Selinexor is a first-in-class selective inhibitor of nuclear export, which, through inhibition of exportin-1, causes accumulation of tumor suppressor proteins, reduction in oncoproteins and apoptosis. Selinexor has been shown to induce tumor regression in preclinical models of a wide range of tumors, including lymphomas, leukemias, and solid tumors. In an ongoing phase I study (EUDRACT number: 2015-005612-15), Selinexor is being evaluated in combination with r-GDP for patients with relapsed/refractory B-cell lymphoma.
approved by the US Food and Drug Administration for the treatment of R/R DLBCL, de novo or transformed from follicular lymphoma (FL) pts after ≥2 therapies (Kalakonda 2020).

We hereby present preliminary data of a phase IB study (SELINDA study) evaluating the safety and tolerability of Selinexor with R-GDP for pts with B-cell lymphoma after first or second treatment failure.

Patients & methods: Eligible pts < 70 years received every 21 days (d) 3 cycles of rituximab 375 mg/m² on d1, dexamethasone 40 mg on d1 to 4, cisplatin 75 mg/m² d1 and gemcitabine 1 gr/m² on d1 and 8 (R-GDP) in combination with escalating doses of Selinexor. The starting dose (dose level 1, DL1) 40 mg was given on days 1, 3, 8, 10 (Cohort A), and from December 2017 on days 1, 8 and 15 (Cohort B). The dose-variation scheme followed a traditional “3+3” design (DL1: 40 mg; DL2: 60 mg). Dose-limiting toxicities (DLTs) were considered during the first cycle. DLTs were defined as non-hematological toxicity grade (Gr) 3-4 excluding alopecia, diarrhea and/or nausea/ vomiting and/or fatigue/asthenia, any Gr ≥ 4 hematological toxicity lasting ≥ 7 d, any toxicity resulting in a delay of > 14 d of the initiation of the second cycle.

Results: Between January 2017 and August 2019, 20 pts received Selinexor-R-GDP. 4 pts had FL and 16 pts had DLBCL. Median age was 63.5 years (range 45-70). In 7 pts of cohort A DL1 (selinexor 40 mg on d1, 3, 8, 10), 1 DLT (anorexia grade 3) was observed and 1 pt discontinued treatment during cycle 3 for intolerance (AE Gr 3). In 6 pts of cohort B DL1 (selinexor 40 mg on d1, 8, 15), no DLTs were observed; 2 pts discontinued treatment after 2 cycles, 1 for progression and 1 for intolerance (AE + Grade). In 7 pts of cohort B DL2 (selinexor 60 mg on d1, 8, 15), 1 DLT (neutropenia grade 4 ≥ 7d) was observed. Fifteen pts experienced one or more adverse events, thrombocytopenia gr 4 (5 in the cohort A 40 mg, 2 in the cohort B 40 mg, 3 in the cohort B 60 mg), neutropenia gr 4 (7 in the cohort A 40 mg, 3 in the cohort B 40 mg, 5 in the cohort B 60 mg). Efficacy results will be reported at the conference.

Conclusion: The recommended dose of weekly selinexor in combination with R-GDP was 40 mg on days 1, 8, and 15. The most common adverse events were Gr 1-2 non-hematological or reversible Gr 3-4 thrombocytopenia or neutropenia. Enrollment for the expansion is completed.

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Conflicts of interests pertinent to the abstract

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Introduction: Patients (pts) with relapsed/refractory diffuse large B-cell lymphoma (R/R DLBCL) who are ineligible for, or relapse after, salvage chemotherapy/stem cell transplant (SCT) have a poor prognosis and limited treatment options. Loncastuximab tesirine (Lonca) comprises a humanized anti-CD19 antibody conjugated to a potent pyrrolobenzodiazepine dimer toxin. LOTIS 2 is a Phase 2 study evaluating Lonca in patients with R/R DLBCL (NCT03589469). Pts are being followed-up, and here, we present updated efficacy and safety results.

Methods: This multicenter, open label, single-arm Phase 2 study enrolled adult pts (≥18 years) with pathologically defined R/R DLBCL and ≥2 prior systemic treatments. Pts received Lonca 150 µg/kg every 3 weeks (Q3W) for 2 cycles, then 75 µg/kg Q3W thereafter. The primary efficacy endpoint was overall response rate (ORR), assessed by central review. Secondary efficacy endpoints included duration of response (DoR), progression free survival (PFS), and overall survival.