



A Study to Investigate Tolerability and Efficacy of Asciminib (Oral) Versus Nilotinib (Oral) in Adult Participants (≥ 18 Years of Age) With Newly Diagnosed Philadelphia Chromosome Positive Chronic Myelogenous Leukemia in Chronic Phase (Ph+ CML-CP)

11/09/2025 11:18:36

Main Information

Primary registry identifying number

LBCTR2023025267

Protocol number

CABL001J12302

MOH registration number

Study registered at the country of origin

Yes

Study registered at the country of origin: Specify

Type of registration

Prospective

Type of registration: Justify

N/A

Date of registration in national regulatory agency

Primary sponsor

Novartis Pharma AG

Primary sponsor: Country of origin

Novartis Pharma AG

Date of registration in primary registry

17/03/2023

Date of registration in national regulatory agency

Public title

A Study to Investigate Tolerability and Efficacy of Asciminib (Oral) Versus Nilotinib (Oral) in Adult Participants (≥ 18 Years of Age) With Newly Diagnosed Philadelphia Chromosome Positive Chronic Myelogenous Leukemia in Chronic Phase (Ph+ CML-CP)

Acronym

Scientific title

A Phase IIIb, Multi-center, Open-label, Randomized Study of Tolerability and Efficacy of Oral Asciminib Versus Nilotinib in Patients With Newly Diagnosed Philadelphia Chromosome Positive Chronic Myelogenous Leukemia in Chronic Phase

Acronym

ASC4START

Brief summary of the study: English

The study is designed to compare the tolerability of asciminib versus nilotinib for the treatment of newly diagnosed, previously untreated patients with Positive Chronic Myelogenous Leukemia in Chronic Phase (Ph+ CML-CP)

Brief summary of the study: Arabic

ب حول تحمل وفعالية أسكيمينيب الفموي مقابل نيلوتينيب لدى المرضى 3دراسة متعددة المراكز ومفتوحة التسمية وعشوائية التوزيع في المرحلة الذين تمّ تشخيص إصابتهم حديثاً بسرطان الدم النقوي المزمن الإيجابي لكروموسوم فيلادلفيا في المرحلة المزمنة

Health conditions/problem studied: Specify

Philadelphia Chromosome-Positive Chronic Myeloid Leukemia





Interventions: Specify

Drug: Asciminib
Asciminib 80 mg QD administered under fasting conditions
Other Name: ABL001
Drug: Nilotinib
Nilotinib 300 mg BID administered under fasting conditions

Key inclusion and exclusion criteria: Inclusion criteria

Inclusion Criteria:

- 1- Patients with CML-CP within 3 months of diagnosis.
- 2- Diagnosis of CML-CP (ELN 2020 criteria) with cytogenetic confirmation of the Philadelphia chromosome

Documented chronic phase CML will meet all the below criteria Baccarani et al 2013:

- < 15% blasts in peripheral blood and bone marrow,
- < 30% blasts plus promyelocytes in peripheral blood and bone marrow,
- < 20% basophils in the peripheral blood,
- PLT count $\geq 100 \times 10^9/L$ ($\geq 100,000/mm^3$), except treatment induced thrombocytopenia
- No evidence of extramedullary leukemic involvement, with the exception of hepatosplenomegaly.
- 3- Evidence of typical BCR::ABL1 transcript [e14a2 and/or e13a2] which is amenable to standardized RQ-PCR quantification by the central laboratory assessment.
- 4- ECOG performance status of 0 or 1.
- 5- Adequate end organ function as defined by:

Total bilirubin (TBL) < 3 x ULN; patients with Gilbert's syndrome may only be included if TBL ≤ 3.0 x ULN or direct bilirubin ≤ 1.5 x ULN, CrCl ≥ 30 mL/min as calculated using Cockcroft-Gault formula, Serum lipase ≤ 1.5 x ULN. For serum lipase > ULN - ≤ 1.5 x ULN, value must be considered not clinically significant and not associated with risk factors for acute pancreatitis.

