ISRCTN87011615 https://doi.org/10.1186/ISRCTN87011615

# 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 |
| **Registration date** | **Overall study status** | [_] Statistical analysis plan |
| 26/01/2009 | Completed | [X] Results |
| **Last Edited** | **Condition category** | [_] Individual participant data |
| 28/08/2018 | Nutritional, Metabolic, Endocrine | |

**Plain English summary of protocol**
Not provided at time of registration

## Contact information

**Type(s)**
Scientific

**Contact name**
Prof Janice Rymer

**Contact details**
Department of Women's Health
Tenth Floor North Wing
St Thomas' Hospital
London
United Kingdom
SE1 7EH

## 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 |