A Randomized, Double-blind, Placebo-controlled Phase 2 Study to Evaluate the Testicular Safety of Filgotinib in Adult Males with Moderately to Severely Active Inflammatory Bowel Disease

Published: 13-11-2017
Last updated: 12-04-2024

The purpose of this study is to see how filgotinib, the experimental drug, affects male sperm and to see if it is a safe and effective treatment for men with moderately to severely active inlammatory bowel disease.

Ethical review	Approved WMO
Status	Will not start
Health condition type	Gastrointestinal inflammatory conditions
Study type	Interventional

Summary

ID

NL-OMON48673

Source
ToetsingOnline

Brief title
MANTA / GS-US-418-4279

Condition

- Gastrointestinal inflammatory conditions

Synonym
chronic gastrointestinal inflammation, Inflammatory Bowel Disease

Research involving
Human

Sponsors and support

Primary sponsor: Gilead Sciences
Source(s) of monetary or material Support: Gilead Sciences Inc.

Intervention

Keyword: Crohn's disease, Filgotinib, Testicular safety, Ulcerative colitis

Outcome measures

Primary outcome

* To evaluate the effect of filgotinib on testicular function as defined by the proportion of subjects with a * 50% decrease from baseline in sperm concentration at Week 13

Secondary outcome

* To evaluate the effect of filgotinib on testicular function as defined by the proportion of subjects with a * 50% decrease from baseline in sperm concentration at Week 26

* To evaluate the effect of filgotinib on sperm total motility at Weeks 13 and 26

* To evaluate the effect of filgotinib on total sperm count at Weeks 13 and 26

* To evaluate the effect of filgotinib on the change from baseline in sperm concentration at Weeks 13 and 26

* To evaluate the effect of filgotinib on ejaculate volume at Weeks 13 and 26

* To evaluate the effect of filgotinib on sperm morphology at Weeks 13 and 26

The exploratory objectives of this study include:

* To evaluate the reversibility of observed effects of filgotinib on testicular

function in subjects who experience a * 50% decrease in sperm concentration

and/or motility and/or morphology

* To evaluate the effect of filgotinib on male sex hormones including

luteinizing hormone (LH), follicle stimulating hormone (FSH), inhibin B, and

total testosterone at Weeks 13 and 26

* To evaluate the safety and tolerability of filgotinib

* To characterize the plasma pharmacokinetics (PK) of filgotinib and its

metabolite (GS-829845, formerly G254445)

Study description

Background summary

IBD is a chronic inflammatory condition affecting the gastrointestinal tract. In UC, this inflammation is limited to the mucosal layer and involves the rectum, with or without direct extension to the colon. The inflammation of CD can involve any segment of the gastrointestinal tract (from oral cavity to perianal area) and, in addition to affecting the mucosal surface, can extend through the full thickness of the gastrointestinal wall.
.Over the last decade, changes in IBD treatment strategies, accompanied by advances in drug development and the addition of targeted biological therapies, have greatly improved patient outcomes. Despite these developments, therapeutic challenges remain. Only a subset of patients respond to currently available biologic therapy, with some losing response and others becoming intolerant over time. There is an unmet medical need for safe, well tolerated, orally administered therapies with novel and targeted mechanisms of action that can effectively improve the disease course. While providing a treatment option for male subjects with moderately to severely active IBD, the present study seeks to evaluate the impact, if any, of filgotinib on spermatogenesis in humans.

Study objective

The purpose of this study is to see how filgotinib, the experimental drug, affects male sperm and to see if it is a safe and effective treatment for men with moderately to severely active inlammatory bowel disease.

Study design

This is a randomized, double-blind, placebo-controlled Phase 2 study in adult males with moderately to severely active inflammatory bowel disease (IBD) who may be on protocol-specified therapy.

Up to 250 males between the age of 21 and 65 years (inclusive) at the time of consent will be randomized to receive 26 weeks of filgotinib 200 mg or placebo once daily.

