

## Loncastuximab Tesirine Clinical Assessments



For information about the LOTIS Clinical Trial Program, visit www.adctmedical.com or email ADC Therapeutics at medicalinformation@ADCTherapeutics.com

To learn more about ADC Therapeutics, please visit www.ADCTherapeutics.com



# Loncastuximab tesirine (Lonca; loncastuximab tesirine-lpyl) indication

Loncastuximab tesirine-lpyl (Zynlonta®, ADC Therapeutics SA) is a CD19-directed antibody and alkylating agent conjugate indicated for the treatment of adult patients with R/R large B-cell lymphoma after ≥2 lines of systemic therapy, including DLBCL not otherwise specified, DLBCL arising from low grade lymphoma, and high-grade B-cell lymphoma.

This indication is FDA-approved under accelerated approval based on ORR. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

## The LOTIS Clinical Development Program



A Phase 1, open-label, dose-escalation, dose-expansion study to evaluate the tolerability, safety, PK, and efficacy of loncastuximab tesirine in patients with R/R B-NHL

NCT02669017

COMPLETED



A Phase 2, open-label, single-arm study to evaluate the efficacy and safety of loncastuximab tesirine in patients with R/R DLBCL

NCT03589469
ACTIVE, NOT

RECRUITING



A Phase 1/2, open-label study to evaluate the safety and efficacy of loncastuximab tesirine and ibrutinib in patients with advanced DLBCL or MCL

NCT03684694

RECRUITING



A Phase 1, open-label study to evaluate the safety and efficacy of loncastuximab tesirine and durvalumab in patients with advanced DLBCL, MCL, or FL

NCT03685344

TERMINATED



A Phase 3, randomized, open-label study to evaluate the efficacy and safety of loncastuximab tesirine and rituximab versus immunochemotherapy in patients with R/R DLBCL

NCT04384484

RECRUITING



A Phase 2, randomized, open-label study to evaluate the efficacy and safety of loncastuximab tesirine versus idelalisib in patients with R/R FL

NCT04699461

RECRUITING



A Phase 1b, open-label study to evaluate the safety and efficacy of loncastuximab tesirine in combination with other anticancer agents in patients with R/R B-NHL

NCT04970901

NOT YET RECRUITING



A Phase 1b, open-label study to evaluate the tolerability, safety, PK, and efficacy of loncastuximab tesirine and R-CHOP in patients with previously untreated DLBCL

NCT04974996

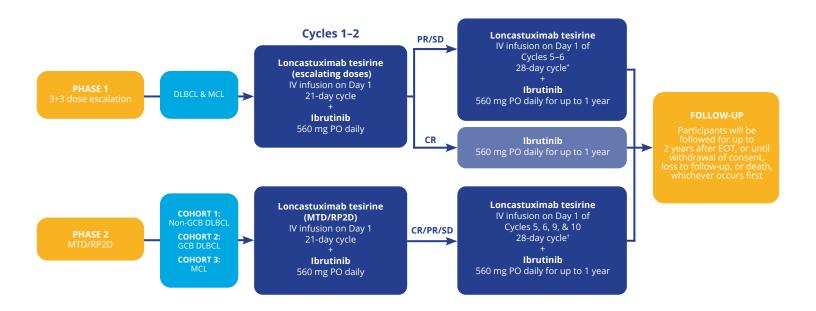
NOT YET
RECRUITING



A Phase 2/3, open-label study to evaluate the efficacy and safety of loncastuximab tesirine and rituximab in unfit/frail patients with previously untreated DLBCL

NCT PENDING
NOT YET
RECRUITING

# A Phase 1/2, open-label study to evaluate the safety and efficacy of loncastuximab tesirine and ibrutinib in patients with advanced DLBCL or MCL



#### **KEY PRIMARY ENDPOINTS**

- Phase 1: AEs, AEs ≥Grade 3, SAEs, SAEs ≥Grade 3; DLTs, dose modifications
- Phase 2: CRR<sup>‡</sup> determined by the IRC. CRR, defined as the number of participants with a BOR of CR in the non-GCB DLBCL cohort only

#### **KEY SECONDARY ENDPOINTS**

- Phase 1: ORR<sup>‡</sup>, defined as the number of participants with a BOR of CR or PR; DOR; RFS; PFS; OS; PK
- Phase 2: ORR<sup>‡</sup>, defined as the number of participants with a BOR of CR or PR
- Phase 2: CRR in GCB DLBCL, all DLBCL, and MCL participants. CRR determined by the investigator and/or IRC. CRR<sup>‡</sup>, defined as the number of participants with a BOR of CR in non-GCB DLBCL, GCB DLBCL, all DLBCL, and MCL participants
- Phase 2: ORR; DOR; RFS; PFS; OS; PK; CRR in subgroups; HRQoL, safety (AEs, AEs ≥Grade 3, SAEs, SAEs ≥Grade 3)

