Savolitinib demonstrated promising anti-tumor activity and acceptable tolerability in METEx14+ NSCLC patients

**Efficacy**

- Robust and durable tumor response with savolitinib among METEx14+ NSCLC pts: IRC-assessed ORR 49.2% in efficacy evaluable set and 42.9% in full analysis set, DOR was 17.1 months (95% CI 10.2-20.0); observations consistent across subgroups.
- PFS and OS data were both not mature yet; median PFS was 6.9 months (maturity 50%) and median OS was 14.0 months (maturity 75%) in 70 pts.
- PFS was of clinical significance both among PSC and other NSCLC subgroups.
- Promising PFS was observed among previously treated metastatic patients.

- In the treatment naïve subgroup, nearly half of pts were with PSC (46.4%, 13/28), which reflected in the PFS of this subgroup.

**Safety**

- Median treatment duration of 70 pts was 6.8 months (range 0.2 to 37.3): 52 pts initially received volitinib, 8 received 400 mg QD.

- 18 (25.7%) pts reported treatment-related serious adverse events (SAE):
  - Hepatic function abnormal (4.3%), drug hypersensitivity (2.9%) and pyrexia (2.9%) reported in 22 pts.
  - One patient had treatment-related fatal SAE (tumor lysis syndrome).
  - 10 (14.3%) pts reported treatment-related AEs leading to dose discontinuation:
    - Drug-induced liver injury and drug hypersensitivity each reported 2 pts (2.9%).
    - Others reported in each pt.

**Table 4. IRC-assessed tumor response in subgroups by pathological types**

**Table 5. IRC-assessed tumor response in subgroups by prior treatment**

**Table 6. Summary of related AEs reported by ≥15% Patients (N=70)**

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**Background**

- Treatment options are limited for pts with METEx14+ NSCLC.
- PSC is a rare type of NSCLC with more progressive clinical behavior and poorer diagnosis than other types of NSCLC, and resistant to chemotherapy (historically, PFS<3 months).2)
- Savolitinib (AZD6904, HMPL-504, volitinib) is a highly selective oral MET tyrosine kinase inhibitor with an EC<5 < 10 nM in vitro.

**Methods**

- A multicenter, multi-cohort, single-arm phase II study in China to evaluate the efficacy, safety, and pharmacokinetics of savolitinib in pts with unresectable or metastatic METEx14+ PSC and other NSCLC. The cohort 1 was presented here.
- Cohort 1 was designed to reject the null hypothesis that the ORR does not exceed 30%, with at least 90% power. Assuming the ORR was at least 55%, the required sample size was 50 efficacy evaluable patients.

**Results**

**Patients**

- A total of 593 Chinese pts were pre-screened/screened, 87 identified with METEx14+ and treated. As of 31 Mar 2020, 50 pts discontinued treatment, 20 were still on treatment, follow-up was ongoing.
- Most of the pts were in stage 1B, their stage IV disease and previously treated with systemic antitumor therapy.
- The proportion of pts with PSC was 35.7% (25/70); half of these pts were previously treated prior to naïve treatment.

**Table 1. Demographics and baseline characteristics (N=70)**

**Table 2. Tumor response in efficacy evaluable set**

**Figure 1. Tumor shrinkage in full analysis set per IRC**

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**Correspondence:** Shun Lu at shunlu@hotmail.com

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**Table 7. TS-1 expression by IHC in metastatic NSCLC**

**References**


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**Table 8. Abbreviations in this paper**

- AB: adrenal metastasis
- AL: adenocarcinoma lung
- BM: brain metastasis
- BR: bone metastasis
- CT: computed tomography
- CTCAE: Common Terminology Criteria for Adverse Events
- DCR: disease control rate
- DOR: duration of response
- ECOG: Eastern Cooperative Oncology Group
- F: female
- FR: feasible residence
- IRA: intracellular resistance
- IRC: independent radiology committee
- J: Japan
- LN: lymph node
- LVE: left ventricular ejection fraction
- M: male
- NE: not evaluable
- NS: non-small cell lung cancer
- NSCLC: non-small cell lung cancer
- OR: objective response
- ORR: objective response rate
- OS: overall survival
- PD: progressive disease
- PR: partial response
- PS: performance status
- R: remission
- RCT: randomized clinical trial
- S: survival
- SD: stable disease
- SCLC: small cell lung cancer
- T: treatment
- TTR: time to tumor regression
- TNM: tumor-node-metastasis
- W: white