ISRCTN17975931 https://doi.org/10.1186/ISRCTN17975931

A study to evaluate the safety, tolerability, processing by the body, mechanism of action, and effectiveness of glofitamab following obinutuzumab pretreatment in patients with Bcell non-Hodgkin lymphoma

Submission date 19/06/2021	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 09/08/2021	Overall study status Ongoing	 Statistical analysis plan Results
Last Edited 02/04/2024	Condition category Cancer	 Individual participant data Record updated in last year

Plain English Summary

Background and study aims

Bcell non-Hodgkin lymphoma (NHL) is a type of cancer where white blood cells called B cells grow abnormally and form tumors throughout the body. The aim of this study is to test the drug glofitamab at different doses to establish the safety and effectiveness of subcutaneous (SC) administration of the drug. SC administration is an injection under the skin of the abdomen in a matter of seconds. Glofitamab has been studied previously as an intravenous (IV) infusion. An IV infusion is a slow injection over several hours into a vein in the arm.

Who can participate?

Patients aged over 18 years living with relapsed or refractory Bcell nonHodgkin lymphoma. Relapsed means the cancer has reappeared after a period of remission. Refractory is when the lymphoma does not respond to treatment or when the response to treatment does not last very long.

What does the study involve?

In this study, two drugs will be administered: a pretreatment called obinutuzumab and glofitamab. The pretreatment drug, obinutuzumab, will be administered before the first dose of glofitamab. Obinutuzumab is an antibody that targets the same normal and cancerous cells as glofitamab. Antibodies are a type of blood protein normally made by the immune system to help defend the body against infection and cancer. Obinutuzumab is designed to bind to a protein called CD20 that is present on cancerous B cells, leading to the death of these types of cancer cells. Obinutuzumab has been approved in the United States and Europe for the treatment of B-cell cancers. Obinutuzumab pretreatment will be given as a safety measure to reduce the number of normal and cancerous B cells, mainly in the circulating blood. The reduction of circulating normal and cancerous B cells in advance of receiving the first dose of glofitamab is predicted to reduce any possible side effects that may occur after the first dose of glofitamab.

Glofitamab is a new T-cell bispecific antibody with two arms. One arm recognizes a specific protein called CD20 on the surface of B cells, such as cancerous NHL cells. The other arm recognizes T cells, a type of white blood cell that is critical in the body's immune system. By bringing T cells near the cancerous B cells, glofitamab is designed to activate T cells so they can identify and destroy cancer cells. Glofitamab is an experimental drug, which means health authorities have not approved glofitamab in combination with obinutuzumab for the treatment of NHL.

What are the possible benefits and risks of participating?

All patients will be treated with high-quality technical advanced assessments designed by a group of leading experts in the field of cancer therapy. Participant's health may or may not improve in this study, but the information that is learned may help other people who have a similar medical condition in the future. Participants may have side effects from the drugs or procedures used in this study. Side effects can be mild to severe and even life-threatening, and they can vary from person to person. Participants should talk to the study doctor right away if they have any of the following during the study:

1. Symptoms that are new or have worsened

2. Changes in prescribed or over-the-counter medications (including herbal therapies)

3. Visits to the doctor or hospital, including urgent care or emergency room visits There may be a risk in exposing an unborn child to study drug, and all risks are not known at this

time. Women and men must take precautions to avoid exposing an unborn child to study drug. Patients who are pregnant, become pregnant, or are currently breastfeeding cannot take part in this study.

Where is the study run from? Genentech, Inc (USA)

When is the study starting and how long is it expected to run for? February 2021 to June 2025

Who is funding the study? Genentech, Inc (USA)

Who is the main contact? global-roche-genentech-trials@gene.com

Study website

https://forpatients.roche.com/en/trials/cancer/non-hodgkins-lymphoma/a-study-to-evaluate-the-safety--tolerability--processing-by-the-0.html

Contact information

Type(s) Public

Contact name Mr Clinical Trials

Contact details 1 DNA Way South San Francisco United States of America 94080 +1 (0)888 662 6728 global-roche-genentech-trials@gene.com

Additional identifiers

EudraCT/CTIS number 2021-000064-29

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers BP43015

Study information

Scientific Title

A Phase Ib, open-label, dose-escalation, multicenter study to evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics, and efficacy of subcutaneous glofitamab following obinutuzumab pretreatment in patients with relapsed or refractory B-cell non-Hodgkin lymphoma

Study hypothesis

To evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics, and efficacy of singleagent glofitamab subcutaneous (SC) in patients with relapsed or refractory B-cell non-Hodgkin lymphoma (R/R NHL).

