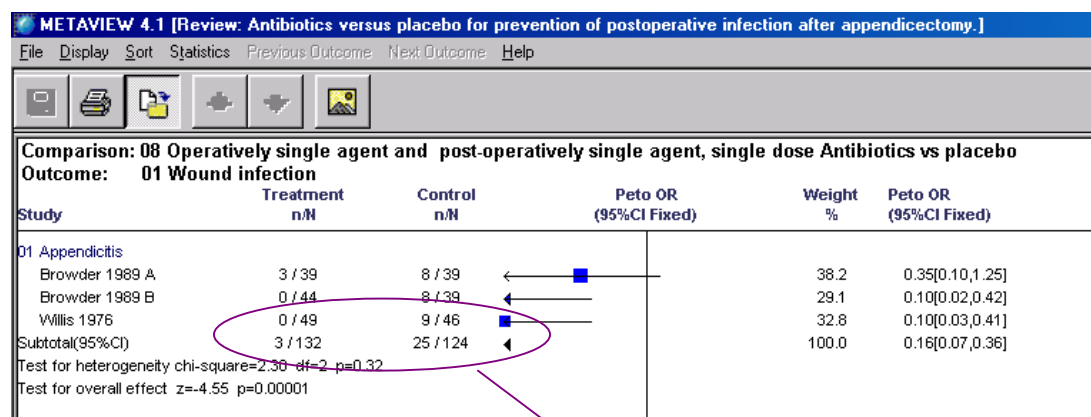


Internal factors

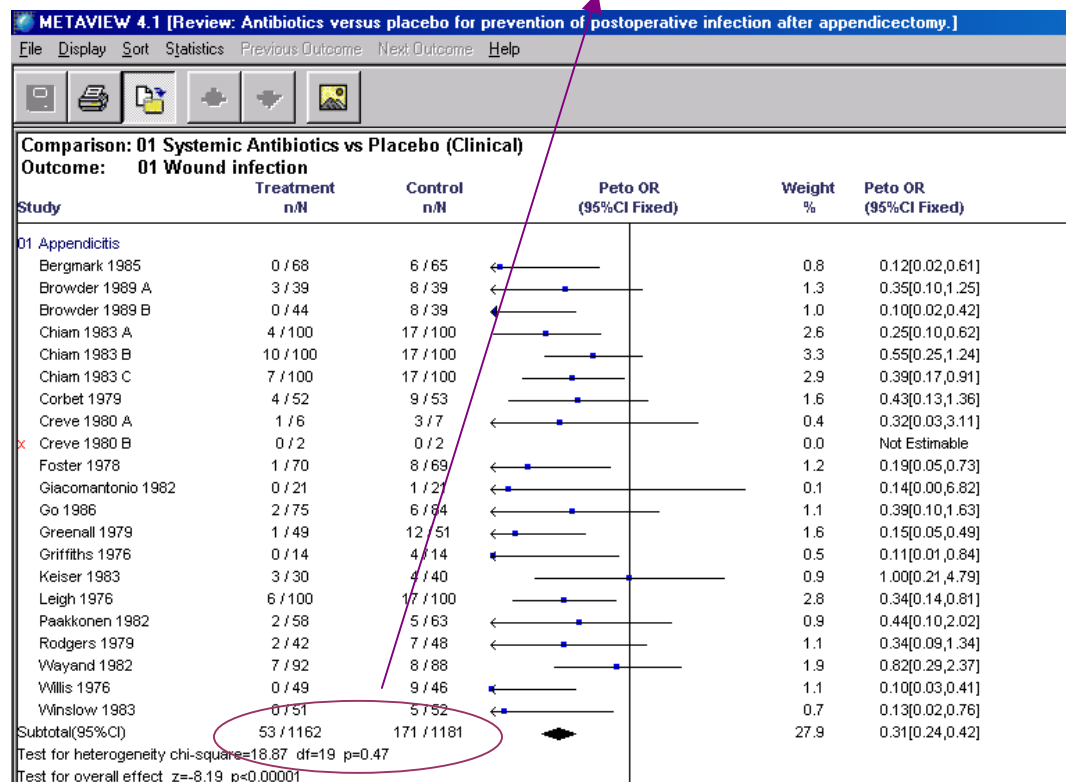
Some factors internal to your review which you may want to consider when drawing conclusions about the strength of evidence are