#### **KEY ELIGIBILITY CRITERIA**

- ECOG PS 0 to 2
- · Pathologic diagnosis of DLBCL or MCL
- Participants with DLBCL must have R/R disease and have failed, or been intolerant to, available standard therapy
- Participants with MCL must have R/R disease and have received ≥1 prior line of therapy
- Lymphoma with active CNS involvement, including leptomeningeal disease, is not eligible
- AHCT or alloHCT permitted if received ≥60 days prior to the start of study drug
- No prior loncastuximab tesirine or BTK inhibitors
- Prior CD19-directed therapy permitted if biopsy confirms CD19 expression

\*Break from loncastuximab tesirine treatment on cycles 3–4.

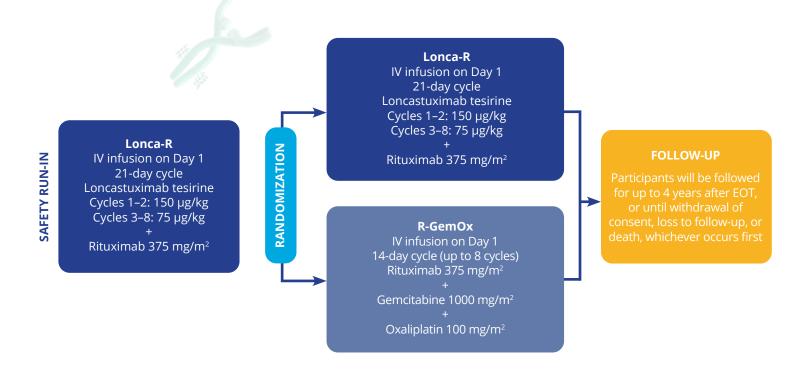
¹Break from loncastuximab tesirine treatment on cycles 3–4 and 7–8.

²According to the 2014 Lugano Classification.

Ibrutinib is supplied by Pharmacyclics LLC.



# A Phase 3, randomized, open-label study to evaluate the efficacy and safety of loncastuximab tesirine and rituximab versus immunochemotherapy in patients with R/R DLBCL



#### PRIMARY ENDPOINT

• PFS

#### **KEY SECONDARY ENDPOINTS**

- OS
- ORR\*
- CRR\*
- DOR
- Number of participants who experience ≥1TEAE and/or SAE
- PK
- HRQoL

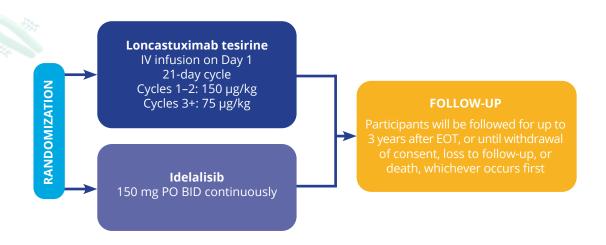
#### **KEY ELIGIBILITY CRITERIA**

- ECOG PS 0 to 2
- Pathologic diagnosis of DLBCL, as defined by the 2016 WHO Classification, or high-grade B-cell lymphoma with MYC and BCL-2 and/or BCL-6 rearrangements
- R/R disease following ≥1 multi-agent systemic treatment regimens
- Lymphoma with active CNS involvement, including leptomeningeal disease, is not eligible
- AHCT or alloHCT permitted if received ≥30 days or ≥60 days prior to the start of study drug, respectively
- No prior loncastuximab tesirine or R-GemOx
- Prior CD19-directed therapy permitted if biopsy confirms CD19 expression



<sup>\*</sup>According to the 2014 Lugano Classification.