- 6- Patients must have the following laboratory values within normal limits or corrected to within normal limits with supplements prior to randomization:

Potassium (potassium increase of up to 6.0 mmol/L is acceptable if associated with CrCl* ≥ 90 mL/min),
Total calcium (corrected for serum albumin); (calcium increase of up to 12.5 mg/dl or 3.1 mmol/L is acceptable if associated with CrCl* ≥ 90 mL/min),
Magnesium (magnesium increase of up to 3.0 mg/dL or 1.23 mmol/L if associated with CrCl* ≥ 90 mL/min),
For patients with mild to moderate renal impairment (CrCl* ≥ 30 mL/min and <90 mL/min) - potassium, total calcium (corrected for serum albumin) and magnesium should be within normal limits or corrected to within normal limits with supplements prior to randomization.

CrCl as calculated using Cockcroft-Gault formula.
Other protocol-defined Inclusion/exclusion criteria will apply

Key inclusion and exclusion criteria: Gender

Both

Key inclusion and exclusion criteria: Specify gender

Key inclusion and exclusion criteria: Age minimum

18

Key inclusion and exclusion criteria: Age maximum

99

Key inclusion and exclusion criteria: Exclusion criteria

Exclusion Criteria:

- 1- Previous treatment of CML with any other anticancer agents including chemotherapy and/or biologic agents or prior stem cell transplant, with the exception of hydroxyurea and/or anagrelide.
- 2- Known cytopathologically confirmed CNS infiltration (in absence of suspicion of CNS involvement, lumbar puncture not required).
- 3- Impaired cardiac function or cardiac repolarization abnormality including but not limited to any one of the following:

History of myocardial infarction (MI), angina pectoris, coronary artery bypass graft (CABG) within 6 months prior to starting study treatment.
Clinically significant cardiac arrhythmias (e.g., ventricular tachycardia), complete left bundle branch block, high-grade AV block (e.g., bifascicular block, Mobitz type II and third degree AV block).
QTcF ≥ 450 ms (male patients), ≥ 460 ms (female patients) on the average of three serial baseline ECG (using the QTcF formula). If QTcF ≥ 450 ms and electrolytes are not within normal ranges, electrolytes should be corrected and then the patient re-screened for QTcF.
Long QT syndrome, family history of idiopathic sudden death or congenital long QT syndrome, or any of the following:
Risk factors for Torsades de Pointes (TdP) including uncorrected hypokalemia or hypomagnesemia, history of cardiac failure, or history of clinically significant/symptomatic bradycardia.
Concomitant medication(s) with a "Known risk of Torsades de Pointes" per www.crediblemeds.org that cannot be discontinued or replaced 7 days prior to starting study drug by safe alternative medication.
Inability to determine the QTcF interval.- 4- Severe and/or uncontrolled concurrent medical disease that in the opinion of the



Investigator could cause unacceptable safety risks or compromise compliance with the protocol (e.g. uncontrolled diabetes, active or uncontrolled infection; uncontrolled arterial or pulmonary hypertension, uncontrolled clinically significant hyperlipidemia).

5- History of significant congenital or acquired bleeding disorder unrelated to cancer.

6- Major surgery within 4 weeks prior to study entry or patients who have not recovered from prior surgery.

7- History of other active malignancy within 3 years prior to study entry with the exception of previous or concomitant basal cell skin cancer and previous carcinoma in situ treated curatively.

8- History of acute pancreatitis within 1 year prior to randomization or medical history of chronic pancreatitis.

9- History of chronic liver disease leading to severe hepatic impairment, or ongoing acute liver disease.

10- Known history of chronic Hepatitis B (HBV), or chronic Hepatitis C (HCV) infection. Testing for Hepatitis B surface antigen (HBs Ag) and Hepatitis B core antibody (HBc Ab/anti HBc) will be performed at screening. If anti-HBc is positive, HBV-DNA evaluation will be carried out at screening. A patient having positive HBV-DNA will not be enrolled in the study. Also, a patient with positive HBsAg will not be enrolled in the study. HCV Ab testing will also be performed at screening. For details on the criteria see Appendix 4.

