CLSA Approved Project

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Project Title
Risk factors for falls and fall-related injuries in patients with neurocognitive disorders: Integrating prospective longitudinal observational cohort studies

Project Summary
Neurocognitive disorders are strongly associated with falls and fall-related injuries (i.e., fractures). However, the nature of the interactions between neurocognitive disorders and the other risk factors for falls and fall-related injuries are still a matter of debate. Our Canadian collaborator (Dr. Olivier Beauchet at McGill University) demonstrated that emerging modelling techniques such as artificial neural networks improve the performance criteria of fall prediction compared to classical linear models in community dwelling older persons. Other methods such as Factor Mixture Models may also be helpful in identification of patterns of risk factors for falls and fall-related injuries but have been not used in this field of research. We can combine four databases from 2 countries including cognitive and musculoskeletal data to characterize, compare and model the risk for incident falls and fall-related injuries in cognitively impaired older adults.

Keywords
Dementia, Falls, Fractures, Injuries, Cohorts