

## The Reply



We thank Dr Ito for his interest in our systematic review and meta-analysis.<sup>1</sup> Dr Ito points out that optimism is a non-permanent mental state, which changes over time. Indeed, we agreed that multiple measurements to achieve accurate matrices is needed in optimism measurement. Unfortunately, most included study did not measure optimism multiple times; we, therefore, agreed this would be a limitation in this kind of study related to nonpermanent mental state. Readers should take into account the possible fluctuation of optimism over time. Future studies on novel methods or biomarkers reflecting mental health state or traits of optimism may be needed.

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## Reference

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