

Applicant

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Project Title

Genome wide association studies (GWAS) on patients with Atypical Femur Fractures (AFFs)

Project Summary

Atypical Femur Fractures (AFFs), though rare, are a major concern for patients and health care providers in the field of osteoporosis and have caused a decline in use of antiresorptive therapies (ART) such as bisphosphonates, with a consequent increase in fractures. We propose to perform a genome-wide association study (GWAS) on 350 patients with AFFs to search for genetic risk factors for the development of AFFs. Our ultimate goals are to better understand the role and function of these genetic variants in bone biology and bone fragility, and to better identify patients at increased risk of AFFs, so as to better screen and monitor them, and to perhaps use bone formation therapies rather than ARTs in these patients.

Keywords

GWAS, Atypical femur fractures, Osteoporosis, Antiresorptive therapies (ART), Bisphosphonates