## A Phase 2, randomized, open-label study to evaluate the efficacy and safety of loncastuximab tesirine versus idelalisib in patients with R/R FL



#### **PRIMARY ENDPOINT**

• CRR\*

#### **KEY SECONDARY ENDPOINTS**

- ORR\*
- PFS
- OS
- DOR
- Number of participants who experience ≥1 TEAE and/or SAE
- PK
- HRQoL

#### **KEY ELIGIBILITY CRITERIA**

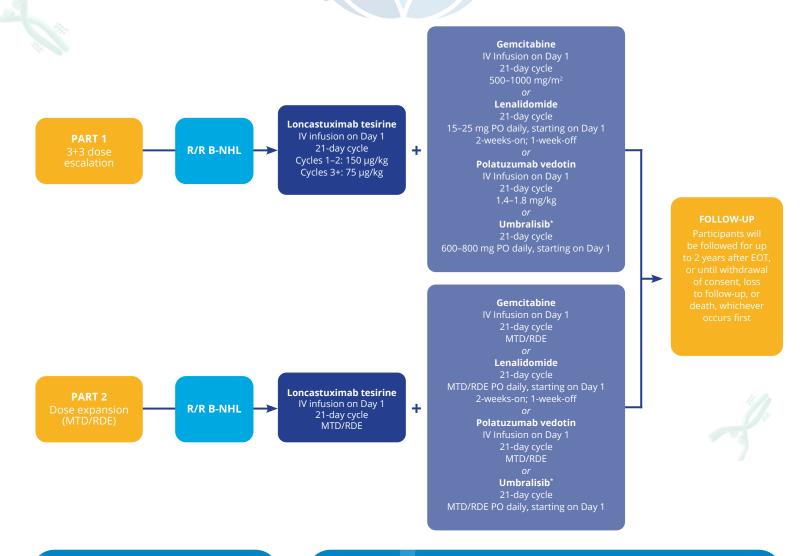
- ECOG PS 0 to 2
- Pathologic diagnosis of FL (Grade 1, 2, 3a)
- Participants with FL that has transformed to DLBCL or other aggressive lymphomas are not eligible
- Lymphoma with active CNS involvement, including leptomeningeal disease, is not eligible
- R/R disease following ≥2 prior treatment regimens, including ≥1 anti-CD20 therapy
- AHCT or alloHCT permitted if received ≥30 or ≥60 days prior to start of study drug, respectively
- No prior loncastuximab tesirine or idelalisib
- Prior CD19-directed therapy permitted if biopsy confirms CD19 expression

\*According to the 2014 Lugano Classification.





# A Phase 1b, open-label study to evaluate the safety and efficacy of loncastuximab tesirine in combination with other anticancer agents in patients with R/R B-NHL



#### **KEY PRIMARY ENDPOINTS**

 Number of participants who experience ≥1 TEAE and/or SAE; DLTs; AEs leading to dose delay, interruption or reduction

#### **KEY SECONDARY ENDPOINTS**

- ORR<sup>†</sup>
- DOR
- CRR<sup>†</sup>
- PFS
- RFS
- OSPK

#### **KEY ELIGIBILITY CRITERIA**

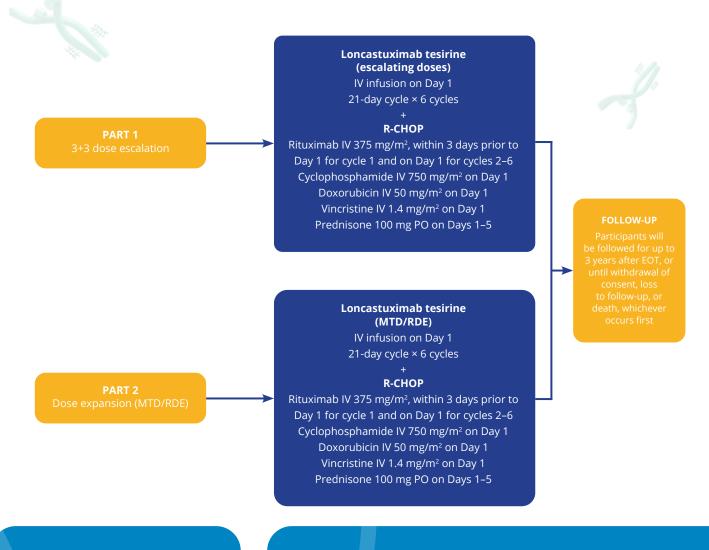
- ECOG PS 0 to 2
- Pathologic diagnosis of B-NHL, as defined by the 2016 WHO Classification (including DLBCL, HGBCL, FL, MCL, MZL, and BL)
- Lymphoma with active CNS involvement, including leptomeningeal disease, is not eligible
- R/R disease, have failed, or been intolerant to, any approved therapy, and have received ≥2 prior systemic treatment regimens
- AHCT or alloHCT permitted if received ≥60 days prior to start of study drug
- No prior loncastuximab tesirine, gemcitabine, lenalidomide, polatuzumab vedotin or umbralisib (applied to relevant arm and/or cohort of the specific drug administered)
- Prior CD19-directed therapy permitted if biopsy confirms CD19 expression

\*Patients with a history of (or ongoing) inflammatory bowel disease, or confirmed CMV infection (CMV IgG-positive or IgM-positive and CMV DNA-positive) are not eligible for enrollment into this treatment arm.