- Methodological issues relating to both the review and the included trials as outlined in earlier modules. If most included trials were methodologically sound, with adequate allocation concealment, careful control for confounding and little missing data you may be more confident regarding the strength of your conclusions.
- The number of studies in your review and the number of participants in the studies. If your data are sparse, the evidence is less strong and you should be careful about what you conclude.

For example, compare the strength of evidence from the forest plots below.

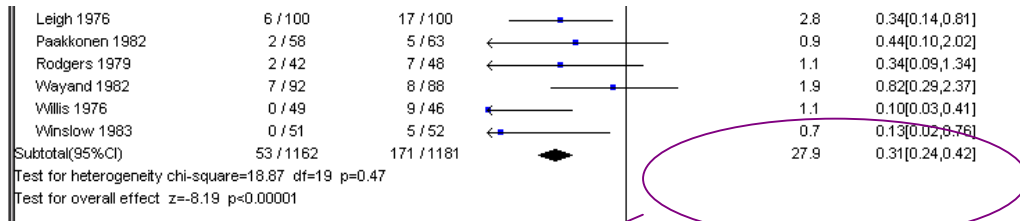


3 trials with total of 256 participants versus 21 trials with total of 2343 participants, the strength of evidence in the second example is greater

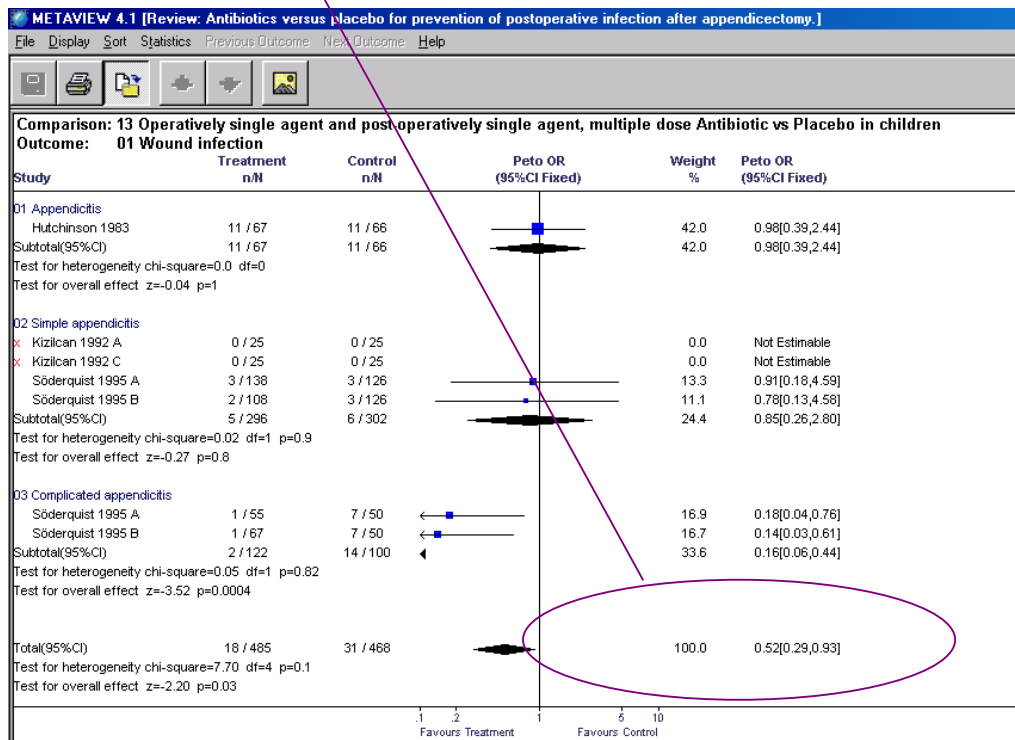


- The size of the treatment effect. If your summary treatment effect is large, and the confidence intervals fall within a range that would be considered clinically significant, the strength of evidence is greater.

