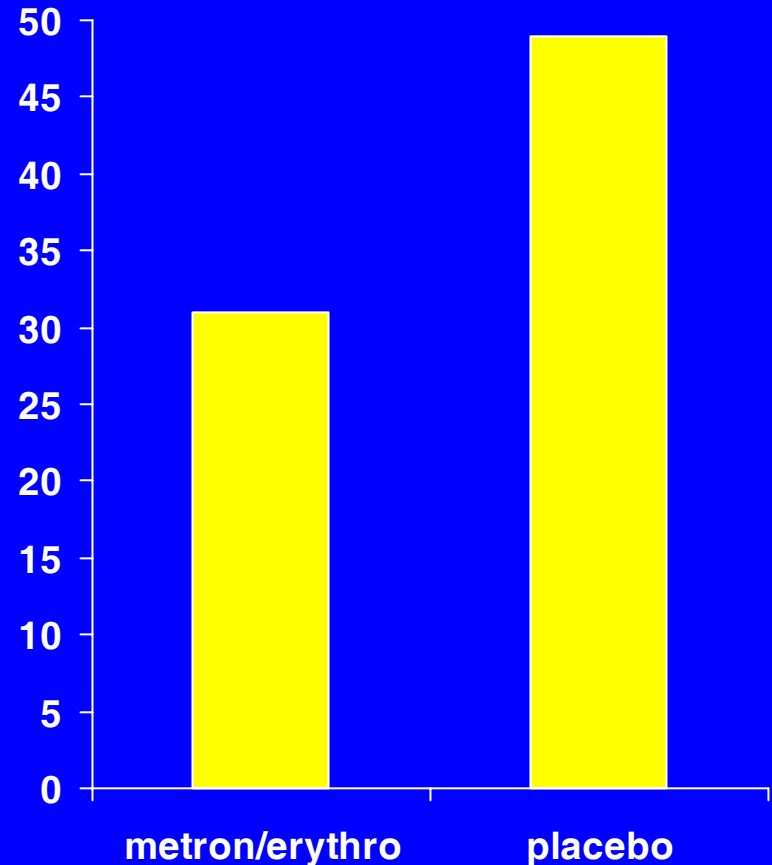
624 screened for BV

22-24 weeks

258 women

p<0.02

preterm birth < 37 w



Joesoef et al 1995

Clindamycin vag

7 days vs placebo

Indonesia 4519

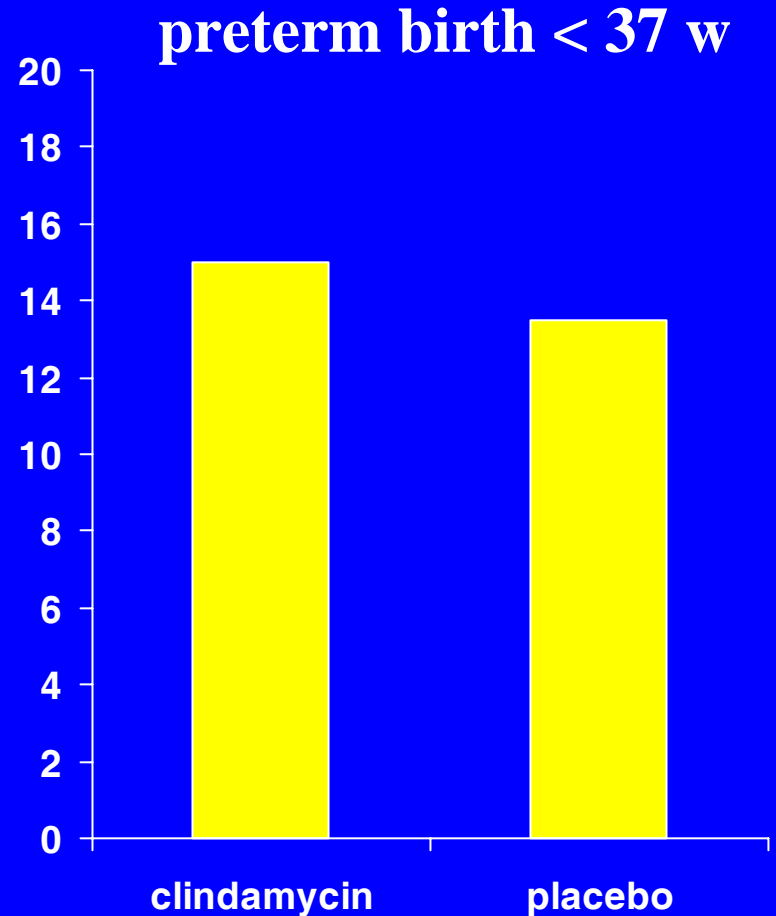
women

screened for BV

14-24 week

681 women

p = n.s



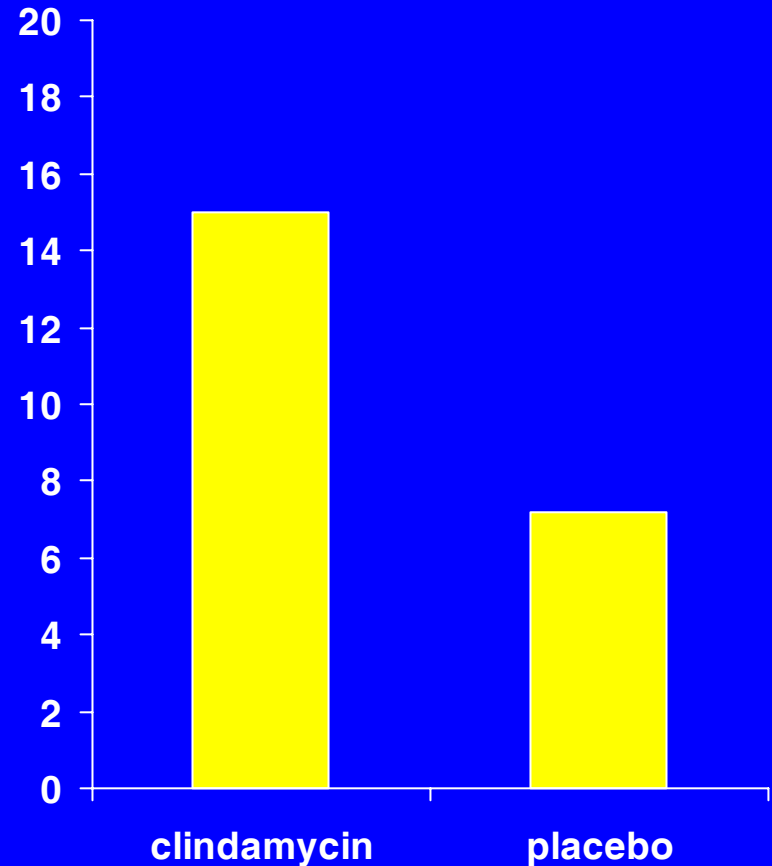


McGregor et al 1994

Clindamycin vag
7 days vs placebo
USA

16-27 week
129 women
p = n.s.

