

# A prospective, randomized, double-blind, double-dummy, placebo- and active controlled, multicenter study assessing the efficacy and safety of the combination BAY 60 4552 / vardenafil compared to vardenafil (20 mg) for the treatment of erectile dysfunction not sufficiently responsive to standard therapy with PDE5 inhibitors

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<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Sexual function and fertility disorders
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON34486

### Source

ToetsingOnline

### Brief title

IMP 14694

## Condition

- Sexual function and fertility disorders

### Synonym

erectile dysfunction, impotence

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Bayer

**Source(s) of monetary or material Support:** Bayer HealthCare AG

## Intervention

**Keyword:** Bay 60-4552, efficacy and safety, erectile dysfunction, vardenafil

## Outcome measures

### Primary outcome

Efficacy variables will consist of standard tools used to assess clinical

efficacy of oral treatment in subject with ED. The primary variable will be

IIEF EF.

### Secondary outcome

SEP 2, SEP 3

## Study description

### Background summary

See protocol page 12-16.

### Study objective

The primary objective of the study is to demonstrate the superiority of the combination BAY 60 4552 / vardenafil over vardenafil alone in the treatment of erectile dysfunction not sufficiently responsive to standard therapy with PDE5

inhibitors.

The secondary objective of the study is to assess the safety of the combination BAY 60 4552 / vardenafil

## **Study design**

Multicenter, randomized, double-blind, double-dummy, placebo- and active controlled, parallel-group design

## **Intervention**

One combination of BAY 60-4552 and vardenafil will be tested in this study. Subjects with ED and Insufficient response to standard therapy with 20 mg vardenafil prn during the open-label run-in phase will be randomized 1:1:1 to receive either the combination of BAY 60 4552 and vardenafil or vardenafil alone or placebo once daily for 28 days.

## **Study burden and risks**

Combinations of BAY 60 4552 with vardenafil were investigated in nonclinical experiments. The data suggest that low-dose BAY 60 4552 combined with vardenafil may have over-additive effects on erectile function and cause erections under low cGMP conditions. However, the hemodynamic effects of the combination of BAY 60 4552 and vardenafil were not over-additive in nonclinical experiments. In fact, the hemodynamic effects of the combination were similarly low and comparable to those elicited by vardenafil alone. Thus, the combination of BAY 60 4552 and vardenafil could become the first effective treatment for non-responders to PDE5 inhibitors.

## **Contacts**

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## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

### **Inclusion criteria**

- Written informed consent signed before any study-specific procedure
- History of ED for at least 6 months prior to screening, defined as "the inability to achieve and maintain an erection of the penis sufficient to complete satisfactory sexual intercourse";(1) the diagnosis of ED has to be confirmed by a physician
- Stable, heterosexual relationship for at least 6 months prior to screening
- Aged 18 to 64 years (inclusive) at the first screening examination
- Highly motivated to obtain treatment for ED
- History of previous use of at least 1 marketed PDE5 inhibitor and insufficient therapeutic efficacy despite use of the highest approved dose
- Ability to understand and follow study-related instructions
- At least 4 attempts at sexual intercourse on 4 separate days during the open-label run-in phase with use of 20 mg vardenafil approximately 1 hour before attempting intercourse (according to the answer to the following question in the Subject Diary: "Was sexual activity initiated with the intention of intercourse?")
- IIEF EF score <17
- At least 50% of attempts at sexual intercourse during the open-label run-in phase were unsuccessful, i.e. the following question in the Subject Diary will have to be answered with "No":  
-"Did your erection last long enough for you to have successful intercourse?" (SEP 3: success in maintenance of erection)
- Highly motivated to obtain treatment for ED
- Ability to understand and follow study-related instructions

### **Exclusion criteria**

- Incompletely cured pre-existing diseases that may influence absorption, distribution, metabolism, elimination, or effects of the study drugs