Randomization will be stratified according to the type of IBD (ie, ulcerative colitis [UC] versus Crohn*s disease [CD]), by concurrent use of methotrexate (MTX; yes or no), and by sperm concentration measured at Screening (*Baseline*) according to the following strata:
* 15 to 25 million/mL
* > 25 to 50 million/mL
* > 50 million/mL

There are 5 distinct parts to the study which subjects may enter depending upon the individual subject*s response of the underlying IBD to assigned treatment and/or observed changes in semen parameters. The 5 parts which are described in the following sections comprise of the following:
1) Part A (Day 1 through Week 13 Study Visit)
2) Part B (After Week 13 through Week 26 Study Visit)
3) Open-Label Filgotinib Phase
4) Monitoring Phase
5) Long Term Extension

The study parts are described in the following sections.

Part A (Day 1 through Week 13 Study Visit)
In Part A, all subjects will receive blinded study drug for the first 13 weeks, starting from the Day 1/Randomization Study Visit. At the Week 13 Study Visit, IBD response status (ie, Non responder vs Responder, see Definition of Terms) will be determined based on the partial Mayo Clinic Score (partial MCS) for subjects with UC, or the Crohn*s Disease Activity Index (CDAI) for subjects with CD. In addition, sperm parameters (see Section 6.13 Semen Collection Procedure) will be evaluated to determine whether any of the pre-specified decrease thresholds (see Definition of Terms) have been met.
* Subjects who are Responders and whose sperm parameters do not meet a pre-specified decrease threshold will continue blinded study drug in Part B.
* Subjects who are Non-responders and whose sperm parameters do not meet a pre-specified decrease threshold will discontinue blinded study drug and commence open-label filgotinib.
* Subjects whose sperm parameters meet a pre-specified decrease threshold, regardless of IBD response status, will discontinue blinded study drug and enter the Monitoring Phase.

Part B (After Week 13 through Week 26 Study Visit)

In Part B, all subjects will continue on blinded study drug for up to an additional 13 weeks. Subjects may experience Disease Worsening (see Definition of Terms) of their underlying IBD at any time during blinded study drug treatment (after Week 13 through Week 26). If Disease Worsening is confirmed, sperm parameters will be evaluated to determine whether a pre-specified decrease threshold has been met prior to a study drug change (changing from blinded study drug to open-label filgotinib). Based upon the sperm parameters at this time point, subjects may follow one of the following pathways:
* All subjects whose sperm parameters meet a pre-specified decrease threshold, regardless of IBD response status, will discontinue blinded study drug and enter the Monitoring Phase.
* Subjects who experience Disease Worsening after Week 13 and prior to Week 26, and whose sperm parameters do not meet a pre-specified decrease threshold will discontinue blinded study drug and commence open label filgotinib.
* Subjects who do not experience Disease Worsening, and are Responders at Week 26, and whose sperm parameters do not meet a pre-specified decrease threshold, will continue blinded study drug as part of the Long Term Extension (LTE).
* Subjects who do not experience Disease Worsening, but are Non responders at Week 26, and whose sperm parameters do not meet a pre-specified decrease threshold, will discontinue blinded study drug and complete a safety follow-up visit 30 days after last study drug dose.

Open-Label Filgotinib Phase (Open-Label Day 1 through Open Label Week 13 Study Visit)
After exposure to 13 weeks of open-label filgotinib, the subject*s IBD response status will be determined and sperm parameters will be evaluated to determine whether a pre-specified decrease threshold has been met. Subjects will be evaluated during this phase as follows:
* All subjects whose sperm parameters meet a pre-specified decrease threshold, regardless of Responder status, will discontinue open label filgotinib, complete a safety follow-up visit 30 days after last study drug dose, and enter the Monitoring Phase.
* Subjects who experience Disease Worsening and whose sperm parameters do not meet a pre-specified decrease threshold will discontinue open-label filgotinib, complete ET and a safety follow up visit 30 days after last study drug dose.

