Tislelizumab (TIS) versus docetaxel (TAX) as second- or third-line therapy in previously treated patients (pts) with locally advanced non-small cell lung cancer (NSCLC): Asian versus non-Asian subgroup analysis of the RATIONALE-303 study

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Background:

In RATIONALE-303 (NCT03358875), TIS significantly improved overall survival (OS) vs TAX in the intent-to-treat population (ITT) at the interim analysis (IA). TIS was later approved in China for advanced or metastatic NSCLC after progression on prior platinum-based chemotherapy. At the final analysis (FA), the co-primary endpoint of OS in the programmed death-ligand 1 (PD-L1, VENTANA SP263 assay) tumor cell ≥ 25% population was met, and TIS continued to improve OS compared with TAX in the ITT. Here we report FA results from the Asian vs non-Asian subgroups.

Methods:

A total of 805 pts with histologically confirmed locally advanced or metastatic NSCLC that progressed during or following treatment with ≥ 1 platinum-based regimen were randomized 2:1 to receive TIS 200 mg or TAX 75 mg/m^2 intravenously once every 3 weeks until disease progression, intolerable toxicity, or withdrawal of consent. Dual primary endpoints were OS in the ITT and PD-L1 ≥ 25% populations. Secondary endpoints included investigator-assessed progression-free survival (PFS), objective response rate (ORR), duration of response (DoR), and safety. A prespecified IA was conducted in ITT after ≈426 deaths (76% of planned events).

Results:

In total, 643 Asian and 162 non-Asian pts were randomized. Baseline characteristics were balanced between treatment arms in both subgroups. Both subgroups demonstrated favorable OS, PFS, DoR, and ORR with TIS vs TAX (**Table**). Treatment-emergent adverse events (TEAEs) of ≥ Grade 3 with TIS vs TAX were experienced by 41.1% vs 75.2% of Asian pts and 45.9% vs 72.9% of non-Asian pts, respectively. Serious TEAEs with TIS vs TAX were experienced by 35.7% vs 31.4% of Asian pts and 29.7% vs 37.5% of non-Asian pts, respectively.

Conclusions:

In both Asian and non-Asian pts, TIS demonstrated favorable efficacy benefits compared with TAX and was generally well tolerated.

Table

	Asian		**Non-Asian**	
ITT analysis set	**TIS (n=424)**	**TAX (n=219)**	**TIS (n=111)**	**TAX (n=51)**
Median study follow-up, months	17.2	10.7	14.3	10.4
Deaths, n (%)	293 (69.1)	169 (77.2)	72 (64.9)	37 (72.5)
mOS, months	17.8	12.2	14.9	11.9
HR* (95% CI)	0.65 (0.54, 0.79); p < 0.0001		0.73 (0.48, 1.11); p=0.0674	
mPFS, months	4.1	2.4	6.3	4.1
HR* (95% CI)	0.62 (0.51, 0.75); p < 0.0001		0.67 (0.45, 1.00); p=0.0241	
ORR, %	21.5	5.9	27.0	11.8
Odds ratio (95% CI)	4.41 (2.41, 8.07); p < 0.0001		2.84 (1.12, 7.20); p=0.0226	
mDoR, months	13.8	4.2	10.3	6.1

*p values are descriptive. *Stratified by histology, lines of therapy, and PD-L1 expression*
CI, confidence interval; HR, hazard ratio; m, median