

## Peer Review

# Review of: "The Devil Lies in the Details: An Analysis of Six Oncology Randomised Controlled Trials"

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The manuscript rightly emphasizes a critical issue highlighted by previous studies: many RCTs in oncology fail to provide complete and transparent reporting of survival endpoints, which undermines the ability of oncologists and clinicians to accurately interpret study findings. The authors reference compelling evidence from prior research, such as a review of 125 articles from eight significant journals in cancer, which found that 68% of studies reported insufficient information on survival analysis. This is a significant concern as it indicates that almost seven out of ten studies lack essential details, including critical information on censoring (42%) and the number of events (28%). These gaps in reporting can lead to skewed or incomplete interpretations of survival benefits, making it difficult for clinicians to make informed decisions about treatment options.

The authors also cite another review of 32 articles that reported survival outcomes in cancer populations, where none of the studies provided details about final model validation for survival analysis. This is particularly problematic as it raises questions about the accuracy and reliability of the survival models used, further complicating the interpretation of the findings.

Furthermore, the manuscript highlights an important concern regarding the Cox proportional hazards regression model, which is commonly used to analyze survival endpoints in oncology RCTs. The authors note that in 88% of studies reporting the use of this model, there was no validation of the proportionality hazard assumption, which is a fundamental assumption of the Cox model. This lack of validation is troubling, as it could lead to misleading results if the assumption does not hold true, thereby affecting the reliability of conclusions drawn from these survival analyses.

Given these concerns, I strongly support the authors' call for more rigorous and transparent reporting of survival data, particularly when using complex statistical methods like the Cox proportional

hazards regression model. I would suggest that the manuscript expand on these findings by recommending best practices for validating survival models, especially in relation to testing the proportionality hazard assumption. Including suggestions for mandatory reporting guidelines on censoring, event numbers, and model validation would further enhance the paper's contribution to improving transparency in oncology RCTs.

## **Declarations**

**Potential competing interests:** No potential competing interests to declare.