

# Clinical Characteristics and Responses of Patients with Relapsed or Refractory High-Grade B-Cell Lymphoma Treated with Loncastuximab Tesirine in the LOTIS-2 Clinical Trial

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## Introduction

DLBCL is a heterogeneous disease, with variable outcomes that are differentially characterized by clinical factors, response to therapy, and the unique biology of underlying disease subtypes<sup>1</sup>

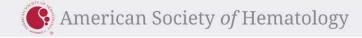
High-grade B-cell lymphoma with MYC and BCL2 and/or BCL6 rearrangement is associated with poor patient prognosis<sup>2,3</sup>

Loncastuximab tesirine (loncastuximab tesirine-lpyl; Lonca) is an FDA-approved CD19-directed antibody-drug conjugate indicated in adults with R/R large B-cell lymphoma after ≥2 lines of systemic therapy, including patients with HGBCL<sup>4</sup>

DLBCL, diffuse large B-cell lymphoma; HGBCL, high-grade B-cell lymphoma with MYC and BCL2 and/or BCL6 rearrangements; R/R, relapsed or refractory.

1. Liu Y and Barta SK. Am J Hematol. 2019;94(5):604-616. 2. Swerdlow SH, et al. Blood. 2016;127(20):2375-2390. 3. Rosenwald A, et al. J Clin Oncol. 2019;37(35):3359-3368.

4. ZYNLOTA [package insert]. Murray Hill, New Jersey: ADC Therapeutics, SA; 2021.



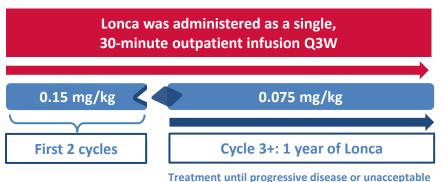
# LOTIS-2: Open-Label, Single-Arm, Phase 2 Study

#### **Patient Population**

R/R DLBCL after ≥2 prior lines of systemic therapy, including DLBCL-NOS, DLBCL arising from low-grade lymphoma, and high-grade B-cell lymphoma

#### **Primary Endpoint**

ORR by IRC of PET-CT using Lugano 2014 criteria



**48.3%**(95% CI: 39.9, 56.7)

ORR in the full LOTIS-2 population (N = 145)

toxicity, up to 1 year (patients followed up to 3 years)

DLBCL, diffuse large B-cell lymphoma; HGBCL, high-grade B-cell lymphoma; IRC, Independent Review Committee; NOS, not otherwise specified; ORR, overall response rate; PET-CT, positron emission tomography-computed tomography; Q3W, every 3 weeks; R/R, relapsed/refractory. Caimi, PF, et al. *Lancet Oncol.* 2021;22(6):790-800.

# Objective

To characterize the clinical characteristics and efficacy of Lonca in patients with high-grade B-cell lymphoma enrolled in the LOTIS-2 trial — Data cutoff: March 1, 2021

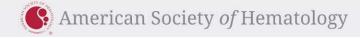
## LOTIS-2: Characteristics of Patients With HGBCL

Baseline Characteristics	Patients with HGBCL (n=11)	Patients with DLBCL-NOS (n=127)
Age, median (min, max), years	74.0 (53, 85)	65.0 (23, 94)
Age group, n (%)		
• <65 years	2 (18.2)	57 (44.9)
• ≥65 to <75 years	4 (36.4)	55 (43.3)
• ≥75 years	5 (45.5)	15 (11.8)
Diagnosis to first dose, median (min, max), months	22.2 (5.4, 86.6)	16.9 (1.4, 292.6)
Prior systemic therapies <sup>a</sup> , n (%)		
• 2 prior lines	3 (27.3)	58 (45.7)
• 3 prior lines	5 (45.5)	27 (21.3)
• >3 prior lines	3 (27.3)	42 (33.1)
Prior stem-cell transplant, n (%)	1 (9.1)	21 (16.5)
Refractory to prior therapy, n (%)		
Primary refractory	3 (27.3)	26 (20.5)
<ul> <li>Refractory to most recent therapy</li> </ul>	5 (45.5)	78 (61.4)
Refractory to all prior therapy	3 (27.3)	24 (18.6)

Among patients with HGBCL, 3/11 patients had prior CAR T-cell therapy, and 2/11 patients had triple-hit lymphoma.