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Australia: Approved 21/05/2021, South Eastern Sydney Local Health District Human Research Ethics Committee (The Sutherland Hospital, Kingsway & Kareena Rd, Caringbah NSW 2229, Australia; +61 (0)2 9540 7756; seslhd-mail@health.nsw.gov.au), ref: 2021/STE00744 2. Belgium: Approved 17/05/2021, Commissie voor medische Ethiek- U/UZ-Gent (Universitair Ziekenhuis Gent, C. Heymanslaan 10 \ B 9000 Gent, Belgium; +32 (0)9 332 41 81; ethisch. comite@uzaent.be), ref: BC-09987

3. Denmark: Approved 24/06/2021, Center for Regional Udvikling De Videnskabsetiske komitéer (De Videnskabsetiske komitéer, Blegdamsvej 60, 1. sal, Opgang 94A11, 2100 København Ø, Denmark; +45 (0)3866 6395; regionh@regionh.dk), ref: H-21026160

4. Italy: Approved 17/06/2021, Comitato Etico di Bergamo (ASST- Papa Giovanni XXIII, P.zza OMS, 1-24127 Bergamo, Italy; +39 (0)352673341; comitatoetico@asst-pg23.it), ref: 110/21
5. Spain: Approved 14/04/2021, Generalitat Valenciana, Department Clinic Malva-Rosa, Comité De Etica (Avenida Menéndez Pelayo, 4 acc, Tercera Planta, 46010 Valencia, Spain; +34 (0)96 197
39 76; ceic_hcv@gva.es), ref: 2021-000064-29

Study design Open-label multicenter interventional non-randomized study

Primary study design Interventional

Secondary study design Non randomised study

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet No participant information sheet available

Condition B-cell non-Hodgkin lymphoma

Interventions

All participants will receive pretreatment with a fixed dose of obinutuzumab (Gpt) on Day 1 of Cycle 1 as a safety measure to deplete B cells both in the peripheral blood and in the secondary lymphoid organs, thereby reducing the risk of sudden cytokine release associated with the first glofitamab administration. All participants will receive dexamethasone 20-mg intravenous (IV) prior to each glofitamab dose. Premedication with dexamethasone will be optional for participants with no CRS related to glofitamab in at least two previous cycles based on the investigator's assessment.

Intervention Type

Drug

Phase

Phase I

Drug/device/biological/vaccine name(s)

Glofitamab (RO7082859), tocilizumab (RO4877533), obinutuzumab (RO5072759), dexamethasone (RO0042867)

Primary outcome measure

Measured using Electronic Data Capture (EDC):

1. Incidence and severity of CRS following glofitamab SC administration, with severity determined according to American Society for Transplantation and Cellular Therapy (ASTCT) criteria by grade and treatment cycle, up to approximately 44 weeks

2. Incidence and severity of adverse events, with severity determined according to National Cancer Institute Common Terminology Criteria for Adverse Events version 5.0 (NCI CTCAE v5.0), up to approximately 44 weeks

3. Incidence and severity of adverse event of special interest (AESI), up to approximately 44 weeks

4.Targeted vital signs from baseline (up to Day -28) to 44 weeks

5. Targeted clinical laboratory test results from baseline (up to Day -28) to 44 weeks 6. Incidence and severity of dose-limiting toxicities, for Cohort 1: 21 days after the SC dose on Day 15 of Cycle 1; for Cohort 2 and 3: 21 days after the SC dose on Day 1 of Cycle 2 7. Local tolerance at injection sites, including injection-site reactions, up to approximately 44 weeks

Secondary outcome measures

Measured using a validated ELISA method:

1. Serum concentration of glofitamab at specified timepoints at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

2. Minimum serum concentration under steady-state conditions within a dosing interval/trough concentration (Cmin/Ctrough) of glofitamab, at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

3. Delayed time to Cmax (Tmax) of glofitamab at specified timepoints

4. Maximum serum concentration (Cmax) of glofitamab, at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

5. Area under the concentration-time curve (AUC) of glofitamab, at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

6. The absolute bioavailability of glofitamab SC administration, at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

7. Prevalence of anti-drug antibodies (ADAs) against glofitamab at baseline (up to Day -28) 8. Incidence of ADAs against glofitamab during the study and after treatment completion, at Days 1, 8, and 15 of Cycle 1; Day 1 of Cycle 2, 3, 4, 5, 6, 8, 10 and 12; and treatment completion visit

