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A Study of JNJ-90009530 in Relapsed or Refractory B-Cell non-Hodgkin Lymphoma (r/r B-NHL)

Submission date
09/01/2024

Recruitment status
No longer recruiting

Registration date
01/03/2024

Overall study status
Ongoing

Last Edited
14/03/2025

Condition category
Cancer

[X] 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
B-cell non-Hodgkin lymphoma (NHL) is a cancer that starts in specific type of white blood cells called B lymphocytes. The symptoms include lymph nodes (part of the body's immune system) that are larger than normal, fever, and weight loss. Although treatments are available, it can come back after treatment (relapse) or can be resistant to standard treatment (refractory). There is a need for the continued development of safe and effective treatments.

The study treatment, JNJ-90009530, is made by using a type of white blood cells (T-cells) from the participant. These cells are changed in the laboratory so that they attack cancer cells when they are put back into the participant's blood.

The purpose of this study is to see if JNJ-90009530 can be used in future studies for the treatment of B-cell Non-Hodgkin Lymphoma in adults. During the study, side effects caused by the study drug will be followed closely, as well as how long the study drug stays in the body and how the body responds to it. Men and women 18 years or older with B-cell NHL who have relapsed or refractory disease after 2 prior treatments will be enrolled.

Who can participate?
Patients aged 18 years or older with relapsed or refractory disease for each histologic subtype-Mature aggressive large B cell NHL and Follicular Lymphoma Grade 3b.

What does the study involve?
This study will be conducted in 2 parts which consists of run in and dose expansion.
Run In: The participants will undergo lymphodepletion and then receive JNJ-90009530 through intravenous infusion on Day 1.
Expansion: Participants will receive JNJ- 90009530 infusion at the recommended phase 2 dose(s) confirmed after the Run In.

What are the possible benefits and risks of participating?
Benefits:

This is the first study using the study drug JNJ-90009530. As such, the benefits associated with this treatment are unknown. Taking part in this study may improve the participant's condition but these benefits are not guaranteed to happen, and there may not be any clinical benefit to being in this study. Participation may help future patients as researchers understand more about the possible effectiveness and safety of JNJ-90009530 in relapsed/refractory B cell Non-Hodgkin Lymphoma

Risks:
Participants will be monitored for their long-term follow-up period after the post-treatment follow-up. Participants will undergo study assessments and tests, such as blood tests, and vital signs. Scans of the participants' body will also be done to monitor disease status. The possible side effects of the study drug will be recorded during the study. Blood samples will be taken at multiple timepoints to understand how the body responds to study drug. The total duration of study is approximately 2 years and 7 months.

Not all possible side effects and risks related to JNJ-90009530 are known, since this is the first time JNJ-90009530 has been given to humans. Different or unexpected side effects may occur. Side effects may go away after treatment is stopped, but they may be serious, long-lasting, or permanent and may even result in hospitalisation or death.

To minimise the risks associated with this, participants are frequently reviewed after receiving JNJ-90009530 for side effects and adverse events. Additionally, safety assessments will be obtained during the Post-Infusion Follow-up and Post Treatment phases.

Participants are educated to report any symptoms and side effects to the study staff without delay. Any serious adverse events that are reported to the Sponsor are thoroughly reviewed by a specialist drug safety team. The Participant Information Sheet/Informed Consent Form (PIS/ICF), which will be signed by every participant agreeing to participate in the study, includes a detailed section outlining potential risks/side effects to participating in the study. Please see the attached PIS/ICF copy included in this submission.

