7MO Oritinib (SH-1028) a third-generation EGFR tyrosine kinase inhibitor in locally advanced or metastatic NSCLC patients with positive EGFR T790M: Results of a single-arm phase II trial

DR. KIRAN S. TAMKHANE

CONSULTANT MEDICAL ONCOLOGIST

NANAVATI MAX HOSPITAL, MUMBAI

Introduction

- 7MO Oritinib (SH-1028) a third-generation EGFR tyrosine kinase inhibitor in locally advanced or metastatic NSCLC patients with positive EGFR T790M: Results of a single-arm phase II trial

Background : Oritinib

- **Oritinib** (SH-1028) is a third-generation EGFR-TK
- Selectively targeting both sensitive EGFR and EGFR T790M mutations.
- Herein, we report the efficacy and safety of oritinib in EGFR T790M-positive advanced NSCLC patients from the phase II study (NCT03823807)

Methods

- Locally advanced or metastatic NSCLC patients
- Aged ≥ 18 years
- Centrally confirmed EGFR T790M mutation.
- Asymptomatic, stable CNS metastases were eligible into the study.
- Oritinib 200 mg was given orally once daily until disease progression or unacceptable toxicity. Primary efficacy endpoint was objective response rate (ORR). Secondary efficacy endpoints included disease control rate (DCR), progression-free survival (PFS), duration of response (DOR) and overall survival (OS).

Methods:

- Oritinib 200 mg was given orally once daily until disease progression or unacceptable toxicity.
- Primary efficacy endpoint was **objective response rate** (ORR).
- Secondary efficacy endpoints:
  - Disease control rate (DCR),
  - Progression-free survival (PFS),
  - Duration of response (DOR)
  - Overall survival (OS).

Results:

- Between December 2019 and March 2021,
- 228 patients were enrolled
- 227 patients received at least one dose of oritinib.
- The median age of 227 patients was 62 years old,
- 57.3% of patients were female
- 24.7% received systemic chemotherapies.

Results:

- At data cutoff (September 17, 2021),
- 137 of 227 patients achieved confirmed partial responses with ORR of 60.4% (95% CI: 42.4%, 68.8%) by IRaC.
- The Disease control rate was 92.5% (88.3%, 95.6%)
- Median PFS was 12.6 months (95% CI: 9.7, 15.3)
- Median DOR was 12.5 months (95% CI: 11.2, NA).
- Median OS was immature.

Results:

- **The most common (≥10%) treatment-emergent adverse events (TEAEs):**
- Diarrhea (45.4%)
- Increased blood creatine phosphokinase (26.0%)
- Anaemia (20.3%)
- Decreased white blood cell count (15.4%)
- Decreased appetite (15.0%)
- Increased blood creatine phosphokinase isoenzyme (13.2%)
- Nausea (13.2%), vomiting (13.2%)
- Increased serum creatine (12.8%),

- Upper respiratory tract infection (12.3%)
- Increased AST (11.9%)
- Cough(11.9%)
- Decreased platelet count (11.0%)
- Constipation (10.6%).

- Grade≥3 TEAEs:
  - Increased blood creatine phosphokinase (4.0%),
  - Hypertension (3.1%)
  - Death (2.6%)
  - Diarrhea (2.2%).

- **No interstitial lung disease were reported.**

Conclusions:

- Oritinib demonstrated potential clinical benefit and tolerable in advanced NSCLC patients with EGFR T 790M mutation.

Thank You !