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Optimal allocation for comparing k test treatments to positive and negative control with unequal weighting under A-optimality and MV-optimality. (English) Zbl 1105.62075
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Summary: Experiments in real life often involve comparisons of test treatments to more than one control. However, the controls may not always be of equal importance. We introduce a weighted MV optimality criterion and present a detailed study using both weighted A and MV optimality criteria for the problem of optimally comparing a set of test treatments to two controls (positive and a negative) that are of unequal importance to the experimenter.

MSC:

62K05 Optimal statistical designs

62J15 Paired and multiple comparisons; multiple testing

62P10 Applications of statistics to biology and medical sciences; meta analysis

Cited in 1 Document

Keywords:

Weighted A-optimality; Weighted MV-optimality; Average variance; Tables

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