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**Project Title**

The relationship between osteosarcopenia and falls, fractures and frailty

**Project Summary**

Osteoporosis and sarcopenia are common medical conditions for older adults. A number of older adults, especially frail elderly, experience these two diseases at the same time which is called osteosarcopenia. Osteoporosis and sarcopenia are interconnected through several mechanisms and metabolic pathways, and share several common risk factors such as X, Y, Z, . Experiencing these two diseases can lead to negative health outcomes such as falls, fractures, hospitalization, poor quality of life and mortality. As osteosarcopenia is a new geriatric syndrome and a recent term, there have still been few studies to describe how many people experience osteosarcopenia and if it is related to negative events like falls, fractures, and frailty. Therefore, our study will describe how many people experience osteosarcopenia and will explore if people with osteosarcopenia are at greater risk for falls, fractures, and frailty compared to those with osteoporosis or sarcopenia alone.

**Keywords**

Osteoporosis, Sarcopenia, Falls, Fractures, Frailty