Subjects who do not experience Disease Worsening, and are Responders at OL Week 13 after exposure to 13 weeks of open label filgotinib, and whose sperm parameters do not meet a pre-specified decrease threshold, may continue receiving open-label filgotinib as part of the LTE.
* Subjects who do not experience Disease Worsening, but are Non responders after exposure to 13 weeks of open-label filgotinib, and whose sperm parameters do not meet a pre-specified decrease threshold, will discontinue open-label filgotinib and complete a safety follow-up visit 30 days after last study drug dose.

Monitoring Phase (up to 52 weeks)

All subjects who enter the Monitoring Phase will undergo semen evaluations every 13 weeks from the day of study drug discontinuation, for up to 52 weeks or until Reversibility (see Definition of Terms) is met, whichever is achieved first. Subjects will be offered locally approved standard of care (SOC) therapy during the Monitoring Phase.

Long Term Extension (up to 195 weeks)
All subjects who enter the LTE will undergo scheduled visits for safety assessments every 13 weeks from the start of LTE, for up to 195 weeks, and semen monitoring (every 13 weeks) until the Week 13 primary study results are analyzed. Subjects will receive either open label filgotinib or blinded study drug based on the individual*s response criteria described above. If a subject experiences Disease Worsening during the LTE, the treatment (either open-label filgotinib or blinded study drug) will be discontinued and the subject will complete an ET visit, followed by a safety follow-up visit 30 days after last study drug dose.

Data Monitoring Committee (DMC)
An external, multidisciplinary DMC, including an expert in male fertility, will review the progress of the study and perform interim unblinded reviews of safety data (details in Section 8.8).

Internal Independent Safety Review
A Gilead internal unblinded team, independent of the blinded study team, will be assembled. The Gilead internal unblinded team will be granted the access to blinded and unblinded clinical data including treatment assignment to closely monitor semen parameters in real time. This internal team will be supported by an external expert in male fertility. To mitigate the risk of inadvertently releasing treatment assignment to sites and subjects, the internal team will keep the unblinded information confidential and will not communicate any information to the blinded study team, site staff or subjects. Data unblinding due to medical emergency will follow standard Gilead procedures. The Internal Independent Safety Review committee*s specific activities will be defined by a mutually agreed upon charter, which will define the committee membership, conduct, and meeting schedule.

Key Concomitant Medication Considerations
Subjects may be treated with 5-aminosalicylic acid (5 ASA), conventional immunomodulators, and/or corticosteroid therapy, as defined by the inclusion criteria. Subjects are prohibited from receiving sulfasalazine, beginning 26 weeks prior to Screening until the end of study, as defined by Exclusion Criteria.
A list of permitted and prohibited medications is provided in the exclusion criteria and Section 5.3.

Intervention

200 mg filgotinib tablet orally once daily or placebo

Study burden and risks

FILGOTINIB COMMON ADVERSE EVENTS

Some adverse effects (unwanted side effects) have been reported in studies of filgotinib given to people or to animals. This information is summarized below.

Across three completed rheumatoid arthritis (RA) and CD phase 2 studies lasting 20 weeks or longer, the most common adverse events were infections and the next most common adverse event were issues related to the stomach and intestines (gastrointestinal tract). In a Phase 2 study among subjects with CD receiving filgotinib for 10 weeks, 24.6% of study participants had infections and 24.6% had adverse events of the gastrointestinal tract. The most common adverse events were headache (13.8%), Crohn*s disease (9.2%), asthenia (weakness or lack of energy, 6.9%), and nausea (6.9%).

INFECTIONS
Drugs that affect the immune system can lower the body*s ability to fight infection. There is a possibility that the ability to fight infection will be weakened while taking filgotinib. In RA and CD studies, there have been more infections in study participants who took filgotinib compared to those who took placebo (pill without filgotinib). Pneumonia (a lung infection that can be potentially serious) has been identified as an adverse effect of filgotinib based on RA and CD studies. Serious infections leading to hospitalization have been reported and in some cases study participants with an infection have died. Based on the information that is available so far, it is estimated that if 100 subjects take filgotinib for one year, 2 people would develop a serious infection, on average.