preterm birth < 37 w



McGregor et al 1995

Oral clindamycin

7 days

USA

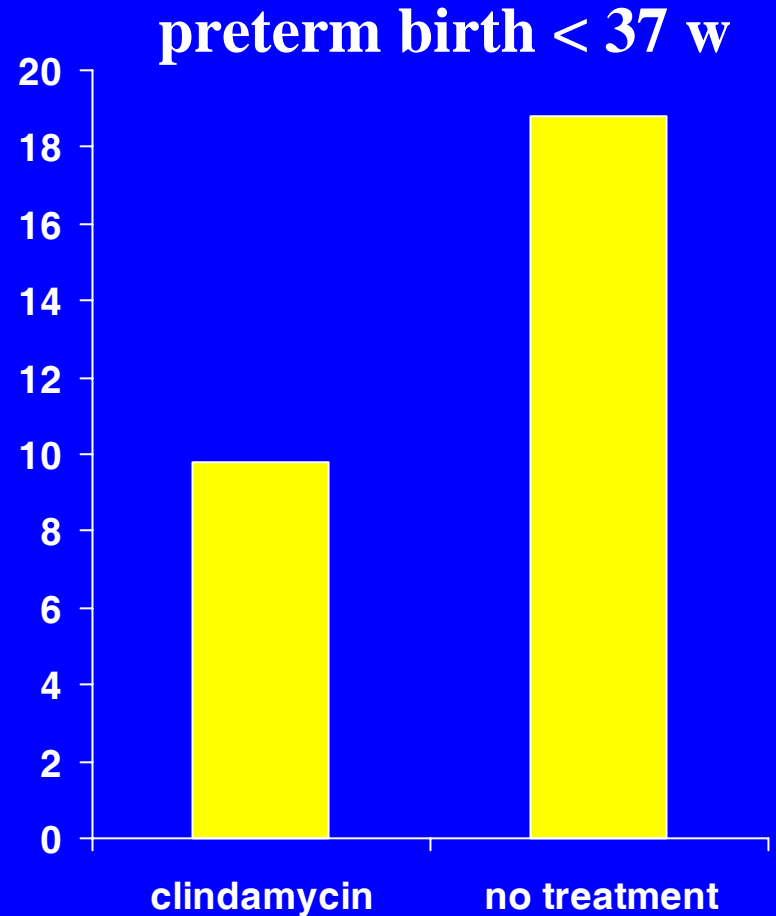
1138 women

screened for BV

18-22 week

265 women

p<0.05



McDonald et al 1997

Metronidazole

400 mg x 2 for 2 days
vs placebo

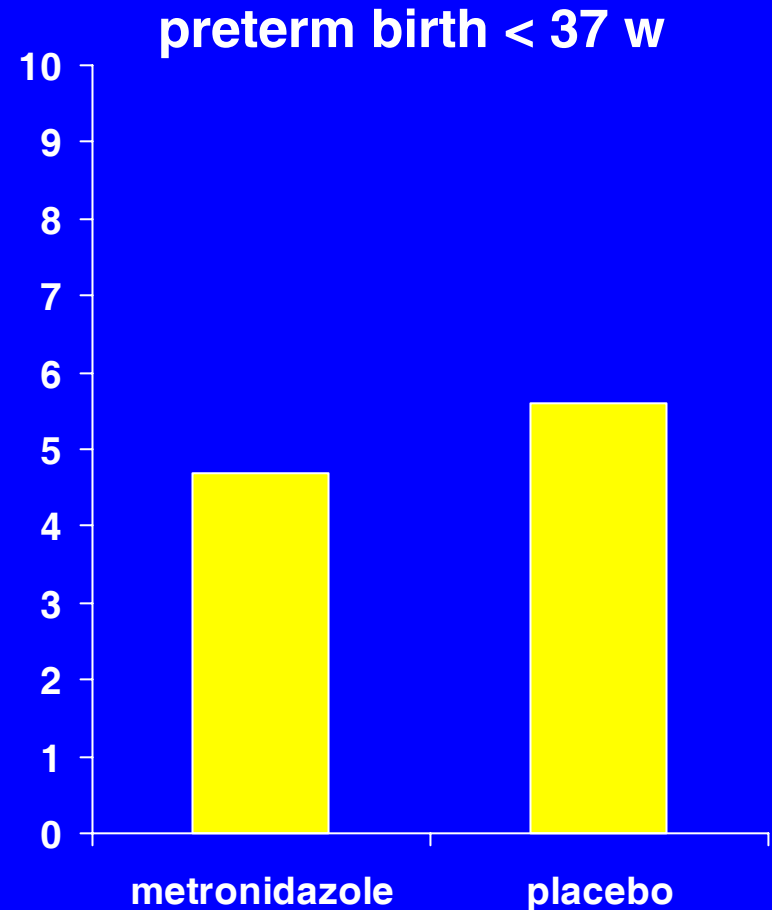
Australia

9407 screened for BV

19 week

857 women

p = n.s.



Carey et al 2000

Metronidazole

2 g day 1 and 3, repeated vs placebo

USA

29 525 screened for BV

7393 BV pos

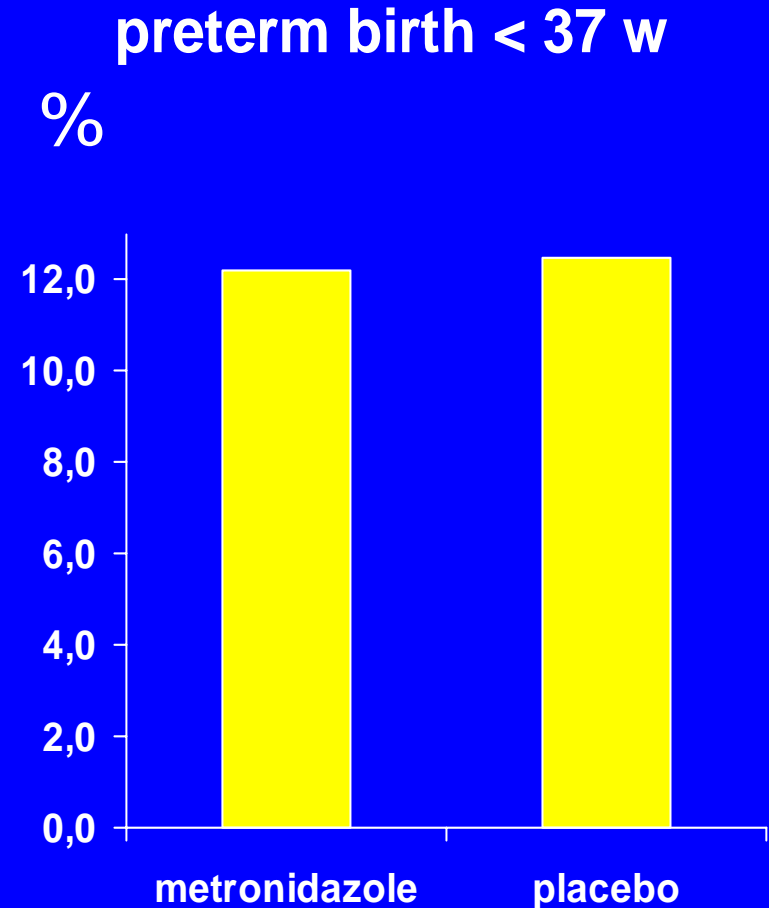
16-24 week

1953 women included

p = n.s.

