Optimal Design Strategies for Relative Potency using the Two-Parameter Log-Logistic Model

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Abstract

In this paper, we focus on the D- and D$_s$-optimal designs for two-parameter log-logistic (LL2) relative potency model where the response variables are normal and binomial distributions. The D- and D$_s$-optimal designs are obtained by using D-optimal design and nesting strategy criterions, respectively. Furthermore, the general equivalence theorem is used to guarantee the D- and D$_s$-optimal designs. The results show that we obtain four support points for D-optimal designs and two support points for D$_s$-optimal designs.

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