

# The prevalence of Premature Ovarian Failure (POF) and Fragile X-associated Tremor Ataxia Syndrome (FXTAS) in families with FMR2 gene mutation (FRAXE).

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More knowledge about the clinical aspects of the FMR2 gene mutation can complete the counseling. Carriers with the desire to start a family can take the chance on POF in consideration. The clinical symptoms of FXTAS can be differentiated from other...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Pending
<b>Health condition type</b>	Chromosomal abnormalities, gene alterations and gene variants
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON30168

### Source

ToetsingOnline

### Brief title

FRAXE and POF, FXTAS

### Condition

- Chromosomal abnormalities, gene alterations and gene variants
- Endocrine disorders of gonadal function
- Movement disorders (incl parkinsonism)

### Synonym

fragile X syndrome, mild mental retardation

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Universitair Medisch Centrum Sint Radboud

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** FRAXE, FXTAS (Fragile X-associated Tremor Ataxia Syndrome) POF (Premature Ovarian Failure)

## Outcome measures

### Primary outcome

Pheno-genotyping of FMR2 gene mutation.

### Secondary outcome

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## Study description

### Background summary

In 1992 a mutation consisting of a CGG-repeat expansion in the FMR2 gene, has been discovered (Sutherland and Baker). The FMR2 genes (FRAXE) fragile site is situated at Xq28, close to the well-known fragile X syndrome (FRAXA) site at Xq27. The underlying molecular basis for FRAXE is an unstable CGG-repeat identical to that of FRAXA. Besides mental retardation FRAXA has been associated with premature ovarian failure (POF) (Hundscheid 2001) and fragile X-associated tremor ataxia syndrome (FXTAS) (Hagerman 2004). We ask ourselves whether the FMR2 gene mutation also enhances the risk of POF, FXTAS or other additional health risks.

### Study objective

More knowledge about the clinical aspects of the FMR2 gene mutation can complete the counseling. Carriers with the desire to start a family can take the chance on POF in consideration. The clinical symptoms of FXTAS can be differentiated from other degenerative neurological diseases and benefit from therapy.

## Study design

A retrospective diagnostic survey among carriers of FMR2 gene mutation and non-carrier familymembers.

## Study burden and risks

Minimal risk/burden: an interview, physical and neurological examination and a blood sample.

## Contacts

### Public

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6500 HB Nijmegen  
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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Familymembers of a family with cytogenetically confirmed mutation in FMR2 gene.

## Exclusion criteria

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## Study design

### Design

Study type:	Observational invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Basic science

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	15-04-2006
Enrollment:	50
Type:	Anticipated

## Ethics review

Approved WMO	
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

## 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**

<b>Register</b>	<b>ID</b>
CCMO	NL11949.091.06