11- History of Human Immunodeficiency Virus (HIV) unless well-controlled on a stable dose of anti-retroviral therapy at the time of screening.

Other protocol-defined Inclusion/exclusion criteria will apply

Type of study

Interventional

Type of intervention

Pharmaceutical

Type of intervention: Specify type

N/A

Trial scope

Therapy

Trial scope: Specify scope

N/A

Study design: Allocation

Randomized controlled trial

Study design: Masking

Open (masking not used)

Study design: Control

Active

Study phase

3

Study design: Purpose

Treatment

Study design: Specify purpose

N/A

Study design: Assignment

Parallel

Study design: Specify assignment

N/A

IMP has market authorization

No

IMP has market authorization: Specify

Name of IMP

Asciminib

Year of authorization

Month of authorization

Type of IMP

Immunological

Pharmaceutical class

tyrosine kinase inhibitor (TKI)

Therapeutic indication

Philadelphia Chromosome-Positive Chronic Myeloid Leukemia

Therapeutic benefit

Treatment

Study model

N/A

Study model: Specify model

N/A

Time perspective

N/A

Time perspective: Specify perspective

N/A

Target follow-up duration
Number of groups/cohorts
Biospecimen retention

Samples with DNA**

Target sample size

5

Date of first enrollment: Type

Anticipated

Date of study closure: Type

Anticipated

Recruitment status

Pending

Date of completion
IPD sharing statement plan

Yes

Additional data URL

<https://clinicaltrials.gov/ct2/show/record/NCT05456191?term=CABL001J12302&draw=2&rank=1>

Study model: Explain model

N/A

Time perspective: Explain time perspective

N/A

Target follow-up duration: Unit
Biospecimen description

Samples will be shipped to ICON Specialty Lab

Actual enrollment target size
Date of first enrollment: Date

17/04/2023

Date of study closure: Date

15/03/2027

Recruitment status: Specify
IPD sharing statement description

Novartis is committed to sharing with qualified external researchers, access to patient-level data and supporting clinical documents from eligible studies. These requests are reviewed and approved by an independent review panel on the basis of scientific merit. All data provided is anonymized to respect the privacy of patients who have participated in the trial in line with applicable laws and regulations.

This trial data availability is according to the criteria and process described on www.clinicalstudydatarequest.com



Admin comments

Trial status

Approved

Secondary Identifying Numbers

| Full name of issuing authority | Secondary identifying number |
|--------------------------------|------------------------------|
| Clinicaltrials.gov | NCT05147220 |

Sources of Monetary or Material Support

| Name |
|--------------------|
| Novartis Pharma AG |

Secondary Sponsors

| Name |
|------|
| NA |

Contact for Public/Scientific Queries

| Contact type | Contact full name | Address | Country | Telephone | Email | Affiliation |
|--------------|-------------------|------------|---------|--------------------------|-------------------------------|----------------------------------------------|
| Public | Ali Bararbachli | Beirut | Lebanon | +961 3 612434 | bazarbac@aub.edu.lb | American University of Beirut Medical Center |
| Scientific | Hind Khairallah | Sin El Fil | Lebanon | 009611512 002 Ext. 271 E | hind.khairallah@fattal.com.lb | Khalil Fattal et Fils s.a.l |

Centers/Hospitals Involved in the Study

| Center/Hospital name | Name of principles investigator | Principles investigator speciality | Ethical approval |
|----------------------------------------------|---------------------------------|------------------------------------|------------------|
| American University of Beirut Medical Center | Ali Bazarbachli | Oncology - Hematology | Approved |



Ethics Review

| Ethics approval obtained | Approval date | Contact name | Contact email | Contact phone |
|----------------------------------------------|---------------|--------------|-----------------|-------------------------------|
| American University of Beirut Medical Center | 23/11/2022 | Rami Mahfouz | rm11@aub.edu.lb | 961 (0) 1 350 000 ext:5445 |

