

A phase II/III randomised, open-label study of combination antiretroviral regimens and treatment-switching strategies in antiretroviral naive children >30 days and <18 years of age

Submission date 19/07/2002	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 19/07/2002	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 21/03/2016	Condition category Infections and Infestations	☐ Individual participant data

Plain English summary of protocol

http://www.ctu.mrc.ac.uk/research_areas/study_details.aspx?s=24

Contact information

Type(s)

Scientific

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Additional identifiers

ClinicalTrials.gov (NCT)

NCT00039741

Protocol serial number

E164/66

Study information

Scientific Title

PENPACT 1: a phase II/III randomised, open-label study of combination antiretroviral regimens and treatment-switching strategies in antiretroviral naive children >30 days and <18 years of age

Acronym

PENPACT 1/ PENTA 9

Study objectives

PENPACT 1 is designed to evaluate the long-term efficacy, as measured by human immunodeficiency virus (HIV)-1 RNA over four years, of different initial highly active antiretroviral therapy (HAART) combinations in children and different strategies for switching therapy. The trial is also known as PENTA 9 and PACTG 390.

Protocol in <http://www.pentatrials.org/pp1v3web.pdf>.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Eastern Multi-centre Research Ethics Committee, 22/03/2002

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Paediatric HIV

Interventions

1. Start therapy with a regimen containing a protease inhibitor (PI) or a non-nucleoside reverse transcriptase inhibitor (NNRTI)
2. Switch therapy when HIV viral load reaches 1000 or 30,000 copies/ml

Intervention Type

Drug

Phase

Not Applicable

Primary outcome(s)

1. To compare the combination of two NRTIs plus a protease inhibitor (PI) versus two NRTIs plus a non-nucleoside reverse transcriptase inhibitor (NNRTI) as initial therapy, followed by second-line therapy if virologic failure occurs, in terms of their effects on a long-term virologic endpoint
2. To compare two different viral load criteria for switching from first-line to second-line therapy

Key secondary outcome(s)

1. To evaluate and compare the safety and tolerability of each drug combination (including first- and second-line therapies)
2. To compare the long-term clinical and immunologic outcomes (by the initial randomization)
3. To compare the proportions of children who have undergone one regimen switch or reached study end-point (by the initial randomization)
4. To compare time from randomization to virologic failure (RNA >400 copies/ml at or after week 24) of the first-line therapy analyzed by initial randomization to either protease inhibitor (PI) or NNRTI containing regimens
5. To compare time from randomization to virologic failure of the second line therapy (RNA >30,000 copies/ml) analyzed by the initial randomization
6. To compare the proportion of children with plasma HIV-1 RNA <400 copies/ml at 4 years (by the initial randomization)
7. To describe resistance patterns at 4 years (by the initial randomization)

Completion date

01/09/2009

Eligibility

Key inclusion criteria

1. Children >30 days and <18 years of age
2. A confirmed diagnosis of HIV infection
3. Female subjects who are sexually active and able to become pregnant must agree to use the approved birth control methods for the assigned drug regimen under PENPACT 1. In most cases, drug regimens mandate the use of two methods of birth control. In these instances, hormonal birth control alone would not be considered adequate or effective. A medically accepted barrier method of contraception (e.g. condom) must also be used during the study. The interaction between study drugs and hormonal birth control has not been studied.
4. Parent/legally authorized representative and child, where appropriate, must be able to provide written informed consent, and assent
5. Antiretroviral naïve (or have received less than 56 consecutive days after birth of antiviral drugs used to prevent mother-to-infant transmission) infants, children, and adolescents

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

30 days

Upper age limit

17 years

Sex

All

Key exclusion criteria

1. Infant or maternal peripartum nevirapine (NVP) exposure for prevention of mother-to-child HIV transmission
2. Current Grade 3 or 4 clinical or laboratory toxicity as defined by age appropriate toxicity tables in Appendices IV and V (Grade 3 and 4 thrombocytopenia will be allowed only if it is of immunological origin)
3. Active opportunistic infection and/or serious bacterial infection at the time of study entry. (Children may be enrolled after the acute phase.)
4. History of clinical pancreatitis, peripheral neuropathy, or other clinical, hematologic, hepatic, or renal contraindications to receiving the trial therapies (i.e. impossibility to identify both a 2 nucleoside reverse transcriptase inhibitor [NRTI] + protease inhibitor [PI] regimen and a 2 NRTI + non-nucleoside reverse transcriptase inhibitor [NNRTI] regimen that the child can take)
5. Current treatment with any medication known to be contraindicated with any of the drugs to be prescribed for the patient's initial therapy (one of the NNRTIs or the selected PI)
6. Receipt of any cytotoxic therapy for malignancy
7. Pregnancy or breastfeeding

Date of first enrolment

01/09/2002

Date of final enrolment

01/09/2009

Locations**Countries of recruitment**

United Kingdom

England

Argentina

Austria

Bahamas

Brazil

France

Germany

Ireland

Italy

Puerto Rico

Romania

Spain

United States of America

Study participating centre

MRC Clinical Trials Unit

London

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Sponsor information

Organisation

PENTA Foundation (Italy)

ROR

<https://ror.org/00d7mpc92>

Funder(s)

Funder type

Government

Funder Name

PENPACT 1 is a collaboration between PENTA (funded by the EU) and the PACTG (funded by the NIAID/NICHD). Funding is also received from the UK Medical Research Council.

Results and Publications

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?
Results article	results	01/04/2011		Yes	No
Results article	results	01/10/2014		Yes	No
Basic results				No	No
Other publications	PENTA guidelines	01/07/2004		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes