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LBA9

IMpower010: Sites of relapse and subsequent therapy from a phase III study of atezolizumab vs best supportive care after adjuvant chemotherapy in stage IB-IIIA NSCLC

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Background

Despite treatment with curative intent, up to 60% of patients (pts) with stage I-III NSCLC still experience disease relapse. IMpower010 is the first randomised Phase 3 study to show significant DFS improvement with adjuvant cancer immunotherapy (CIT; atezolizumab [atezo]; anti–PD-L1) after adjuvant chemotherapy in pts with early-stage resected NSCLC (Wakelee ASCO 2021). We explored the sites of relapse and post-relapse treatment (tx).

Methods

Enrolled pts had completely resected stage IB-IIIA NSCLC and ECOG PS 0-1. 1280 pts received up to four 21-day cycles of cisplatin-based chemotherapy (plus pemetrexed, docetaxel, gemcitabine or vinorelbine). 1005 pts were then randomised 1:1 to atezo 1200 mg Q3W (16 cycles or until disease relapse or unacceptable toxicity) or best supportive care (BSC). The DFS primary endpoint was tested hierarchically in PD-L1 TC ≥1% (SP263) stage II-IIIA pts, then in all randomised stage II-IIIA pts and then in ITT stage IB-IIIA pts. Exploratory analyses of relapse sites and post-relapse tx were conducted.

Results

As previously reported, the DFS significance boundary was crossed in PD-L1 TC ≥1% stage II-IIIA (HR [95% CI] 0.66 [0.50, 0.88]) and all randomised stage II-IIIA (HR 0.79 [0.64, 0.96]) pts. In all randomised stage II-IIIA pts, DFS improvement (HR [95% CI]) was seen with increasing PD-L1 expression: TC <1%, 0.97 (0.72, 1.31); TC 1-49%, 0.87 (0.60, 1.26); TC ≥50%, 0.43 (0.27, 0.68). Among PD-L1 TC ≥1% stage II-IIIA pts, 73 (29%) relapsed in the atezo arm vs 102 (45%) in the BSC arm. Sites of relapse and post-relapse tx are shown in the table; further data will be presented, including in all randomised stage II-IIIA and ITT pts.

Conclusions

At this interim DFS analysis, relapse rate was higher in the BSC vs atezo arm, but there was no clear difference in pattern of relapse between the arms among pts with relapse. Post-relapse CIT use was higher in the BSC arm.Table: LBA9

PD-L1 TC ≥1% stage II-IIIA population

n (%)	Atezo[a] n=73	BSC[a] n=102
Relapse sites		
Locoregional only	35 (48)	42 (41)
Distant only	28 (38)	40 (39)
Distant only - CNS only	8 (11)	12 (12)
Locoregional and distant	9 (12)	17 (17)

n (%)	Atezo[a] n=73	BSC[a] n=102
Second primary lung	1 (1)	3 (3)
Post-relapse tx		
Systemic anticancer therapy	51 (70)	68 (67)
Systemic anticancer therapy - immunotherapy	8 (11)	36 (35)
Radiotherapy	32 (44)	48 (47)
Surgery	12 (16)	11 (11)

[a] Patients with relapse/recurrence only.

Clinical trial identification

NCT02486718.

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Legal entity responsible for the study

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Disclosure

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