Dolutegravir Use and Predictors of CNS events: Meta-analysis of Data from Phase III/IIIb Clinical Trials

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Last updated: 02/04/2024

Study Finalised

Administrative details

EU PAS number

EUPAS26866

Study ID

48229

DARWIN EU® study

No

Study countries

- [ ] Argentina
- [ ] Australia
- [ ] Belgium
- [ ] Brazil

- [ ] Canada
- [ ] Chile
- [ ] Denmark
- [ ] France
- [ ] Germany
- [ ] Greece
- [ ] Hungary
- [ ] Italy
- [ ] Mexico
- [ ] Netherlands
- [ ] Portugal
- [ ] Puerto Rico
- [ ] Romania
- [ ] Russian Federation
- [ ] South Africa
- [ ] Spain
- [ ] Switzerland
- [ ] Taiwan
- [ ] Thailand
- [ ] United Kingdom
- [ ] United States

Study description

This study is a meta-analysis of dolutegravir studies that included data that were previously collected for VH-sponsored clinical trials in adult Phase III/IIIb of drug development for dolutegravir. Studies included in the meta-analysis are Spring 2, Single, Flamingo, Aria and Sailing. The primary objective was to assess if there are any variables associated with the development of a Neuropsychiatric Symptom(NP) during the course of the trials. The incidence of NP events was calculated from frequencies of reported adverse events in the

included clinical trials, 95% CIs are based on exact binomial 2-sided CIs. To assess the effect of pre-specified variables associated with the exposure adjusted incidence rate and relative rate of NP events in HIV patients treated with DTG containing versus non DTG containing regimens as well as DTG + ABC exposure vs DTG + other regimens Poisson mixed effects meta-regression models was used. 95% CIs were calculated for rates and relative rates.

Study status

Finalised

Research institutions and networks

Institutions

ViiV Healthcare

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Institution

Contact details

Study institution contact

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Study contact

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Primary lead investigator

GSK Clinical Disclosure Advisor GSK Clinical Disclosure Advisor

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 29/06/2018

Actual: 25/05/2017

Study start date

Actual: 26/05/2017

Date of final study report

Actual: 30/09/2018

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

ViiV Healthcare

Study protocol

viiv-207953-protocol-redact.pdf(389.59 KB)

Regulatory

Was the study required by a regulatory body?

No

Is the study required by a Risk Management Plan (RMP)?

Not applicable

Methodological aspects

Study type

Study type list

Study topic:

Disease /health condition

Human medicinal product

Study type:

Non-interventional study

Scope of the study:

Safety study (incl. comparative)

Data collection methods:

Secondary use of data

Main study objective:

The primary objective is to identify if there are any predictors of the development of a CNS AE during the course of the trials.

Study Design

Non-interventional study design

Systematic review and meta-analysis

Study drug and medical condition

Study drug International non-proprietary name (INN) or common name

DOLUTEGRAVIR

ABACAVIR

Medical condition to be studied

HIV infection

Population studied

Short description of the study population

The total number of patients exposed to DTG from all 5 studies is 1672 and the total number of comparator regimen exposed patients included is 1681. The number of patients exposed to DTG + ABC containing regimen is 930

Age groups

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

Special population of interest

Immunocompromised

Estimated number of subjects

1672

Study design details

Outcomes

Incidence of CNS events by predictor, Relationship between exposure to DTG, predictors and development of outcome Sensitivity analyses

Data analysis plan

The primary objective was to assess if there are any variables associated with the development of a NP during the course of the trials. This meta-analysis will include data that were previously collected for VH-sponsored clinical trials in adult Phase III/IIIb of drug development for dolutegravir. Studies included in the meta-analysis are Spring 2, Single, Flamingo, Aria and Sailing. The incidence of NP events was calculated from frequencies of reported adverse events (AEs) in the included clinical trials, 95% CIs are based on exact binomial 2-sided CIs. To assess the effect of pre-specified variables associated with the exposure adjusted incidence rate and relative rate of NP events in human immunodeficiency virus (HIV) patients treated with DTG containing versus non DTG containing regimens as well as DTG + ABC exposure vs DTG + other regimens Poisson mixed effects meta-regression models was used. 95% CIs were calculated for rates and relative rates

Documents

Study results

viiv-207953-clinical-study-report-redact.pdf(2.46 MB)

Data management

Data sources

Data sources (types)

Other

Data sources (types), other

The studies that will be included in the meta-analysis were initially identified in the VH clinical-trial repository that includes prospectively collected data from VH-sponsored trials and contains clinical studies from phases III/IIIb of drug development.

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No