Overall study start date

12/02/2021

Overall study end date

20/06/2025

Eligibility

Participant inclusion criteria

Participants who are age ≥18 years at the time of signing the Informed Consent Form
 Participants with a history or status of:

2.1. A histologically confirmed hematological malignancy that is expected to express CD20

2.2. No available treatment options that are expected to prolong survival (e.g., standard chemotherapy or autologous stem cell transplant [SCT])

3. Participants with measurable disease, defined as at least one bi-dimensionally measurable nodal lesion, defined as >1.5 cm in its longest dimension, or at least one bi-dimensionally measurable extra-nodal lesion, defined as >1.0 cm in its longest dimension

4. Participants who are able to provide a fresh biopsy from a safely accessible site, per investigator determination, provided that the participant has more than one measurable target lesion

5. Participants with Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1

- 6. Participants with life expectancy (in the opinion of the investigator) of \geq 12 weeks
- 7. Adverse events from prior anti-cancer therapy must have resolved to Grade 1 or better
- 8. Participants with adequate liver, hematological and renal function

9. Participants with a negative human immunodeficiency virus (HIV) and hepatitis C virus (HCV) test at screening

10. Participants with a negative serologic or polymerase chain reaction (PCR) test results for acute or chronic hepatitis B virus (HBV) infection

11. For women of childbearing potential: participants who agree to remain abstinent (refrain from heterosexual intercourse) or use contraception during the treatment period and for at least 18 months after the final dose of obinutuzumab, 3 months after the final dose of tocilizumab (if applicable), or 2 months after the final dose of glofitamab, whichever is longer 12. For men: participants who agree to remain abstinent (refrain from heterosexual intercourse) or use contraceptive methods, and agree to refrain from donating sperm during the treatment period and for at least 3 months after the final dose of obinutuzumab, tocilizumab (if applicable), or glofitamab, whichever is longer, to avoid exposing the embryo

Participant type(s)

Patient

Age group

Mixed

Lower age limit

18 Years

Sex

Both

Target number of participants

36

Participant exclusion criteria

1. Participants who are unable to tolerate subcutaneous injection into the abdomen

2. Participants who are pregnant or breastfeeding, or intending to become pregnant during the study or within 3 months after pretreatment with obinutuzumab or 2 months after the final dose of glofitamab, whichever is longer

3. Participants who are unable to comply with protocol-mandated hospitalizations and restrictions

4. Participants with a known or suspected history of hemophagocytic lymphohistiocytosis (HLH) 5. Participants with acute bacterial, viral, or fungal infection at baseline, confirmed by a positive blood culture within 72 hours prior to obinutuzumab pretreatment (Gpt) infusion or by clinical judgment in the absence of a positive blood culture

6. Participants with known active infection, or reactivation of a latent infection, whether bacterial, viral, fungal, mycobacterial, or other pathogens (excluding fungal infections of nail beds) or any major episode of infection requiring hospitalization or treatment with IV antibiotics within 4 weeks of dosing

7. Participants who have had prior treatment with systemic immunotherapeutic agents within 4 weeks or five half-lives of the drug, whichever is shorter, before Gpt infusion on Day 1 of Cycle 1 8. Participants who were previously treated with CD20-CD3 bispecific antibodies (including glofitamab and mosunetuzumab), as this could influence the interpretation of pharmacokinetics and safety

9. Participants with a history of treatment-emergent immune-related adverse events associated with prior immunotherapeutic agents

10. Participants who have been treated with standard radiotherapy, any chemotherapeutic agent, any chimeric antigen receptor-modified T-cell (CAR-T) cell therapy, or any other investigational anti-cancer agent (defined as treatment for which there is currently no

regulatory authority approved indication) within 4 weeks prior to Gpt infusion

11. Participants with prior solid organ transplantation

12. Participants with prior allogeneic stem cell transplant (SCT)

13. Participants with autologous SCT within 100 days prior to Gpt infusion

14. Participants with a history of autoimmune disease

15. Participants with a history of severe allergic or anaphylactic reactions to monoclonal antibody therapy or recombinant antibody-related fusion proteins

16. Participants with a history of confirmed progressive multifocal leukoencephalopathy

17. Participants who currently have, or who have a history of, central nervous system (CNS) lymphoma

18. Participants who currently have, or who have a history of, CNS disease such as stroke, epilepsy, CNS vasculitis, or neurodegenerative disease

