

A new strategy to calculate confidence intervals Confiabilidad de la sensibilidad y especificidad del 100%

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A new strategy and four new methods are presented to calculate the limits of the confident interval for an estimate of a proportion equal to 1.0 or 0.0. A current formula which includes $1/(2n)$ for continuity correction leads to a confident interval which does not include the parameter estimate. Thus, it is proposed: 1) The exclusion of the factor $1/(2n)$ in that formula leads to correct most of its inconsistencies, the new strategy assumes that the upper limit of a confident interval when the estimates is 100%, is also 100%. the lower limit is calculated by assuming that there is a proportion in the population, from where the sample was taken, such as the probability of getting 100% in the sample is equal to the probability of falling into type I error of current statistics (0.05, 0.01, etc). Three methods are proposed with this strategy. 2) A combinatorial solution based in the knowledge of the number of individuals at whom the test can be applied. 3) A solution based on the binomtal d