

# Hip and groin related clinical and radiological outcomes in professional female football players

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON26722

### Source

Nationaal Trial Register

### Brief title

PROFE hip study

### Health condition

Cam morphology, which results in a higher risk of future hip osteoarthritis.

## Sponsors and support

**Primary sponsor:** Isala (initiator)

**Source(s) of monetary or material Support:** AnnaFonds | NOREF grant.

## Intervention

## Outcome measures

### Primary outcome

The prevalence of cam morphology in a sample of professional female football players.

### Secondary outcome

- Hip related radiological features, measured on radiographs (e.g. neck-shaft angle, epiphyseal extension, lateral centre edge angle, early signs of hip osteoarthritis)
- Radiological features of the os pubis region
- Associate cam morphology with hip range of motion, hip muscle strength, hip provocation-testing, palpation of clinical hip and groin entities, functional outcomes and symptomatology and quality of life
- Hip and groin related injury burden

## Study description

### Background summary

Football (soccer) is the most popular sport worldwide and more females will start to play it in the future. In male football, hip and groin injuries occur frequently, especially in professional athletes (2 per team, per season). This is not yet known for females. It can negatively impact performance in short and long term. High hip load can result in an abnormal shape of the hip joint, called cam morphology. This can give limited range of motion and pain (femoroacetabular impingement syndrome). The etiology, consequences and treatment are not investigated for females. What we do know from previous research (Feyenoord cohort) is that cam morphology is prevalent in 80% of professional male athletes, which is 15 times higher than average. Cam morphology gives a 2-10 times higher risk to develop hip osteoarthritis in the future. Prevention can result in a better quality of life, less drop-out in work/sport, less surgery, which finally results in medical and socio-economic cost reduction. The first step in prevention is to quantify the extent of the problem of cam morphology and hip osteoarthritis. In professional female athletes, no information is available about these topics. Primary aim is to determine the prevalence of cam morphology in this group and to identify the hip and groin related injury burden.

### Study objective

It is hypothesized that cam morphology prevalence is lower in females, due to earlier osseous maturation and differences in hormonal status.

### Study design

Cross-sectional, intention for future follow-up.

### Intervention

Imaging (X-rays of pelvis and hips), hip muscle testing (dynamometer), range of motion testing (goniometer) and palpation of all groin entities (following Doha Agreement).

## Contacts

### Public

Isala

Pim van Klij

0384244483

### Scientific

Isala

Pim van Klij

0384244483

## Eligibility criteria

### Inclusion criteria

- Professional female football players performing at a professional football club in the Netherlands (Vrouwen Eredivisie) from clubs PEC Zwolle, PSV Eindhoven and FC Twente.
- Age 16 or higher.

### Exclusion criteria

- History of systemic diseases concerning rheumatoid arthritis, spondyloarthropathies or juvenile idiopathic arthritis.
- Current pregnancy. Potential participants will be asked if they know they are pregnant, and state in the subjection information form (PIF) that they know they are not allowed to participate in this study if they are currently pregnant. For potential participants who want to perform a pregnancy test before participation, a urine pregnancy test will be provided for free.

## Study design

### Design

Study type: Observational non invasive

Intervention model: Other

Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

## Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-02-2022
Enrollment:	100
Type:	Anticipated

## IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Not applicable	
Application type:	Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL9845
Other	METC Isala : Not available yet.

## Study results