<sup>†</sup>According to the 2014 Lugano Classification.



# A Phase 1b, open-label study to evaluate the tolerability, safety, PK, and efficacy of loncastuximab tesirine in combination with R-CHOP in patients with previously untreated DLBCL



#### **KEY PRIMARY ENDPOINTS**

 DLTs (part 1); number of participants who experience ≥1 TEAE and/or SAE; AEs leading to dose delay, interruption or reduction

#### **KEY SECONDARY ENDPOINTS**

- ORR\*
- DOR
- PFS
- OS
- CRR\*
- PK

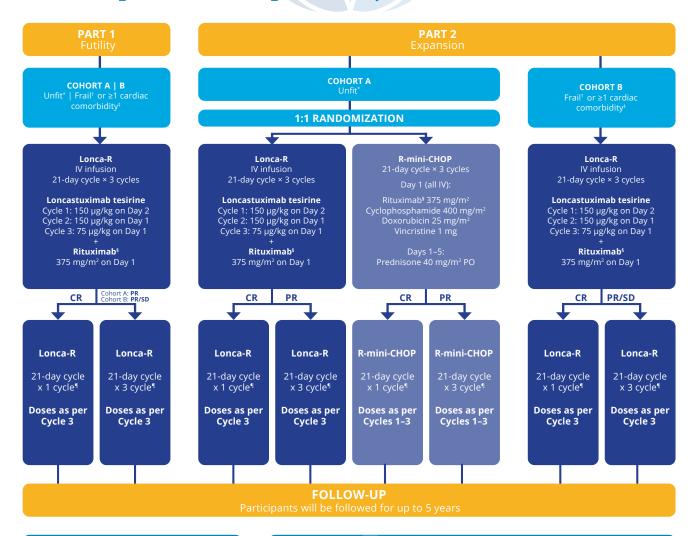
#### **KEY ELIGIBILITY CRITERIA**

- ECOG PS 0 to 2
- LVEF ≥50%
- Pathologic diagnosis of DLBCL, as defined by the 2016 WHO Classification, or HGBCL
- Lymphoma with active CNS involvement, including eptomeningeal disease, is not eligible
- No prior loncastuximab tesirine, rituximab, anthracycline, or CHOP
- No prior treatment for aggressive lymphoma, except for up to 7 days of corticosteroids for symptom management

 $^*$ According to the 2014 Lugano Classification.



# A Phase 2/3, open-label study to evaluate the efficacy and safety of loncastuximab tesirine and rituximab in unfit/frail patients with previously untreated DLBCL



#### **KEY PRIMARY ENDPOINTS**

- Part 1: CR rate#; tolerability
- Part 2: CR rate#; 2-year PFS

#### **KEY SECONDARY ENDPOINTS**

- ORR#
- DOR
- 3-year OS
- Safety
- HRQoL

#### **KEY ELIGIBILITY CRITERIA**

- Age ≥80 years or ≥65 years with ≥1 cardiac comorbidity‡
- Unfit<sup>\*</sup> & Frail<sup>†</sup> patients as defined by sGA
- ECOG PS 0 to 2, or ECOG PS 3 if decline in status is deemed related to lymphoma and potentially reversible
- Pathologic diagnosis of DLBCL, as defined by the 2016 WHO Classification, HGBCL, or FL (Grade 3b)
- No prior therapy for DLBCL, HGBCL, or FL (Grade 3b)
- No prior loncastuximab tesirine or R-CHOP for any indication
- No prior treatment for aggressive lymphoma, except for up to 14 days of corticosteroids for symptom management

\*Defined by the sGA as ≥80 years of age, an ADL score of 6, an IADL score of 8, and for CIRS-G: no score of 3-4 and <5 scores of 2 based on the FIL tool.

¹Defined by the sGA as ≥80 years of age, an ADL score of <6, an IADL score of <8, and for CIRS-G: ≥1 score of 3-4 and ≥5 scores of 2 based on the FIL tool.

¹≥65 years of age with at least one of the following cardiac comorbidities: LVEF ≥30 to <50%; history of MI within 6 months prior to screening;IHD; history of stroke within 12 months prior to screening.

§A subcutaneous formulation of rituximab may be used at a flat dose of 1400 mg, starting from Cycle 2.

 $\P$ Up to 6 cycles of either Lonca-R or R-mini-CHOP may be ad

\*Responses according to the 2014 Lugano Classification.