Cure rate 78%

N Engl J Med 2000;342:534



Carey et al 2000

Metronidazole

2 g day 1 and 3,
repeated vs placebo

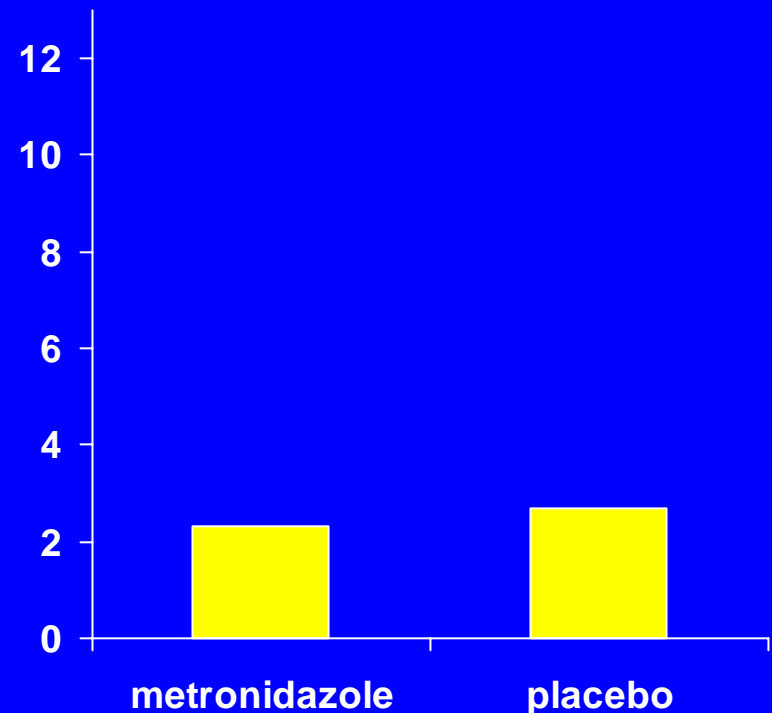
16-24 week

Previous preterm: n.s.

