

# Interaction between human immunodeficiency virus (HIV) drugs (non-nucleoside reverse transcriptase inhibitors [NNRTIs]) and anti-platelet agents

<b>Submission date</b> 28/10/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 17/12/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 19/05/2022	<b>Condition category</b> Infections and Infestations	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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## Additional identifiers

### EudraCT/CTIS number

2008-006371-67

### IRAS number

**ClinicalTrials.gov number**

**Secondary identifying numbers**

RLBUHT 3729

## **Study information**

### **Scientific Title**

Effect of thienopyridine derivative (clopidogrel) on the disposition of efavirenz and nevirapine in human immunodeficiency virus (HIV) positive patients: a randomised single-phase multi-dose proof-of-concept study

### **Study objectives**

The plasma concentration of non-nucleoside reverse transcriptase inhibitors (NNRTIs) (nevirapine and efavirenz) may be pharmacologically enhanced in-vivo through inhibition of CYP2B6 with clopidogrel.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

National Research Ethics Service (Northwest Research Ethics Committee) (UK) approved on the 28th August 2009 (ref: 09/H1010/6)

### **Study design**

Open-label sequential randomised single phase multi-dose proof-of-concept study

### **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**

Human immunodeficiency virus (HIV)

### **Interventions**

Study patients on nevirapine should be receiving 200 mg 12-hourly. Study patients on efavirenz who are taking 600 mg at night would be converted to 600 mg in the morning as follows: 400 mg mane, 200 mg nocte for 1 day, then 600 mg for 1 day followed by the study day.

**Study Day 1:**

Patients are fasted from midnight and attend at 08:00 hours without taking their pills. After breakfast and blood sampling for pharmacokinetic profiles patients would then be administered initial dose of clopidogrel (Plavix®, 75 mg once daily; Sanofi Synthelabo, Guildford, United Kingdom) and would self-administer the remaining dose at home for the remaining 6 days.

**Joint sponsor details:**

The University of Liverpool (UK)  
Pembroke Place  
Liverpool L69 3GF  
United Kingdom  
<http://www.liv.ac.uk/>

**Intervention Type**

Drug

**Phase**

Not Applicable

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

Efavirenz, nevirapine, clopidogrel

**Primary outcome measure**

Absolute change (demonstrated by significant difference) in plasma AUC of efavirenz alone or nevirapine alone if the respective 90% classical confidence interval for geometric mean ratio lies within 0.80 - 1.25 of the reference AUC 0 - 24 hours.

All measures determined at the end of the study duration and data analysis (entire study duration is 8 days and data analysis approximately 3 weeks to a month).

**Secondary outcome measures**

1. Change in C<sub>max</sub>, C<sub>min</sub>, and weight-corrected apparent oral clearance (CL/F)/kg of efavirenz/nevirapine
2. Safety and tolerability of co-administration of clopidogrel and efavirenz/nevirapine

All measures determined at the end of the study duration and data analysis (entire study duration is 8 days and data analysis approximately 3 weeks to a month).

**Overall study start date**

15/11/2009

**Completion date**

15/12/2009

**Eligibility****Key inclusion criteria**

1. Aged greater than 18 years, either sex
2. On efavirenz (EFV) or nevirapine (NVP) containing regimen for greater than or equal to 6 months

3. Viral load less than or equal to 40 copies/ml and any CD4 count
4. No laboratory evidence of NNRTI toxicity:
  - 4.1. Alanine aminotransferase (ALT) less than or equal to upper limit of normal (ULN)
  - 4.2. Bilirubin less than or equal to ULN
  - 4.3. Albumin greater than or equal to 30 g
  - 4.4. Creatinine less than or equal to ULN
5. Not pregnant (for contraception, patients would be advised to use non-oestrogen based contraceptive devices)
6. No inter-current acute illness
7. No past medical history of coronary heart disease
8. No history of bleeding diathesis
9. No history of allergy to thienopyridines

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

37

**Key exclusion criteria**

1. Unable to provide informed consent
2. Known or suspected poor adherence to anti-retroviral therapy (ART)
3. Continuing intravenous (IV) drug user
4. On a HIV protease inhibitor or any known P450 inhibitors or inducers
5. Platelets less than or equal to  $100 \times 10^9/l$
6. Neutrophils less than or equal to  $1.0 \times 10^9/ml$

**Date of first enrolment**

15/11/2009

**Date of final enrolment**

15/12/2009

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre**  
**Professor and Hon Consultant Infectious Diseases**  
Liverpool  
United Kingdom  
L69 3GF

## Sponsor information

### Organisation

Royal Liverpool University Hospital and the University of Liverpools Biomedical Research Centre (UK)

### Sponsor details

Royal Liverpool & Broadgreen University NHS Trust  
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### Sponsor type

Government

### ROR

<https://ror.org/01ycr6b80>

## Funder(s)

### Funder type

Government

### Funder Name

National Institute for Health Research (NIHR) (UK) - through the Royal Liverpool University Hospital and the University of Liverpools Biomedical Research Centre (ref: UoL000399. R&D 3729)

## Results and Publications

### Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

Not provided at time of registration

## 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="#">Basic results</a>		08/09/2021	19/05/2022	No	No
<a href="#">HRA research summary</a>			28/06/2023	No	No