Oral Presentations

Completed clinical trial

081 IMPOWER110: INTERIM OVERALL SURVIVAL (OS) ANALYSIS OF A PHASE III STUDY OF ATEZOLIZUMAB (ATEZO) MONOTHERAPY VS PLATINUM-BASED CHEMOTHERAPY (CHEMO) AS FIRST-LINE (1L) TREATMENT IN PD-L1–SELECTED NSCLC

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Background PD-L1/PD-1 inhibitors (CPI) as monotherapy or in combination with platinum-based doublet chemo (± bevacizumab) are 1L treatment options in metastatic NSCLC, with choice of agent(s) determined by PD-L1 expression. For patients (pts) who may be ineligible for combination therapy, CPI monotherapy remains an attractive treatment choice. IMpower110 evaluated atezo as 1L treatment in PD-L1–selected pts independent of tumor histology.

Methods IMpower110 enrolled 572 chemo-naive pts with stage IV nonsquamous (nsq) or squamous (sq) NSCLC, PD-L1 expression ≥ 1% on TC or IC, measurable disease by RECIST 1.1 and ECOG PS 0-1. Pts were randomized 1:1 to receive atezo 1200 mg IV q3w (Arm A) or platinum-based chemo (Arm B; 4 or 6 21-day cycles). Arm B nsq pts received cisplatin (cis) 75 mg/m^2 or carboplatin (carbo) AUC 6 + pemetrexed 500 mg/m^2 IV q3w; Arm B sq pts received cis 75 mg/m^2 + gemcitabine (gem) 1250 mg/m^2 or carbo AUC 5 + gem 1000 mg/m^2 IV q3w. Stratification factors were sex, ECOG PS, histology and tumor PD-L1 status (TC1/2/3 and any IC vs TC0 and IC1/2/3). The primary endpoint of OS is tested hierarchically in the wild-type (WT; EGFR/ALK-negative) population (TC3 or IC3 then TC2/3 or IC2/3 then TC1/2/3 or IC1/2/3).

Results The 3 primary efficacy populations included 554 TC1/2/3 or IC1/2/3 WT pts, 328 TC2/3 or IC2/3 WT pts and 205 TC3 or IC3 WT pts. Median follow-up was 15.7 months (range, 0-35) in TC3 or IC3 WT pts. In the TC3 or IC3 WT population, atezo monotherapy improved median OS by 7.1 months (HR, 0.595; P = 0.0106) compared with chemo (table 1). The safety population comprised 286 pts in Arm A and 263 in Arm B. Treatment-related AEs (TRAEs) and Grade 3-4 TRAEs occurred in 60.5% (Arm A) and 85.2% (Arm B), and 12.9% (Arm A) and 44.1% (Arm B), respectively.

Conclusions At this interim analysis, IMpower110 met the primary endpoint of OS with statistically significant and clinically meaningful improvement in the TC3 or IC3 WT population. The safety profile favored Arm A, with no new or unexpected safety signals identified.

Trial Registration NCT02409342

Ethics Approval The trial was conducted according to the principles of the Declaration of Helsinki. All patients provided written informed consent. Protocol approval was obtained from independent review boards or ethics committees at each site.

Abstract 081 Table 1

	Median OS					
	Arm A (atezo)		Arm B (chemo)		HR[a]	*P* value[a]
	n	Months	n	Months	95% CI	
TC3 or IC3 WT	107	20.2	98	13.1	0.595 (0.398, 0.890)	0.0106
TC2/3 or IC2/3 WT	166	18.2	162	14.9	0.717 (0.520, 0.989)	0.0416
TC1/2/3 or IC1/2/3 WT	277	17.5	277	14.1	0.832 (0.649, 1.067)	0.1481[b]

IC, tumor-infiltrating immune cells; TC, tumor cells. PD-L1 expression was centrally evaluated with the VENTANA SP142 IHC assay. TC3 or IC3 = TC ≥ 50% or IC ≥ 10% PD-L1+; TC2/3 or IC2/3 = TC ≥ 5% or IC ≥ 5% PD-L1+; TC1/2/3 or IC1/2/3 = TC ≥ 1% or IC ≥ 1% PD-L1+. [a]Stratified. [b]Only for descriptive purposes.

In-progress clinical trials

082 A PHASE 1 DOSE ESCALATION STUDY OF PRS-343, A HER2/4–1BB BISPECIFIC MOLECULE, IN PATIENTS WITH HER2-POSITIVE MALIGNANCIES

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Background Anticalin® proteins are recombinantly engineered human proteins based on lipocalins. PRS-343 is a first-in-class bispecific antibody-Anticalin fusion protein targeting the oncogenic tumor antigen HER2 and the costimulatory immune receptor 4-1BB on T and other immune cells. Here, we report the results of a phase 1 single-agent dose escalation trial in patients with HER2+ solid tumors.

Methods PRS-343 has been evaluated in sequential dose cohorts from 0.0005 to 8 mg/kg i.v. Doses were administered Q3W and the 8 mg/kg dose was also given Q2W. An