# **Molecular basis of Pierpont syndrome**

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1,detection of the gene causing Pierpont syndrome2. study of the molecular and cellular mechanisms leading to the various manifestations of Pierpont syndrome3. better understanding of the regulation of subcutaneous fat depositions

**Ethical review** Approved WMO **Status** Recruitment stopped

Health condition type Congenital and hereditary disorders NEC

**Study type** Observational invasive

## **Summary**

### ID

NL-OMON38587

#### **Source**

ToetsingOnline

#### **Brief title**

Molecular basis of Pierpont syndrome

### **Condition**

Congenital and hereditary disorders NEC

#### **Synonym**

Pierpont syndrome; lipomatosis and mental retardation

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Academisch Medisch Centrum

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

#### Intervention

**Keyword:** etiology, functional analysis, molecular research, Pierpont syndrome

### **Outcome measures**

### **Primary outcome**

Detection of the gene causing Pierpont syndrome.

### **Secondary outcome**

- Understanding the molecular and cellular mechanisms leading to the various manifestations of Pierpont syndrome.
- better understanding of the regulation of subcutaneous fatdepositions

## **Study description**

### **Background summary**

Pierpont syndrome is an entity characterized by marked intellectual disability, unusual face, and abnormal fat depositions. Affected individuals develop epilepsy and show a progressively difficult behaviour. A single boy had a brain tumour as a young child. There is at present no therapy to influence the natural history of the entity. The cause is unknown and we assume it is an autosomal dominant de novo mutation.

### **Study objective**

- 1,detection of the gene causing Pierpont syndrome
- 2. study of the molecular and cellular mechanisms leading to the various manifestations of Pierpont syndrome
- 3. better understanding of the regulation of subcutaneous fat depositions

### Study design

Whole exome sequencing of 3 persons with the clinical diagnosis Pierpont syndrome, and of one of them also the parents for trio analysis (vcomparison of variants in results of child with those in parents); if results provide insufficient information whole exome sequencing will also be performed in the parents of the two other patients.

### Study burden and risks

The risk of blood sampling is limited. There is no benefit of participating in

this study to the participants themselves but there is a group benefit as the study should provide essential information needed for adequate genetic counselling and future interventions with respect to epilepsy and behaviour.

### **Contacts**

#### **Public**

Academisch Medisch Centrum

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Scientific

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### **Trial sites**

### **Listed location countries**

**Netherlands** 

## **Eligibility criteria**

### Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Children (2-11 years) Elderly (65 years and older)

### Inclusion criteria

Patients: clinical diagnosis Pierpont syndrome

Parents: having a child with clinically diagnosed Pierpont syndrome; able to read and

understand the written information

### **Exclusion criteria**

none

## Study design

### **Design**

**Study type:** Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 03-09-2013

Enrollment: 11

Type: Actual

## **Ethics review**

Approved WMO

Date: 19-07-2013

Application type: First submission

Review commission: METC Amsterdam UMC

## **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

CCMO NL45117.018.13