# Melatonin treatment for sleep problems in children with autism: a randomised controlled crossover trial

Submission date	Recruitment status	Prospectively registered		
23/04/2008	No longer recruiting Overall study status	[_] Protocol		
Registration date		Statistical analysis plan		
19/06/2008	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
27/03/2012	Mental and Behavioural Disorders			

#### Plain English summary of protocol

Not provided at time of registration

### **Contact information**

**Type(s)** Scientific

**Contact name** Dr Barry Wright

#### **Contact details**

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## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers

N/A

## Study information

Scientific Title

**Study objectives** Melatonin will be better than placebo at improving time-to-onset of sleep (sleep latency) and total sleep time.

**Ethics approval required** Old ethics approval format

**Ethics approval(s)** York Research Ethics Committee. Date of Approval: 21/01/2004 (ref: 03/12/17)

**Study design** Randomised controlled crossover trial.

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Not specified

**Study type(s)** Treatment

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Sleep disorder in autism

**Interventions** This is a crossover trial, with two arms: Melatonin medication vs placebo.

Group 1: One month no medication, 3 months melatonin, 1 month washout, 3 months placebo, 1 month no medication. Group 2: One month no medication, 3 months placebo, 1 month washout, 3 months melatonin, 1 month no medication.

Melatonin (oral) started at 2 mg 30-40 minutes before planned sleep and increased every 3 nights by 2 mg to a maximum dose of 10 mg, titrating the dose to the response. If good sleep is achieved, the dose is kept at that level.

#### Intervention Type

Drug

Phase Not Specified

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

Melatonin

#### Primary outcome measure

The following are recorded by the family every day from the beginning of the study for 9 months: 1. Sleep latency (i.e. time to onset of sleep)

2. Number of hours sleep per night (as recorded in daily sleep diaries)

#### Secondary outcome measures

The following are carried out at baseline and after 4, 8 and 9 months:

1. General Health Questionnaire

2. Sleep Difficulties Questionnaire (Likert scale)

**Overall study start date** 

01/04/2004

**Completion date** 

01/11/2008

## Eligibility

#### Key inclusion criteria

1. Both male and female children, aged 4-10 years

2. Diagnosis of typical or atypical childhood autism and sleep disorder (as defined by World Health Organization ICD-10 and sub-classified using the International Classification of Sleep Disorders)

Participant type(s) Patient

Age group Child

Lower age limit 4 Years

Upper age limit 10 Years

Sex Not Specified

Target number of participants

32

#### Key exclusion criteria

- 1. Children on any other medication including anti-epileptic medication
- 2. Children previously on melatonin or having any other sleep disorder treatments
- 3. Any families who do not complete sleep diaries during the one month lead-in period

Date of first enrolment 01/04/2004

Date of final enrolment 01/11/2008

### Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre Lime Trees Child** York United Kingdom YO30 5RF

### Sponsor information

**Organisation** North Yorkshire and York Primary Care Trust (UK)

#### **Sponsor details**

c/o North Yorkshire Alliance R&D Unit Learning & Research Centre York District Hospital Wigginton Road York England United Kingdom YO31 8HE +44 (0)1904 726996 research.governance@york.nhs.uk

Sponsor type

Hospital/treatment centre

Website

## Funder(s)

**Funder type** Government

#### Funder Name

York Innovation Research Fund from the York and Selby Research and Development Committee, Selby and York Primary Care Trust. The Committee is currently represented by the North Yorkshire Research and Development Alliance (http://www.northyorksresearch.nhs.uk) (UK)

#### Funder Name

London Law Trust (UK) (ref: 10/1/04)

### **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	01/02/2011		Yes	No