A Safety, Efficacy and Pharmacokinetic Study of BTCT4465A (Mosunetuzumab) as a Single Agent and Combined with Atezolizumab in Non-Hodgkin's Lymphoma (NHL) and Chronic Lymphocytic Leukemia (CLL)

Estado	**Tipo de Participantes**	**Rangos de Edad**
Reclutando	No aportado	Mayores de 64 , Adultos (18-64 años)
Género	**Fases**	**Participantes esperados**
Ambos	Fase I , Fase II	648
Resultados	**Bajo nivel intervención**	**Enfermedad rara**
Sin resultados	No	No
Cobertura geográfica	**Ámbitos del ensayo**	**Terapia avanzada**
Sin determinar	seguridad, eficacia, farmacocinética	NO

Información

Identificador
2023-506820-10-00 (CTIS)

Cod. Protocolo
GO29781

Transicionado 2017-003267-35

Área terapéutica
Enfermedades [C] - Cáncer [C04]|

Enfermedad investigada
B-Cell Malignancies

Título Científico
An Open-Label, Multicenter, Phase I/II Trial Evaluating the Safety, Efficacy, and Pharmacokinetics of Escalating Doses of Mosunetuzumab (BTCT4465A) as a Single Agent and Combined with Atezolizumab in Patients with

Relapsed or Refractory B-Cell Non-Hodgkins Lymphoma and Chronic Lymphocytic Leukemia

Justificación

No aportado

Objetivo Principal

In pre-specified cohorts: To evaluate safety, tolerability, and pharmacokinetics of mosunetuzumab as a single agent and in combination with atezolizumab in patients with relapsed or refractory (R/R) non-Hodgkins lymphoma (NHL) and chronic lymphocytic leukemia (CLL) To determine maximum tolerated dose (MTD) and dose-limiting toxicities (DLTs) of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL and CLL To identify, on the basis of safety, PK, and pharmacodynamic data, recommended Phase II dose(s) (RP2D) and schedule(s) of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL and CLL To evaluate efficacy of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL, as measured by IRF-assessed CR rate according to standard NHL response criteria To evaluate PK non-inferiority (PKNI) of mosunetuzumab subcutaneous (SC) compared to the reference mosunetuzumab Intravenous (IV) RP2D in patients with R/R FL with at least two prior lines of systemic therapy

Variables de Evaluación Primaria

1. Safety: Incidence and nature of dose-limiting toxicity (DLTs) when mosunetuzumab is given as a single agent IV or SC
2. Safety: Incidence and nature of DLTs when mosunetuzumab is given in combination with atezolizumab
3. Efficacy: Independent Review Facility (IRF)-assessed complete response (CR) rate, defined as the proportion of patients whose best overall response is a CR based upon IRF assessment using standard criteria for NHL
4. PK: Serum concentration of mosunetuzumab at specified timepoints
5. PK: The following PK parameters (if data allows): AUC, Cmax, Cmin, CL, and Vss
6. PK: Other parameters such as accumulation ratio, half-life, and dose proportionality may also be calculated
7. PKNI: Observed Cycle 3 (i.e., pre-dose Cycle 4) serum Ctrough concentration (CtroughCYC3_OBS)
8. PKNI: Cumulative AUC over 084 days (AUC0-84)

Momentos temporales de evaluación primaria

No aportado

Objetivo Secundario

To assess the incidence of anti-drug antibodies (ADAs) to mosunetuzumab and atezolizumab (when given in combination with mosunetuzumab), and their relationship to relevant clinical outcomes
Where evaluation of efficacy of mosunetuzumab as single agent and in combination with atezolizumab is not a primary objective as described above, to make a preliminary assessment of the anti-tumor activity of mosunetuzumab, as a single agent and in combination with atezolizumab, in patients with R/R NHL and CLL
To assess impact of treatment- and disease-related symptoms on health-related quality of life (HRQoL) and health status in the NHL expansion cohorts

