# Neurology and enzyme therapy in MODY8

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>	
21/11/2007	No longer recruiting	☐ Protocol	
Registration date 04/12/2007	Overall study status Completed Condition category	Statistical analysis plan	
		[X] Results	
Last Edited		[] Individual participant data	
10/06/2021	Nutritional, Metabolic, Endocrine		

### Plain English summary of protocol

Not provided at time of registration

## Contact information

Type(s)

Scientific

#### Contact name

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## Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

**Secondary identifying numbers** N/A

# Study information

#### Scientific Title

Neurology and enzyme therapy in MODY8

#### Study objectives

The MODY8 syndrome is a monogenically inherited syndrome of diabetes and pancreatic exocrine dysfunction due to single-base deletion mutations in the Carboxyl-Ester Lipase (CEL) gene Variable Number of Tandem Repeats (VNTR), registered in OMIM as MODY8 or DPED.

#### **Hypotheses:**

That pancreatic enzyme substitution therapy will:

- 1. Ameliorate exocrine function as reflected by fecal fat excretion and fat-soluble vitamin status
- 2. Improve glycemic control as measured by HbA1c
- 3. Improve neuropathology in patients with the MODY8 syndrome

### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

The Regional Committee for Research Ethics of Western Norway (REK Vest), approved on 11 November 2004, (ref: REK Vest 209.04)

#### Study design

Open, non-randomized, single-center, interventional study.

#### Primary study design

Interventional

#### Secondary study design

Non randomised controlled trial

#### Study setting(s)

Not specified

#### Study type(s)

Treatment

#### Participant information sheet

#### Health condition(s) or problem(s) studied

MODY8 syndrome

#### **Interventions**

All participants initially received one Creon enterocapsule (Solvay Pharmaceuticals, Germany) containing 10,000 units lipase, 18,000 units amylase, 600 units protease three times daily, orally at meals. If the clinical effect was unsatisfactory based on patient symptoms, the dose was first increased to 1-2 capsules 3-4 times daily, and if the clinical effect was still unsatisfactory, the medication was changed to Creon Forte, taken orally with meals, 1-2 capsules per meal.

#### Intervention Type

Drug

#### **Phase**

**Not Specified** 

#### Drug/device/biological/vaccine name(s)

Creon enterocapsule and Creon Forte, Creon enterocapsule and Creon Forte

#### Primary outcome measure

- 1. Fecal elastase-1, assessed at 0, 6, 12 and 30 months
- 2. Fecal fat excretion, assessed at 0, 12 and 30 months
- 3. HbA1c (blood test), assessed at 0, 6, 12 and 30 months
- 4. Vitamins A, D and E (blood test), assessed at 0, 6, 12 and 30 months
- 5. Creatinine (blood test), assessed at 0, 6, 12 and 30 months
- 6. Total calcium (blood test), assessed at 0, 6, 12 and 30 months
- 7. Total High Density Lipoprotein (HDL) and Low Density Lipoprotein (LDL) cholesterols (blood test), assessed at 0, 6, 12 and 30 months
- 8. Triglycerides (blood test), assessed at 0, 6, 12 and 30 months
- 9. C-peptide (blood test), assessed at 0, 6, 12 and 30 months
- 10. Bone mass density (age-matched Z-scores), assessed at 0, 12 and 30 months
- 11. Visual evoked potential, assessed at 0 and 18 months
- 12. Sensory evoked potential, assessed at 0 and 18 months
- 13. Nerve conduction velocity, assessed at 0 and 18 months

#### Secondary outcome measures

No secondary outcome measures

#### Overall study start date

01/09/2004

#### Completion date

30/06/2007

## **Eligibility**

#### Key inclusion criteria

Participants should:

- Be a carrier of a single-nucleotide deletion mutation in the CEL VNTR
- 2. Have diabetes by the World Health Organization criteria
- 3. Have exocrine dysfunction defined by fecal elastase <200 micrograms/ml in two consecutive tests
- 4. Patients of both sexes and all ages should be included

#### Participant type(s)

Patient

#### Age group

**Not Specified** 

#### Sex

Both

## Target number of participants

16

#### Total final enrolment

9

#### Key exclusion criteria

- 1. Ongoing treatment with pancreatic enzyme supplements
- 2. Inability to attend clinical examinations and other necessary investigations for geographical reasons
- 3. Side effects of medication (strong stomach ache)

#### Date of first enrolment

01/09/2004

#### Date of final enrolment

30/06/2007

## Locations

### Countries of recruitment

Norway

### Study participating centre Section for Paediatrics

Bergen Norway 5021

## Sponsor information

#### Organisation

University of Bergen (Norway)

#### Sponsor details

Faculty of Medicine Post Box 7804 Bergen Norway 5020 +47 55 58 20 86 post@medfa.uib.no

#### Sponsor type

University/education

#### Website

http://www.uib.no/info/english/

#### **ROR**

https://ror.org/03zga2b32

## Funder(s)

#### Funder type

University/education

#### **Funder Name**

Haukeland University Hospital, Innovest, University of Bergen (Norway)

#### **Funder Name**

The Norwegian Research Council (FUGE Program)

## **Results and Publications**

## Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/09/2008	10/06/2021	Yes	No