Treatm. < 20 th week:
n.s

N Engl J Med 2000:342:534

preterm birth < 32



Vermeulen et al 1999

Clindamycin

cream 7 days vs
placebo

Netherlands

previous preterm

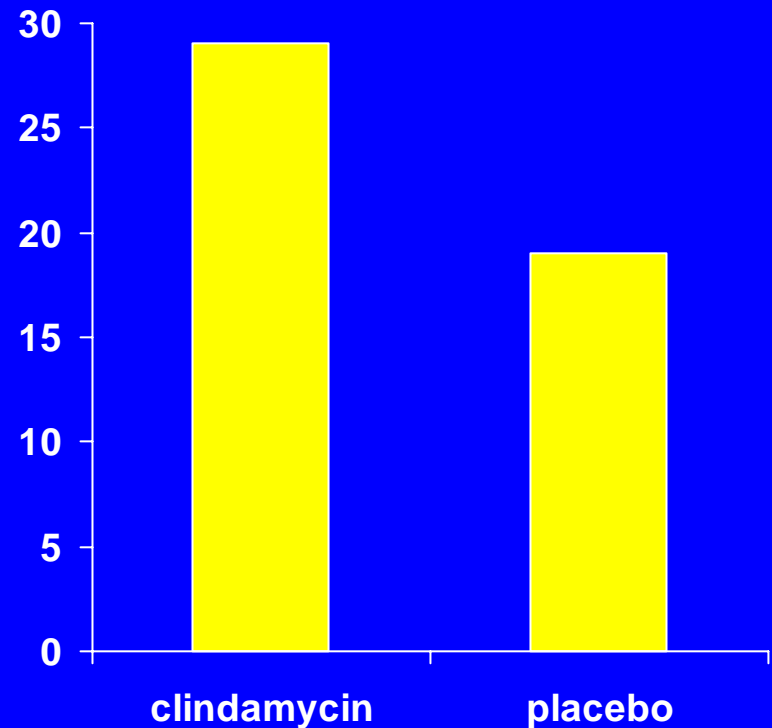
26 and 32 weeks

142 women

16 women with BV

$p = n.s.$

Preterm birth < 37 w



Vermeulen et al 1999

Clindamycin

cream 7 days vs
placebo

Netherlands

previous preterm

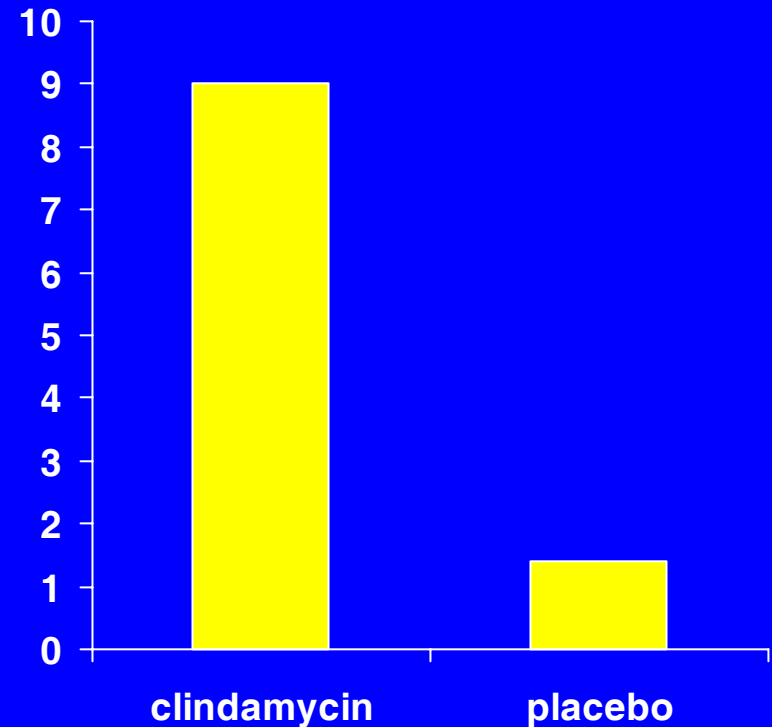
26 and 32 weeks

142 women

16 women with BV

