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A study of Pasritamig (JNJ-78278343) in combination with JNJ-86974680 for treatment of prostate cancer

Submission date
16/10/2025

Recruitment status
No longer recruiting

Registration date
20/01/2026

Overall study status
Ongoing

Last Edited
26/10/2026

Condition category
Cancer

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Prostate cancer is a cancer that forms in the prostate, a male reproductive gland found below the bladder. Cancer is considered “advanced” if it spreads extensively to other parts of the body. Although treatments are available, they do not cure advanced prostate cancer. Over time, the disease gets worse and progresses to metastatic castration-resistant prostate cancer (mCRPC; prostate cancer that grows despite low levels of male hormones), showing the need for better treatment. Pasritamig (JNJ-78278343) is a bispecific antibody (activates T-cells aimed at damaging tumor cells and stopping them from growing), which targets a protein, human kallikrein 2, on tumor cells and cluster of differentiation 3 protein on T-cells (key cell in the immune system). This type of protein recognizes and attaches to 2 different targets. JNJ-86974680 works by blocking a protein called adenosine A2A receptor present on cancer and immune cells. By blocking this protein, the drug helps immune cells (T cells) to stay active and attack the cancer cells more effectively. In this study, researchers want to identify the most suitable dose of Pasritamig and JNJ-86974680 and to find out how safe it is at the recommended dose.

Who can participate?
Patients with histologically confirmed adenocarcinoma of the prostate.

What does the study involve?
The study will be conducted in 2 parts:

1. Dose Finding (Part 1): Participants will receive Pasritamig and JNJ-86974680 to confirm the recommended phase 2 combination dose(s) (RP2CDs).
2. Dose Expansion (Part 2): Participants will receive Pasritamig and JNJ-86974680 at the doses determined in Part 1 to assess safety and anti-tumor activity.
Safety assessments include physical examinations, vital signs, Eastern Cooperative Oncology Group (ECOG; how well participants can take care of themselves) performance status, clinical laboratory tests and electrocardiogram (ECG; test to record heart activity). All side effects will be recorded until the study ends (around 1 year 2 months).

What are the possible benefits and risks of participating?
Participants may not receive any benefit from taking part in this study, but the information that is learned from the study may help people with advanced prostate cancer in the future. This is a first-in-humanstudy, which means that Pasritamig (JNJ-78278343) with JNJ-95298177 in combination have not been given to people before, although each of these drugs has been given by itself to participants with prostate cancer.
The expected risks for Pasritamig based on how the drug works and results from clinical studies are listed: cytokine release syndrome (inflammation condition that may occur after treatment with some types of immunotherapy), neurological side effects that may include headaches, changes in mental status, or seizures, and systemic administration-related reaction or infusion related reactions, which can include chills, low blood pressure, or feeling short of breath after the drug infusion. For participants with residual prostate or local tumour tissue, prostatitis (inflammation in the prostate) is possible.
The expected risks for JNJ-86974680 based on how the drug works and results from clinical studies are listed: increased
nausea (feeling like vomiting) and vomiting.
*liver enzymes, which are substances in the blood
The participant information sheet and informed consent form, which will be signed by every participant agreeing to take part in the study, include a detailed section outlining the risks of participating in the study. Participants may have none, some, or all of the possible side effects listed, and they may be mild, moderate, or severe. To minimise the risk associated with taking part, participants are frequently reviewed for any side effects and other medical events. If they have any side effects or are worried about them, or have any new or unusual symptoms, participants will be encouraged to talk with their study doctor. The study doctor will also be looking out for side effects and will provide appropriate medical care. There may also be side effects that the researchers do not expect or do not know about and that may be serious. Many side effects go away shortly after the intervention ends. However, sometimes side effects can be serious, long-lasting, or permanent.
If a severe side effect or reaction occurs, the study doctor may need to stop the procedure. The study doctor will discuss the best way of managing any side effects with participants. There is always a chance that an unexpected or serious side effect may happen. This can happen to people who take this or any other drug.

Where is the study run from?
Janssen-Cilag International NV

When is the study starting and how long is it expected to run for?
January 2026 to June 2028.