For example, compare the strength of evidence from the forest plots below.

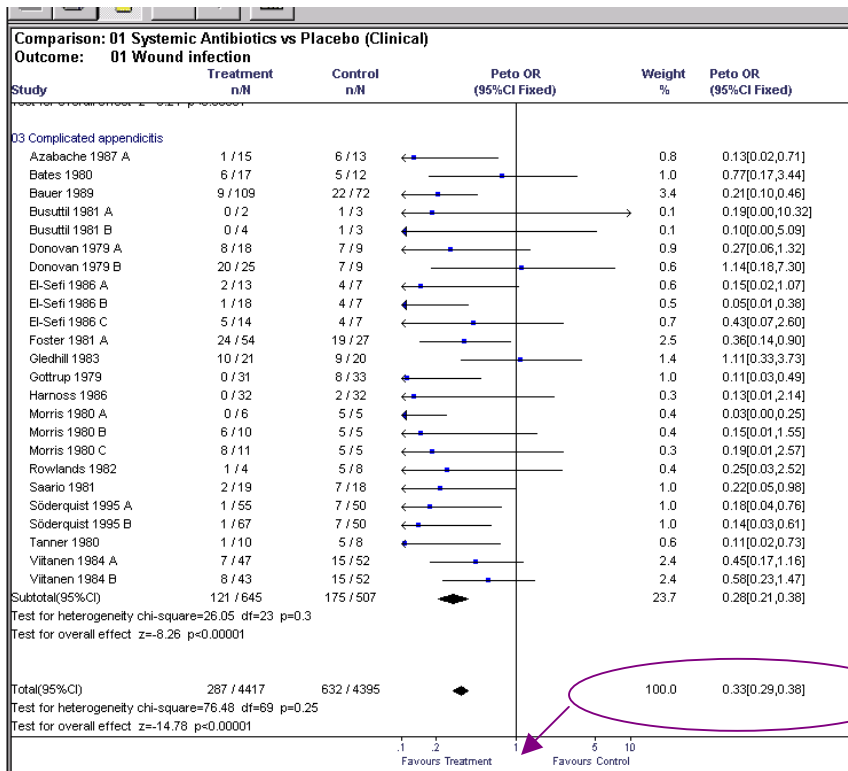


OR of 0.31 with upper confidence interval of 0.42 indicates confidence intervals fall within a clinically significant range compared to OR of 0.52 with upper CI of 0.93, upper confidence interval may not be clinically significant. The first example is stronger evidence for an important effect.

