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Dear Editor,

We are pleased to submit a manuscript titled "Approximating the Sum of Independent Non-Identical Binomial Random Variables" by Boxiang Liu and Thomas Quertermous for consideration for publication in the R journal. The distribution of sum of independent non-identical binomial random variables is frequently encountered in areas such as genomics, healthcare, and operations research. Analytical solutions to the density and distribution are usually cumbersome to find and difficult to compute. The saddlepoint approximation is a well-known method to approximate the sum of binomials. However, its implementation is non-trivial and, to our knowledge, an R package is still lacking.

In this manuscript, we implement the saddlepoint method to approximate the sum of independent non-identical binomials in the **sinib** package. We provide two examples to illustrate its usage. In addition, we assess the accuracy of saddlepoint approximation against ground truth in both examples.

We believe that this manuscript is appropriate for publication by the R journal because it describes a tool that can be of interest to a broad audience. In addition, the comparison between **sinib** and ground truth could inform users who want to understand the empirical properties of saddlepoint approximation.

This manuscript has not been published and is not under consideration for publication elsewhere. We have no conflicts of interest to disclose.

Thank you for your consideration!

Sincerely,

boxiang Liu
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