WeMeReC
Welsh Medicines Resource Centre
Canolfan Adnoddau Moddion Cymru

Things to know

"Independent prescribing information for NHS Wales"

January 2007

… about forest plots

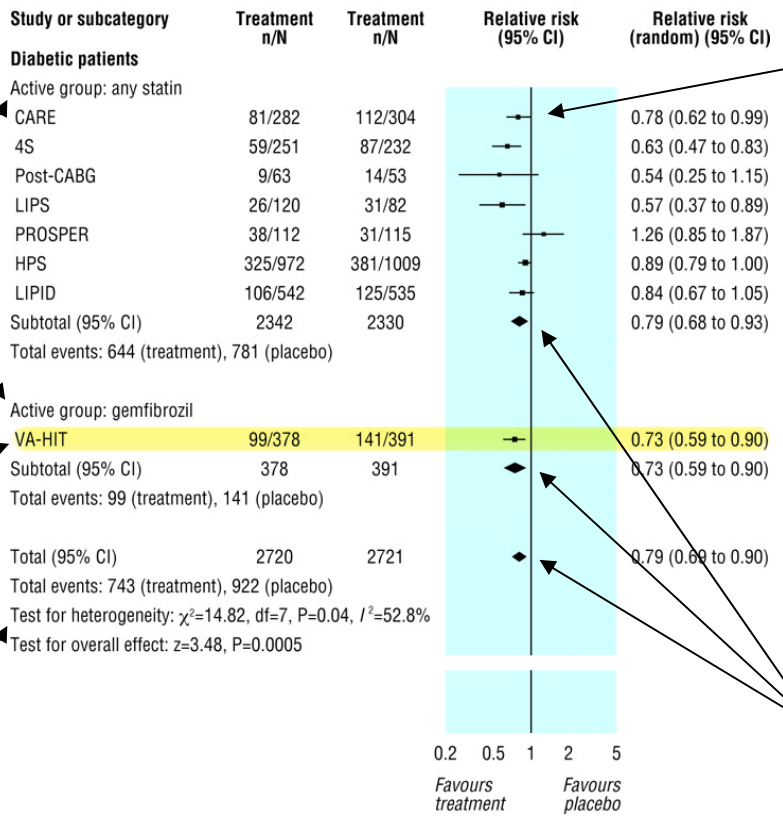
Forest plots are pictorial representations of data from **meta-analysis** - a statistical technique for combining the findings from independent studies.

Individual studies of an intervention are listed with information relating to the outcome of interest.

In this case, studies of diabetic patients on lipid lowering treatment (a statin or gemfibrozil) are presented.

The numbers of major coronary events observed in the treatment groups (intervention and control) are given with the relative risk (risk ratio or RR).

Results of a meta-analysis are dependent on the quality of the systematic review performed: there should be complete coverage of all relevant studies, checks for heterogeneity, and a sensitivity analysis.



Secondary prevention of major coronary events
Costa J et al. BMJ 2006; 332: 1115-1124

The "**blobs**" (in this case, squares) represent the results of each study. These are arranged relative to the vertical line of 'no difference' (RR=1) - those to the left of the line represent studies in which a reduction in relative risk was observed.

The **size** of the blobs varies with the amount of information from the individual studies (the study or treatment group size).

The **horizontal lines** around the blobs represent the 95% confidence limits for the measured effect (i.e. relative risk). Where these cross the **vertical line**, the result is not statistically significant.

Alongside the individual study results, the effect size for sub-groupings and the overall effect calculated from the meta-analysis are displayed.

Here the relative risks calculated by combining study data for diabetic patients in different treatment groups appear as **diamonds**, with edges that extend to encompass the 95% CI

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