Extended Abstract

Journal of Pulmonology and Clinical Research

2020
Vol. 1, Iss. 1

The international debate on Oral Poziotinib shows clinical activity and durable response in previously treated EGFR exon 20 NSCLC patients –a phase 2 study

Mark A Socinski

Spectrum Pharmaceuticals Inc., USA

Management of non-small cell lung cancer (NSCLC) with EGFR exon 20 mutations is an unmet medical need. Poziotinib is a potent irreversible tyrosine kinase inhibitor of wild type and EGFR and HER2 exon 20 insertion mutants. Patient pharmacokinetics demonstrated a dose-proportional increase in plasma (half-life of 7.9 hr at 16 mg QD) with and no accumulation. Efficacy and safety of Poziotinib in NSCLC patients with EGFR exon 20 insertion mutations (ZENITH20-1) was studied in a multi-center phase 2 study. Patients received Poziotinib 16 mg QD (dose reductions permitted for AEs) until progression, or intolerable AE for 24 mo. primary endpoint was objective response rate (ORR), RECIST v1. (Central radiographic read). ORR was achieved if the 95% CI>17% in the ITT Population. Secondary endpoints were disease control rate (DCR), duration of response (DOR), progression-free survival (PFS) and safety. One hundred fifteen patients median age 61 years with a median of two prior therapies consisting of chemo and immunotherapy were studied. Results show 65% had tumor reduction; DCR of 69%; PR 15% confirmed 4% unconfirmed; 54% SD; ORR 15%; DOR 7.4 mo. and PFS 4.2 mo. safety profile was mechanism related and similar to others of the class with patient compliance improvement observed with dose reduction to 12 mg QD. In summary, ORR was lower than expected; however, Poziotinib demonstrated unequivocal clinical activity with tumor reduction in majority of patients. Impact of drug compliance/holidays coupled with its short half-life due to AEs may have reduced efficacy. Studies to optimize dose and schedule for ongoing and future studies are in progress.

Note: This work is partly presented at 11th Annual Congress on Pulmonology & Respiratory Medicine | March 18-19, held at Amsterdam, Netherlands