

Confidence Interval [CI]

A confidence interval is an estimated range of values in which all data (results) are likely to lie. For a given treatment effect measured in a trial on a sample of a population, the confidence interval can be calculated to give a 'best estimate' range of the treatment effect that will be seen in the whole population.

The likelihood that the confidence interval will contain the value is called the confidence level. Traditionally, confidence levels are set at 95% or 99%. This means that researchers are 95% (or 99%) certain that the measured effect lies within the true range.

For example, instead of estimating the mean age of a population as 15 years, researchers say that the mean age is between 14 and 16. This confidence interval contains the true value being estimated.