Countries of Recruitment

| Name |
|--------------------------|
| France |
| Czech Republic |
| Germany |
| Hungary |
| Bulgaria |
| Slovakia |
| Canada |
| Greece |
| Italy |
| Malaysia |
| Netherlands |
| Oman |
| South Africa |
| Switzerland |
| United States of America |

Health Conditions or Problems Studied

| Condition | Code | Keyword |
|-----------------------------------------------------------|-----------------------------------|---------|
| Philadelphia Chromosome-Positive Chronic Myeloid Leukemia | Chronic myeloid leukaemia (C92.1) | CML |



Interventions

| Intervention | Description | Keyword |
|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Consenting, IMP administration, Laboratory testing, Imaging | Consenting, IMP administration, Laboratory testing, Imaging | Consenting, IMP administration, Laboratory testing, Imaging |

Primary Outcomes

| Name | Time Points | Measure |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time to discontinuation of study treatment due to adverse event (TTDAE) | From date of first dose to date of treatment discontinuation due to AE, assessed up to 4.5 years | TTDAE is defined as the time from the date of first dose of study treatment to the date of discontinuation of study treatment due to adverse event (AE) |

Key Secondary Outcomes

| Name | Time Points | Measure |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Percentage of participants with Major Molecular response (MMR) at scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MMR will be assessed using fusion gene of the BCR and ABL genes (BCR-ABL) transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants with MMR at each time point will be assessed |
| Percentage of participants with Major Molecular response (MMR) by scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MMR will be assessed using BCR-ABL transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants who meet the criteria for having achieved the endpoint (MMR) at or before the specified visit will be calculated |
| Percentage of participants with MR4.0 at scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MR4.0 will be assessed using BCR-ABL transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants with MR4.0 at each time point will be assessed |
| Percentage of participants with MR4.0 by scheduled data collection time points | Screening, week 4, week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MR4.0 will be assessed using BCR-ABL transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants who meet the criteria for having achieved the endpoint (MR4.0) at or before the specified visit will be calculated |
| Percentage of participants with MR4.5 at scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MR4.5 will be assessed using BCR-ABL transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants with MR4.5 at each time point will be assessed |
| Percentage of participants with MR4.5 by scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | MR4.5 will be assessed using BCR-ABL transcript levels measured by realtime quantitative polymerase chain reaction. The percentage of participants who meet the criteria for having achieved the endpoint (MR4.5) at or before the specified visit will be calculated |
| Percentage of participants with Complete Hematological response (CHR) at scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | Hematologic response will be assessed by complete blood count and physical examination at each visit. The percentage of participants with CHR at each time point will be assessed |