19. Participants with evidence of significant, uncontrolled concomitant diseases that could affect compliance with the protocol or interpretation of results, including diabetes mellitus, history of relevant pulmonary disorders (bronchospasm, obstructive pulmonary disease) and known autoimmune diseases

20. Participants who have undergone major surgery (excluding biopsies) or significant traumatic injury <28 days prior to the Gpt infusion or who anticipate the need for major surgery during study treatment

21. Participants who have had another invasive malignancy in the last 2 years

22. Participants who have significant cardiovascular disease such as New York Heart Association Class III or IV cardiac disease, myocardial infarction within the last 6 months, unstable arrhythmias, or unstable angina

23. Participants who have received a live, attenuated vaccine within 4 weeks before Gpt infusion or anticipation that such a live attenuated vaccine will be required during the study

24. Participants who have received systemic immunosuppressive medications within 2 weeks prior to Gpt infusion

25. Participants with a history of illicit drug or alcohol abuse within 12 months prior to screening, in the investigator's judgment

26. Participants with any other diseases, metabolic dysfunction, physical examination finding, or clinical laboratory finding giving reasonable suspicion of a disease or condition that would contraindicate the use of an investigational drug

27. Participants with a history of hypersensitivity to dexamethasone or systemic corticosteroids

Recruitment start date 03/08/2021

Recruitment end date 31/07/2024

Locations

Countries of recruitment Australia

Belgium

Denmark

Italy

Poland

Spain

United States of America

Study participating centre Prince of Wales Hospital Haematology Randwick Australia 2031

Study participating centre UZ Gent C. Heysmanslaan 10 Gent Belgium 9000

Study participating centre Rigshospitalet Hæmatologisk Klinik

Klinisk Afprøvnings Team KAT Blegdamsvej 9 Afsnit 4032 København Ø Denmark 2100

Study participating centre

Asst Papa Giovanni XXIII Ematologia Piazza OMS-Organizzazione Mondiale della Sanità, 1 Bergamo Italy 24127

Study participating centre Istituto Clinico Humanitas u.O. Oncologia Medica Ed Ematologia via Manzoni 56 Rozzano Italy 20089

Study participating centre Uniwersyteckie Centrum Kliniczne Osrodek Badan Wczesnych Faz Smoluchowskiego 17 Gdańsk Poland 80-214

Study participating centre Uniwersytecki Szpital Kliniczny Klinika Hematologii Nowotworów Krwi i Transplantacji Szpiku ul. L. Pasteura 4 Wrocław Poland 50-367

Study participating centre Szpital Kliniczny im. Przemienienia Panskiego Uniwersytetu Medycznego im. K. Marcinkowskiego w Poznaniu Oddzial Hematologii i Transplantacji Szpiku Augustyna Szamarzewskiego 84 Poznan Poland 60-569

Study participating centre University of Alabama at Birmingham 354 A Learning Resource Center, 1714 9 th Birmingham United States of America 35294

Study participating centre Icahn School of Medicine at Mount Sinai One Gustave L. Levy Place Box 1079 New York United States of America 10029

Study participating centre Rutgers Cancer Institute of New Jersey 195 Little Albany Street New Brunswick United States of America 08901

Study participating centre Hospital Universitario Fundación Jiménez Díaz Oncology & Hematology Madrid Spain 28040

Study participating centre Institut Català d'Oncologia-Hospital Germans Trias i Pujol Clinical Hematology Barcelona Spain 08916

Study participating centre Hospital Clinic de Barcelona Department o Hematology Barcelona Spain 08036

Study participating centre Hospital Clinico Valencia Hematology Valencia Spain 46010

Sponsor information

Organisation

Genentech, Inc

Sponsor details

1 DNA Way South San Francisco United States of America 94080 +1 (0)888 662 6728 global-roche-genentech-trials@gene.com

Sponsor type

Industry

Website https://www.roche.com/about/business/roche_worldwide.htm

Funder(s)

Funder type Industry

Funder Name

Genentech

Alternative Name(s) Genentech, THE GENENTECH FOUNDATION, GF

Funding Body Type

Private sector organisation

Funding Body Subtype Trusts, charities, foundations (both public and private)

Location United States of America

Results and Publications

Publication and dissemination plan

Planned publication in an ICMJE member journal. No additional study documents will be made available.

Intention to publish date

16/12/2024

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 participant-level data not being a regulatory requirement for Phase I studies.

IPD sharing plan summary

Not expected to be made available