Neutrophils are a type of white blood cell that helps to fight infection. The number of neutrophils was lower in the blood of study participants with RA who were given filgotinib, but only approximately 1.5% of these study participants had a severe decrease in neutrophils. Other types of infection-fighting cells in the blood were not affected.

MALE INFERTILITY
Filgotinib caused damage to the testes (testicles) of male rats and dogs. In these animals, filgotinib caused deterioration and loss of cells that make sperm, resulting in less sperm, or no sperm being produced. As a result, filgotinib caused male rats to be infertile (unable to get a female rat pregnant).

Damage to the testes in rats and dogs was observed at doses producing blood levels of filgotinib slightly higher than blood levels produced by the planned doses in study participants in this study. At these doses, while sperm counts

in rats and dogs increased after filgotinib was stopped, they stayed low overall and did not return to normal. At the highest doses tested in male rats and dogs, these adverse effects did not go away. These adverse effects were not seen in the testes of rats and dogs when these animals were given a dose that produces blood levels of filgotinib similar to blood levels produced by the 200 mg daily dose in humans.

Based on the results in male rats and dogs, there is a risk that men treated with filgotinib may have reduced sperm production, and may become temporarily or permanently infertile (unable to get a woman pregnant). This study is being done to help understand the effect of filgotinib on sperm production. Currently, the long term effect of filgotinib on sperm production in humans is unknown. Patients should not enroll in this study unless they understand and accept the risk that they may have reduced fertility (a lower chance of getting a woman pregnant) or infertility (unable to get a woman pregnant), and that this side effect may not go away after they leave the study; it could be permanent. If reduced fertility or infertility is a concern for the patient it is possible to store a sample of the patients semen (sperm banking) for future use before starting this study. While sperm banking may be an option for the patient, it is not considered to be a highly reliable way to preserve future fertility in all cases. If patients are interested in sperm banking, they should talk to their study doctor or regular health care provider. Sperm banking is not part of this study.

BIRTH DEFECTS
Filgotinib treatment caused malformations (birth defects) of the bone and internal organs in the fetuses (unborn babies) of pregnant rats and rabbits. These birth defects happened at doses producing blood levels of filgotinib comparable to blood levels produced by the planned doses in study participants in this study. Other effects were also seen, including increased pregnancy loss and decreased fetal body weights.

Based on these animal data, filgotinib may cause birth defects in humans. Patients should not enroll in this study unless they understand and accept this risk and are willing to take appropriate measures to avoid pregnancy in a female partner. Birth control should be considered for female partners of male participants; the study doctor can provide details on recommended types of birth control.

CANCER
Lymphoma (a type of cancer of the immune system) and other types of cancers have been seen in study participants with RA taking filgotinib. Some of these cancers have resulted in death. Based on the information that is available so far, it is estimated that if 100 subjects with RA take filgotinib for one year, 1 person would develop cancer, on average. Some types of cancer, such as lymphoma, are known to happen more often in people with RA, but it is not yet known if filgotinib increases this risk.It is not known if filgotinib increases

the risk of cancer in people with UC and CD.

OTHER EFFECTS
Increases in cholesterol, including certain types of both *good* and *bad* cholesterols, have been seen in study participants taking filgotinib, but the importance of these findings is not yet known. A small increase in creatinine (which is a measure of how well the kidney is working) was seen in studies with RA patients. The creatinine levels overall, however, stayed within normal limits.

As with any drug, there are unknown risks involved, since only a limited number of people have taken this drug and not all adverse effects or risks of taking this drug are known. In the future, more serious and/or long-term adverse effects could happen, including allergic reactions. Also, the risks or discomforts described here could happen more often or be more severe than what has been seen before. The patients health will be checked at each study visit by the study doctor, and the patients will be asked to report any changes or problems they may have noticed. If the patients partner becomes pregnant during the study, they should let their study doctor know right away. If the patient has any changes in their health or if the patient has any health problems, they should let their study doctor know right away.