Immunological effects
• Cytokine release syndrome (CRS)
• Immune Effector Cell-associated HLH-like Syndrome (IEC-HS)
• Immune effector cell associated neurotoxicity syndrome (ICANS)

Other possible side effects
• Blood cell effects
• Risk of infections
• Hypogammaglobulinemia
• Tumor Lysis Syndrome
• Allergic Reactions
• Pneumonitis

Where is the study run from?
Janssen Research & Development (Netherlands)

When is the study starting and how long is it expected to run for?
January 2024 to May 2039

Who is funding the study?
Janssen Research & Development (Netherlands)

Who is the main contact?
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Additional identifiers

Clinical Trials Information System (CTIS)
2023-506259-97

Integrated Research Application System (IRAS)
1009316

ClinicalTrials.gov (NCT)
NCT05784441

Protocol serial number
90009530LYM1001, IRAS 1009316, CPMS 57721

Study information

Scientific Title
A Phase 1b Multicenter, Open-label, Study of JNJ-90009530, an Autologous Anti-CD20 CAR-T Cell Therapy in Adult Participants with Relapsed or Refractory B-cell Non- Hodgkin Lymphoma

Study objectives
Primary objectives:
1. To check if JNJ-90009530 is safe and well-tolerated.
2. To find the most effective dose (Recommended Phase 2 Dose [s]) of JNJ-90009530.

Secondary objectives:
1. To examine JNJ-90009530 in participants with relapsed (reoccurrence) B-cell non-Hodgkin lymphoma cancer or resistant to standard therapies to check how many people respond well overall (overall response rate), how quickly they respond (time to response) and how long the positive response lasts (duration of response).
2. To examine how JNJ-90009530 is absorbed, processed, and eliminated by the body (pharmacokinetics).

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 22/02/2024, London - West London & GTAC Research Ethics Committee (2 Redman Place, London, E20 1JQ, United Kingdom; +44 (0)207 104 8241; westlondon.rec@hra.nhs.uk), ref: 24/LO/0010

Study design
Interventional non randomized

Primary study design
Interventional

Study type(s)
Safety, Efficacy

Health condition(s) or problem(s) studied
Non-Hodgkin Lymphoid Malignancies

Interventions
Current interventions as of 14/03/2025:

This is an open-label study, single drug administration study.
Up to 12 adult participants with r/r aggressive B-cell NHL may be enrolled into a Run In dose level.
After completion of the Run In, an aggressive lymphoma and an indolent lymphoma Dose Expansion cohort may open. Up to approx. 40 participants may be enrolled in each Dose Expansion cohort, allowing for up to approx. 92 participants to be enrolled in total.
For both the Run In and Dose Expansion, the study periods and durations for participants are:
• Screening (28 days): To confirm eligibility
• Apheresis/Enrolment: To collect certain type of white blood cells.
• Bridging therapy: Participants may get anticancer drug while JNJ-90009530 is being prepared.
• Lymphodepletion: Participants will get cyclophosphamide and fludarabine for 3 days to prepare the body for study drug.
• JNJ-90009530: Participants will get single JNJ-90009530 infusion in vein on Day 1.
• Post-infusion follow-up: up to 90 days): Participants will be assessed for vital signs, pulse oximetry, laboratory parameters, biomarker.
• Post-treatment follow-up (up to 2 years): Participants will be monitored for health.
• Long-term follow-up period (up to 15 years)

After post-treatment follow-up participants will be monitored in long-term follow-up period for side effects, blood tests, vital signs and body scan to monitor disease status. Blood samples will be taken at multiple timepoints to find how body responds to study drug. Total study duration will be approximately up to 16 years.

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For both the Run In and Dose Expansion, the study periods and durations for participants are:
• Screening: ?28 days prior to apheresis
• Apheresis/Enrollment
• Bridging therapy: For participants who are at high risk to experience disease progression during the manufacture of JNJ-90009530 drug product and before lymphodepletion, a bridging therapy is allowed at the investigator’s discretion and Sponsor’s approval.
• Lymphodepletion: Day -5 to Day -3 (window to begin lymphodepletion: Day -7 to Day -5)
• JNJ-90009530 single infusion: Day 1
• Post-infusion follow-up: Beginning after JNJ-90009530 infusion (DLT period: Days 1 to 29) and continuing up to Day 90

• Post-treatment follow-up: Beginning after post-infusion follow-up and continuing 2 years postinfusion
• Long-term follow-up: beginning after post-treatment follow-up

Intervention Type
Drug

Phase
Phase I

Drug/device/biological/vaccine name(s)
JNJ-90009530

Primary outcome(s)
Current primary outcome measure as of 14/03/2025:

1. Occurrence of AEs and abnormal laboratory results, including dose limiting toxicities (DLTs) for up to 24 months
2. Determine Recommended Phase 2 dose (RP2D) with review of the number of dose-limiting toxicities for up to 24 months

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Previous primary outcome measure:

1. Occurrence of AEs and abnormal laboratory results, including dose limiting toxicities (DLTs) for up to 24 months

Key secondary outcome(s))
Current secondary outcome measures as of 14/03/2025:

1. Overall Response (OR), which includes Partial Response (PR) and Complete Response (CR) for up to 24 months
2. Time to response (TTR), defined as the time from the date of JNJ-90009530 infusion to the first documented CR or PR for up to 24 months
3. Duration of response (DOR), defined as the time from the first documented CR or PR to relapse or death (whichever occurs first) for up to 24 months
4. Amount of JNJ-90009530 in blood over time by measuring the Chimeric Antigen Receptor (CAR) copy number over time by Quantitative polymerase chain reaction (qPCR) for up to 24 months

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Previous secondary outcome measures:

1. Overall Response (OR), which includes Partial Response (PR) and Complete Response (CR), for up to 24 months
2. Time to response (TTR), defined as the time from the date of JNJ-90009530 infusion to the first documented CR or PR for up to 24 months

3. Duration of response (DOR), defined as the time from the first documented CR or PR to relapse or death (whichever occurs first) for up to 24 months
4. Amount of JNJ-90009530 in blood over time for up to 24 months

Completion date
31/05/2039

Eligibility

Key inclusion criteria
1. Participant must be greater than or equal to (>=) 18 years of age, at the time of signing informed consent
2. All participants must have relapsed or refractory disease for each histologic subtype-Mature aggressive large B cell NHL and Follicular Lymphoma Grade 3b: Participants must have >= 2 lines of systemic therapy or >=1 line of systemic therapy in case of participants ineligible for high-dose chemotherapy and autologous Hematopoietic stem cell transplantation (HSCT). Participants also must have had exposure to an anthracycline and an anti-CD20 targeted agent-Follicular lymphoma Grade 1-3a and Marginal Zone Lymphoma: Participants must have >=2 prior lines of anti-neoplastic systemic therapy. Participants also must have prior exposure to an anti-CD20 monoclonal antibody
3. Tumor must be cluster of differentiation (CD) 20 positive
4. Measurable disease as defined by Lugano 2014 classification
5. Eastern Cooperative Oncology Group (ECOG) performance status of either 0 or 1

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
1. Diagnosis of Human herpes virus (HHV) 8-positive Diffuse large B Cell lymphoma (DLBCL)
2. Prior allogeneic Hematopoietic stem cell transplantation (HSCT)
3. Autologous stem cell transplant within 12 weeks of chimeric antigen receptor (CAR) T cell infusion
4. Uncontrolled active infections
5. History of deep vein thrombosis or pulmonary embolism within six months of infusion (except for line associated deep vein thrombosis [DVT])
6. History of stroke, unstable angina, myocardial infarction, congestive heart failure (New York Heart Association [NYHA] Class III or IV), severe cardiomyopathy or ventricular arrhythmia requiring medication or mechanical control within 6 months of screening

7. History of a seizure disorder, cerebrovascular ischemia/hemorrhage, dementia, cerebellar disease or neurodegenerative disorder
8. Known history or prior diagnosis of optic neuritis or other immunologic or inflammatory disease affecting the central nervous system
9. Active central nervous system (CNS) involvement by malignancy
10. Current active liver or biliary disease (except for Gilbert’s syndrome or asymptomatic gallstones)

Date of first enrolment
17/05/2024

Date of final enrolment
31/03/2025

Locations

Countries of recruitment
United Kingdom

Australia

Israel

United States of America

Study participating centre
University College London Hospitals NHS Foundation Trust
250 Euston Road
London
United Kingdom
NW1 2PG

Sponsor information

Organisation
Janssen-Cilag International NV

Funder(s)

Funder type
Industry

Funder Name
Janssen Research & Development, LLC

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available due to commercial confidentiality.

IPD sharing plan summary
Not expected to be made available, Data sharing statement to be made available at a later date