Table S1 Inclusion and exclusion criteria

Inclusion criteria

- Signed the informed consent form prior to patient entry;
- Male or female patients aged 18-75 years old;
- Diagnosed with advanced NSCLC (phase IIIB/IV) through pathology, Neoadjuvant chemotherapy, or postoperative adjuvant chemotherapy or neoadjuvant chemotherapy combined with postoperative adjuvant chemotherapy or targeted chemoradiotherapy for local advanced disease recurrence within 6 months after completion;
- In the past 3 months at least one target lesion that had not previously been irradiated, and at least one direction with the longest diameter at baseline greater than 10 mm (shorter diameter required not less than 15 mm if lymph nodes are involved) could be imaged by CT scan or MRI:
- Expected Survival Time: Over 6 months;
- Had an Eastern Cooperative Oncology Group (ECOG) performance-status score of 0 or 1 (on a 5-point scale, with higher scores indicating increasing disability);
- The main organs function are normally, the following criteria are met: (1) Blood routine examination criteria should be met (no blood transfusion and blood products within 14 days, no correction by G-CSF and other hematopoietic stimuli): HB ≥90 g/L; ANC ≥ 1.5×10⁹/L; PLT ≥80×10⁹/L; (2) Biochemical examinations must meet the following criteria: TBIL <1.5×ULN; ALT and AST <2.5×ULN, and for patients with liver metastases <5×ULN; serum Cr ≤1.25×ULN or endogenous creatinine clearance >60 ml/min (Cockcroft-Gault formula);
- Women of child-bearing age should take appropriate contraceptive measures and should not breastfeed from screening to 3 months after stopping the study and treatment. Before starting administration, the pregnancy test was negative, or one of the following criteria was met to prove that there was no risk of pregnancy:
 - 1. Post-menopause is defined as amenorrhea at least 12 months after age 50 and cessation of all exogenous hormone replacement therapy;
 - 2. Postmenopausal women under the age of 50 years also be considered postmenopausal if their amenorrhea is 12 months or more after the cessation of all exogenous hormone therapy and their luteinizing hormone (LH) and follicle-stimulating hormone (FSH) levels are within the reference value range of laboratory postmenopausal;
 - 3. Has undergone irreversible sterilization surgery, including hysterectomy, bilateral ovariectomy or bilateral salpingectomy, except for bilateral tubal ligation.
- For men, consent is required to use appropriate methods of contraception or to be surgically sterilized during the trial and 8 weeks after the
 last administration of the trial drug.