To further assess the PKNI of mosunetuzumab SC RP2D compared to the reference mosunetuzumab IV RP2D in patients with R/R FL with at least two prior lines of systemic therapy based on additional PK parameters

Variables de Evaluación Secundaria

1. Safety: Incidence, nature, and severity of adverse events (AEs)
2. Safety: Incidence of anti-drug antibodies (ADAs) against mosunetuzumab and atezolizumab, and their relationship to clinical outcomes
3. Safety: Changes in vital signs and clinical laboratory values
4. Efficacy: Investigator-assessed CR rate, defined as the proportion of patients whose best overall response is a CR based upon investigator assessment using standard criteria for NHL
5. Efficacy: IRF and investigator assessed objective response rate (ORR), defined as the proportion of patients whose best overall response is a PR or CR using standard criteria for NHL
6. Efficacy: IRF and investigator assessed duration of complete response, defined as the time from the initial occurrence of a documented CR until documented disease progression or death due to any cause, whichever occurs first, using standard criteria for NHL
7. Efficacy: IRF and investigator assessed duration of response, defined as the time from the initial occurrence of a documented PR or CR until documented disease progression or death due to any cause, whichever occurs first, using standard criteria for NHL
8. Efficacy: IRF and investigator assessed progression-free survival (PFS), defined as the time from the first study treatment to the first occurrence of disease progression or death from any cause, whichever occurs first, using standard criteria for NHL
9. Efficacy: Overall survival (OS), defined as the time from the first study treatment to the date of death from any cause
10. PRO: The HRQoL and health status measures that will be used in NHL expansion cohorts to evaluate PROs are as follows: Summary statistics and change from baseline in HRQoL based on EORTC QLQ C30 Summary statistics and change from baseline in disease-related symptoms based on the FACT-Lym subscale Descriptive results of the EQ-5D-5L data during patients participation in the study
11. Pharmacokinetic Non-Inferiority (PKNI): Observed Cycle 2 (i.e., pre-dose Cycle 3) serum Ctrough concentration (CtroughCYC2_OBS)
12. PKNI: Modeled Cycle 2 (i.e., pre-dose Cycle 3) serum Ctrough concentration (CtroughCYC2), derived using EBEs or virtual trial simulations, data permitting
13. PKNI: Modeled Cycle 3 (pre-dose Cycle 4) serum Ctrough concentration (CtroughCYC3), derived using EBEs or virtual trial simulations, data permitting
14. PKNI: Modeled AUC at steady state (AUCSS), as approximated by AUC of Cycle 4 using EBEs or virtual trial simulations, data permitting

Momentos temporales de evaluación secundaria

No aportado

Criterios de Inclusión

1. Agreement to provide tumor samples as follows: For NHL patients with more than one bi-dimensionally measurable lesion (>1.5 cm in the largest dimension for nodal lesions, or >1.0 cm in its largest dimension for extranodal lesions by CT scan or MRI), agreement to undergo biopsy from a safely accessible site per investigator determination. Biopsies obtained at any time between the last dose of last prior anti-cancer therapy and the first dose of mosunetuzumab may be acceptable. For patients with CLL: -Bone marrow biopsy and aspirate -Must have a circulating lymphocyte count of >5000/micro Litre blood 2. Eastern Cooperative Oncology Group (ECOG)

performance status of 0 or 1 and life expectancy of at least 12 weeks 3. Histologically-documented relapsed or refractory NHL or CLL expected to express the cluster of differentiation 20 (CD20) antigen and for which there is no available therapy expected to improve survival 4. NHL patients only: must have at least one bi-dimensionally measurable lesion (>1.5 cm in its largest dimension for nodal lesions, or >1.0 cm in its largest dimension for extranodal lesions by CT or MRI scan) 5. Adequate hepatic, hematologic, and renal function