$p < 0.05$

Preterm birth < 34 w



Kurkinen-Raty et al Finland

Clindamycin vag

7 days vs placebo

101 women with BV

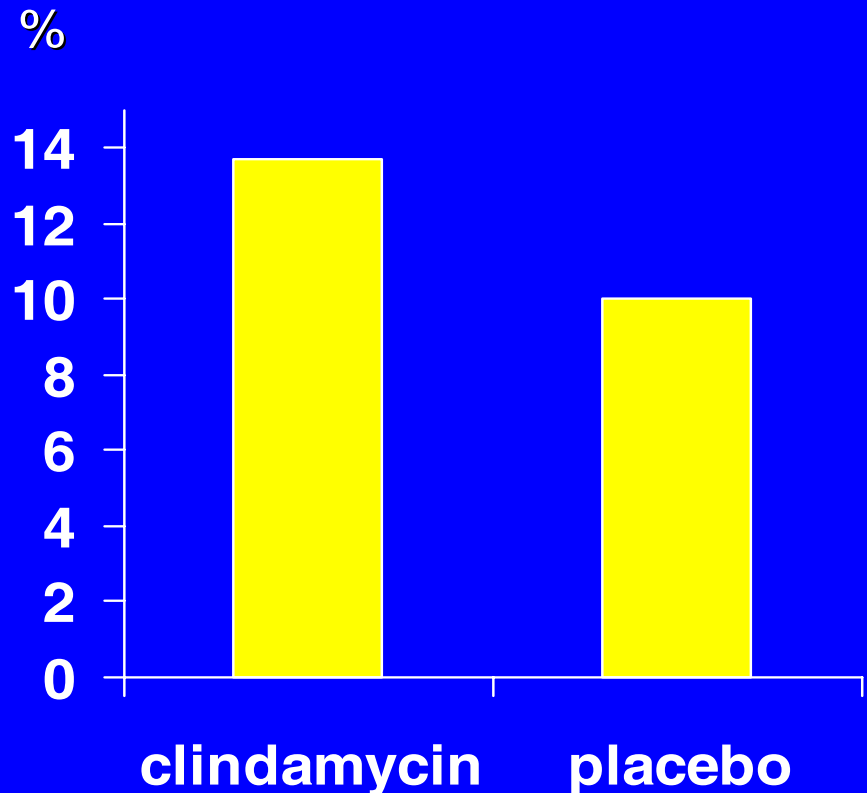
12 week

Prevalence BV 7.3%

OR= -2.5 (0.6-10)

cure 33% vs 34%

Preterm birth <37 w



Kekki, Kurki Pelkonen

Kurkinen-Raty et al Finland

Clindamycin vag

7 days vs placebo

5432 women screened

BV 10% pos

350 women

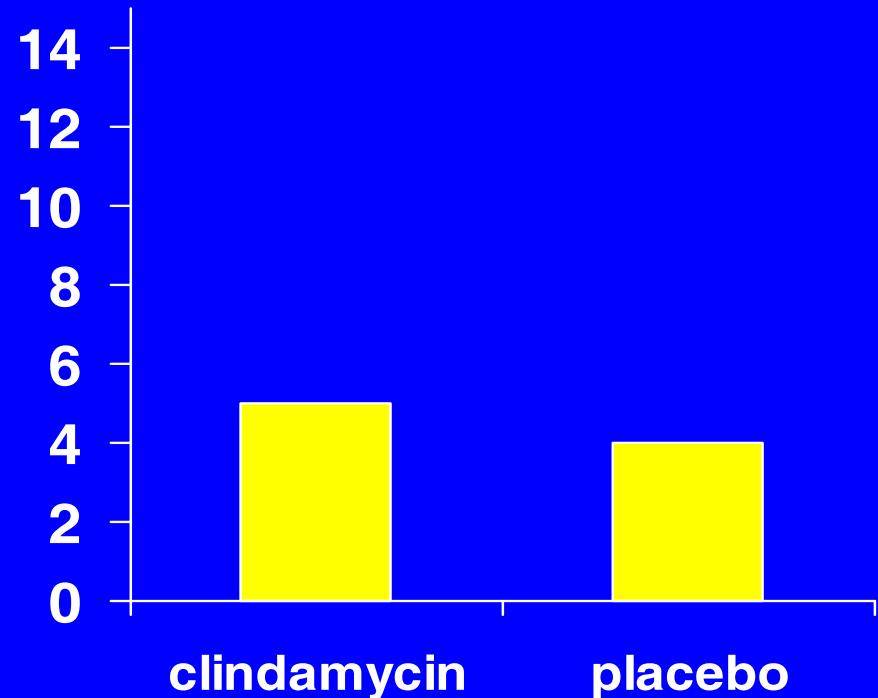
10-17 week

OR= -1.3 (0.5-3.5)