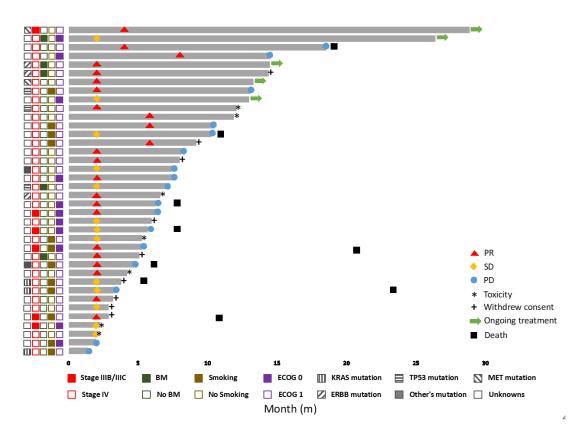
Exclusion criteria

- Small cell lung cancer (including lung cancer mixed with small cell lung cancer and non-small cell lung cancer), lung sarcomatoid carcinoma;
- Had histologically confirmed lung squamous cell carcinoma, or adenosquamous carcinoma;
- Patients with pathological fracture in bone metastasis of non-small-cell lung cancer;
- Tumor histology or cytology confirmed EGFR mutagenesis [EGFR sensitive mutations include 18 exon point mutations (G719X), 19 exon deletions, 20 exon S768I mutations and 21 exon point mutations (L858R and L861Q)] and ALK gene rearrangement positivity, include EGFR/ALK status cannot be determined for various reasons;
- Imaging (CT or MRI) shows that the distance between tumor lesion and the large blood vessel is ≤ 5 mm, or there is a central tumor that invades the local large blood vessel; or there is a significant pulmonary cavity or necrotizing tumor;
- Medical history and combined history:
 - Active brain metastases, cancerous meningitis, spinal cord compression, or imaging CT or MRI screening for brain or pia mater disease (a patient with brain metastases who have completed treatment and stable symptoms in 28 days before enrollment may be enrolled, but should be confirmed by brain MRI, CT or venography evaluation as no cerebral hemorrhage symptoms and metastases in midbrain, pons, cerebellum, medulla oblongata, or spinal cord, brain metastases and local radiotherapy after two weeks to allow group);
 - 2. The patient is participating in other clinical studies or completing the previous clinical study in less than 4 weeks;
 - 3. Had malignant tumors except NSCLC within 5 years before enrollment (except for patients with cervical carcinoma *in situ*, basal cell or squamous cell skin cancer who have undergone a curative treatment, local prostate cancer after radical resection, ductal carcinoma *in situ* or papillary thyroid cancer after radical resection);
 - 4. Abnormal blood coagulation (INR >1.5 or prothrombin time (PT) >ULN + 4 seconds or APTT >1.5 ULN), with bleeding tendency or undergoing thrombolytic or anticoagulant therapy; Note: Under the premise of prothrombin time international normalized ratio (INR) ≤ .5, low-dose heparin (adult daily dose of 0.6 million to 12,000 U) or low-dose aspirin (daily dosage ≤100 mg) is allowed for preventive purposes;
 - 5. Renal insufficiency: urine routine indicates urinary protein ≥++, or confirmed 24-hour urine protein ≥ 1.0g;
 - The effects of surgery or trauma have been eliminated for less than 14 days before enrollment in subjects who have undergone major surgery or have severe trauma;
 - 7. Severe acute or chronic infections requiring systemic treatment;
 - 8. Suffering from severe cardiovascular disease: myocardial ischemia or myocardial infarction above grade II, poorly controlled arrhythmias (including men with QTc interval ≥450 ms, women ≥470 ms); according to NYHA criteria, grades III to IV Insufficient function, or cardiac color Doppler ultrasound examination indicates left ventricular ejection fraction (LVEF) <50%;
 - 9. There is currently a peripheral neuropathy of CTCAE ≥2 degrees, except for trauma;
 - 10. Respiratory syndrome (CTC AE grade ≥2 dyspnea), serous effusion (including pleural effusion, ascites, pericardial effusion) requiring surgical treatment:
 - 11. Long-term unhealed wounds or fractures;
 - 12. Decompensated diabetes or other ailments treated with high doses of glucocorticoids;
 - 13. Factors that have a significant impact on oral drug absorption, such as inability to swallow, chronic diarrhea, and intestinal obstruction;
 - 14. Clinically significant hemoptysis (daily hemoptysis greater than 50ml) within 3 months prior to enrollment; or significant clinically significant bleeding symptoms or defined bleeding tendency, such as gastrointestinal bleeding, hemorrhagic gastric ulcer, baseline fecal occult blood ++ and above, or suffering from vasculitis;
 - 15. Events of venous/venous thrombosis occurring within the first 12 months prior to enrollment, such as cerebrovascular accidents (including transient ischemic attacks, cerebral hemorrhage, cerebral infarction), deep vein thrombosis, and pulmonary embolism;
- Physical examination and laboratory findings:
 - 1. A known history of HIV testing positive or acquired immunodeficiency syndrome (AIDS);
 - 2. Untreated active hepatitis (hepatitis b: HBsAg positive and HBV DNA more than 1×10³ copy /ml; Hepatitis c: HCV RNA is positive and liver function is abnormal); Combined with hepatitis b and hepatitis c infection;
 - 3. Serious diseases that endanger patients' safety or affect patients' completion of research, according to the researchers' judgment.

Table S2 Treatment outcomes

Best response ————————————————————————————————————	Patients (n=38)	
	n	%
Complete response	0	0
Partial response	23	60.5%
Stable disease	13	34.2%
Progressive disease	2	5.3%
Objective response rate	60.5%	
95%CI	43.4%-76.0%	
Disease control rate	94.7%	
95%CI	82.3%-99.4%	
Median progression-free survival, months	10.5	
95%CI	4.1-17.0	
Median overall survival, months	23.4	
95%CI	NE-NE	

CI: confidence interval; NE: non-evaluable.



 $Figure \ S1 \ {\rm Swimlane} \ {\rm chart} \ {\rm of} \ {\rm the} \ {\rm time-to-event}.$

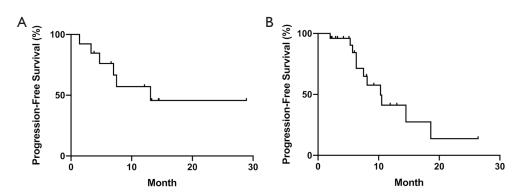


Figure S2 Kaplan-Meier curves of progression-free survival for patients with (A) other gene mutations (B) unknown gene mutation status.