Strengths and limitations of meta-analyses

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This commentary refers to 'Meta-analyses of moving targets', by C. Berry, https://doi.org/10.1093/eurheartj/ehab 359 and the discussion piece 'Reporting data from meta-analysis: snapshot of a moving target', by Y. Ahmad et al., https://doi.org/10.1093/eurheartj/ehab681.

I thank Drs Ahmad, Howard, Madhavan, Bangalore, and Stone¹ for their response to my editorial.²

Their points are very well made. Taken together, we have shared motivation to provide the community with insights into the strengths and limitations of meta-analysis.

The results of meta-analysis are a function of multiple factors, not least the available data at any moment in time. When considering the impact of a meta-analysis, plurality is also relevant. Multiple meta-analyses by different research groups may be published on a given topic, and their findings may not be coherent. These issues are less relevant to individual-patient data pooled analyses, and we agree on the value of this approach. A critical review of evidence from meta-analyses is all the more

important given their prioritization to inform clinical practice guidelines.

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References

- 1. Ahmad Y, Howard JP, Madhavan MV, Bangalore S, Stone GW. Reporting data from meta-analysis: snapshot of a moving target. Eur Heart J 2022;43:699–700.
- 2. Berry C. Meta-analyses of moving targets. Eur Heart J 2021;42:2655–2656