

Phase I/II Study of Rapcabtagene Autoleucel in CLL, 3L+ DLBCL, r/r ALL and 1L HR LBCL

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Phase I/II, Open Label, Multicenter Study of Rapcabtagene Autoleucel in Adult Patients With CLL/SLL, 3L+ DLBCL, r/r ALL and 1L HR LBCL

ClinicalTrials.gov Identifier:

[NCT03960840](#)

Novartis Reference Number:CYTB323A12101

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All compounds are either investigational or being studied for (a) new use(s). Efficacy and safety have not been established. There is no guarantee that they will become commercially available for the use(s) under investigation.

Study Description

This is a phase I/II study to evaluate the feasibility, safety and preliminary antitumor efficacy of rapcabtagene autoleucel (also known as YTB323). Rapcabtagene autoleucel will be investigated in combination with ibrutinib in chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL) and as single agent in diffuse large B-cell lymphoma (3L+ DLBCL), adult acute lymphoblastic leukemia (ALL) and 1st Line High Risk Large B-Cell Lymphoma (1L HR LBCL). This clinical trial is phase I/II open label, multi-center study of rapcabtagene autoleucel.

The Phase I part of the study comprises three independent treatment arms:

- * Rapcabtagene autoleucel in combination with ibrutinib in adult CLL/SLL participants with SD or PR after at least 6 months of second or subsequent line ibrutinib therapy. As of 05-May-2021, this arm had completed enrollment.
- * Rapcabtagene autoleucel single agent in adult DLBCL participants having failed two or more lines of chemotherapy and either having progressed (or relapsed) after autologous HSCT or being ineligible for or not consenting to the procedure.
- * Rapcabtagene autoleucel single agent in adult relapsed/refractory ALL participants

The Phase II part of the study comprises two independent cohorts:

- * Rapcabtagene autoleucel single agent in adult 3L + DLBCL participants having failed two or more lines of chemoimmunotherapy and either having progressed (or relapsed) after autologous HSCT or being ineligible for or not consenting to the procedure. This is an extension of the Phase I r/r DLBCL treatment arm to support Phase II objectives
- * Rapcabtagene autoleucel single agent in newly diagnosed, adult 1L HR LBCL participants defined as IPI 3-5 and/or DH/TH disease who have completed 2 cycles of CIT and have a response of PR/SD (with a Deauville score of 4-5).

In the Phase I part of the trial, the 3L+ DLBCL and ALL arms consist of two parts: a dose escalation part to evaluate feasibility, characterize safety and identify the recommended dose (RD) of rapcabtagene autoleucel,

and a dose expansion part to further characterize safety, study rapcabtagene autoleucel cellular kinetics and assess preliminary antitumor activity. Once the RD of rapcabtagene autoleucel is determined for each arm, the corresponding expansion part will commence.

In the Phase II part of the trial, approximately 70 additional participants will be enrolled in a 3L+ DLBCL cohort treated at the recommended dose (RD). Including the 3L+ DLBCL participants who were treated at the RD from the Phase I part, it is planned to have in total a cohort of approximately 100 participants included in the primary efficacy analysis based on the efficacy analysis set. In addition, a separate cohort in 1LHR LBCL will be included, with approximately 50-60 participants planned for the primary efficacy analysis based on the efficacy analysis set.

Participants will be followed under the current treatment protocol for safety and efficacy within this trial for a minimum of 2 years before being transferred to the long-term follow-up trial. Once the study is complete, participants will be enrolled in a post-study long term follow-up for lentiviral vector safety for up to 15 years. This post-study long term follow-up for lentiviral vector safety will continue under a separate destination protocol.

Condition

Chronic Lymphocytic Leukemia, Small Lymphocytic Lymphoma, Diffuse Large B-cell Lymphoma, Acute Lymphoblastic Leukemia, Large B-cell Lymphoma

Phase

Phase1, Phase2

Overall Status

Recruiting

Number of Participants

225

Start Date

Jun 26, 2019

Completion Date

May 31, 2028

Gender

All

Age(s)

18 Years - 100 Years (Adult, Older Adult)

Interventions

Drug

Ibrutinib

Tablets or capsules for oral daily use

Biological

Rapcabtagene autoleucel single agent

Single infusion of rapcabtagene autoleucel

Eligibility Criteria

Inclusion Criteria:

- * ECOG performance status 0-1 for ALL and DLBCL
- * ECOG performance status 0-2 for 1L HR LBCL at screening
- * CLL or SLL diagnosis according to iwCLL criteria
- * CLL/SLL in SD or PR after at least 6 months of ibrutinib, either as second or subsequent line of therapy
- * DLBCL diagnosis by local histopathology
- * DLBCL relapsed or refractory after 2 or more lines of therapy, including autologous hematopoietic stem cell transplantation (HSCT)
- * Refractory or relapsed CD19-positive ALL
- * ALL with morphologic disease in the bone marrow

1L HR LBCL - Considered to be high-risk based on at least 1 of the following at diagnosis:

- * IPI score of 3, 4 or 5
- * MYC and BCL2 and/or BCL6 rearrangement (DH/TH lymphoma)
- * Participants must have received 2 cycles of frontline therapy for LBCL with R-CHOP or Pola-R-CHP or DA-EPOCH-R. Participants with DH/TH lymphoma must have received at least one cycle (the most recent) DA-EPOCH-R.
- * Participants must have a positive PET per Lugano classification (Deauville PET score of 4 or 5 and an overall response of PR/SD) after 2 cycles of frontline CIT. Note: Patient's with Deauville PET score of 5 and overall response of PD, or with Deauville PET score of 1, 2, or 3 and overall response of CR, are not eligible for this trial.

Exclusion Criteria:

- * Prior CD19-directed therapy
- * Prior administration of a genetically engineered cellular product
- * Prior allogeneic HSCT
- * Richter's transformation
- * For 1L HR LBCL: Richter's transformation, Burkitt lymphoma, primary DLBCL of CNS, DLBCL associated with chronic inflammation, intravascular large B-cell lymphoma, ALK- positive large B-cell lymphoma, HHV8 positive LBCL, DLBCL leg type or EBV positive DLBCL, NOS.
- * Active CNS lymphoma
- * For 1L HR LBCL: Active or prior history CNS involvement by malignancy
- * Targeted small molecule or kinase inhibitor within 2 weeks from leukapheresis

Other protocol-defined inclusion/exclusion may apply.

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