T-Test

National Cancer Institute

Source

National Cancer Institute. t-Test. NCI Thesaurus. Code C53231.

A statistical hypothesis test based on a test statistic whose sampling distribution is a t-distribution. The term "t-test" is often used in a narrower sense: it refers to a popular test aimed at testing the hypothesis that the population mean is equal to some value m (see also t-statistic). The most popular t-tests are aimed at testing the following hypotheses: 1. The population mean is as hypothesized (the population variance is not known); 2. The means of two populations are equal (the population variances are not known but equal); 3. The means of two populations are equal (the population variances are not known and not equal); 4. The correlation coefficient for two random variables is zero; 5. The slope of the population regression line is zero.