

# 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

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### Study ID

48229

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### DARWIN EU® study

No

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### 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
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### **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.

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## Study status

Finalised

## Research institutions and networks

### Institutions

ViiV Healthcare

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Institution

## Contact details

### Study institution contact

GSK Clinical Disclosure Advisor GSK Clinical Disclosure  
Advisor Pharma.CDR@gsk.com

Study contact

[Pharma.CDR@gsk.com](mailto:Pharma.CDR@gsk.com)

## 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

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### Study start date

Actual: 26/05/2017

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### 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

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**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

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**Study type:**

Non-interventional study

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**Scope of the study:**

Safety study (incl. comparative)

**Data collection methods:**

Secondary use of data

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**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

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### **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

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### **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)

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### **Special population of interest**

Immunocompromised

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## 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

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## 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)

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## Data management

## Data sources

## Data sources (types)

Other

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### 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

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### Check completeness

Unknown

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### Check stability

Unknown

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### Check logical consistency

Unknown

## Data characterisation



**Data characterisation conducted**

No