SINTILIMAB IN COMBINATION WITH ANLOTINIB IN NON-SMALL CELL LUNG CANCER PATIENTS WITH UNCOMMON EGFR MUTATIONS: A PHASE II, SINGLE-ARM, PROSPECTIVE STUDY

K. CHEN, Y. FAN
DOI:HTTPS://DOI.ORG/10.1016/J.ANNONC.2022.02.030

Dr Birendra Kumar Yadav

Consultant Clinical Oncologist

Purbanchal Cancer Hospital

Birtamode, Jhapa, Nepal

PURBANCHAL CANCER HOSPITAL

BACKGROUND

- Uncommon EGFR alterations have shown poorer outcomes in non-small-cell lung cancer (NSCLC) patients as compared to those with EGFR mutations

- S768I substitution in exon 20 and the L861Q mutation in exon 21 , G719X are the most common uncommon EGFR mutation

  1-2 % of total EGFR mutated cases

- Globally, the prevalence is similar to other molecular drivers such as BRAF mutations, ROS1 and ALK re-arrangements

AIM

To investigate the efficacy and safety of PD-1/PD-L1 blockade and anti-angiogenesis treatments in NSCLC patients with uncommon EGFR mutations

PURBANCHAL CANCER HOSPITAL

METHODS

- Phase II, Single Arm
- Prospective Study
- Department of Thoracic Oncology, Cancer Hospital of The University of Chinese Academy of Sciences/Zhejiang Cancer Hospital, Hangzhou, China

- Patients received sintilimab (anti-PD-1) combined with anlotinib (multi-target anti-angiogenesis)

The primary endpoint :

- Objective response rate (ORR) based on RECIST 1.1

Secondary goals:

- Progression-free survival (PFS)
- Overall survival (OS)
- Disease control rate (DCR) based on RECIST 1.1

INCLUSION CRITERIA

- Life expectancy > 3 months
- At least one measurable lesion according to the RECIST 1.1 standard
- Metastatic or recurrent (stage IV) NSCLC confirmed treatment
- ECOG fitness status score = 0 or 1
- Genetic testing confirmed uncommon mutations (EGFR G719X, L861Q, S768I, and 20ins)
- Prior treatment with two regimen with a platinum-containing systemic chemotherapy and an EGFR-TKI treatment.
- EGFR 20ins with disease progression only after platinum-containing systemic chemotherapy

PURBANCHAL CANCER HOSPITAL

EXCLUSION CRITERIA

- Histology > NSCLC except
  - Small cell carcinoma
  - Neuroendocrine carcinoma
  - Sarcoma components
- Known EGFR-sensitive mutations (19-Del and L858R)
- Cavity lung squamous cell carcinoma, or non-small cell lung cancer with hemoptysis (>50 mL/day)
- Tumour invasion to major blood vessels
- Any signs or history of bleeding physique
- Prior treatment with anti-PD-1, anti-PD-L1 or anti-PD-L2 drugs

PURBANCHAL CANCER HOSPITAL

RESULTS

- Total enrolled patients = 21
- Data cut-off time = January 11, 2022
- The median follow-up =15.2 months

Among enrolled patients :

- EGFR Ex20ins =12 cases
- EGFR other mutations such as L861Q, G719A, and G709T = 9 cases

PURBANCHAL CANCER HOSPITAL

RESULTS

Patients harboring uncommon EGFR mutations

- Median progression-free survival = 6.7 months (95% CI, 2.4, 11.0)
- The 6-month PFS rate = 52.4%.
- The objective response rate (ORR) = 36.8% (7/19)
- The disease control rates (DCR) = 84.2%

Patients carrying EGFR Ex20ins showed similar ORR/DCR and PFS with other mutation patterns

- (ORR: 36.4% [4/11] vs. 37.5% [3/8] p=1.00
- DCR: 90.9% [10/11] vs. 75.0% [6/8] p=0.348,
- PFS: 4.3 vs. 7.1 months, p=0.327

PURBANCHAL CANCER HOSPITAL

RESULTS

Most commonly observed grade 3 or greater treatment-related adverse events :

- Hypertension (4.8%,1/21)
- Immune-related pneumonitis (4.8%,1/21)
- Hand-foot syndrome (9.5%,2/21)

The use of Sintilimab and Anlotinib did not result in increased safety concerns

PURBANCHAL CANCER HOSPITAL

CONCLUSION

- Combination of sintilimab and anlotinib demonstrated durable efficacy and good tolerability in NSCLC patients with uncommon EGFR mutations.
- Further investigation is warranted to confirm this new chemo-free strategy.

PURBANCHAL CANCER HOSPITAL

THANK YOU

PURBANCHAL CANCER HOSPITAL