

# vibrOs - Case-Control Study on Osteoporosis Prevention By Vibration Therapy

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## General

### Identification

Detailed name Case-Control Study on Osteoporosis Prevention By Vibration Therapy

Sign or acronym vibrOs

CNIL registration number, number and date of CPP agreement, AFSSAPS (French Health Products Safety Agency) authorisation CNIL (declaration of conformity to MR001): 1167710; CPP notification date: 07/01/2009; 07/01/2009; AFFSAPS approval date: 05/02/2010

### General Aspects

Medical area Disability/handicap  
Geriatrics  
Physical medicine and rehabilitation  
Radiology and medical imaging  
Rheumatology

Keywords vibration, vibrating "power plate" platform, bone mass, incidence

### Scientific investigator(s) (Contact)

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Unit U1059 Biologie intégrative du tissu osseuxÉquipe/activité :Contraintes mécaniques et tissu osseux- Métabolisme énergétique et os

Organization Inserm ; CHU de Saint-Etienne ; Université Jean

## Collaborations

### Funding

Funding status Public

Details - IFRESIS - Federal Scientific Research and Health Engineering Institute (Institut fédératif de recherche en sciences et ingénierie de la santé) - French National Institute of Health and Medical Research.

### Governance of the database

Sponsor(s) or organisation(s) responsible Institut national de la santé et de la recherche médicale - Inserm

Organisation status Public

Sponsor(s) or organisation(s) responsible CHU de Saint-Etienne

Organisation status Public

Sponsor(s) or organisation(s) responsible Université Jean Monnet

Organisation status Public

Sponsor(s) or organisation(s) responsible Institut fédératif de recherche en sciences et ingénierie de la santé - Ifresis

Organisation status Public

### Additional contact

### Main features

### Type of database

Type of database Study databases

Study databases (details) Case control study

Database recruitment is carried out by an intermediary A selection of health institutions and services

Database recruitment is carried out as part of an interventional study No

Additional information regarding sample selection. Recruitment takes place about every 4 months; female volunteers are identified following a selection

visit.

## Database objective

Main objective To highlight the positive impact of professional vibrating platforms on bone fragility.

Inclusion criteria

- Female;
- Aged between 55 and 75 years old;
- Sedentary (less than 2 hours physical activity per week);
- Bone fragility not treated with medication.

## Population type

Age Adulthood (45 to 64 years)  
Elderly (65 to 79 years)

Population covered General population

Gender Woman

Geography area National

Detail of the geography area France

## Data collection

### Dates

Date of first collection (YYYY or MM/YYYY) 05/2010

## Size of the database

Size of the database (number of individuals) < 500 individuals

Details of the number of individuals 240 - 120 cases - 120 controls.

## Data

Database activity Current data collection

Type of data collected  
Clinical data  
Paraclinical data  
Biological data

Clinical data (detail) Direct physical measures

Paraclinical data (detail) Bone function test, high-resolution ankle and wrist

scan, calculation of muscular and postural strength, as well as control and balance.

Biological data (detail)

Blood sample with bone markers.

Presence of a biobank

Yes

Contents of biobank

Whole blood

Details of biobank content

Bone markers.

Health parameters studied

Health event/morbidity

## Procedures

Data collection method

The "case" group consists of three 15-minute sessions per week on the Power Plate platform, supervised by a coach, at a rate of 130 sessions over 12 months. All sports activity shall be stopped for the following six months to see if the benefits remain. The control group does not participate in any session.

Participant monitoring

Yes

Details on monitoring of participants

Follow-up for 18 months with medical checkpoints every 6 months.

Links to administrative sources

No

## Promotion and access

### Promotion

Link to the document

<http://www.ncbi.nlm.nih.gov/pubmed/1627903>

### Access

Terms of data access (charter for data provision, format of data, availability delay)

Contact the scientist in charge.

Access to aggregated data

Access on specific project only

Access to individual data

Access on specific project only