

Title:

On Optimality of Stepdown and Stepup Procedures

Author(s):

E. L. Lehmann, Joseph P. Romano and Juliet Popper Shaffer

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Abstract:

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Consider the multiple testing problem of testing k null hypotheses, where the unknown family of distributions is assumed to satisfy a certain monotonicity assumption. Attention is restricted to procedures that control the familywise error rate in the strong sense and which satisfy a monotonicity condition. Under these assumptions, we prove certain maximin optimality results for the well-known stepdown and stepup procedures.