**Principal Investigator**
Felix Wehrli, PHD

**Study Title:**
Bone Water and Mineralization Measured by Nuclear Magnetic Resonance

**Purpose:**
The purpose of this research study is to gather and compare information about the structure and chemistry of bone in post-menopausal women who do not have osteoporosis, and those with osteoporosis undergoing treatment with an FDA (Federal Drug Administration) approved drug called zoledronic acid. Osteoporosis, a disease that causes a decrease in normal bone density, causes bones to be weak or brittle, increasing the risk of bones breaking easily. Osteoporosis most often occurs in individuals over the age of 50 and is twice as frequent in women than men. The information about participants' bones will be gathered using new MRI (magnetic resonance imaging) techniques.

**Brief Description**
The study involves a screening, baseline and Month 12 and Month 24 Visits. Patients must meet certain inclusion criteria and that is done prior to scheduling a screening visit. The schedule of events are as followed:

At the screening, the consent form is review and signed by the patient and person obtaining consent, undergo a DXA and Pqct scan at CHOP. You height and weight will be obtained 3 times to get an average weight and height and labs will be obtained at the outpatient lab at PCAM. This visit can take approximately 2 hours.

At the baseline screening you will have an MRI of the left calf at HUP and an infusion of Zoledronic. Infusion is administer for 30 minutes at CHPS. Supplements will be dispensed, you will receive Calcium and Vitamin D. This visit can take approximately 2 hours. Month 12 Part 1 will consist of DXA Scan and Labs. Part 2 consist of MRI and Infusion. Vitamin D and Calcium will be dispensed at this visit.

Month 24 will consist of DXA Scan, labs and MRI. No vitamins will be dispense at this visit. All vitamins dispense at Baseline, Month 12 and Month 24 must be returned.

**Eligibility**
Women who are between the ages of 50 to 75 who have been diagnosis with Osteoporosis for atleast 24 months or women who have not been diagnosed and who have a BMI of less or equal to 30.

**Compensation (if applicable)**
Patients/Subjects will be compensate $75 for every in person visit completed and provide a parking voucher for parking in a garage not valet.

**Which section would you like the trial listed under?**
Bone Center Trials

**Name**
Jade Olurin

**Phone**
(215) 746-6789

**Email:**
LSPFI@pennmedicine.upenn.edu

**Upload study flyer**
[Bone Water Flyer final.pdf](Bone Water Flyer final.pdf)