cure 66 % vs 34% after 1 week

Preterm birth < 37

%



Kekki, Kurki Pelkonen Kurkinen-Raty et al Finland

Clindamycin vag

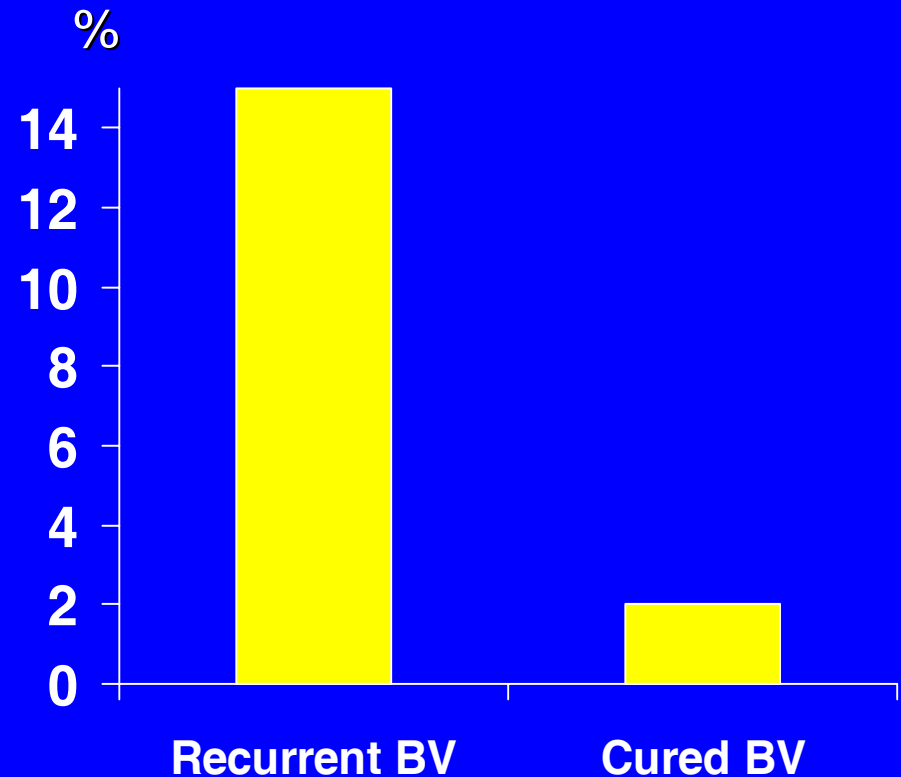
7 days vs placebo

**Recurrent BV vs cured BV
regardless of treatment**

OR 9.3 95% CI 1.6-53.5

4/26 vs 2/121

Preterm birth < 37



Kekki, Kurki Pelkonen Kurkinen-Raty et al Finland

Clindamycin vag

7 days vs placebo

**Reccurent BV women
screened**

BV 10% pos

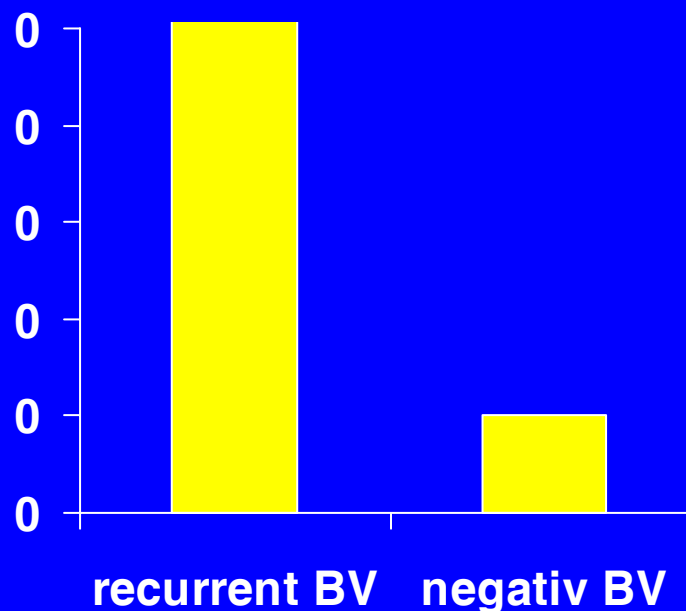
350 women

10-17 week

p = n.s.

