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Tarlatamab with first-line chemoimmunotherapy for extensive stage small cell lung cancer (ES-SCLC): DeLLphi-303 study

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Background

Tarlatamab with anti-PD-L1 achieved notable survival outcomes with manageable safety as maintenance therapy following 1L platinum-etoposide chemotherapy and anti-PD-L1 (1L chemo-IO) for ES-SCLC. In this phase Ib study (parts 2, 4, 7), the safety and efficacy of adding tarlatamab to 1L chemo-IO was assessed.

Methods

Patients (pts) had received 1 cycle of 1L chemo-IO prior to enrollment. On study, pts received 3 cycles of tarlatamab + 1L chemo-IO followed by tarlatamab + anti-PD-L1 Q3W until progression. Tarlatamab was administered 20 mg Q3W with a 1 mg step dose. Primary endpoints included dose-limiting toxicities (DLTs), treatment-emergent (TE), and treatment-related (TR) adverse events (AEs). Key secondary endpoints were objective response (OR), duration of response (DOR), progression-free survival (PFS), and overall survival (OS).

Results

Of 96 pts enrolled, 3 (3%) had DLTs. TEAEs and TRAEs were reported in all pts. The most common TRAEs were cytokine release syndrome (CRS, 56%), anemia (54%), and dysgeusia (46%). Grade (Gr) ≥ 3 TRAEs occurred in 72 pts (75%), most commonly neutropenia/neutrophil count decreased (44%), anemia (23%), and lymphopenia/lymphocyte count decreased (11%), primarily within the first two cycles. CRS (54% Gr 1-2; 2% Gr 3-4) and ICANS and associated neurological events (5% Gr 1-2; 1% Gr 3) TRAEs were mostly low grade. Other immune-related AEs were rare (2%). From a baseline scan after 1 cycle of 1L chemo-IO, OR rate following tarlatamab addition to 1L chemo-IO was 71%, with median DOR of 11.0 months (mo) (95% CI 6.7-not estimable). Median PFS was 9.0 mo. With a median follow-up time of 11.3 mo, the Kaplan-Meier estimate of OS at 12 mo was 81% (Table). Results from further follow-up will be presented. Table: 27570

Safety and efficacy of tarlatamab + chemoimmunotherapy as 1L treatment for ES-SCLC

	Overall (N = 96) ^a
TEAE, n (%)	96 (100)
TRAE, n (%)	96 (100)
Grade 3	40 (41.7) ^b
Grade 4	31 (32.3) ^b
Fatal TRAE	1 (1.0) ^c
Leading to tarlatamab dose interruption/dose reduction	28 (29.2)
Leading to discontinuation of tarlatamab	7 (7.3)
Survival Kaplan-Meier estimates, % (95% CI)	
Median PFS	9.0 months (6.4, NE)
PFS, 6-month	67.5 (56.5, 76.3)

	Overall (N = 96) ^a
PFS, 9-month	51.6 (39.5, 62.4)
OS, 6-month	91.3 (83.4, 95.6)
OS, 12-month	81.1 (69.3, 88.7)

^aOne patient withdrew before receiving tarlatamab. ^bWorst grade. ^cFatal TRAE of septic shock related to platinum-etoposide chemotherapy.

Conclusions

The combination of tarlatamab with chemo-IO for 1L treatment of ES-SCLC demonstrated manageable safety with encouraging initial survival outcomes, supporting further investigation of this combination in the phase III DeLLphi-312 study.

Clinical trial identification

NCT05361395.

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Legal entity responsible for the study

Amgen Inc.

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Disclosure

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