IHC-001: Safety and Tolerability Evaluation of Sintilimab in Combination With Radiation in Stage IV NSCLC Patients

NCT number: NCT03812549

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Version:1.0

**Study population**

Eligible patients had histologically or cytologically confirmed stage IV NSCLC; were negative for mutations of EGFR\ALK\ROS1; were aged 18 to 75; never received any systematic treatment (including immunotherapy, chemotherapy and targeted therapy); had an Eastern Cooperative Oncology Group (ECOG) performance status 0–1; PD-L1 positive (TPS ≥ 1%); had an expected survival time ≥ 3 months; and presented no major organ dysfunction Patients were excluded if they had active brain metastases, uncontrolled hypertension, severe cardiovascular diseases, or coagulation abnormalities. This study was reviewed and approved by the Institutional Review Board of West China Hospital, Sichuan University. Written informed consent was obtained from all participants.
This study is registered with ClinicalTrials.gov, number NCT03812549

**Study design**

This study is a dose-finding, phase I trial of IBI308 in combination with radiotherapy, including dose-escalation and dose-expansion parts. Patients with untreated advanced NSCLC will receive SBRT for small lesions, LDRT for large lesions, and IBI308 treatment every three weeks. Tumors of enrolled patients must be PD-L1 positive. The dose-escalation part during the dose-escalation phase trial includes the determination of DLT, MTD, and RDE for LDRT, and preliminary assessment of safety and tolerability. The dose-expansion part of dose-expansion phase includes continuing to expand to 17 patients based on MTD/RDE, and further observing the safety and efficacy of this dose.

**Assessments**

Primary objectives:
To evaluate the safety and preliminary efficacy of IBI308 combined with radiotherapy in the treatment of patients with stage IV PD-L1 positive NSCLC.
1.As the dose-escalation stage, dose-escalation phase mainly serves to evaluate the safety of IBI308 combined with radiotherapy and to determine the LDRT dose.
2.Dose-expansion phase further evaluates the safety and objective response rate (ORR) of IBI308 combined with radiotherapy.
To evaluate the safety of IBI308 combined with radiotherapy for first-line treatment of PD-L1-positive stage IV NSCLC, including incidences of all adverse events (AEs) and serious adverse events (SAEs), treatment-related adverse events (TRAEs), and their severity.
Secondary objectives:

To evaluate the efficacy of IBI308 combined with radiotherapy for first-line treatment of PD-L1-positive stage IV NSCLC, including median ORR, progression-free survival (PFS), overall survival (OS).

## Statistical analysis

All analyses were performed using R software33 (version 4.02) or Prism (version 9.0; GraphPad Software, San Diego, CA, USA). Unless otherwise noted, two-sided 95% confidence intervals will be adopted. Continuous variables will be summarized using descriptive statistics including number of cases, mean, median, standard deviation, and maximum and minimum. The numbers and percentages of cases will be described by categories. Statistical analyses will be further explained in the statistical analysis plan (SAP). SAP will be finalized before database lock.