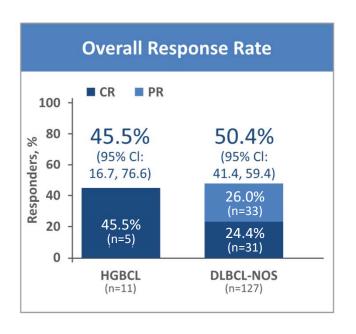
Data cutoff: March 1, 2021. Median (range) follow-up for the entire LOTIS-2 population: 7.8 (0.3-31.0) months.

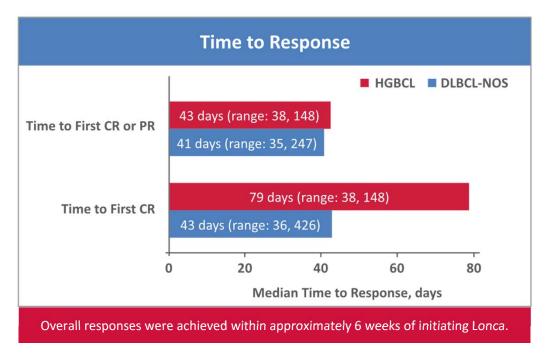
CAR, chimeric antigen receptor; DLBCL, diffuse large B-cell lymphoma; HGBCL, high-grade B-cell lymphoma with MYC and BCL2 and/or BCL6 rearrangements; NOS, not otherwise specified.



<sup>&</sup>lt;sup>a</sup>Prior stem cell transplant is included. For patients who received an autologous transplant, the mobilization regimen was considered a line of therapy if it was chemotherapy-based and distinct from the other previous lines of treatment.

# LOTIS-2: Efficacy in Patients With HGBCL



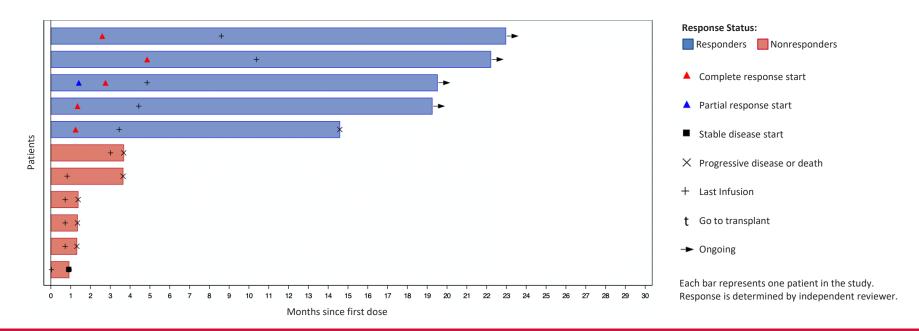


Data cutoff: March 1, 2021.

CR, complete response; DLBCL, diffuse large B-cell lymphoma; DoR, duration of response; HGBCL, high-grade B-cell lymphoma with MYC and BCL2 and/or BCL6 rearrangements; NOS, not otherwise specified; PR, partial response.



# LOTIS-2: Duration of Response in Patients with HGBCL



All 5 responding patients with HGBCL had a duration of response >1 year; median duration of response has not been reached at the time of data cutoff.

Data cutoff: March 1, 2021.

CR, complete response; DLBCL, diffuse large B-cell lymphoma; DoR, duration of response; HGBCL, high-grade B-cell lymphoma with MYC and BCL2 and/or BCL6 rearrangements; NOS, not otherwise specified; PR, partial response.



## **Conclusions**



In LOTIS-2, response rates in this small subgroup of patients with HGBCL (45.5%) are consistent with the DLBCL-NOS patient population (50.4%)



All responding patients with HGBCL achieved a CR



Overall responses were achieved within approximately the first six weeks of initiating Lonca, and long-term disease control was seen in responding patients



These results suggest that Lonca is active in the treatment of this highrisk lymphoma subgroup

Data cutoff: March 1, 2021.

CR, complete response; DLBCL, diffuse large B-cell lymphoma; HGBCL, high-grade B-cell lymphoma; Lonca, loncastuximab tesirine; NOS, not otherwise specified.



## Disclosures and Acknowledgments

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