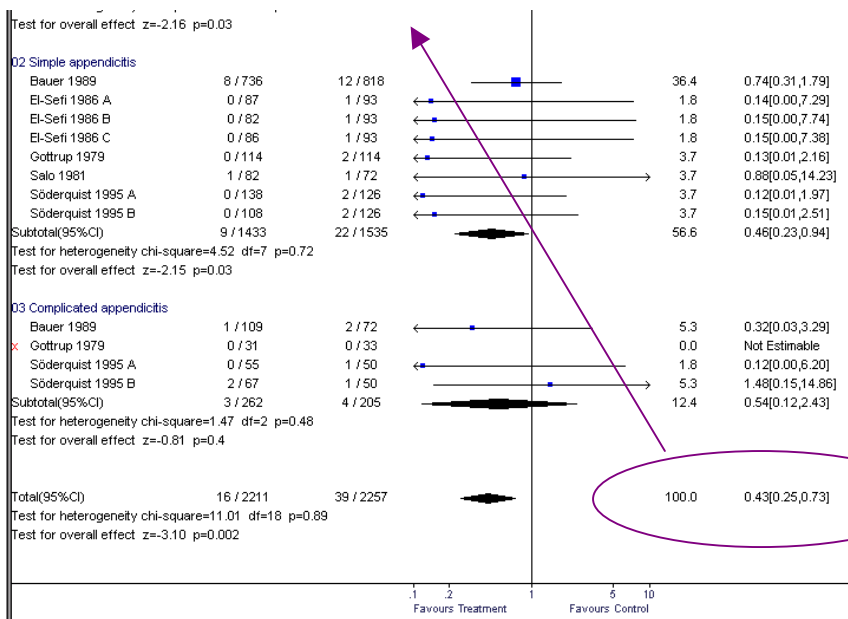


- The precision of the treatment effect. If the confidence intervals around your summary estimate are narrow and so you are more sure that the 'true' result lies within the range bordered by the upper and lower confidence interval (and is clinically significant) you can be more confident about the strength of evidence.

For example, compare the strength of evidence from the forest plots below.

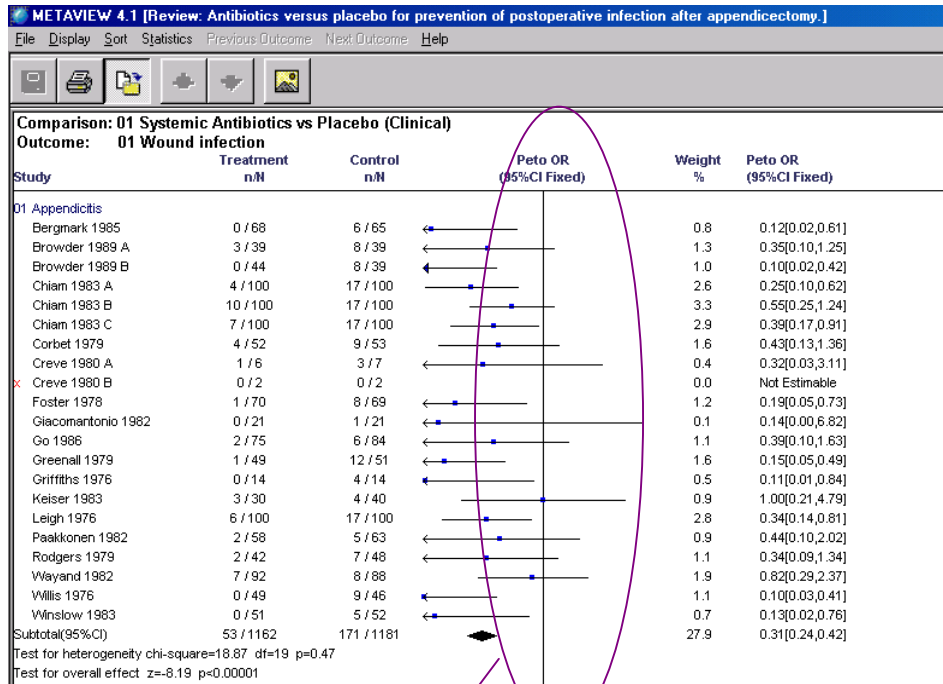


CI's of 0.29 to 0.38 compared to 0.25 to 0.73
The first example is more precise, hence greater strength of evidence

