

# CE mark study of a home self-test system for blood cell count and ear temperature

<b>Submission date</b> 29/11/2013	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 12/12/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 30/01/2017	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

There is no home test system for self-test blood cell count and ear-temperature test in the home. This study aims to validate the use of a new system for this purpose.

### What does the study involve?

The new system will measure total white blood cell count (WBC), Granulocyte cell count (GRN) and haemoglobin (HGB) within finger prick blood. The new system is based on proven technology, and this study will achieve CE marking (the declaration from the manufacturer that the device complies with EU regulations).

### Who can participate?

Patients attending routine clinics at St Thomas Hospital, London, aged 18-85, male or female, of a range of educational backgrounds, who will be selected to provide a range of WBC, GRN and HGB values to help evaluate the accuracy performance of the new device.

The study involves assessment of the ability of patients to perform a self-test using finger prick blood and to obtain a correct result. Each patient will also be assessed for their ability to perform ear temperature measurement and complete a health assessment questionnaire. The ability of patients to correctly test before and after training will be determined. Patients will also use the system in the home and will complete a questionnaire regarding ease of use.

### What are the possible benefits and risks of participating?

There are no benefits to patients participating. In the longer term, once that CE marking has been obtained, patients could benefit from using the device in the home if their doctors think it is useful to monitor their blood status at home. Risk involved in participating is no greater than the risks that people with diabetes are exposed to in terms of finger prick sampling (ie some possible bruising).

### Where is the study run from?

St Thomas Hospital, London, UK.

### When is the study starting and how long is it expected to run for?

The study is expected to run for 3-4 months.

Who is funding the study?  
Philips Electronics [Philips Healthcare Incubator] are funding the project.

Who is the main contact?  
Dr Martin Payne  
martin.payne@philips.com

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof David D'Cruz

**Contact details**  
Louise Coote Lupus Unit  
St Thomas' Hospital  
Westminster Bridge  
London  
United Kingdom  
SE1 7EH

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
HCM003.CT.042

## Study information

**Scientific Title**  
Protocol for the commercial study to enable CE marking for the sale of a whole white blood cell count, granulocyte blood cell count, and haemoglobin-measuring device and ear thermometer with telehub, within the European Union

**Study objectives**  
This CE mark commercial study should prove that the change in intended use for existing device technology to measure total white blood cell count (WBC), granulocyte (GRN) and haemoglobin (HGB) levels from finger capillary blood in the home by self-test users, provides clinically acceptable performance, and that patients can additionally measure their ear temperature.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**

London City-East, 04/12/2013, Ref: 14/LO/0021

**Study design**

Observational CE mark study

**Primary study design**

Interventional

**Secondary study design**

Other

**Study setting(s)**

Hospital

**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**

This is CE mark trial to prove device suitability for intended use - no drug therapy, no patient specific state monitoring sought

**Interventions**

The purpose of the study is to provide evidence that after training patients are able to perform a finger prick and add a blood droplet to a cartridge for successful and accurate measurement of white blood cell count and haemoglobin level using a device that has been designed for self-test use, based on a laboratory device. Patients are also asked to perform an ear temperature measurement following training and complete a questionnaire.

Patients visiting the clinic perform finger prick/ear-temperature measurements over 4 days, with training after an unaided first attempt. They are monitored unaided for the subsequent three visits.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

To prove the device can be CE marked for its intended use

**Secondary outcome measures**

No secondary outcome measures

**Overall study start date**

17/02/2014

**Completion date**

30/05/2014

## Eligibility

**Key inclusion criteria**

1. Patients attending clinics within St Thomas' Hospital, London, UK
2. Aged 18 - 85

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

150

**Key exclusion criteria**

Leukaemic patients

**Date of first enrolment**

17/02/2014

**Date of final enrolment**

30/05/2014

## Locations

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

Louise Coote Lupus Unit

London

United Kingdom

SE1 7EH

# Sponsor information

## Organisation

Philips Healthcare Incubator (Home Clinical Monitoring) (Netherlands)

## Sponsor details

Building 34  
High Tech Campus  
Eindhoven  
Netherlands  
5656AE

## Sponsor type

Industry

## Website

[http://www.healthcare.philips.com/gb\\_en/](http://www.healthcare.philips.com/gb_en/)

## ROR

<https://ror.org/02p2bgp27>

# Funder(s)

## Funder type

Industry

## Funder Name

Philips Electronics (Netherlands)

# 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?
<a href="#">HRA research summary</a>			28/06/2023	No	No