ISRCTN91737921 https://doi.org/10.1186/ISRCTN91737921

ODYSSEY: Once daily Dolutegravir in Young people vS Standard thErapY

Submission date
16/07/2014

Recruitment status
No longer recruiting

Registration date
08/08/2014

Overall study status
Completed

Last Edited
29/01/2026

Condition category
Infections and Infestations

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Dolutegravir is new medication being used to treat HIV-positive adults. It is strong, safe, has low toxicity (few or no side effects) and only needs to be taken once a day. It has not yet been tested in children, and could be an excellent option for them if it works as well in them as it does in adults. The aim of this study is to compare dolutegravir treatment to the standard of care treatment for HIV to find out whether is as effective and has fewer side effects.

Who can participate?
Children under 18 years of age with a confirmed diagnosis of HIV infection.

What does the study involve?
Children will be randomly allocated to one of two groups. The usual care group will receive the usual, nationally approved HIV medication for either their first set of medication or if they are changing medicine for the first time. The dolutegravir group will take a combination of medication that includes dolutegravir. Children will be on the study for a minimum time of 2 years. To begin with they will be closely monitored. Once the doctor is happy that the child has no side effects and is doing well, they will go back to having their regular appointments. In addition to the normal clinical tests, a small amount of additional blood will be collected and stored at each visit. These will be tested at the end of the study to look at the effects of different HIV medicines in the blood.

What are the possible disadvantages and risks of taking part in this study?
We cannot promise that participating in the study will directly help your child. Your child will have three extra visits to the clinic even if they get usual care. All the information we get will help children and young people with HIV around the world and in the future it may mean your child has the chance to change to medicines that are easier to take. Dolutegravir has been shown to be very effective with less side effects in adults, but we dont know how it will work in children, which is why we need to do this study. Therefore, there may be unknown side effects, which is why the doctor needs to follow you closely.

Where is the study run from?
Not provided at time of registration.

When is the study starting and how long is it expected to run for?
The study will start in June 2015 and will run for 4 years.

Who is funding the study?
Viiv Healthcare (UK).

Who is the main contact?
Dr Pablo Rojo Conejo
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Contact information

Type(s)
Scientific

Contact name
Dr Pablo Rojo Conejo

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Additional identifiers

Clinical Trials Information System (CTIS)
2014-002632-14

Integrated Research Application System (IRAS)
179128

ClinicalTrials.gov (NCT)
NCT02259127

Protocol serial number
ODYSSEY (PENTA 20)

Study information

Scientific Title
A randomised trial of dolutegravir (DTG)-based antiretroviral therapy vs standard of care (SOC) in children with HIV infection starting first-line or switching to second-line ART

Acronym
ODYSSEY

Study objectives
Dolutegravir plus two NRTIs is non-inferior to standard of care (NNRTI or PI plus two or three NRTIs) in terms of efficacy and superior in terms of toxicity profile.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Open label multi-centre randomised non-inferiority phase II/III two-arm trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
HIV infection

Interventions
Dolutegravir plus two NRTIs (dolutegravir arm) vs standard of care (SOC arm) in first-line and second-line antiretroviral regimens

Intervention Type
Drug

Phase
Phase II/III

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

Primary outcome(s)
Difference in proportion with clinical or virological failure at 96 weeks, estimated using time to the first occurrence of any of the following components:
1. Insufficient virological response defined as < 1 log drop at week 24
2. VL>400 copies/ml at or after 36 weeks confirmed by next visit
3. Death due to any cause
4. Any new or recurrent AIDS-defining event (CDC C or WHO 4) or severe/modified CDC B/WHO 3 events, adjudicated by the Endpoint Review Committee (ERC)

Key secondary outcome(s))
Secondary efficacy outcomes:
1. Difference in proportion with clinical or virological failure over 48 weeks
2. Time to any new or recurrent AIDS-defining event (CDC C or WHO 4) or severe/modified CDC B /WHO 3 events after 24 weeks from randomisation, adjudicated by the Endpoint Review Committee (ERC)

3. Proportion of children with VL suppression <50 copies/ml at 48 and 96 weeks
4. Proportion of children with VL suppression <400 copies/ml at 48 and 96 weeks
5. Rate of clinical events over 96 weeks: CDC C/WHO 4, severe CDC B/WHO 3 events and death
6. Change in CD4 count and percentage from baseline to weeks 48 and 96
7. Proportion developing new resistance mutations in those with viral load > 400 c/ml

Secondary safety outcomes:
1. Change in total cholesterol, triglycerides and lipid fractions (LDL, HDL) from baseline to weeks 48 and 96 These safety outcomes will be used to formally assess superiority of dolutegravir-based regimen vs standard of care
2. Incidence of serious adverse events
3. Incidence of new clinical and laboratory grade 3 and 4 adverse events
4. Incidence of adverse events (of any grade) leading to treatment modification

Completion date
30/06/2019

Eligibility

Key inclusion criteria
1. Children <18 years with confirmed HIV-1 infection
2. Dolutegravir dose known for child's age/weight-band
3. Parents/carers and children, where applicable, give informed written consent
4. Girls aged 12 years or older who have reached menses must have a negative pregnancy test at screening and be willing to adhere to effective methods of contraception if sexually active
5. In settings where HLA B5701 is available, participants starting ABC as part of the NRTI backbone must be or have been screened and be negative for the HLA-B*5701 allele
6. Children with co-infections who need to start ART can be enrolled into ODYSSEY according to local/national guidelines
7. Parents/carers and children, where applicable, willing to adhere to a minimum of 96 weeks' follow-up

In addition to that, if about to start second-line therapy defined as switch of at least two ART drugs due to treatment failure:
9. At least one NRTI with predicted preserved activity available for a background regimen
10. In settings where resistance tests are routinely available, at least one new active NRTI from TDF, ABC or ZDV should have preserved activity based on cumulative results of resistance tests within 3 months
11. In settings where resistance tests are not routinely available, children who are due to switch according to national guidelines should have at least one new NRTI available from TDF, ABC or ZDV
12. Viral load >1000 copies/ml at screening visit

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
0 years

Upper age limit
17 years

Sex
All

Total final enrolment
707

Key exclusion criteria
1. Alanine aminotransferase (ALT) > 5 times the upper limit of normal (ULN)
2. History or presence of allergy to the study drugs or their components

Date of first enrolment
30/06/2015

Date of final enrolment
30/06/2019

Locations

Countries of recruitment
Albania

Spain

Study participating centre
Hospital Universitario 12 de Octubre
Madrid
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28041

Sponsor information

Organisation
The PENTA Foundation (Fondazione PENTA Onlus) (Italy)

ROR
https://ror.org/00d7mpc92

Funder(s)

Funder type
Industry

Funder Name
Viiv Healthcare (UK)

Results and Publications

Individual participant data (IPD) sharing plan
Not provided at registration

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		30/12/2021	30/12/2021	Yes	No
Results article	Results of pharmacokinetic and safety substudies in children weighing 20 to 40 kg	01/08/2021	30/12/2021	Yes	No
Results article	Nested pharmacokinetic and safety substudy in children with HIV-associated TB		25/07/2022	Yes	No
Results article	results from the below 14 kg cohort	01/09/2022	23/05/2024	Yes	No
Results article	Secondary safety outcome analyses	21/01/2026	29/01/2026	Yes	No
Other publications	Study design	04/01/2021	30/12/2021	Yes	No