



Response letter to “sarcopenia, osteoporosis and fractures: what we see”

Rebekah J. Harris^{1,2} · Neeta Parimi³ · Peggy M. Cawthon³ · Elsa S. Strotmeyer¹ · Robert M. Boudreau¹ · Jennifer S. Brach⁴ · C. Kent Kwoh⁵ · Jane A. Cauley¹

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We thank the authors of the letter to the editor for their comments on our paper, *The Association of the Components of Sarcopenia and Fracture Risk* [1]. We agree that a consensus definition for sarcopenia is critical to move forward with diagnosis, prevention, treatment, and research. There is currently not a consensus definition or cut-points established for sarcopenia which is a significant challenge in both the clinical and research realms.

Assessment of gait speed and grip strength is important to identify impairments in our body structures and function that may lead to functional limitations and disability. Use of grip strength as an absolute measure and adjustment for body stature within our statistical models is an acceptable practice as the authors pointed out in their letter. We would like to comment that we did acknowledge the limitations of our selected sarcopenia definition and cut-points within our paper. Our results are similar to a work from the Sarcopenia Definition and Outcomes Consortium [2], where no association between low lean mass and hip fracture was found and inconsistent associations with weakness (grip strength) and hip fracture which varied based on gender and definition. Again, we want to highlight that there is no universally accepted definition and cut-points for sarcopenia yet, but there is progress in the field to identify cut-points that are

associated with clinically meaningful outcomes. While the results of our paper from the MrOS cohort may not have shown as association with weakness or low lean mass and fractures, it is important to note that these are results from 1 study and should be understood within the larger context of sarcopenia research.

Declarations

Conflict of interest All authors, Harris, Parimi, Cawthon, Strotmeyer, Boudreau, Brach, Kwoh and Cauley declare no conflicts of interest.

References

1. Harris RJ, Parimi N, Cawthon PM et al (2022) Associations of components of sarcopenia with risk of fracture in the Osteoporotic Fractures in Men (MrOS) study. *Osteoporos Int*. <https://doi.org/10.1007/s00198-022-06390-2> (In eng)
2. Cawthon PM, Travison TG, Manini TM et al (2020) Establishing the link between lean mass and grip strength cut points with mobility disability and other health outcomes: proceedings of the sarcopenia definition and outcomes consortium conference. *J Gerontol A Biol Sci Med Sci* 75(7):1317–1323. <https://doi.org/10.1093/gerona/glz081> (In eng)

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✉ Rebekah J. Harris
Rebekah.harris@va.gov

¹ Department of Epidemiology, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, USA

² VA Boston Healthcare System, 150 South Huntington Ave, Boston, MA 02130, USA

³ Research Institute, California Pacific Medical Center, San Francisco, CA, USA

⁴ Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA, USA

⁵ Department of Medicine, University of Arizona, Tucson, AZ, USA