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Krishnamoorthy. *Some Properties of the Exact and Score Methods for Binomial Proportion and Sample Size Calculation.*

In this talk, we point out some interesting relations between the exact test and the score test for a binomial proportion p . Based on the properties of the tests, we propose some approximate as well as exact methods of computing sample sizes required for the tests to attain a specified power. Sample sizes required for the tests are tabulated for various values of p to attain a power of 0.80 at level 0.05. We also propose approximate and exact methods of computing sample sizes needed to construct confidence intervals with a given precision. The approximate methods for computing sample sizes for score confidence intervals are very satisfactory and the results coincide with those of the exact methods for many cases. (Received September 14, 2007)