**Introduction**

EpiReumaPt is an ongoing national, population-based, cross-sectional, epidemiologic study developed by the Portuguese Society of Rheumatology to estimate the prevalence of rheumatic diseases in Portugal.

Trained interviewers have been randomly applying a standardized questionnaire to 10,000 subjects at their houses. Selected cases are eventually observed by a rheumatologist and ankle and wrist BMA performed.

BMA (DM3A systems) is a new imaging technique based on a digital X-ray system that allows bone microarchitecture quantification and osteo-articular imaging at a highest spatial resolution.

**Methods**

Trained interviewers have been randomly applying a standardized questionnaire to 10,000 Portuguese subjects at their houses (random route). Selected cases (positive screenings and 20% of the negative screenings) were eventually observed by a rheumatologist and ankle and wrist BMA performed.

BMA (DM3A systems) is a new imaging technique based on a digital X-ray system that allows bone microarchitecture quantification and osteo-articular imaging at a highest spatial resolution.

**Objectives**

To determine Bone Microarchitecture Analysis (BMA) standard curves for wrist and ankle in men and women.

**Results**

1700 subjects were observed by a rheumatologist. Mean age was 53.8 ± 18.4 years, 61.8% were women and 94% Caucasians.

BMA was performed at bone ankle in 747 women and 371 men and at bone wrist in 837 women and 427 men. Exclusion criteria included: Other ethnicities rather than Caucasian and subjects with missing data on birth date. Subjects with left and right sides assessed were considered as “duplicates” and the right side was removed from the analysis.

The figures represent the BMA standard curves for women and men ankle.

A strong and significant correlation was found between measurements at left and right sides.

A highly significant but weak correlation (r=0.30) was found between ankle and wrist measurements from the same individuals.

**Conclusions**

These data allow for the first time the development of BMA standard curves for bone ankle in men and for wrist in men and women.

Bone quality is a systemic feature, yet differences may occur among sites assessed.