# The use of a mini-colposcope, the Gynocular, to detect cervical lesions in women with abnormal cytology and high-risk human papillomavirus: a randomized, cross-over, non-inferiority trial

Submission date	Recruitment status	Prospectively registered
08/12/2013	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
30/01/2014	Completed	Results
Last Edited	Condition category	Individual participant data
30/01/2014	Urological and Genital Diseases	Record updated in last year

## Plain English summary of protocol

Background and study aims

Cervical cancer is diagnosed in 470,000 women a year worldwide and 273,000 women die of the disease, mostly where there is less helpaccess to healthcare. If detected early, many women can be cured of the disease. However, often women lack access to screening, diagnosis and treatment. Our aim is to compare the performance of a battery-driven colposcope, the Gynocular, to traditional stationary colposcopes in detecting the cervical cancer lesions.

## Who can participate?

Women referred to undergo colposcopy to detect cervical lesions can take part in this study.

#### What does the study involve?

Women are randomly allocated to undergo examination using either the Gynocular or the traditional colposcope. A sample from the cervix is taken from all women for further analysis. The performance of the two instruments are is analysed.

What are the possible benefits and risks of participating? There are no risks to the women in participating in the study.

#### Where is the study run from?

- 1. Department of Obstetrics and Gynecology, Danderyd Hospital, Sweden
- 2. Department of Clinical Sciences, Karolinska Institute (Karolinska Institutet), Stockholm, Sweden.

When is the study starting and how long is it expected to run for? The study ran from June 2012 to July 2013.

#### Who is funding the study?

The H&M Conscious Concious Foundation (Sweden) and Gynius AB (Sweden) funded the study.

Who is the main contact? Dr Helena Kopp Kallner

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Elisabeth Wikström Shemer

#### Contact details

Döbelnsgatan 23 Sweden Sweden 111 14

# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

**Secondary identifying numbers** N/A

# Study information

#### Scientific Title

A comparison of the performance of the Gynocolar and stationary colposcope by the Swede score colposcopy system in women with abnormal cytology: a randomized cross-over trial

# Acronym

**ARTEMIS** 

# **Study objectives**

A pocket-sized mini-colposcope magnifier (Gynocular) is equally good at detecting cervical lesions compared to a stationary colposcope.

Primary study aim: to demonstrate that the Gynocular magnifier is non-inferior to a stationary colposcope in finding acetowhite cervical lesions during examination in women with precancerous cervical dysplasia.

Secondary study aim: to show that the Gynocular magnifier is non-inferior to a colposcope with regard to sensitivity and specificity in finding cervical intraepithelical neoplasia (CIN) verified in cervical biopsies.

# Ethics approval required

## Old ethics approval format

## Ethics approval(s)

- 1. Stockholm Regional Ethical Review Board, 10/04/2010, Dnr: 2013/1855-3 and 2009/2032-31/1
- 2. The Medical Products Agency of Sweden, 31/10/2013, Dnr: 461:2010/502414.

#### Study design

Randomized cross-over trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

#### Study setting(s)

Not specified

# Study type(s)

Diagnostic

#### 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

Colposcopy and cervical dysplasia

#### **Interventions**

Women will be randomly allocated in blocks of clinic day to start the examination with either the stationary colposcope or the Gynocular. Then, the woman will be examined by the same examiner with the second instrument in order to assess the performance of agreement between the two instruments.

#### Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome measure

Each patient will be assessed by the Swede score systematic colposcopy system, where each of five colposcopic variables (acetowhiteness, margins plus surface, vessel pattern, lesion size and iodine staining) are given a score of 0, 1 or 2 points. All women will also have a liquid-based cytology specimen taken at the time of examination using a plastic spatula on the cervix and a cervix brush in the cervical canal. The examination will be finalized with one or more biopsies taken from areas of suspected cervical lesions when the Swede score is above 0.

#### Secondary outcome measures

Not provided at time of registration

## Overall study start date

01/06/2012

# Completion date

01/07/2013

# **Eligibility**

#### Key inclusion criteria

- 1. Women with atypical cells of undetermined significance (ASC-US) or low-grade squamous intraepithelial lesion (LSIL) and high-risk human papillomavirus (HPV) and HR HPV positivity, or any high grade lesion (CIN II or more) regardless of HPV status, referred for colposcopy to the Department of Obstetrics and Gynecology, Danderyd Hospital, Stockholm, Sweden between June 2012 and June 2013
- 2. Ability to understand written and oral information in Swedish
- 3. Willingness to sign informed consent to take part in the study after oral and written information

## Participant type(s)

**Patient** 

#### Age group

Adult

#### Sex

Female

# Target number of participants

125

## Key exclusion criteria

- 1. Ongoing vaginal bleeding
- 2. Any previous gynecological examinations within a week prior to the examination
- 3. Pregnancy

#### Date of first enrolment

01/06/2012

#### Date of final enrolment

01/07/2013

# Locations

#### Countries of recruitment

Sweden

# Study participating centre

# Döbelnsgatan 23

Sweden Sweden 111 14

# Sponsor information

# Organisation

Gynius AB (Sweden)

# Sponsor details

Döbelnsgatan 23 Stockholm Sweden 111 14

## Sponsor type

Industry

#### Website

http://gynocular.com

#### **ROR**

https://ror.org/04ykj1118

# Funder(s)

# Funder type

Industry

#### Funder Name

H&M Conscious Foundation (Sweden)

#### Funder Name

Gynius AB (Sweden)

# **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