Abstract 2661: Efficacy and safety of Penpulimab plus Anlotinib in recurrent / metastatic head and neck squamous cell carcinoma, a phase Ⅱ study

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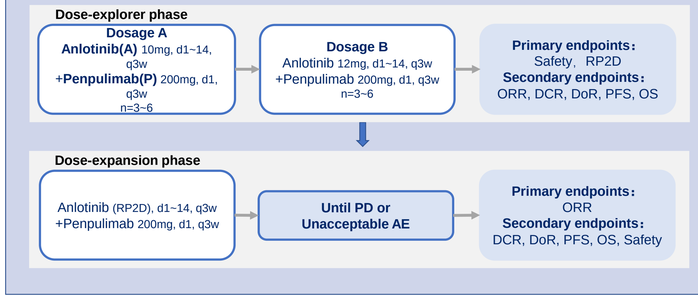
Background

- Penpulimab is a newly developed programmed cell death-1 monoclonal antibody with complete elimination of FcγR binding and ADCC/ADCP.
- Anlotinib is an oral multi-target tyrosine kinase inhibitor blocking angiogenesis and proliferation
- A phase Ⅱ study (ALTN-AK105-II-01, NCT04203719) was designed to explore the efficacy and safety of penpulimab plus anlotinib in the treatment of patients (pts) with several advanced cancers.
- Here we report the preliminary results for the cohort of recurrent/metastatic (R/M) head and neck squamous cell carcinoma (HNSCC)

Methods

Key Eligibility Criteria

- Histologically confirmed R/M HNSCC
- Failed prior platinum based chemotherapy
- ≥18 years, ECOG PS 0-1
- ≥ 1 measurable lesion（RECIST 1.1）
- previous anti-angiogenic agents or immune checkpoint inhibitors naïve



- In the dose-explorer phase of the whole study, only one patient was from cohort R/M HNSCC, and received anlotinib 10mg.
- The RP2D of anlotinb was 12mg, d1~14, q3w.
- From June 10, 2020 to April 28 2021, 30 pts were enrolled in this cohort and received treatment. A total of 25 patients received radiographic assessment.
- Baseline characteristics were shown in Table.1

Results

Table.1 Baseline characteristics of enrolled pts

Characteristics		Overall (n=30)
Median age, years (range)		59 (34-80)
Gender, n (%)	Male	25 (83.3)
	Female	5 (16.7)
ECOG score, n (%)	0	2 (6.7)
	1	26 (86.7)
Primary tumor site, n (%)	Oral cavity	14 (46.7)
	Larynx	6 (20.0)
	Oropharynx	2 (6.7)
	Hypopharynx	2 (6.7)
Metastatic , n (%)		17 (56.7)
Metastatic site, n (%)	Lung	6 (20.0)
	Lymph nodes	8 (26.7)
	Maxillofacial	5 (16.7)
Treatment history, n (%)	Previous radiotherapy	20 (66.7)
	Previous surgery	20 (66.7)
	Previous chemotherapy	29 (96.7)

Efficacy

- As shown in Table. 2, ORR was 28% and DCR was 88%.
- The tumor best change from baseline was shown in Figure 1.

Table.2 Efficacy outcomes Tumor response

	Overall (n=25)
CR , n(%)	0
PR, n(%)	7 (28.0)
SD, n(%)	15 (60.0)
PD, n(%)	3 (12.0)
ORR, %	28
DCR, %	88

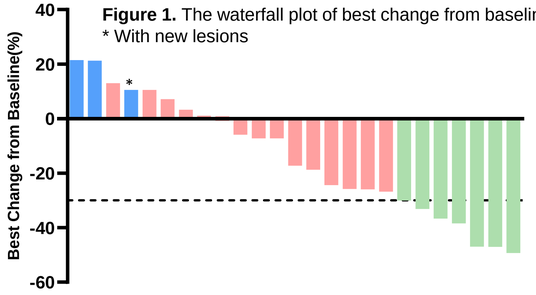
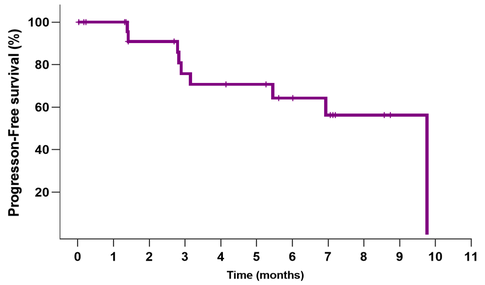


Figure 1. The waterfall plot of best change from baseline
* With new lesions

Figure 2. Kaplan-Meier Estimates of PFS



- As shown in Figure 2, the median PFS was 9.76 months.

Safety

Table.3 TRAEs

Adverse reactions n=30	All Grade , n(%)		
	Overall	P-related	A-related
total	28 (93.3)	26 (86.7)	28 (93.3)
hypothyroidism	10 (33.3)	9 (30.0)	10 (33.3)
hypertension	8 (26.7)	4 (13.3)	8 (26.7)
hypertriglyceridemia	5 (16.7)	3 (10.0)	5 (16.7)
oral mucositis	3 (10.0)	0	3 (10.0)
hand-foot syndrome	3 (10.0)	3 (10.0)	3 (10.0)
platelet count decreased	2 (6.7)	2 (6.7)	2 (6.7)
Proteinuria	2 (6.7)	0	2 (6.7)
anemia	2 (6.7)	2 (6.7)	2 (6.7)
GGT increased	2 (6.7)	2 (6.7)	2 (6.7)
WBC counts decreased	2 (6.7)	2 (6.7)	2 (6.7)

- As shown in table 3, 93.3% of patients experienced TRAEs, the most common TRAEs were hypothyroidism (33.3%) and hypertension (26.7%).

Table.4 Overview of Grade 3~4 TRAEs

Adverse reactions n=30	Grade 3~4, n(%)		
	Overall	P-related	A-related
total	11 (36.7)	7 (23.3)	11 (36.7)
hypothyroidism	2 (6.7)	2 (6.7)	2 (6.7)
hypertension	2 (6.7)	2 (6.7)	2 (6.7)
oral mucositis	1 (3.3)	0	1 (3.3)
hand-foot syndrome	2 (6.7)	2 (6.7)	2 (6.7)
platelet count decreased	1 (3.3)	0	1 (3.3)
proteinuria	1 (3.3)	0	1 (3.3)
GGT increased	1 (3.3)	1 (3.3)	1 (3.3)
WBC counts decreased	1 (3.3)	0	1 (3.3)
wound ruptured with infection	1 (3.3)	0	1 (3.3)

- Treatment-related adverse events (TRAEs) of Grade 3~4 occurred in 36.7% [11/30] of patients and leading to treatment discontinuation in 3.3% [1/30], anlotinib dose de-escalation in 13.3% [4/30].
- There were no Grade 5 TRAEs.

Conclusion

- **The combination of Anlotinib and Penpulimab showed promising efficacy and was well tolerated in treatment of pts with R/M HNSCC who failed standard first-line chemotherapy.**
- **Further investigation is warranted.**

Acknowledgement

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