Who is funding the study?
Janssen-Cilag International NV

Who is the main contact?
janssenukregistryqueries@its.jnj.com

Contact information

Type(s)
Scientific

Contact name

None Medical Information and Product Information Enquiry

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Additional identifiers

Integrated Research Application System (IRAS)
1011799

Protocol serial number
78278343PBPCR1005

Study information

Scientific Title

A phase 1b study of Pasritamig (JNJ-78278343), a T-cell redirecting agent targeting human kallikrein 2 (KLK2), in combination with JNJ-86974680, an A2a receptor (A2aR) antagonist, for prostate cancer

Study objectives
1.1.Main objectives
• Part 1 (Dose finding): To find out the most suitable dose (recommended phase 2 combination dose[s] [RP2CDs]) of Pasritamig (JNJ-78278343) and JNJ-86974680.
• Part 2 (Dose expansion): To find out how safe Pasritamig and JNJ-86974680 are at the recommended dose(s).

1.2.Secondary objectives
• To assess the preliminary antitumor (cancer-fighting) activity.
• To evaluate the pharmacokinetics* of Pasritamig and JNJ-86974680.
*Process by which drug gets absorbed, distributed in the body, and excreted.
• To evaluate immunogenicity (immune response against the drug) of Pasritamig.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 16/12/2025, North West - Haydock Research Ethics Committee (2 Redman Place Stratford, London, E20 1JQ, United Kingdom; -; haydock.rec@hra.nhs.uk), ref: 25/NW/0333

Primary study design
Interventional

Allocation
Non-randomized controlled trial

Masking
Open (masking not used)

Control
Uncontrolled

Assignment
Single

Purpose
Treatment

Study type(s)
Efficacy, Safety

Health condition(s) or problem(s) studied
Prostate cancer

Interventions
The study will be conducted in 2 Parts:
Part 1: Dose Finding, Participants will receive pasritamig in combination with JNJ-86974680 to

determine the recommended phase 2 combination dose (RP2CD) regimen.
Part 2: Dose Expansion Participants will receive pasritamig in combination with JNJ-86974680 at the RP2CD as determined in Part 1 of the study to confirm the safety and anti-tumor activity. Pasritamig will be administered intravenously & JNJ-86974680 will be administered orally. Safety assessments include physical examinations, vital signs, Eastern Cooperative Oncology Group (ECOG; how well participants can take care of themselves) performance status, clinical laboratory tests and electrocardiogram (ECG; test to record heart activity).
All side effects will be recorded until the study ends (around 1 year and 2 months).

Intervention Type
Drug

Phase
Phase I

Drug/device/biological/vaccine name(s)
JNJ-78278343, JNJ-86974680

Primary outcome(s)
1. Number of Participants With Adverse Events (AEs) by Severity
An AE is any untoward medical occurrence in a participant participating in a clinical study that does not necessarily
have a causal relationship with the pharmaceutical/biological agent under study. Severity will be graded according to
the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI-CTCAE) version 5.0. Severity
scale ranges from Grade 1 (Mild) to Grade 5 (Death). Grade 1= Mild, Grade 2= Moderate, Grade 3= Severe, Grade 4=
Life-threatening and Grade 5= Death related to adverse event. Cytokine release syndrome (CRS) and immune effector
cell associated neurotoxicity syndrome (ICANS) will be graded according to the American Society for Transplantation
and Cellular Therapy (ASTCT) guidelines and ocular events will be graded using the alternative scale provided in the
protocol. [Time Frame: Up to 1 year 2 months]
2. Part 1: Number of Participants With Dose-Limiting Toxicity (DLT)
High grade hematologic or non-hematologic toxicities with exceptions and/or toxicities leading to treatment
discontinuation will be regarded as DLT. [Time Frame: Up To Day 22]

Key secondary outcome(s)
1. Objective Response Rate (ORR). ORR is defined as the percentage of participants who have a partial response (PR) or better according to the response evaluation criteria in solid tumors (RECIST) version 1.1 response criteria without evidence of bone progression according to prostate cancer working group 3 (PCWG3). [Time Frame: Up to 1 year 2 months]
2. Prostate-Specific Antigen (PSA) Response Rate PSA response rate is defined as the percentage of participants with a decline of PSA of 50% or more from baseline. [Time Frame: Up to 1 year 2 months]
3. Duration of Response (DOR) DOR will be calculated among responders (PR or better) from the date of initial documentation of a response (PR or better) to the date of first documented evidence of progressive disease, as defined in the PCWG3 or RECIST version 1.1 response