Criterios de Exclusión

1. Prior treatment with systemic immunotherapeutic agents for which the mechanism of action involves T cells within 12 weeks or five half-lives of the drug, whichever is shorter, before first mosunetuzumab administration - Treatment with any chemotherapeutic agent, or treatment with any other anti-cancer agent (investigational or otherwise) within 4 weeks or five half-lives of the drug, whichever is shorter, prior to first mosunetuzumab administration - Treatment with radiotherapy within 2 weeks prior to the first mosunetuzumab administration. - Received systemic immunosuppressive medications (with exceptions) within 2 weeks prior to first mosunetuzumab administration
2. Prior anti-lymphoma treatment with monoclonal antibodies, radioimmunoconjugates or antibody-drug conjugates within 4 weeks before first mosunetuzumab administration Autologous SCT within 100 days prior to first mosunetuzumab administration Prior treatment with CAR-T therapy within 30 days before first mosunetuzumab administration
3. Prior allogeneic stem cell transplantation (SCT) Prior solid organ transplantation
4. Patients with history of macrophage activation syndrome/hemophagocytic lymphohistiocytosis or confirmed progressive multifocal leukoencephalopathy (PML)
5. History of central nervous system (CNS) lymphoma or other CNS disease, autoimmune disease, other malignancy, significant cardiovascular disease, significant active pulmonary disease, known active infection (or any major episode of infection requiring treatment with IV antibiotics or hospitalization within 4 weeks prior to first mosunetuzumab administration), or major surgery within 4 weeks prior to first mosunetuzumab administration
6. Administration of a live, attenuated vaccine within 4 weeks before first dose of study treatment or anticipation that such a live attenuated vaccine will be required during the study

Calendario

(Última actualización: 22/09/2025)

Autorización	Inicio de Ensayo	Inclusión Primer Paciente	Interrumpido	Reiniciado
21/05/2018	14/06/2018	03/08/2018	No aportado	No aportado

Fin de reclutamiento	Fin prematuro (España)	Fin prematuro (Global)	Fin del ensayo en España	Fin del ensayo global
No aportado	No aportado	No aportado	No aportado	No aportado

Promotor

Genentech Inc. United States

1 Dna Way

Contact Person

US Program Manager Product Development Regulatory

4161681111

EU.CTSubmissions@roche.com

Monetary support: N/A

Tipo de promotor: Comercial

Ceim

CEIm de la Comunidad Foral de Navarra

C/ Irunlarrea, 3 31008 Pamplona

ceic@cfnavarra.es

Centros

Activo (31/05/2018)

CLINICA UNIVERSIDAD DE NAVARRA

Pamplona/Iruña

NAVARRA

Servicio de Oncología Médica

No iniciado (--/--/----)

Clinica Universidad De Navarra

Pamplona

NAVARRA

Hematology

No iniciado (--/--/----)

Hospital Universitari Vall D Hebron

Barcelona

BARCELONA

Hematology

Activo (31/05/2018)

Hospital Universitari Vall d'Hebron

Barcelona

BARCELONA

Servicio de Oncología Médica

Activo (30/01/2019)

HOSPITAL UNIVERSITARIO DE SALAMANCA

Salamanca

SALAMANCA

Servicio de Oncología Médica

No iniciado (--/--/----)

Hospital Universitario De Salamanca

Salamanca

SALAMANCA

Hematology

Activo (20/11/2018)

HOSPITAL UNIVERSITARIO LA PAZ

Madrid

MADRID

Servicio Oncología Médica

No iniciado (--/--/----)

Hospital Universitario La Paz

Madrid

MADRID

Hematology

Medicamentos

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Principios Activos: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Principios Activos: N/A

Experimental

RoActemra 20 mg/mL concentrate for solution for infusion
SOLUTION FOR INFUSION
INTRAVENIOUS INFUSION

Código ATC: L04AC07 - TOCILIZUMAB

Principios Activos: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INJECTION
SUBCUTANEOUS INJECTION

-

Principios Activos: N/A

Experimental

Tecentriq 1 200 mg concentrate for solution for infusion
SOLUTION FOR INFUSION
INTRAVENIOUS INFUSION

Código ATC: L01FF05 - ATEZOLIZUMAB

Principios Activos: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Principios Activos: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INJECTION
SUBCUTANEOUS INJECTION