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|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Percentage of participants with Complete Hematological response (CHR) by scheduled data collection time points | Screening, Week 4, Week 12 and thereafter every 12 weeks until End of Treatment (EOT) and EOT, assessed up to approximately 4.5 years | Hematologic response will be assessed by complete blood count and physical examination at each visit. The percentage of participants who meet the criteria for having achieved the endpoint (CHR) at or before the specified visit will be calculated |
| Percentage of participants with BCR::ABL1 ratio $\leq 1\%$ by Week 48 and Week 96 | Week 48 and Week 96 | The percentage of participants who meet the criteria for having achieved BCR::ABL1 ratio $\leq 1\%$ at or before the specified visit will be calculated |
| Duration of MMR | From the date of the first documented molecular response at MMR level to the date of first documented loss of MMR or death due to any cause, whichever occurs first, assessed up to approximately 4.5 years | Duration of MMR is defined as the time between the date of the first documented achievement MMR and the earliest date of loss of MMR, treatment failure, progression to AP/BC, or CML-related death |
| Duration of MR4.0 | From the date of the first documented molecular response at MR4 level to the date of first documented loss of the response level or death due to any cause, whichever occurs first, assessed up to approximately 4.5 years | Duration of MR4.0 is defined as the time between the date of the first documented achievement MR4 and the earliest date of loss of MR4, treatment failure, progression to AP/BC, or CML-related death |
| Duration of MR4.5 | From the date of the first documented molecular response at MR4.5 level to the date of first documented loss of the response level or death due to any cause, whichever occurs first, assessed up to approximately 4.5 years | Duration of MR4.5 is defined as the time between the date of the first documented achievement MR4.5 and the earliest date of loss of MR4.5, treatment failure, progression to AP/BC, or CML-related death |
| Time to first MMR | From the date of randomization to the date of the first MMR, assessed up to approximately 4.5 years | Time to first MMR is defined as the time from the date of randomization to the date of the first documented occurrence of MMR |
| Time to first MR4.0 | From the date of randomization to the date of the first MR4, assessed up to approximately 4.5 years | Time to first MR4.0 is defined as the time from the date of randomization to the date of the first documented occurrence of MR4 |
| Time to first MR4.5 | From the date of randomization to the date of the first MR4.5, assessed up to approximately 4.5 years | Time to first MR4.5 is defined as the time from the date of randomization to the date of the first documented occurrence of MR4.5 |
| Time to treatment failure (TTF) | Up to approximately 4.5 years | TTF is defined as the time from date of randomization to the first/earliest documented date of any of the following events: Treatment failure per European leukemia network (ELN) criteria, Confirmed loss of MMR (in 2 consecutive tests) at any time while on study treatment, Discontinuation from study treatment due to any reason |
| Event free survival (EFS) | Up to approximately 4.5 years | EFS is defined as the time from the date of the first dose of study treatment to the earliest occurrence of treatment failure, confirmed loss of MMR, discontinuation due to AE, progression to AP/BC, and death from any cause |
| Progression free survival (PFS) | Up to approximately 4.5 years | PFS is defined as the time from the date of randomization to the earliest occurrence of progression to AP/BC or death from any cause |
| Overall survival (OS) | Up to approximately 4.5 years | OS is defined as the time from the date of randomization to the date of death from any cause |
| Time to treatment discontinuation (TTD) due to selected reasons | Up to approximately 4.5 years | TTD is the time from the date of first dose of study treatment to the date of discontinuation of study treatment due to lack of efficacy, treatment failure, disease progression, suboptimal response or death |



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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Change from baseline in overall scores and individual scales of the European organization for research and treatment of cancer - quality of life questionnaire (EORTC QLQ-C30) | Baseline, every 4 weeks from Week 4 to Week 12, after Week 24, Week 48, Week 96, EOT and every 4 weeks until 12 weeks after EOT, assessed up to approximately 4.5 years | Change from baseline in Overall Scores and individual domains of the EORTC QLQ-C30. The EORTC QLQ-C30 contains 30 items and is composed of both multi-item scales and single-item measures based on the participant's experience over the past week. These include five functional scales (physical, role, emotional, cognitive and social functioning), three symptom scales (fatigue, nausea/vomiting, and pain), six single items (dyspnea, insomnia, appetite loss, constipation, diarrhea and financial impact) and a global health status/QoL scale |
| Change from baseline in overall scores and individual scales of the European organization for research and treatment of cancer CML module (EORTC QLQ-CML24) | Baseline, every 4 weeks from Week 4 to Week 12, after Week 24, Week 48, Week 96, EOT and every 4 weeks until 12 weeks after EOT, assessed up to approximately 4,5 years | Change from baseline in Overall Scores and individual domains of the EORTC QLQ-CML24. The EORTC QLQ-CML24 assesses specific concepts relevant to the experience of patients with CML. The QLQ-CML24 has 24 items which assess symptom burden, impact on daily life and on worry/mood, body image problems, and satisfaction with care and with social life based on the participant's experience over the past week |

Trial Results

Summary results

Study results globally

Date of posting of results summaries

Date of first journal publication of results

Results URL link

Baseline characteristics

Participant flow

Adverse events

Outcome measures

URL to protocol files