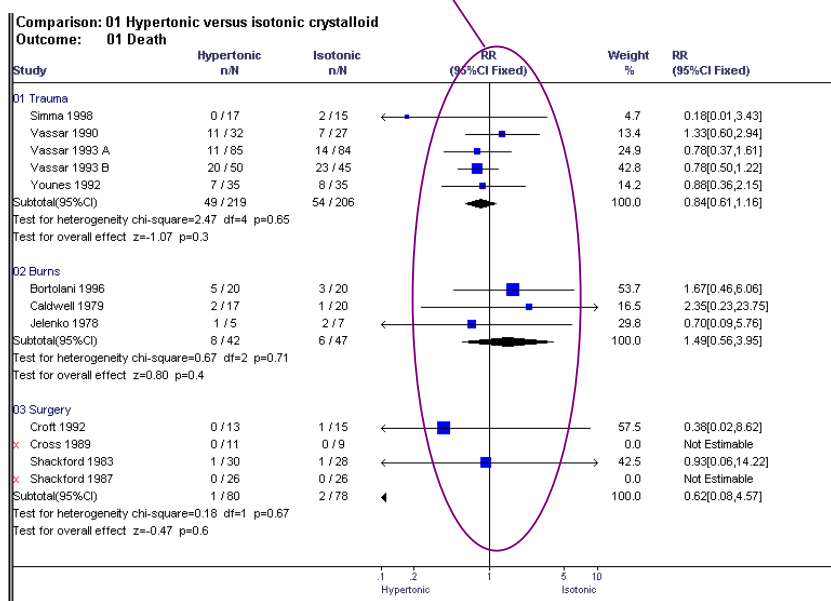


- The consistency of the results. If the results of all or most of the trials in your review are in the same direction (i.e. demonstrating an effect) the evidence is stronger (although ensure you also discuss the possibility of publication bias).

For example, compare the strength of evidence from the forest plots below.



Consistency of effect versus disagreement between trials (i.e. all effect estimates in example 1 to the left of the line, example 2 differs in direction). The first example offers greater strength of evidence



- The consistency of outcomes. If the intervention is showing similar effects on all related outcomes (for example if an exercise program both significantly reduces pain and increases function) you may be more confident to conclude it is effective.

For example, compare the strength of evidence from the forest plots below.

METAVIEW 4.1 [Review: Antibiotics versus placebo for prevention of postoperative infection after appendectomy.]

File Display Sort Statistics Previous Outcome Next Outcome Help

Comparison/Outcome	No. of Studies	No. of Participants	Statistical Method	Effect Size
Total number of included studies: 58				
01 Systemic Antibiotics vs Placebo (Clinical)				
01 Wound infection	71	8812	Peto OR [95% CI]	0.33 [0.29,0.38]
02 Postoperative intra abdominal abs...	20	4468	Peto OR [95% CI]	0.43 [0.25,0.73]
03 Length of stay in hospital	8	1200	WMD [Fixed] [95% CI]	-1.69 [-1.78,-1.61]

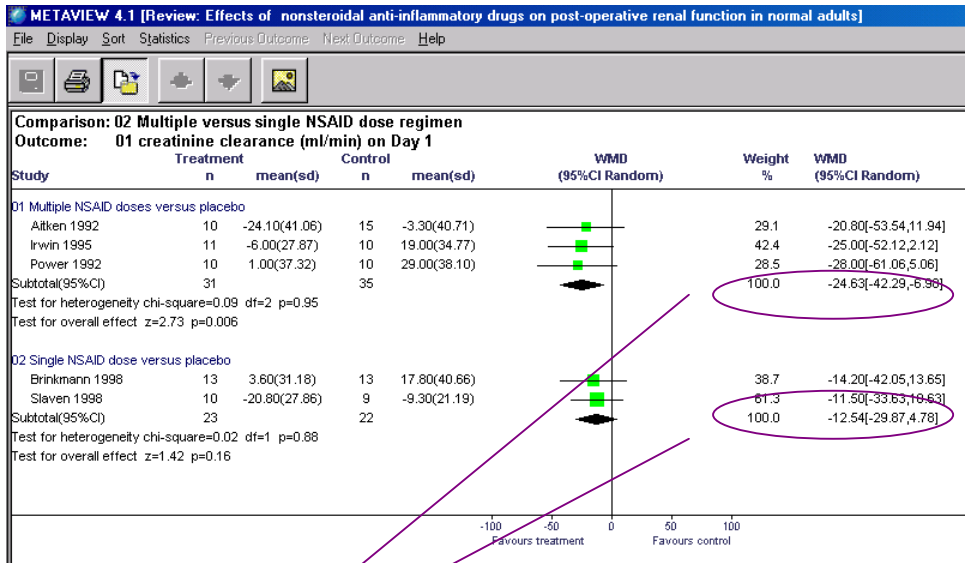
Consistent effect across all measured outcomes (example 1) versus beneficial effect for some outcomes and not others (example 2)

METAVIEW 4.1 [Review: Antihypertensive drug therapy for mild to moderate hypertension during pregnancy]

