

June 5th, 2024

Dear editors,

It is with great pleasure that I submit the manuscript entitled “Comparing estimators of discriminative performance of time-to-event models” for consideration of publication in the WNAR/IMS/Graybill special issue of Journal of Data Science.

The current work, not currently published elsewhere, explores the validity of evaluation metrics of discriminative performance of time-to-event models, including time-dependent AUC and concordance. Specifically, we identify the conditions under which various estimators of discrimination in time-to-event models are appropriate. We believe these findings can prevent investigators from being misguided by inappropriate evaluation measures in many practical tasks, such as model selection and assessment.

Both authors contributed to (1) the conception of the problem and the proposed methods presented; and (2) drafting or revising the work for statistical and/or subject matter content. Each author has read the manuscript and approved its submission to JDS. There are no conflicts of interest to disclose for this work.

We also suggest the following reviewers for this manuscript:

1. Mei-Cheng Wang (mcwang@jhu.edu)
2. Yifei Sun (ys3072@cumc.columbia.edu)
3. Frank E. Harrell (f.harrell@vumc.org)

On behalf of my co-author, I thank you for your consideration of this manuscript for publication. Please address all correspondence to me at ying.jin@cuanschutz.edu

Sincerely,

Ying Jin