

# A PHASE 1, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, ALTERNATING PANEL, SINGLE ASCENDING DOSE STUDY EVALUATING THE SAFETY, TOLERABILITY AND PHARMACOKINETICS OF JTK-656 AND THE EFFECT OF FOOD ON THE PHARMACOKINETICS OF JTK-656 IN HEALTHY MALE SUBJECTS

Published: 24-06-2008

Last updated: 06-05-2024

**Primary :**To investigate the safety and tolerability of ascending single oral doses of JTK-656 administered to healthy male subjects  
**Secondary:**To determine the pharmacokinetics (PK) of ascending single oral doses of JTK-656 administered to healthy...

|                              |                            |
|------------------------------|----------------------------|
| <b>Ethical review</b>        | Approved WMO               |
| <b>Status</b>                | Recruitment stopped        |
| <b>Health condition type</b> | Immunodeficiency syndromes |
| <b>Study type</b>            | Interventional             |

## Summary

### ID

NL-OMON32420

### Source

ToetsingOnline

### Brief title

JTK-656 single ascending dose and food effect study

## Condition

- Immunodeficiency syndromes

### Synonym

immune deficiency infections

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Japan Tobacco Inc.

**Source(s) of monetary or material Support:** Sponsor van dit onderzoek

## Intervention

**Keyword:** HIV, JTK-656, Single ascending dose

## Outcome measures

### Primary outcome

Criteria for evaluation

Pharmacokinetics :Plasma JTK-656

concentrations, PK parameters

Safety :AEs, vital signs,

ECG-parameters, laboratory parameters, physical examination and weight

Exploratory lipid profile assessments :HDL2-cholesterol and HDL3-cholesterol

Statistical methods

Pharmacokinetic parameters :Analysis of variance (ANOVA) on

Cmax and AUC to explore the food effect, statistical analysis on

dose-normalized C<sub>max</sub>, AUC<sub>last</sub> and AUC<sub>inf</sub> to assess dose proportionality, other parameters descriptive statistics

Safety parameters :Descriptive statistics,

frequency tables

Exploratory lipid profile parameters :Descriptive statistics

## **Secondary outcome**

N.v.t.

# **Study description**

## **Background summary**

A randomized, double-blind, placebo-controlled, alternating panel, single ascending dose study with four panels of nine subjects each. Subjects will receive three single oral doses (Panels A, B and C) or two single oral doses (Panel D) of JTK-656 or placebo. The subjects will receive medication under fasting conditions, except in one period of Panel C where the medication will be taken after an FDA high-fat breakfast. At each dose level, 6 subjects will receive active drug and 3 subjects will receive placebo in a randomized fashion. Subjects in Panels A and B will receive placebo once in the study and active treatment twice. Subjects in Panel C will receive the same treatment twice, once under fasting conditions and once after an FDA high-fat breakfast. In Panels C and D, 6 subjects will receive placebo at least once and 3 subjects will receive active treatment only. There will be a wash-out of at least ten days between administrations within a panel.

## **Study objective**

Primary :To investigate the safety and tolerability of ascending single oral doses of JTK-656 administered to healthy male subjects

Secondary:To determine the pharmacokinetics (PK) of ascending single oral doses of JTK-656 administered to healthy male subjects (Part 2 only)  
To determine the effect of food on the PK of JTK-656 administered under fed and fasted conditions to healthy male subjects (Part 2, Panel C)

## **Study design**

3 - A PHASE 1, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, ALTERNATING PANEL, SING ...  
13-05-2025

Part 1 (Period 1 of Panels A and B; Period 2 of Panel A)

#### Procedures and assessments

Screening and follow-up: Clinical laboratory, vital signs, physical examination, 12-lead electrocardiogram (ECG), weight and previous and concomitant medication; at eligibility screening only: height, medical history, alcohol and drug screen, cotinine test, hepatitis B surface antigen (HBsAg), anti hepatitis C virus (HCV) and anti-human immunodeficiency virus (HIV) 1/2; at follow-up only: adverse events (AEs)

Each admission :Alcohol and drug screen, cotinine test, vital signs, clinical laboratory, brief physical examination, AEs and previous and concomitant medication

Observation period :Each period in clinic from -17 h up to 24 h after drug administration and an ambulatory visit on Day 8 (+/- 1 day) for follow-up

Safety assessments :AEs: throughout the study and specifically at pre-dose and 1, 2, 4, 8, 12 and 24 h post dose; weight: pre-dose; vital signs: pre-dose and 1, 2, 3, 4, 6, 8, 12 and 24 h post-dose; 12-lead ECG: pre-dose and 1, 4 and 24 h post-dose; clinical laboratory: pre dose and 24 h post-dose

Exploratory lipid profile assessments:HDL2-cholesterol and HDL3-cholesterol: pre dose and 24 h post-dose

Bioanalysis:Analysis of serum exploratory lipid profile assessment samples (HDL2-cholesterol and HDL3 cholesterol) by the contracted laboratory

Part 2 (Period 1 of Panels C and D; Period 2 of Panels B, C and D; Period 3 of Panels A, B, and C)

#### Procedures and assessments

Screening and follow-up: Clinical laboratory, vital signs, physical examination, 12-lead ECG, weight and previous and concomitant medication; at eligibility screening only: height, medical history, alcohol and drug screen, cotinine test, HBsAg, anti HCV, anti-HIV 1/2; at follow-up only: AEs

Each admission :Alcohol and drug screen, cotinine test, vital signs, clinical laboratory, brief physical examination, AEs and previous and concomitant medication

Observation period :Each period in clinic from -17 h up to 48 h after drug administration and an ambulatory visit on Day 8 (+/- 1 day) for follow-up

Blood sampling :For PK of JTK-656: pre-dose and 0.5, 1, 1.5, 2, 3, 4, 6, 8, 12, 24, 36 and 48 h post dose and at follow-up

4 - A PHASE 1, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, ALTERNATING PANEL, SING ...