criteria, or death due to any cause, whichever occurs first. [Time Frame: Up to 1 year 2 months]
4. Radiographic Progression-Free Survival (rPFS) rPFS is defined as the time from the date of first dose of pasritamig or JNJ-86974680 until the date of radiographic disease progression or death, whichever comes first. [Time Frame: Up to 1 year 2 months]
5. Time to Response (TTR) TTR is defined for the responders as the time from the date of first dose of any study treatment to the date of first
documented response. [Time Frame: Up to 1 year 2 months]
6. Serum Concentration of Pasritamig Serum samples will be analysed to determine concentrations of pasritamig. [Time Frame: Up to 1 year 2 months]
7. Plasma Concentration of JNJ-86974680 Plasma samples will be analysed to determine concentrations of JNJ-86974680. [Time Frame: Up to 1 year 2 months]
8. Number of Participants With Anti-Pasritamig Antibodies Serum samples will be analysed for the detection of anti-pasritamig antibodies using a validated assay method. Up to 1 year and 2 months

Completion date
30/06/2028

Eligibility

Key inclusion criteria
1. Histologically confirmed adenocarcinoma of the prostate. Primary small cell carcinoma, carcinoid tumor, neuroendocrine (NE) carcinoma, or large cell NE carcinoma arising in the prostate are not allowed; however, adenocarcinomas with NE features (for example [e.g.], immunohistochemistry [IHC] with both androgen receptor [AR]- and NEmarker positivity) are allowed.
2. Metastatic castration-resistant prostate cancer (mCRPC) that is metastatic either to bone, any lymph node, or both without clear evidence of metastasis to visceral organs. Local-regional invasion (rectum, bladder) and bone disease with soft tissue component can be included
3. Prior orchiectomy or medical castration (for example, must be receiving ongoing androgen deprivation therapy with a gonadotropin-releasing hormone [GnRH] analog [agonist or antagonist] prior to the first dose of study drug and must continue this therapy throughout the treatment phase)
4. Prostate-specific antigen (PSA) greater than or equal to (>=) 2 nanograms per milliliters (ng /mL) at screening
5. Measurable or evaluable disease
6. Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit

110 Years

Sex
Male

Total final enrolment
0

Key exclusion criteria
1. Toxicity related to prior anticancer therapy that has not returned to grade less than or equal to (<=) 1 or baseline levels (except for alopecia,
neuropathy [Grade 2] and vitiligo)
2. Known allergies, hypersensitivity, or intolerance to any of the components (for example, excipients) of pasritamig or JNJ-86974680
3. Active infection or condition that requires treatment with systemic antibiotics within 7 days prior to the first dose of study treatment. Antibiotic or antiviral prophylaxis is allowed
4. Have leptomeningeal disease or brain metastases, except participants with definitively, locally treated brain metastases that are clinically stable and asymptomatic >2 weeks, and who are off corticosteroid treatment for at least 2 weeks prior to first dose of study treatment
5. Any serious underlying medical conditions or other issue that would impair the ability of the participant to receive or tolerate the planned treatment at the investigational site to understand the informed consent, or any condition for which, in the opinion of the investigator, participation would not be in the best interest of the participant or that could prevent, limit, or confound the protocol-specified assessments

Date of first enrolment
14/01/2026

Date of final enrolment
22/05/2026

Locations

Countries of recruitment
United Kingdom

England

United States of America

Study participating centre
The Christie
550 Wilmslow Road
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Study participating centre
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Study participating centre
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Sponsor information

Organisation
Janssen-Cilag International NV

Funder(s)

Funder type
Industry

Funder Name
Janssen Research and Development

Alternative Name(s)
Janssen R&D, Janssen Research & Development, Janssen Research & Development, LLC, Janssen Research & Development LLC, Janssen Pharmaceutical Companies of Johnson & Johnson, Research & Development at Janssen, JRD, J&J PRD

Funding Body Type
Private sector organisation

Funding Body Subtype
For-profit companies (industry)

Location
United States of America

Results and Publications

Individual participant data (IPD) sharing plan
The data sharing policy of the Janssen Pharmaceutical Companies of Johnson and Johnson is available at www.janssen.com/clinical-trials/transparency. As noted on this site, requests for access to the study data can be submitted through the Yale Open Data Access (YODA) Project site at yoda.yale.edu.

IPD sharing plan summary
Available on request, Stored in non-publicly available repository