

# Sample Size and Robust Randomized Design

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## Abstract

For randomized designs, the power and sample size are usually obtained by ignoring the randomness of the allocation in the literature. But the power is a random variable for a fixed sample size  $n$ , when a randomized design is used. Therefore, a fixed power may not be achieved by a randomized design with a per-determined sample size. In this talk, we propose a class of robust randomized designs which can achieve a fixed power with a per-determined sample size. Some examples are discussed.