cure 66 % vs 34%

Preterm birth < 37



Lamont et al London



Clindamycin vag

3 and 7 days vs placebo

409 women with BV

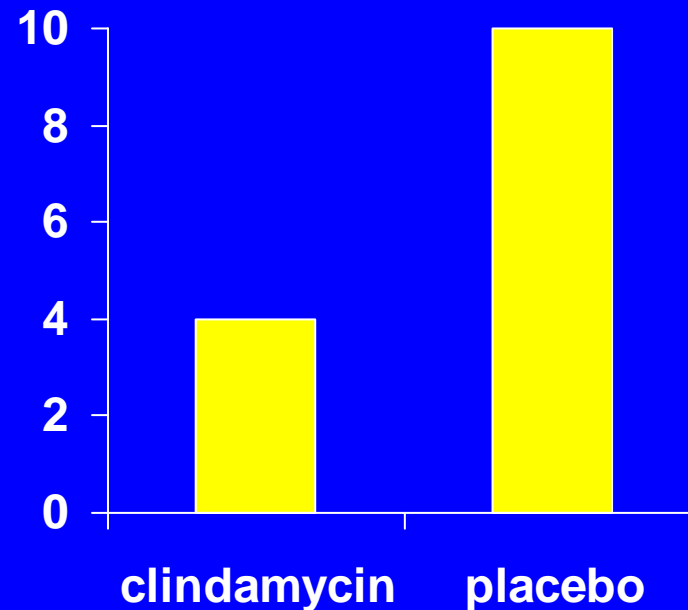
13-20 week

$p < 0.05$

OR 0.38 (0.16-0.88)

cure 76% vs 13%

Preterm birth <37 w



Kiss Petricevic Husslein et al

Österrike

Clindamycin vaginally

Open prospective randomized with
treatment against BV and candida

Gram-stain

BV 12% pos (740)

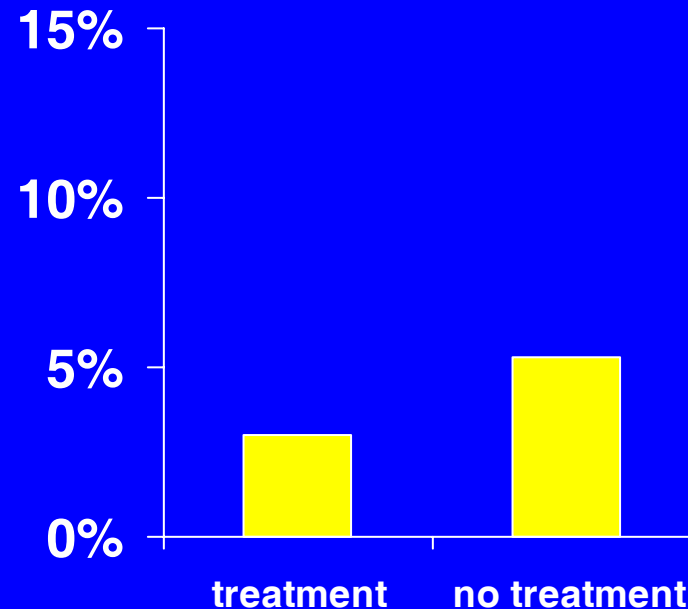
4229 women 15-20 week

3,0% vs 5,3% (95% CI 1,2-3,6)

Spontaneous preterm

OR 0.55 (95% CI 0,38-0,78)

Preterm birth < 37



Odendaal et al

Syd afrika

**400 mg metronidazole 2 + 2 or
Vitamin C**

Gram-stained

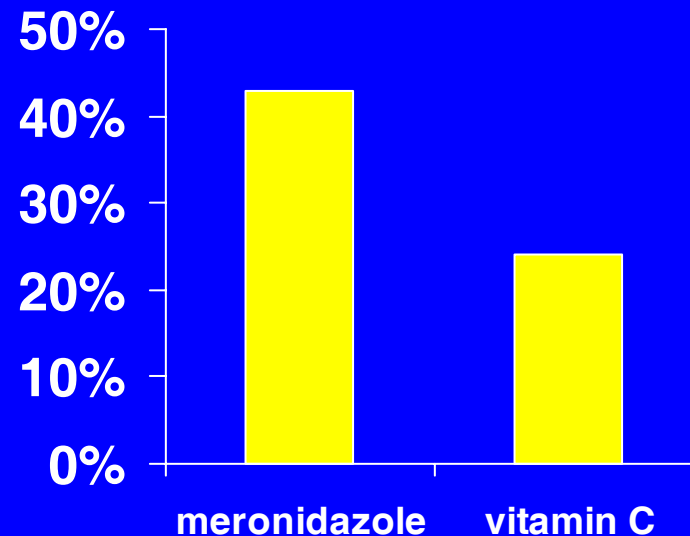
491 women

BV 26% multipara High risk

Treatment at 26 week

(32% pos (Prim))

**preterm delivery
< 37 weeks**



Ugwumadu, Manyonda, Reid, Hay

London

Clindamycin 300 mg BID orally

5 days vs placebo

**Asymptomatic BV 6120 women
screened Self taken Nugent**

BV 12% pos (740)

494 women (78 inter 416 BV)

