Inference about Binocular Sensitivity and Specificity of Screening Tests for Paired Organs

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Abstract

Recently, Perera, *et. al.* (2017) introduced two new binocular accuracy measures to evaluate diagnostic tests for paired organs. They adopted the Gaussian copula model to account for correlation between fellow eyes. As the measures are functions of several joint probabilities and due to the nature of the joint models, variations of the estimates for the two new measures were assessed via bootstrapping.

We provide a different approach to inference about the two interesting and innovative measures. In our opinion, when patients are independent, the binomial models suffice for inference about the parameters of interest.