## Peer Review

## Review of: "Investors' Perspective on Healthspan in 2025"

Jens R. Coorssen<sup>1</sup>

1. Brock University, Canada

I appreciated the opportunity to review this quite interesting manuscript. A few comments to hopefully improve this submission:

- 1) The actual locations of 5P Future of Health Investment and the Fachhochschule für Oekonomie und Management (both in Germany) should be identified.
- 2) Section 7: Dubai and Abu Dhabi are not countries, although the next sentence indicates that they are.
- 3) Section 8: I would have to suggest that another reason that investing in healthcare is so notoriously complex is the lack of critical depth in much of the science that is promoted too quickly, without proper, large-scale validation, and often simply with profit rather than long-term viability in mind. This applies to the identification of both rational biomarkers and therapeutic targets; as but one example, we keep chasing after supposedly critical proteins when we need to be looking for the right proteoforms, but that is not as easy, so 'quick-and-dirty' approaches dominate. With seemingly everyone-and-their-brother claiming that the molecule(s) they have identified are 'the' right ones and establishing a start-up around it, investors (i.e., VCs as well as governments, etc.) are at high risk of believing and thus chasing after false leads when they don't educate themselves to the extent required to truly understand what they are investing in, and the 'experts' they do consult are themselves invested in the technology in question. This must be emphasized in any manuscript proposing to address Investor Perspectives.
- 4) Building from the above, this broad, shiny-object-syndrome approach to the marketing of less than mature science, including the lack of a deeper understanding or even consideration of its implications or reasonable/rational applicability, are key factors truly holding back genuine healthspan and longevity research and critical investment.
- 5) Overall, I must reasonably ask what is actually new here? The enigma of healthspan, and most certainly investment in it (whether in the science or its commercialization), has been widely addressed.

While I do think this is a potentially important contribution to the literature, I would like to see the authors more critically integrate the available information and thus present substantive proposals for how to reasonably move things forward. To that end, I find the referencing throughout a bit thin, and certainly the underlying science glossed over, basically amounting to the mention of a few key words such as geroscience and senolytics. The quality of the science and its reasonable applicability, in a reasonable as well as longer-term timeline, are critical considerations for investors. In this light, any investors looking for a quick profit need not look to this particular area or to quality biotech in general; these are areas for critical investors who want to see their investment mature strongly over time (i.e., rather than in ~4 months with some largely useless new cell phone app). These tend to be investors who also, rightfully, seek to invest more broadly in the health of their communities. As pointed out, while some insightful regions are already doing this to some extent (although perhaps not as critically as necessary), most established governments and industries (e.g., insurance) have generally been lax, at best, in doing so. These are all critical considerations for such a manuscript and thus, respectfully, require more thoughtful integration rather than just repetition of available information already in the literature.

## **Declarations**

Potential competing interests: No potential competing interests to declare.