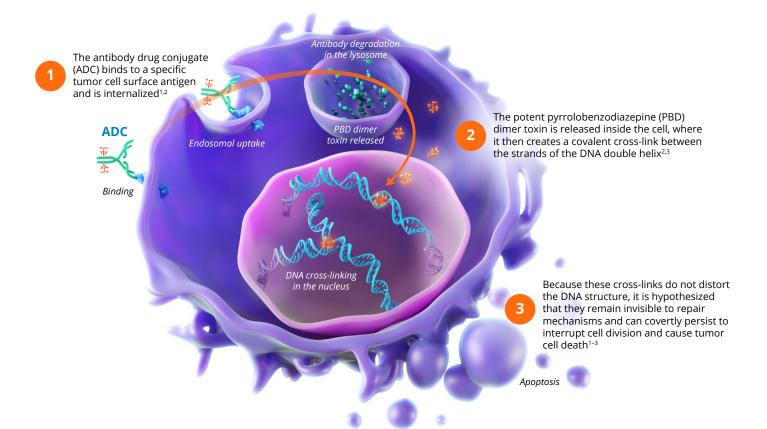




## **ADC Therapeutics is advancing next-generation PBD-based ADCs**

ADC Therapeutics is a commercial-stage biotechnology company dedicated to delivering next-generation PBD-based ADCs for those affected by cancer. With a deep understanding of ADC technology and of the oncology treatment landscape, ADC Therapeutics intends to address significant unmet medical needs and improve outcomes for those with difficult-to-treat cancers

# An MOA that features the "stealth-like" properties of PBD dimer toxins





## **Abbreviations**

ADL. Activities of Daily Living

ADL, Activities of Daily Living

AE, adverse event

AHCT, autologous hematopoietic cell

transplantation

AlloHCT, allogeneic hematopoietic cell

transplantation

BID, twice daily

B-NHL, B-cell non-Hodgkin lymphoma

BOR, best overall response

BL, Burkitt lymphoma

BTK, Bruton tyrosine kinase

CD, cluster of differentiation

CHOP, cyclophosphamide, doxorubicin,

vincristine, and prednisone

CIRS-G, Cumulative Illness Rating Scale-Geriatric

CMV, cytomegalovirus

CNS, central nervous system

CR, complete response

CRR, complete response rate

DLBCL, diffuse large B-cell lymphoma

DLT, dose-limiting toxicities

DOR, duration of response

ECOG PS, Eastern Cooperative Oncology

Group performance status

EOT, end of treatment

FDA, US Food and Drug Administration

FIL, Fondazione Italiana Linformi

FL, follicular lymphoma

GCB, germinal center B-cell-like

HGBCL, high grade B-cell lymphoma

HRQoL, health-related quality of life

IADL, Instrumental Activities of Daily Living

IgG, immunoglobulin G

IgM, immunoglobulin M

IHD, ischemic heart disease

IRC, Independent Review Committee

IV. intravenous

Lonca-R. loncastuximab tesirine and rituximab

LVEF, left ventricular ejection fraction

MCL, mantle cell lymphoma

MI, myocardial infarction

MOA, mechanism of action

MTD, maximum tolerated dose

MZL, marginal zone lymphoma

ORR, overall response rate

OS, overall survival

PBD, pyrrolobenzodiazepine

PFS, progression-free survival

PK, pharmacokinetics

PO, taken orally

PR, partial response

R-CHOP, rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone

doxorubicin, vincristine, and prednisone

R-mini-CHOP, rituximab and a reduced dose regimen of cyclophosphamide,

doxorubicin, vincristine, and prednisone

RDE, recommended dose for expansion

RFS, relapse-free survival

R-GemOx, rituximab, gemcitabine,

and oxaliplatin

RP2D, recommended Phase 2 dose

R/R, relapsed or refractory

SAE, serious adverse event

SD, stable disease

sGA, simplified geriatric assessment

TEAE, treatment-emergent adverse event

WHO, World Health Organization

## References

1. Kaplon H, et al. mAbs. 2020;12:e1703531.

2. Zammarchi F, et al. Blood. 2018;131:1094-1105.

3. Hartley JA, et al. Sci Rep. 2018;8:10479.



# Learn more about the LOTIS Clinical Development Program



For additional outcome measures and inclusion/exclusion criteria, and a list of active study sites, visit www.ClinicalTrials.gov



For information about the LOTIS Clinical Trial Program, email ADC Therapeutics at medicalinformation@ADCTherapeutics.com

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