File Display Sort Statistics Previous Outcome Next Outcome Help

Comparison/Outcome	No. of Studies	No. of Participants	Statistical Method	Effect Size
Total number of included studies: 39				
01 Any antihypertensive drug versus none (subgrouped by class of drug)				
01 Maternal death	3	306	Relative Risk [Fixed] [95% CI]	2.85 [0.30,27.00]
02 Eclampsia	4	508	Relative Risk [Fixed] [95% CI]	0.34 [0.01,8.15]
03 Severe hypertension	17	2155	Relative Risk [Fixed] [95% CI]	0.52 [0.41,0.64]
04 Proteinuria/pre-eclampsia	19	2402	Relative Risk [Fixed] [95% CI]	0.99 [0.84,1.18]
05 HELLP syndrome	1	197	Relative Risk [Fixed] [95% CI]	2.02 [0.38,10.78]
06 Pulmonary oedema	1	176	Relative Risk [Fixed] [95% CI]	5.23 [0.25,107.40]
07 Additional antihypertensive	10	1285	Relative Risk [Fixed] [95% CI]	0.42 [0.30,0.58]
08 Changed/stopped drugs due to m...	13	1202	Relative Risk [Fixed] [95% CI]	1.88 [0.89,3.95]
09 Maternal side effects	8	633	Relative Risk [Fixed] [95% CI]	1.74 [1.04,2.91]
10 Antenatal hospital admission	3	306	Relative Risk [Fixed] [95% CI]	0.94 [0.78,1.12]
11 Induction of labour	5	563	Relative Risk [Fixed] [95% CI]	0.91 [0.77,1.07]
12 Elective delivery (induction of labo...	5	710	Relative Risk [Fixed] [95% CI]	0.91 [0.83,1.00]
13 Caesarean section	17	2221	Relative Risk [Fixed] [95% CI]	0.96 [0.85,1.08]
14 Placental abruption	9	1214	Relative Risk [Fixed] [95% CI]	1.83 [0.77,4.37]
15 Total reported fetal or neonatal de...	23	2727	Relative Risk [Fixed] [95% CI]	0.71 [0.46,1.09]
16 Fetal or neonatal death (subgroup...			Relative Risk [Fixed] [95% CI]	Totals not selected
17 Preterm birth (< 37 weeks)	12	1738	Relative Risk [Fixed] [95% CI]	1.00 [0.87,1.15]
18 Preterm birth (subgrouped by gest...			Relative Risk [Fixed] [95% CI]	Totals not selected
19 Small for gestational age	17	2159	Relative Risk [Fixed] [95% CI]	1.13 [0.91,1.42]
20 Small for gestational age (subgrou...			Relative Risk [Fixed] [95% CI]	Totals not selected
21 Admission to special care baby unit	7	1251	Relative Risk [Fixed] [95% CI]	1.08 [0.90,1.30]
22 Respiratory distress syndrome	5	825	Relative Risk [Fixed] [95% CI]	0.28 [0.12,0.63]
23 Neonatal hypoglycaemia	4	679	Relative Risk [Fixed] [95% CI]	0.87 [0.46,1.63]
24 Neonatal bradycardia	3	418	Relative Risk [Fixed] [95% CI]	1.93 [1.05,3.53]
25 Neonatal jaundice	2	346	Relative Risk [Fixed] [95% CI]	0.89 [0.59,1.35]
26 Follow-up of the children at 1 year...	1	110	Relative Risk [Fixed] [95% CI]	0.33 [0.01,8.07]
27 Follow-up of the children at 7 1/2 ...			Relative Risk [Fixed] [95% CI]	Totals not selected

- Apparent dose response relationship. It may be that if an intervention is significantly beneficial (or harmful), the more of the intervention you have, the better (or worse) you will do. This is known as a dose-response relationship and, in studies of causation, the presence of a dose-response relationship (i.e. the more of a harmful agent you are exposed to the greater your chance of developing the outcome), the stronger the evidence of association. In some reviews however dose-response association may not be important, for example if there is no threshold dose.



Multiple doses appear to have a greater effect than single doses, which may strengthen the evidence.