Outlier detection in logistic regression and its application in medical data analysis

ABSTRACT

The application of logistic regression is widely used in medical research. The detection of outliers has become an essential part of logistic regression. It is often observed outliers have a considerable influence on the analysis results, which may lead the study to the wrong conclusions. Many procedures for the identification of outliers in logistic regression are available in the literature. In this paper, four methods for outlier detection have been investigated and compared through numerical examples.

Keyword: Logistic regression; Outlier; Residual; Detection