

# Does work per repetition and phase angle play a role in Sarcopenia?

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## Backgrounds

- ✓ Aging is related to the increase of several chronic diseases, such as, osteoarthritis, osteoporosis, diabetes, hypertension and sarcopenia. Sarcopenia (progressive loss of muscle mass and physical performance) is related to difficulties in treating other comorbidities, whether pharmacologically or non-pharmacologically.
- ✓ It's important to understand the relations between strength (W), muscular mass and the phase angle (PA) of bioimpedance, in sarcopenic subjects to prescribe more accurate treatments.

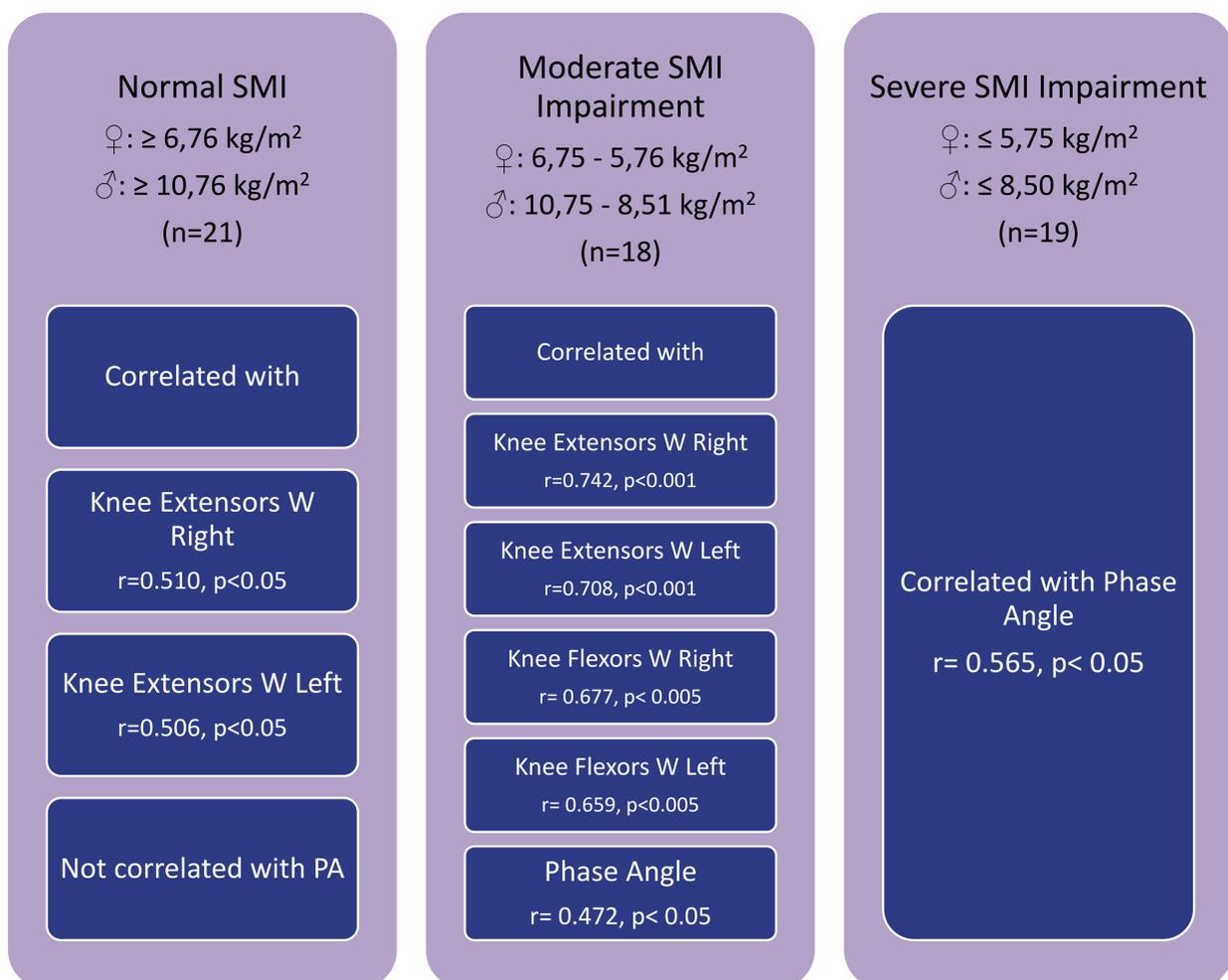
## Objectives

- ✓ To study the relations of Skeletal Muscle Index (SMI) with W, PA and the presents of comorbidities (NC) in elderly subjects.

## Methods

- ✓ A prospective, observational secondary analysis of data from the “The Sarcopenia Screening and health related issues in the Region of Algarve”, was performed. Community independent living elderly subjects were recruited. Body composition was measured by bioimpedance (Seca analytics 115), knee flexion and extension isokinetic strength (60°/sec) (HUMAC NORM). A screening questionnaire was used to determine the presence of comorbidities. SMI levels were assessed using European Working Group on Sarcopenia in Older People cut-off points.

## Results



Comorbidities did not show any correlation with SMI levels.



## Conclusion

- ✓ Our results seem to indicate that isokinetic strength (work) may have in the future a role in understanding Sarcopenia, once it is related to SMI. Also, PA may indicate moderate and severe SMI impairment.