# The effect of ondansetron, a 5-Ht3 receptor antagonist, on fatigue severity and functional impairment in Chronic Fatigue Syndrome patients

Submission date	<b>Recruitment status</b> No longer recruiting	Prospectively registered		
20/12/2005		☐ Protocol		
Registration date 20/12/2005	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
15/06/2010	Nervous System Diseases			

#### Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

EudraCT/CTIS number

IRAS number

#### ClinicalTrials.gov number

# **Secondary identifying numbers** NTR209

# Study information

#### Scientific Title

#### Study objectives

Accumulating data in the literature support an important role for serotonin, in the neurobiology of Chronic Fatigue Syndrome (CFS). Neuroendocrine and neuropharmacological studies point to an up-regulated or hyper-responsive serotonin system.

In a randomised controlled trial by our own research group the Selective Serotonin Reuptake Inhibitor (SSRI) fluoxetine proved to be ineffective in Centre for Diseases Control (CDC)-diagnosed CFS patients.

Positive reports of the use of serotonine inhibitors in the treatment of fatigue, due to hepatitis and to fibromyalgia, support an effect. Based on these findings we hypothesise that a serotonin antagonist could be effective in the treatment of CFS.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics approval received from the local medical ethics committee

# Study design

Randomised placebo controlled, parallel group, double blinded trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

# Study setting(s)

Not specified

# Study type(s)

Treatment

#### Participant information sheet

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

Chronic fatigue syndrome

#### **Interventions**

10 weeks ondansetron versus placebo.

#### **Intervention Type**

Drug

#### **Phase**

**Not Specified** 

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

Ondansetron

#### Primary outcome measure

- 1. Fatigue severity: measured with Checklist Individual Strength
- 2. Functional impairment: measured with Sickness Impact Profile
- 3. CDC-symptoms

#### Secondary outcome measures

Physical activity level: measured with actometer

#### Overall study start date

19/06/2002

#### Completion date

01/03/2006

# Eligibility

#### Key inclusion criteria

- 1. CDC-diagnosed CFS-patients
- 2. Male and female patients 18 65 years of age
- 3. High-fatique severity level
- 4. Substantial functional impairment
- 5. Written informed consent

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

60

#### Key exclusion criteria

- 1. Pregnancy
- 2. Lactating women
- 3. Participation in CFS-treatment programs
- 4. Participation in other CFS-research
- 5. Psychopharmaca

#### Date of first enrolment

19/06/2002

#### Date of final enrolment

01/03/2006

# Locations

#### Countries of recruitment

Netherlands

# Study participating centre Department Internal Medicine - 541

Nijmegen Netherlands 6500 HB

# Sponsor information

#### Organisation

University Medical Centre Nijmegen (Netherlands)

## Sponsor details

P.O. Box 9101 Nijmegen Netherlands 6500 HB +31 (0)24 361 1111 info@ozi.umcn.nl

#### Sponsor type

Hospital/treatment centre

#### Website

http://www.umcn.nl/homepage

#### **ROR**

https://ror.org/05wg1m734

# Funder(s)

# Funder type

Industry

#### **Funder Name**

GlaxoSmithKline (Netherlands)

#### Alternative Name(s)

GlaxoSmithKline plc., GSK plc., GSK

#### Funding Body Type

Government organisation

## **Funding Body Subtype**

For-profit companies (industry)

#### Location

United Kingdom

# **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	results	01/05/2010		Yes	No