

## Authors' response

Sir,

Thank you for your interest in our article<sup>1</sup>, published in the November 2024 issue of the Indian Journal of Medical Research. We sincerely appreciate your thoughtful comments<sup>2</sup> regarding the significance and interpretation of the mortality-to-incidence ratio (M/I ratio) in relation to our study.

We have reviewed the research article cited in your letter-to-editor and found it insightful and comprehensive. As highlighted in the article authored by Ellis *et al*<sup>3</sup>, The 1-M/I ratio lacks any theoretical basis as a proxy for cancer survival and is not a valid proxy for cancer survival in practice, we do agree with certain points as presented in the paper. However, other studies on this same topic<sup>4,5</sup>, using different datasets, suggest that the M/I ratio can serve as a reasonable approximation for survival in certain contexts.

A study conducted among cancer patients in metropolitan Lima (Lima and Callao) concluded that the complement of M/I ratio [ $1 - M/I$ ] is a valid proxy for estimating five-year observed survival for specific cancer types<sup>4</sup>. The study showed close alignment between  $1 - M/I$  ratio and actual 5-yr observed survival for breast and prostate cancers, 68 vs. 69.6 per cent and 63.8 vs. 64.3 per cent, respectively. For thyroid cancer, both indicators were identical at 86.7 per cent, indicating high accuracy of MIR-based survival estimation.

Similarly, another study analysing data from seven population-based cancer registries in Denmark, Finland, Iceland, Norway, Sweden, the USA, and the Netherlands concluded that  $1 - (M/I)$  is a reliable approximation of the 5-yr relative survival for most, though not all, tumour sites<sup>5</sup>.

These discrepancies between different research studies may be due to variations in methodology, data sources, and the nature of follow up practices. For instance, in low- and middle-income countries, passive follow up is more common due to resource limitations, as opposed to active follow up systems<sup>6</sup>. Additionally, challenges in integrating vital statistics with cancer registries in these regions, often due to financial and logistical constraints, may influence outcomes.

In conclusion, we value your insights. Future research that addresses these aspects will undoubtedly help refine conclusions and deepen our understanding of cancer outcome measures.

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