# Treatment of premature ovarian failure with hormone replacement therapy or combined oral contraceptive pill

Submission date Recruitment status [X] Prospectively registered 15/01/2009 No longer recruiting [X] Protocol [ ] Statistical analysis plan Registration date Overall study status 26/01/2009 Completed [X] Results [ ] Individual participant data Last Edited Condition category Nutritional, Metabolic, Endocrine 28/08/2018

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

**Prof Janice Rymer** 

#### Contact details

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# Additional identifiers

EudraCT/CTIS number 2008-002599-86

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

# Study information

#### Scientific Title

A prospective open randomised controlled trial of women diagnosed with premature ovarian failure (POF) to investigate the effects of active treatment with hormone replacement therapy (HRT) or combined oral contraceptive pill (COCP), and observation of patients who choose to have no treatment, on bone density, markers of cardiovascular disease, markers of bone metabolism, menopausal symptoms, quality of life, depression score, sexual function and ovarian function over two years

#### Study objectives

It is assumed that bone loss will occur at the normal post-menopausal rate in the no treatment group and that bone mass will be preserved and will be equal in the two treatment groups (hormone replacement therapy [HRT] and combined oral contraceptive pill [COCP]).

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Guy's Research Ethics Committee, approved on 18/12/2008 (ref: 08/H0804/140)

#### Study design

Prospective open randomised controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

# 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

Premature ovarian failure

#### Interventions

Participants will be asked whether they wish to receive treatment or prefer not to receive treatment. Those who choose to be in the active treatment group will be randomised to take either Nuvelle® or Microgynon® 30 for two years. Nuvelle® is oestradiol 2 mg once a day for 16

days then oestradiol 2 mg and levonorgestrel 75 mcg for 16 days on a cyclical basis. Microgynon® 30 is ethinylestradiol 30 mcg and levonorgestrel 150 mcg daily for 21 days followed by a 7 day pill-free break on a cyclical basis.

The participants who decide not to receive treatment will be followed-up for two years.

#### Intervention Type

Drug

#### Phase

Not Applicable

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

Nuvelle®, Microgynon®

#### Primary outcome measure

Bone mineral density at the lumbar spine and hip, assessed at 0, 6, 12 and 24 months.

#### Secondary outcome measures

- 1. Serum markers of bone metabolism, assessed at 0, 6, 12 and 24 months
- 2. Menopausal symptom scores, assessed at 0, 3, 6, 12, 18, 24 months
- 3. Depression score, assessed at 0, 3, 6, 12, 18, 24 months
- 4. Sexual function, assessed at 0, 3, 6, 12, 18, 24 months
- 5. Quality of life, assessed by SF-36® Health Survey at 0, 3, 6, 12, 18, 24 months
- 6. Serum markers of cardiovascular disease (lipid profile, C reactive protein [CRP]), assessed at 0,
- 6, 12 and 24 months
- 7. Ovarian function markers (anti-Mullerian hormone [AMH] and inhibin-B), assessed at 0, 6, 12, 24 months
- 8. Ovarian volume and antral follicle count, assessed by ultrasound at 0, 6, 12, 24 months

#### Overall study start date

01/03/2009

#### Completion date

01/09/2011

# Eligibility

#### Key inclusion criteria

- 1. Age 18-44 years
- 2. Women with a diagnosis of premature ovarian failure (POF) within the last 36 months (with documented follicle-stimulating hormone [FSH] level >30 IU on 2 occasions 4-8 weeks apart)
- 3. Ability to understand English
- 4. Written informed consent for participation in the trial
- 5. Not taking hormone medication (HRT/COCP/"natural" preparations) for 2 months prior to commencement in the trial

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Upper age limit

44 Years

#### Sex

**Female** 

#### Target number of participants

66

#### Key exclusion criteria

- 1. Age less than 18 or over 45 years
- 2. Current desire for pregnancy is an exclusion criterion from the active treatment group (as she may be randomised to take COCP). However, she could elect to take part in the no treatment group.
- 3. Women with absolute contraindications to hormone treatment will be excluded from the active treatment group (i.e. personal history of thromboembolic disease, oestrogen dependent malignancies, and personal history of focal migraine)
- 4. Women taking medication for high cholesterol or found to have raised cholesterol levels on initial assessment
- 5. Untreated thyroid disease

#### Date of first enrolment

01/03/2009

#### Date of final enrolment

01/09/2011

# Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre Department of Women's Health London United Kingdom

SE1 7EH

# Sponsor information

#### Organisation

King's College London (UK)

#### Sponsor details

c/o Jackie Pullen Third Floor Conybeare House Great Maze Pond London England United Kingdom SE1 9RT

#### Sponsor type

University/education

#### Website

http://www.kcl.ac.uk/

#### **ROR**

https://ror.org/0220mzb33

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Wellcome Trust (UK), Research Training Fellowship, decision expected in April 2009 (ref: 10092)

# **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?
Protocol article	protocol	01/03/2010		Yes	No
Results article	results	01/09/2016		Yes	No
HRA research summary			28/06/2023	No	No