-

Principios Activos: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Principios Activos: N/A

Experimental

Sin resultados

A Safety, Efficacy and Pharmacokinetic Study of BTCT4465A (Mosunetuzumab) as a Single Agent and Combined with Atezolizumab in Non-Hodgkin's Lymphoma (NHL) and Chronic Lymphocytic Leukemia (CLL)

State	**Type of participants**	**Age Ranges**
Recruiting	Not provided	Older than 64 , Adults (18-64 years)
Gender	**Phases**	**Expected Participants**
Both	Phase I , Phase II	648
Results	**Low level of intervention**	**Rare disease**
No results	No	No
Geographic coverage	**Areas of the study**	**Advanced therapy**
Undetermined	safety, effectiveness, pharmacokinetics	NO

Information

Identifier
2023-506820-10-00 (CTIS)

Protocol Code
GO29781

Transitioned 2017-003267-35

Therapeutic area
Diseases [C] - Cancer [C04]|

Investigated Disease
B-Cell Malignancies

Scientific Title
An Open-Label, Multicenter, Phase I/II Trial Evaluating the Safety, Efficacy, and Pharmacokinetics of Escalating Doses of Mosunetuzumab (BTCT4465A) as a Single Agent and Combined with Atezolizumab in Patients with

Relapsed or Refractory B-Cell Non-Hodgkins Lymphoma and Chronic Lymphocytic Leukemia

Rationale

Not provided

Main Objective

In pre-specified cohorts: To evaluate safety, tolerability, and pharmacokinetics of mosunetuzumab as a single agent and in combination with atezolizumab in patients with relapsed or refractory (R/R) non-Hodgkins lymphoma (NHL) and chronic lymphocytic leukemia (CLL) To determine maximum tolerated dose (MTD) and dose-limiting toxicities (DLTs) of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL and CLL To identify, on the basis of safety, PK, and pharmacodynamic data, recommended Phase II dose(s) (RP2D) and schedule(s) of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL and CLL To evaluate efficacy of mosunetuzumab as a single agent and in combination with atezolizumab in patients with R/R NHL, as measured by IRF-assessed CR rate according to standard NHL response criteria To evaluate PK non-inferiority (PKNI) of mosunetuzumab subcutaneous (SC) compared to the reference mosunetuzumab Intravenous (IV) RP2D in patients with R/R FL with at least two prior lines of systemic therapy

Primary Endpoints

1. Safety: Incidence and nature of dose-limiting toxicity (DLTs) when mosunetuzumab is given as a single agent IV or SC
2. Safety: Incidence and nature of DLTs when mosunetuzumab is given in combination with atezolizumab
3. Efficacy: Independent Review Facility (IRF)-assessed complete response (CR) rate, defined as the proportion of patients whose best overall response is a CR based upon IRF assessment using standard criteria for NHL
4. PK: Serum concentration of mosunetuzumab at specified timepoints
5. PK: The following PK parameters (if data allows): AUC, Cmax, Cmin, CL, and Vss
6. PK: Other parameters such as accumulation ratio, half-life, and dose proportionality may also be calculated
7. PKNI: Observed Cycle 3 (i.e., pre-dose Cycle 4) serum Ctrough concentration (CtroughCYC3_OBS)
8. PKNI: Cumulative AUC over 084 days (AUC0-84)

Temporary moments of secondary assessment

Not provided

Secondary Objective

To assess the incidence of anti-drug antibodies (ADAs) to mosunetuzumab and atezolizumab (when given in combination with mosunetuzumab), and their relationship to relevant clinical outcomes
Where evaluation of efficacy of mosunetuzumab as single agent and in combination with atezolizumab is not a primary objective as described above, to make a preliminary assessment of the anti-tumor activity of mosunetuzumab, as a single agent and in combination with atezolizumab, in patients with R/R NHL and CLL
To assess impact of treatment- and disease-related symptoms on health-related quality of life (HRQoL) and health status in the NHL expansion cohorts

