

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

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Abstract

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-centre 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 tumour 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 tumour

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.

Biography:

Mark A Socinski is a Board-Certified, Fellowship-Trained Medical Oncologist, specializing in all Thoracic Malignancies, including Small Cell and Non-Small Cell Lung Cancers and Mesothelioma. He is an internationally recognized expert in the development of novel chemotherapy agents and treatment strategies for advanced non-small cell lung cancer and small cell lung cancer. His research has focused on incorporating personalized medicine and molecular biomarkers in the treatment of lung cancer. Formerly he served as a Co-Chair of the Thoracic Malignancies Steering Committee for the National Cancer Institute. He also serves on the Respiratory Core Committee of the Cancer and Leukaemia Group B (Alliance) and has been instrumental in the development of many cooperative clinical trials. He is the Executive Medical Director of the Advent Health Cancer Institute.