



# Correlation of Body Composition vs Regional Electrical Bioimpedance Spectroscopy

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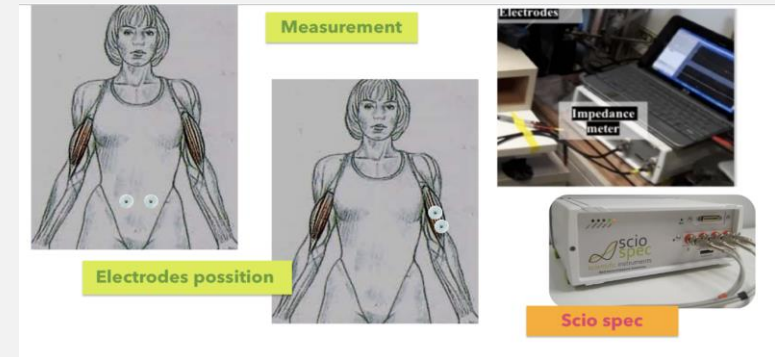
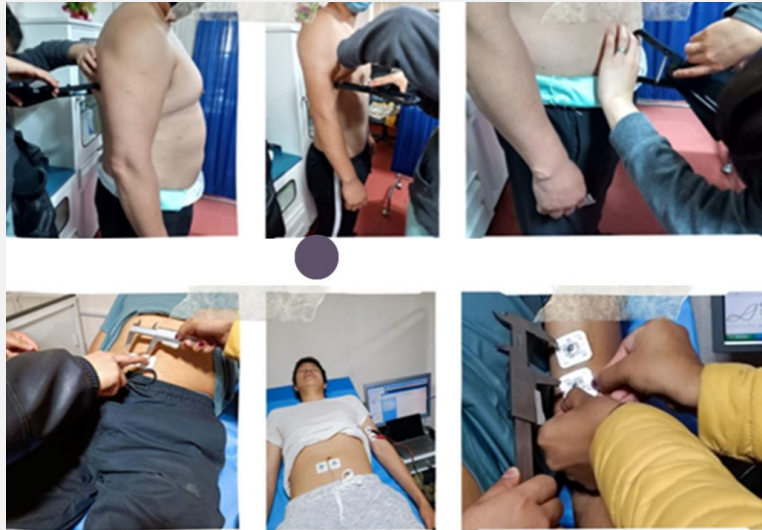


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# Introduction

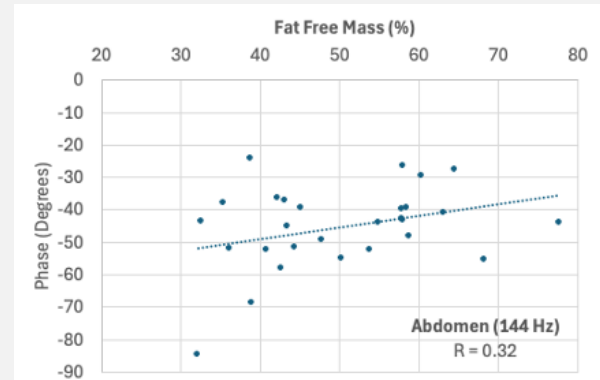
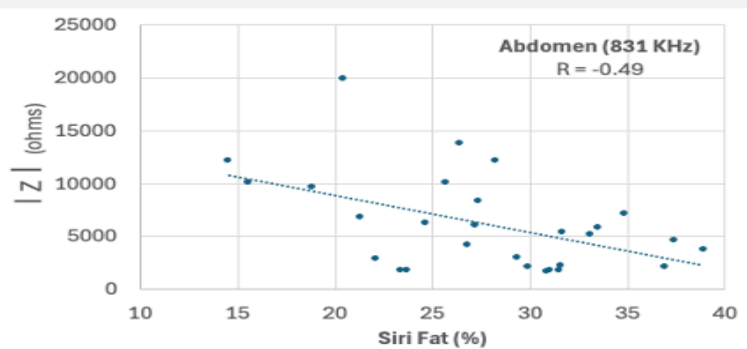
In sports environment the estimation of Body Composition (BC) is an important concern for fitness monitoring

available portable devices for such purpose is limited.



The goal of this work was to explore the correlation between BC and regional Electrical Bioimpedance Spectroscopy (EBiS) measurements in healthy volunteers to identify a potential bioimpedance parameter potentially useful to estimate non-invasively BC factors.

BC was estimated by plicometry and correlated with regional EBiS measurements developed in abdomen and arm.



The results indicate significant correlations of Siri-Fat and Fat Free Mass (FFM) percentages with regional bioimpedance magnitude and phase measurements at specific frequencies.

Siri-Fat correlates with bioimpedance magnitude for abdomen and arm at 831KHz (R=-0.49, P<0.05) and 1.58MHz (R=-0.51, P<0.05) respectively

FFM correlates with bioimpedance phase for abdomen and arm at 144Hz (R=0.32, P<0.05) and 229Hz (R=0.57, P<0.05) respectively



# 5<sup>TH</sup> CLABIO

LATIN AMERICAN BIOIMPEDANCE  
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# Thanks