To further assess the PKNI of mosunetuzumab SC RP2D compared to the reference mosunetuzumab IV RP2D in patients with R/R FL with at least two prior lines of systemic therapy based on additional PK parameters

Secondary Endpoints

1. Safety: Incidence, nature, and severity of adverse events (AEs)
2. Safety: Incidence of anti-drug antibodies (ADAs) against mosunetuzumab and atezolizumab, and their relationship to clinical outcomes
3. Safety: Changes in vital signs and clinical laboratory values
4. Efficacy: Investigator-assessed CR rate, defined as the proportion of patients whose best overall response is a CR based upon investigator assessment using standard criteria for NHL
5. Efficacy: IRF and investigator assessed objective response rate (ORR), defined as the proportion of patients whose best overall response is a PR or CR using standard criteria for NHL
6. Efficacy: IRF and investigator assessed duration of complete response, defined as the time from the initial occurrence of a documented CR until documented disease progression or death due to any cause, whichever occurs first, using standard criteria for NHL
7. Efficacy: IRF and investigator assessed duration of response, defined as the time from the initial occurrence of a documented PR or CR until documented disease progression or death due to any cause, whichever occurs first, using standard criteria for NHL
8. Efficacy: IRF and investigator assessed progression-free survival (PFS), defined as the time from the first study treatment to the first occurrence of disease progression or death from any cause, whichever occurs first, using standard criteria for NHL
9. Efficacy: Overall survival (OS), defined as the time from the first study treatment to the date of death from any cause
10. PRO: The HRQoL and health status measures that will be used in NHL expansion cohorts to evaluate PROs are as follows: Summary statistics and change from baseline in HRQoL based on EORTC QLQ C30 Summary statistics and change from baseline in disease-related symptoms based on the FACT-Lym subscale Descriptive results of the EQ-5D-5L data during patients participation in the study
11. Pharmacokinetic Non-Inferiority (PKNI): Observed Cycle 2 (i.e., pre-dose Cycle 3) serum Ctrough concentration (CtroughCYC2_OBS)
12. PKNI: Modeled Cycle 2 (i.e., pre-dose Cycle 3) serum Ctrough concentration (CtroughCYC2), derived using EBEs or virtual trial simulations, data permitting
13. PKNI: Modeled Cycle 3 (pre-dose Cycle 4) serum Ctrough concentration (CtroughCYC3), derived using EBEs or virtual trial simulations, data permitting
14. PKNI: Modeled AUC at steady state (AUCSS), as approximated by AUC of Cycle 4 using EBEs or virtual trial simulations, data permitting

Temporary moments of secondary assessment

Not provided

Inclusion criteria

1. Agreement to provide tumor samples as follows: For NHL patients with more than one bi-dimensionally measurable lesion (>1.5 cm in the largest dimension for nodal lesions, or >1.0 cm in its largest dimension for extranodal lesions by CT scan or MRI), agreement to undergo biopsy from a safely accessible site per investigator determination. Biopsies obtained at any time between the last dose of last prior anti-cancer therapy and the first dose of mosunetuzumab may be acceptable. For patients with CLL: -Bone marrow biopsy and aspirate -Must have a circulating lymphocyte count of >5000/micro Litre blood 2. Eastern Cooperative Oncology Group (ECOG)

performance status of 0 or 1 and life expectancy of at least 12 weeks 3. Histologically-documented relapsed or refractory NHL or CLL expected to express the cluster of differentiation 20 (CD20) antigen and for which there is no available therapy expected to improve survival 4. NHL patients only: must have at least one bi-dimensionally measurable lesion (>1.5 cm in its largest dimension for nodal lesions, or >1.0 cm in its largest dimension for extranodal lesions by CT or MRI scan) 5. Adequate hepatic, hematologic, and renal function