The patient should talk to their study doctor if they have any questions about the possible side effects of filgotinib.

RISKS TO STUDY PROCEDURES

BLOOD DRAWS
Collecting a blood sample from a vein may cause pain, bruising, lightheadedness, fainting, and very rarely, infection at the site of the needle.

HOME STOOL COLLECTION
You may be required to provide a stool sample at home if you are not able to provide one during your clinic visit. You will be sent home with Para-Pak® containers which contain potentially harmful liquids (such as formalin, polyvinyl alcohol, and mercuric chloride). These substances can irritate your skin and eyes, and they are dangerous to inhale or ingest. It is important that you follow the instructions on handling the stool containers correctly (including wearing gloves).

ILEOCOLONOSCOPY/FLEXIBLE SIGMOIDOSCOPY
Ileocolonoscopies and flexible sigmoidoscopies are generally safe procedures, but with any procedure there are risks. These risks will be discussed with you by your medical doctor. You will sign a separate consent form for the procedure. Preparation for this test may require use of an enema or laxative, or both, which may cause abdominal discomfort and increased loose stools during the preparation period. Preparation may also include a special diet where you

clean your intestines. You may experience cramping from the air used to inflate your colon during the procedure, which will pass.

ECG
After the patient has an ECG, they may have mild irritation, slight redness, and itching on their skin where the recording patches were attached. The patients may need to have their chest hair shaved for this procedure.

FASTING
Fasting could cause dizziness, headache, stomach discomfort, or fainting.

CHEST X-RAY
The patients may receive some radiation exposure from a chest x-ray. Generally, the amount of radiation received during this procedure is the same as a person gets from exposure to natural sources of radiation in the environment in a 10 day period.

ALLERGIC REACTION
Allergic reaction is always possible with any drug. Serious allergic reactions that can be life-threatening may happen. Some things that may happen during an allergic reaction to any type of medication are:

* skin rash
* having a hard time breathing
* wheezing when you breathe
* a sudden drop in blood pressure
* swelling around the mouth, throat, or eyes
* fast pulse
* sweating

UNKNOWN/UNEXPECTED RISKS AND DISCOMFORTS
There may be unwanted side events that are not yet known or may happen rarely when people take these study drugs. The patient will be told of any new information that might cause them to change their mind about continuing to take part in this study.

As with any new drug, extra care has to be taken to watch for the side effects that are not always obvious. If the patients feel any side effects or unusual symptoms, they should notify their study doctor as soon as possible at the phone number listed in the informed consent form.

PREGNANCY
It is very important that the patients do NOT cause a woman to become pregnant while they are in this study from the time of screening and for at least 90 days after the last dose of study drug. Not having sex is the only certain way to prevent pregnancy.

To be in this study, the patients must agree to protect their partner from becoming pregnant before, during, and after the study. Men with female partners, who may become pregnant, must use effective methods of birth control. The study doctor will need to discuss what type(s) of birth control the patient is using.

Other not yet identified side effects could happen to the patient, and/or to the embryo or fetus (unborn child) if the patients partner becomes pregnant during the time they are in the study and for 90 days after your last dose of study drug.

These potential side effects may harm an unborn baby. If the patient has a female partner who is pregnant or suspects that she has become pregnant while the patient was in the study or within 90 days after their last dose of study drugs, they must stop taking the study drug immediately and tell their study doctor. As the risk to the partner and unborn baby are not known, it is recommended for the partner to receive appropriate prenatal care from her own doctor. The partner will be asked to sign a consent form to allow her to give the study doctor information about the pregnancy and its outcome.

The study doctor may need to tell the patients partner details about this study and about him taking part in it. The Study Sponsor and the study doctor will not be responsible for the costs related to the pregnancy, delivery, or care of the child.

The patient must also agree not to donate sperm during the study (except for required study sperm collection) and until 90 days after the last dose of study drugs. The patients sexual activity and sexual behaviors are not restricted except for the periods around the time they are donating sperm for the study.

