

# **CLSA Approved Project**

## **Applicant**

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## **Project Title**

Cardiovascular disease onset in osteoarthritis: a longitudinal investigation of the role of sex and multijoint symptoms

#### **Project Summary**

Osteoarthritis (OA) and cardiovascular disease (CVD) are common. OA is a risk factor for later CVD, and the risk is higher for females, and possibly those with OA at multiple joints. Important biologic mechanisms likely relate to inflammation and metabolic factors. Using baseline CLSA data, we found inflammation was the main contributor to overall CVD risk in females, versus metabolic factors and smoking in males. Also, OA was increasingly associated with worse CVD risk among females with multijoint OA, but not males. This prior work was cross-sectional; risks over time could not be investigated. Now, we will longitudinally investigate CVD onset risk and CVD risk factor changes, believing these will differ by sex and single/multijoint OA. Also, as joint symptoms data are available for those without OA, we will also consider those with 'possible-OA'.

### Keywords

osteoarthritis; cardiovascular disease; risk profile