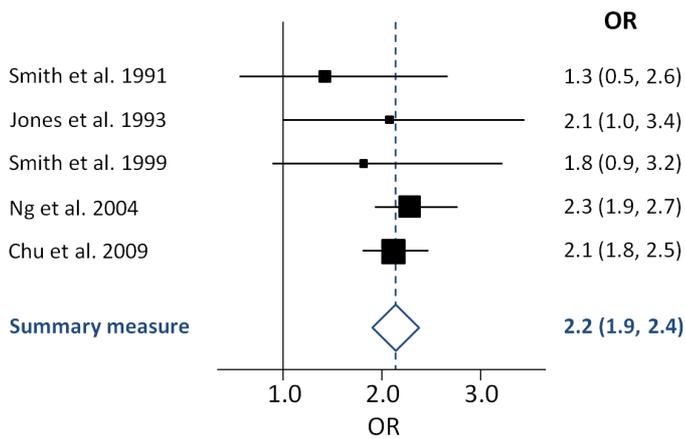


Q21 The following is a Forest plot representing the results of a meta-analysis. Explain the meaning of all the components of the Forest plot (March 2012)



- The x axis represents the odds ratio - a measure of the association between an exposure and an outcome of interest
- The square box indicates the relative weighting of the study in the meta-analysis (dependent on sample size and precision – the greater the sample size and narrower the confidence interval, the more precise the study is and hence the greater the weighting)
- The short horizontal lines associated with each square represent the confidence intervals. Short lines are more precise.
- The solid vertical line from 1.0 on the x axis is the line of no effect – if the confidence interval for any study crosses this line, it demonstrates that at the given level of confidence, the effect size of that study does not differ from no effect
- The dotted vertical line is a visual assessment of heterogeneity of the studies. If a line can be drawn that includes all of the studies, then they are similar enough to be included in the meta-analysis.
- The diamond represents the pooled effect estimate – to make a clear interpretation, the diamond needs to be on one side of the 'line of no effect' and as far away from it as possible. The horizontal width of the diamond represents the confidence interval. If the diamond crosses the line of no effect, the meta-analysis has shown no statistically significant difference in the two interventions.