13-05-2025

Safety assessments :AEs: throughout the study and specifically at pre-dose and 1, 2, 4, 8, 12, 24, 36 and 48 h post-dose; weight: pre-dose; vital signs: pre-dose and 1, 2, 3, 4, 6, 8, 12, 24 and 48 h post dose; 12-lead ECG: pre-dose and 1, 4, 24 and 48 h post-dose; clinical laboratory: pre dose and 24 and 48 h post-dose

Exploratory lipid profile assessments:HDL2-cholesterol and HDL3-cholesterol: pre-dose and 24 and 48 h post-dose

Bioanalysis:Analysis of plasma JTK-656 samples using a validated high performance LC-MS/MS method by Sponsor

:Analysis of serum exploratory lipid profile assessment samples (HDL2-cholesterol and HDL3 cholesterol) by the contracted laboratory

## **Intervention**

### Study Medication

Active substance :JTK-656

Activity :HIV integrase inhibitor

Indication :HIV-1 infection

Strength :0.3 mg/2 g PEG400, 1.5 mg/2 g PEG400 and 7.5 mg/2 g PEG400 (Part 1) and 25 and 200 mg (Part 2)

Dosage form :Oral solution (Part 1) and tablet (Part 2)

Batch number :To be included in the clinical study report

### Treatments

#### Part 1

Panel A : Period 1: a single oral dose of 0.3 mg JTK-656 or placebo in the fasted state

Period 2: a single oral dose of 7.5 mg JTK-656 or placebo in the fasted state

Panel B : Period 1: a single oral dose of 1.5 mg JTK-656 or placebo in the fasted state

#### Part 2

Panel A : Period 3: a single oral dose of 75 mg JTK-656 or placebo in the fasted state

Panel B : Period 2: a single oral dose of 25 mg JTK-656 or placebo in the fasted state

Period 3: a single oral dose of 200 mg JTK-656 or placebo in the fasted state

Panel C : One Period: a single oral dose of 400 mg JTK-656 or placebo in the fasted state

One Period: a single oral dose of 400 mg JTK-656 or placebo in the fed state

One Period: a single oral dose of 800 mg JTK-656 or placebo in the fasted state

Panel D : Period 1: a single oral dose of 1200 mg JTK-656 or placebo in the fasted state

Period 2: a single oral dose of 1600 mg JTK-656 or placebo in the fasted state

### **Study burden and risks**

Procedures: insertion of the dwelling canula/venapuncture: some pain, bruise, light bleeding.

JTK-656:

adverse events in animal studies: vomiting, changes and increase of levels of blood lipids at high doses.

## **Contacts**

### **Public**

Japan Tobacco Inc.

JT Bldg. 2-1, Toranomom 2-chome, Minato-ku

Tokyo 105-8422, Japan

Japan

### **Scientific**

Japan Tobacco Inc.

JT Bldg. 2-1, Toranomom 2-chome, Minato-ku

Tokyo 105-8422, Japan

Japan

## **Trial sites**

### **Listed location countries**

Netherlands

6 - A PHASE 1, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, ALTERNATING PANEL, SING ...

13-05-2025

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Healthy volunteers

Male

18 and 55 years of age

Body Mass Index: 19 - 28 kg/m<sup>2</sup>, inclusive, at the screening visit

### Exclusion criteria

Clinically relevant medical history

Hypersensitivity to any component of the JTK-656 formulation

## Study design

### Design

|                     |                               |
|---------------------|-------------------------------|
| Study type:         | Interventional                |
| Intervention model: | Parallel                      |
| Allocation:         | Randomized controlled trial   |
| Masking:            | Double blinded (masking used) |
| Control:            | Placebo                       |
| Primary purpose:    | Treatment                     |

### Recruitment

|                           |                     |
|---------------------------|---------------------|
| NL                        |                     |
| Recruitment status:       | Recruitment stopped |
| Start date (anticipated): | 01-08-2008          |
| Enrollment:               | 36                  |
| Type:                     | Actual              |

## Medical products/devices used

Product type: Medicine  
Brand name: nvt  
Generic name: JTK-656

## Ethics review

Approved WMO

Date: 24-06-2008

Application type: First submission

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO

Date: 02-07-2008

Application type: First submission

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO

Date: 10-09-2008

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO

Date: 11-09-2008

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO

Date: 29-09-2008

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Approved WMO

Date: 14-10-2008

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

| <b>Register</b> | <b>ID</b>              |
|-----------------|------------------------|
| EudraCT         | EUCTR2008-003565-87-NL |
| CCMO            | NL23782.056.08         |