Contacts

Public
Gilead Sciences

Lakeside Drive 333
Foster City CA 94404
US
Scientific
Gilead Sciences

Lakeside Drive 333
Foster City CA 94404
US

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

For a complete list of study inclusion and exclusion criteria, please refer to Sections 4.2 and 4.3.;Key Inclusion Criteria
* Males between the age of 21 and 65 (inclusive) on the day of signing informed consent
* Documented diagnosis of UC or CD of at least 4 months duration. Documentation must include endoscopic and histopathologic documentation of either UC or CD, as follows:
* UC:
- Medical record documentation of, or an endoscopy report dated * 4 months before randomization, which shows features consistent with UC, determined by the procedure performing physician, AND
- Medical record documentation of, or a histopathology report indicating features consistent with UC as determined by the pathologist
Note: Subjects also need to have minimum disease extent of 15 cm from the anal verge
* CD:
- Medical record documentation of, or an ileocolonoscopy (full colonoscopy with intubation of terminal ileum) reported dated * 4 months before randomization, which shows features consistent with CD, determined by the procedure performing physician, AND
- Medical record documentation of, or a histopathology report indicating features consistent with, CD as determined by the pathologist
* Moderately to severely active UC, or moderately to severely active CD, assessed locally and defined by:
* UC:
- Mayo Clinic Score (MCS; Appendix 3) * 6, Physician*s Global Assessment (PGA) of 2 or 3, and endoscopic subscore * 2, at Screening or in the prior 90 days
* CD:
- CDAI total score (Appendix 9) * 220, AND
- Evidence of active inflammation, with a total score of * 6 by the Simple Endoscopic Activity Score in Crohn*s Disease (SES-CD; Appendix 10), OR if disease is limited to the ileum and/or right colon, a combined SES-CD score * 4 in these 2 segments, at Screening or in the prior 90

days
* Previously demonstrated an inadequate clinical response, loss of response to, or intolerance of at least 1 of the following 5 classes of agents, as individually defined in Section 4.2 Inclusion Criteria, #6
* Corticosteroids
* Azathioprine, 6-mercaptopurine, or methotrexate
* TNF* antagonists (infliximab, adalimumab, golimumab [UC only], or certolizumab [CD only])
* Vedolizumab
* Ustekinumab (CD only)
* The mean of 2 separate semen samples collected at the Screening visit must meet the following minimum criteria (in accordance with Section 6.14 and Figure 6 1): semen volume * 1.5 mL, total sperm/ejaculate * 39 million, sperm concentration * 15 million/mL, sperm total motility * 40%, and normal sperm morphology * 30%

Exclusion criteria

For a full list please see the study protocol.;* Previously or currently documented problems with male reproductive health, including but not limited to primary hypogonadism, secondary hypogonadism, or reduced fertility
* Current use of sulfasalazine or its use within the 26 weeks leading up to Screening; sulfasalazine is not permitted at any point during the study
* Current use of corticosteroids at a dosage of > 20 mg/day of prednisone or equivalent at randomization
* Active tuberculosis or untreated latent tuberculosis (Section 4.2 Inclusion Criteria, #12)
* Infection with active Hepatitis B, Hepatitis C, or HIV (Section 4.3 Exclusion Criteria, #31-33)

Study design

Design

Study phase:	2
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	6
Type:	Anticipated

Medical products/devices used

Product type:	Medicine
Brand name:	Filgotinib
Generic name:	Filgotinib

Ethics review

Approved WMO Date:	13-11-2017
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	24-05-2018
Application type:	First submission
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	12-09-2018
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	02-10-2018
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	21-01-2019
Application type:	Amendment

Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	30-01-2019
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	05-02-2019
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	02-04-2019
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	15-04-2019
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	13-01-2020
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)
Approved WMO Date:	14-01-2020
Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

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

Register	ID
EudraCT	EUCTR2017-000402-38-NL
ClinicalTrials.gov	NCT03201445
CCMO	NL62946.078.17