Exclusion criteria

1. Prior treatment with systemic immunotherapeutic agents for which the mechanism of action involves T cells within 12 weeks or five half-lives of the drug, whichever is shorter, before first mosunetuzumab administration - Treatment with any chemotherapeutic agent, or treatment with any other anti-cancer agent (investigational or otherwise) within 4 weeks or five half-lives of the drug, whichever is shorter, prior to first mosunetuzumab administration - Treatment with radiotherapy within 2 weeks prior to the first mosunetuzumab administration. - Received systemic immunosuppressive medications (with exceptions) within 2 weeks prior to first mosunetuzumab administration
2. Prior anti-lymphoma treatment with monoclonal antibodies, radioimmunoconjugates or antibody-drug conjugates within 4 weeks before first mosunetuzumab administration Autologous SCT within 100 days prior to first mosunetuzumab administration Prior treatment with CAR-T therapy within 30 days before first mosunetuzumab administration
3. Prior allogeneic stem cell transplantation (SCT) Prior solid organ transplantation
4. Patients with history of macrophage activation syndrome/hemophagocytic lymphohistiocytosis or confirmed progressive multifocal leukoencephalopathy (PML)
5. History of central nervous system (CNS) lymphoma or other CNS disease, autoimmune disease, other malignancy, significant cardiovascular disease, significant active pulmonary disease, known active infection (or any major episode of infection requiring treatment with IV antibiotics or hospitalization within 4 weeks prior to first mosunetuzumab administration), or major surgery within 4 weeks prior to first mosunetuzumab administration
6. Administration of a live, attenuated vaccine within 4 weeks before first dose of study treatment or anticipation that such a live attenuated vaccine will be required during the study

Calendar

(Last Update: 22/09/2025)

Authorization	Start of Trial	First patient inclusion	Halted	Restarted
21/05/2018	14/06/2018	03/08/2018	Not aported	Not aported

End of recruitment	Premature end (Spain)	Premature End (Global)	Trial end (Spain)	Trial end (Global)
Not aported	Not aported	Not aported	Not aported	Not aported

Sponsor

Genentech Inc. United States

1 Dna Way

Contact Person

US Program Manager Product Development Regulatory

4161681111

EU.CTSubmissions@roche.com

Monetary support: N/A

Sponsor type: Commercial

Ceim

CEIm de la Comunidad Foral de Navarra

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ceic@cfnavarra.es

Sites

Active (31/05/2018)

CLINICA UNIVERSIDAD DE NAVARRA

Pamplona/Iruña

NAVARRA

Servicio de Oncología Médica

not initialized (--/--/----)

Clinica Universidad De Navarra

Pamplona

NAVARRA

Hematology

not initialized (--/--/----)

Hospital Universitari Vall D Hebron

Barcelona

BARCELONA

Hematology

Active (31/05/2018)

Hospital Universitari Vall d'Hebron

Barcelona

BARCELONA

Servicio de Oncología Médica

Active (30/01/2019)

HOSPITAL UNIVERSITARIO DE SALAMANCA

Salamanca

SALAMANCA

Servicio de Oncología Médica

not initialized (--/--/----)

Hospital Universitario De Salamanca

Salamanca

SALAMANCA

Hematology

Active (20/11/2018)

HOSPITAL UNIVERSITARIO LA PAZ

Madrid

MADRID

Servicio Oncología Médica

not initialized (--/--/----)

Hospital Universitario La Paz

Madrid

MADRID

Hematology

Medication

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Active Principles: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Active Principles: N/A

Experimental

RoActemra 20 mg/mL concentrate for solution for infusion
SOLUTION FOR INFUSION
INTRAVENIOUS INFUSION

ATC code: L04AC07 - TOCILIZUMAB

Active Principles: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INJECTION
SUBCUTANEOUS INJECTION

-

Active Principles: N/A

Experimental

Tecentriq 1 200 mg concentrate for solution for infusion
SOLUTION FOR INFUSION
INTRAVENIOUS INFUSION

ATC code: L01FF05 - ATEZOLIZUMAB

Active Principles: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Active Principles: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INJECTION
SUBCUTANEOUS INJECTION

-

Active Principles: N/A

Experimental

Mosunetuzumab
SOLUTION FOR INFUSION
INTRAVENOUS INFUSION

-

Active Principles: N/A

Experimental

No results