647TiP

A multi-center Phase Ib trial evaluating the safety and efficacy of lacutamab in patients with relapsed/refractory peripheral T-cell lymphoma that express KIR3DL2



S. Iyer¹, I. Greenwell², L. Shea³, J.-H. Lee⁴, Alejandro Gru⁵, Maxime Battistella⁶, M. Muller⁷

1 Texas, The University of Texas M. D. Anderson Cancer Center, Houston, USA, 2 Hematology, Oncology, University of Alabama at Birmingham - School of Medicine, Birmingham, USA, 4 Hematology/Oncology, Gachon University Gil Hospital, Incheon, Korea, France, 5 Department of Pathology, University of Virginia School of Medicine, Charlottesville, VA, 22908, USA, 6 Pathology Department, Hôpital Saint-Louis, AP-HP, Université de Paris, INSERM U976, Paris, France, 7 Medical Director, INNATE PHARMA, Marseille

Disclaimer: Marianna MULLER is an employee of Innate Pharma | Corresponding author: Marianna MULLER marianna.muller@innate-pharma.fr

Background

Unmet Need in PTCL

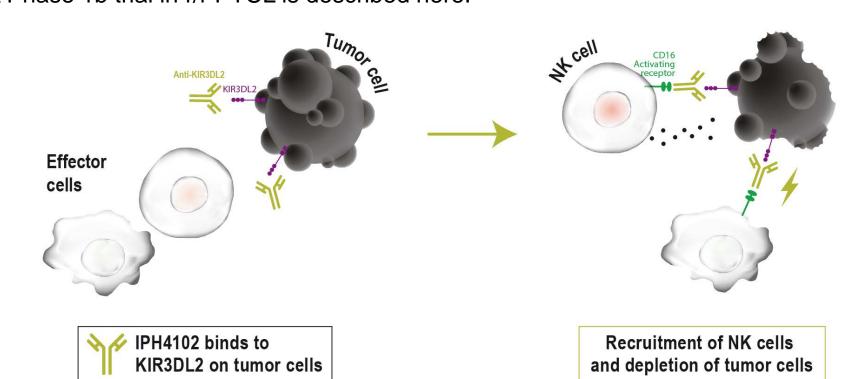
- Peripheral T-cell Lymphoma (PTCL) is a heterogeneous group of mature T-cell lymphomas with adverse outcomes.
- The majority of patients (pts) with PTCL relapse despite responding to first line systemic therapy.
- Current treatment options for relapsed/refractory (r/r) PTCL are limited with no generally accepted standard of care.

KIR3DL2 Expression in PTCL

- KIR3DL2 is a killer immunoglobulin-like receptor that is expressed across different subtypes of T-cell Lymphoma.
- Approximately ~50% of PTCL pts express KIR3DL2.

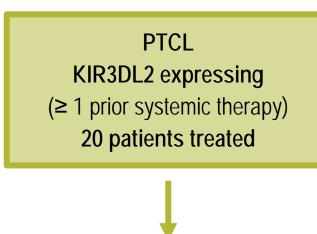
Lacutamab Clinical Development in CTCL and PTCL

- Lacutamab is a humanized first-in-class monoclonal antibody in clinical development in cutaneous T-cell lymphoma (CTCL) and PTCL designed to deplete KIR3DL2-expressing cells via antibody-dependent cell-cytotoxicity and phagocytosis.
- In a previous phase I trial in pts with r/r CTCL, lacutamab showed adequate safety profile with no dose limiting toxicities and confirmed global overall response was 36.4% (42.9% in pts with Sezary Syndrome). TELLOMAK open-label, multi-cohort, international phase II trial (NCT03902184) in patients with Advanced T-cell lymphoma is ongoing.
- EMA PRIME and FDA Fast Track designations for Sezary Syndrome pts who have received at least two prior systemic therapies.
- Orphan drug designation in the EU and US for the treatment of CTCL.
- A Phase 1b trial in r/r PTCL is described here.



Study Design

- A global, multi-center, open label phase
 1b clinical trial.
- Up to 40 pts are planned to be enrolled. Approximately 20 pts will be initially included in the study. Depending on safety profile and preliminary level of clinical activity, 20 more pts could be added.
- All patients will be treated with monotherapy lacutamab. Lacutamab 750 mg is administered as an intravenous infusion weekly x 5 weeks (w), every 2 w x 10 then every 4 w, until progression or unacceptable toxicity.



PTCL
KIR3DL2 expressing
(≥ 1 prior systemic therapy)
20 additional patients treated

Study Objectives

Primary Objective

 To assess the safety and tolerability of lacutamab in patients with r/r PTCL.

Secondary Objectives

- To assess antitumor activity in terms of:
 - Objective response rate,
 - Complete response rate,
 - Duration of response,
 - Time to starting next treatment,
 - Event free survival: median and rate at 6 and 12 months and
- Overall survival: median and rate at 6 and 12 months.
- To characterize the pharmacokinetics and immunogenicity.

Exploratory Objectives

- To explore the correlation between KIR3DL2 expression using immunohistochemistry and clinical activity.
- To evaluate the percentage of patients proceeding to autologous or allogenic transplant.

Patient Population

Key Inclusion Criteria

- Any subtype of PTCL.
- ≥1 prior line of systemic therapy.
- Documented refractory, relapsed, or progressive disease.
- Patients must receive at least 2 cycles of prior line of systemic therapy.
- KIR3DL2 expression (≥ 1%) based on central evaluation by IHC.
- ECOG Performance status ≤ 2.
- Adequate baseline laboratory values:
 - Hematology: hemoglobin >9 g/dL, ANC ≥1,000/μL, platelets ≥50,000/μL,
- Biochemistry: bilirubin ≤1.5 X ULN or ≤3 X ULN for patients with Gilbert's disease, serum creatinine ≤1.5 X ULN, Creatinine clearance ≥30 mL/min, assessed using the Cockcroft & Gault formula, ALT or AST ≤3X ULN.

Key Exclusion Criteria

- Treatment with > 8 lines of systemic therapies prior to enrollment. Consolidation therapy including stem cell transplant is not considered a line of therapy.
- Life expectancy of less than 3 months.
- Receipt of live vaccines within 4 weeks prior to treatment.
- Known central nervous system (CNS) lymphoma involvement.
- Autologous stem cell transplantation less than 3 months prior to enrollment.
- Prior allogenic transplantation.
- Concomitant administration of radiotherapy or systemic anti-cancer therapy including but not restricted to: chemotherapy, biological agents or immunotherapy.

Bibliography

- Foss, F. M., P. L. Zinzani, et al. (2011). "Peripheral T-cell lymphoma." Blood 117(25): 6756-6767
- ✓ Cheminant, M., L. Lhermitte, et al. (2019). "KIR3DL2 is expressed in Peripheral T-cell lymphomas and may be a therapeutic target." Hematological Oncology 37((suppl2))
- ✓ Bagot, M., A. Moretta, et al. (2001). "CD4(+) cutaneous T-cell lymphoma cells express the p140-killer cell immunoglobulin-like receptor." Blood 97(5): 1388-1391
- ✓ Bagot, M., P. LPorcu, et al. (2019). "IPH4102, a first-in-class anti-KIR3DL2 monoclonal antibody, in patients with relapsed or refractory cutaneous T-Cell lymphoma: an international, first-in-human, open label, phase I trial." Lancet Oncol 10(1016).

Study status

- Enrollment is currently ongoing in USA and South Korea.
- For participating sites, please see <u>www.clinicaltrials.gov</u> (NCT0532114).

Acknowledgments

- The patients and families that participated in this trial.
- The clinical study teams who made this trial possible.