Insulin sensitisation to delay pubertal progression in girls: a pilot study in small-forgestational-age (SGA) girls with an early-normal onset of puberty

Submission date	Recruitment status No longer recruiting	Prospectively registered		
24/08/2005		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
05/10/2005	Completed	[X] Results		
Last Edited 11/09/2009	Condition category Urological and Genital Diseases	Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Lourdes Ibañez

Contact details

Hospital Sant Joan de Déu University of Barcelona Esplugues Spain 08950

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Acronym

Metformin-Puberty

Study objectives

Modulation of insulin-signalling contributes to variation in the tempo of pubertal progression in girls.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled 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

Advanced and progressive puberty in low-birthweight girls, resulting in final height below target

Interventions

Insulin sensitisation: metformin 850 mg/day versus placebo

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Metformin

Primary outcome measure

- 1. Menarche
- 2. Final height

Secondary outcome measures

- 1. Fasting insulin
- 2. IGF-I

Overall study start date

20/10/2002

Completion date

25/06/2006

Eligibility

Key inclusion criteria

- 1. Birthweight for gestational age below -1.5 standard deviation (SD)
- 2. Onset of breast development (Tanner stage 2, B2) between age 8-9 years and <12 months before study start
- 3. Height SD score (SDS) at enrollment at least 1 SD above mid-parental height
- 4. Height velocity >6 cm/year
- 5. Progressive puberty, as assessed by pelvic ultrasonography and by gonadotropin and steroid responses to gonadotropin releasing hormone (GnRH) agonist stimulation

Participant type(s)

Patient

Age group

Child

Sex

Female

Target number of participants

22

Key exclusion criteria

A family or personal history of diabetes mellitus; a history of precocious pubarche; evidence for thyroid dysfunction, Cushing syndrome, hyperprolactinemia or glucose intolerance; medication known to affect gonadal function or carbohydrate metabolism.

Date of first enrolment

20/10/2002

Date of final enrolment

25/06/2006

Locations

Countries of recruitment

Spain

Study participating centre Hospital Sant Joan de Déu

Esplugues Spain 08950

Sponsor information

Organisation

Hospital Sant Joan de Deu (Spain)

Sponsor details

University of Barcelona Passeig de Sant Joan de Déu, 2 Esplugues Spain 08950

Sponsor type

Hospital/treatment centre

ROR

https://ror.org/001jx2139

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Hospital Sant Joan de Déu (Spain)

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	01/06/2006		Yes	No
Results article	results	01/09/2007		Yes	No