- Known hypersensitivity to the study drugs (active substances or excipients of the formulations)
- Known severe allergies, non-allergic drug reactions, or multiple drug allergies
- Any underlying cardiovascular condition, including unstable angina pectoris that would preclude sexual activity
- History of myocardial infarction, stroke, or life-threatening arrhythmia within 6 months prior to screening
- Bleeding disorder
- History of prostatectomy due to prostate cancer, including nerve-sparing techniques.  
Clarification: Any surgical procedures for the treatment of benign prostatic hypertrophy (BPH) are permitted, with the exception of cryosurgery, cryotherapy, and cryoablation
- Hereditary degenerative retinal disorders such as retinitis pigmentosa
- History of loss of vision due to non-arteritic anterior ischemic optic neuropathy (NAION), temporary or permanent loss of vision, including unilateral loss of vision
- History of uni- or bilateral hearing loss
- Presence of penile anatomical abnormalities such as penile fibrosis or Peyronie's disease which, in the investigator's opinion, would significantly impair sexual performance
- Primary hypoactive sexual desire
- History of spinal cord injury
- Moderate or severe hepatic impairment, i.e. Child-Pugh class B and C
- Clinically significant chronic hematological disease which may lead to priapism such as sickle cell anemia, multiple myeloma, or leukemia
- Active peptic ulceration
- History of syncope within 6 months prior to screening
- History of malignancy within the 5 years prior to screening (other than squamous or basal cell skin cancer)
- Any unstable medical, psychiatric, or substance abuse disorder that in the opinion of the investigator is likely to affect the subject's ability to complete the study or precludes the subject's participation in the study
- Diseases within the 4 weeks prior to screening that are considered clinically relevant by the investigator
- Concomitant use of nitrates or nitric oxide donors (from screening until the end-of-treatment visit)
- Concomitant use of anti-androgens. Clarification: 5 $\alpha$  reductase inhibitors, commonly not classified as anti-androgens, are permitted
- Concomitant use of  $\alpha$  adrenergic blockers (within 2 days prior to screening until the end-of-treatment visit)
- Use of moderate or potent inhibitors of cytochrome P450 (CYP) 3A4 within 2 weeks prior to screening: human immunodeficiency virus (HIV) protease inhibitors such as ritonavir or indinavir, azole-type antimycotic agents such as itraconazole or ketoconazole (topical forms are allowed), or macrolide antibiotics such as clarithromycin and erythromycin
- Use of potent inducers of CYP3A4 such as carbamazepine, phenytoin, or rifampicin within 2 weeks prior to screening
- Use of medication known to prolong the QT interval such as type Ia or type 3 anti-arrhythmics within 2 weeks prior to screening
- Concomitant use of any treatment for ED during the study including oral medication, vacuum devices, constrictive devices, injections, urethral suppositories, gels, any over-the-

counter or non-prescription medications, or products purchased via the internet

- Use of other medication within 2 weeks prior to screening which could interfere with the study treatment
- Suspicion of drug or alcohol abuse
- Intake of foods or beverages containing grapefruit from screening until the end-of-treatment visit
- Clinically relevant findings in the ECG such as a second- or third-degree AV block, prolongation of the QRS complex over 120 ms or of the QTc interval over 450 ms, or uncontrolled atrial fibrillation / atrial flutter (defined as ventricular response rate \*100 bpm)
- History of congenital QT prolongation
- Resting hypotension, i.e. SBP <100 mmHg at rest
- Moderate / severe hypertension, i.e. SBP >170 mmHg or DBP >110 mmHg at rest
- Symptomatic orthostatic hypotension with a decrease in SBP >20 mmHg or in DBP >10 mmHg subsequent to change from the supine to standing position
- Heart rate <45 bpm or >95 bpm
- Clinically relevant findings in the physical examination which may influence absorption, distribution, metabolism, elimination, or effects of the study drugs or jeopardize the subject's safety during the study
- Subjects who have a total serum testosterone level of more than 25% below the lower limit of normal according to the range of the testing laboratory
- History of positive test for HIV, hepatitis B or C
- Estimated creatinine clearance \*50 mL/min according to Cockcroft-Gault(9)
- Elevation of AST and/or ALT >2 times the upper limit of normal
- Participation in another clinical study within 3 months prior to screening
- Subjects who are illiterate or unable to understand the questionnaires or the Subject Diary
- Subjects who are unwilling or unable to complete the Subject Diary
- Subjects who, in the opinion of the investigator, would be non-compliant with the visit schedule or study procedures
- Criteria which in the opinion of the investigator preclude participation for scientific reasons, for reasons of compliance, or for reasons of the subject's safety
- Previous assignment to treatment during this study
- Subjects who report dizziness of moderate or severe intensity during the run-in treatment
- No new medical condition that would have excluded the subject from entering the open-label run-in phase
- No new concomitant medication that would have excluded the subject from entering the open-label run-in phase
- Criteria which in the opinion of the investigator preclude participation for scientific reasons, for reasons of compliance, or for reasons of the subject's safety
- History of pelvic radiotherapy
- Pulmonary venous occlusive disease

## 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:	Recruitment stopped
Start date (anticipated):	18-11-2010
Enrollment:	30
Type:	Actual

## Medical products/devices used

Product type:	Medicine
Brand name:	combination Bay 60-4552 / vardenafil
Generic name:	nog niet bekend
Product type:	Medicine
Brand name:	vardenafil
Generic name:	Levitra
Registration:	Yes - NL intended use

## Ethics review

Approved WMO	
Date:	12-07-2010
Application type:	First submission
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)
Approved WMO	
Date:	08-09-2010
Application type:	Amendment

Review commission:	METC Leids Universitair Medisch Centrum (Leiden)
Approved WMO	
Date:	05-10-2010
Application type:	First submission
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)
Approved WMO	
Date:	23-12-2010
Application type:	Amendment
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)
Approved WMO	
Date:	24-02-2011
Application type:	Amendment
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)

## 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	EUCTR2010-020122-18-NL
CCMO	NL32798.058.10
Other	nog niet bekend