12-22 week

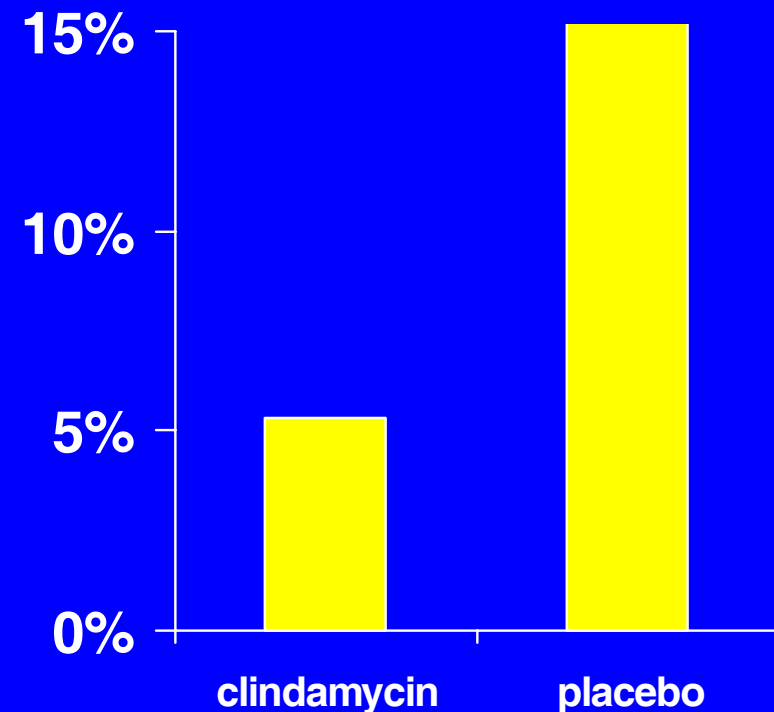
p <0.001

10% difference (CI 5.0-15.8)

ITT analysis

OR 0.38 (0.21-0.70)

**miscarriage 13-24 and
preterm birth < 37**



Camargo et al

Brasilien

Metronidazol/tinidazol

5 days vs placebo

First prenatal visit

Nugent Gram-stain

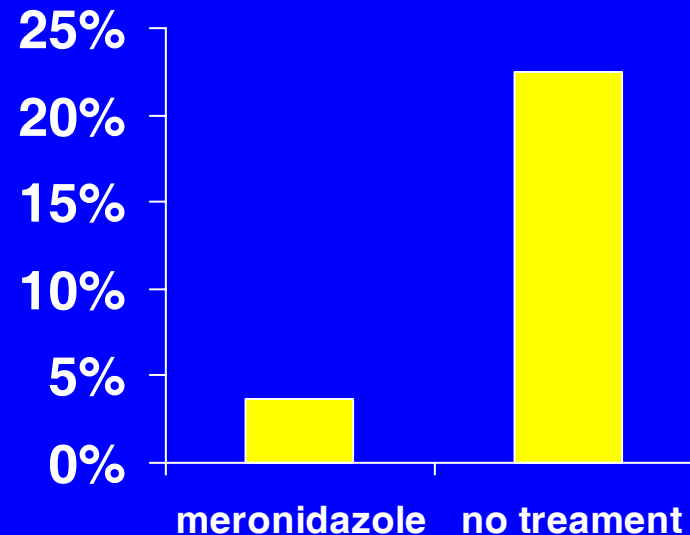
134 BV behandlade

71 BV icke behandlade.

OR 0,10 (0,04-0,25)

(ej BV 5,5% prematur)

preterm delivery
< 37 weeks



Guaschino et al Italy

Clindamycin vaginal cream

7 days vs placebo

112 women with BV

(12 lost to follow up)

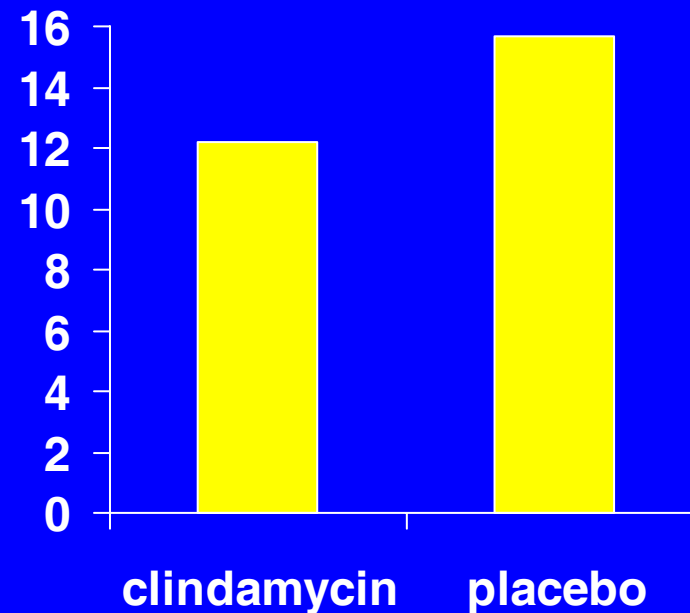
14-25 week

p=0.78

OR 0.75 (0.2-2.3)

cure 76% vs 70%

Preterm birth <37 w



Problems with interpretation of prenatal BV treatment studies

- **Low cure rate after treatment (70%)**
- **Time of diagnosis and treatment**
- **Maybe a subgroup of BV women at risk**
- **Is preterm delivery <37 week a good endpoint?**

Preconceptional care

Prepare for pregnancy