Poster Session (Poster presentations categorized by each organ)

THE ADDITION OF BEVACIZUMAB TO ERLOTINIB FOR MALIGNANT PLEURAL EFFUSION: A CASE REPORT WITH PHARMACOKINETIC ANALYSIS

Satoru Miura1, Hiroshi Kagamu1, Chiyo Imamura2, Rie Kondo1, Masaaki Okajima1, Satoshi Watanabe3, Junta Tanaka1, Ichiei Narita1, Yusuke Tanigawara2, Hirohisa Yoshizawa2
1Internal Medicine (II, Niigata University of Medical and Dental Hospital
2Department of Clinical Pharmacokinetics and Pharmacodynamics, School of Medicine, Keio University
3Bioscience Medical Research Center, Niigata University Medical and Dental Hospital

Background: Vascular endothelial growth factors (VEGF) play a critical role in pleural fluid accumulation. Bevacizumab is a recombinant humanized monoclonal antibody that blocks VEGF pathways, and it has become an expected treatment option for patients with malignant effusion.

Case report: An 81-year-old woman was diagnosed as advanced lung adenocarcinoma (cT4N0M0, stage IIIB), and the epidermal growth factor receptor mutation analysis revealed that exon 19 deletion was present. She had received erlotinib 150mg daily as a third-line therapy following vinorelbine monotherapy and gefitinib. She initially visited our outpatient clinic complaining shortness of breath, and a chest X-ray revealed massive pleural effusion on her right side. We obtained informed consent from the patient, and administered bevacizumab 15 mg/kg in addition to erlotinib. Six weeks following the treatment, the pleural effusion and pleural dissemination had remarkably improved. No obvious adverse event was observed.

Discussion: The clinical course of the case suggests addition of bevacizumab to molecular-targeted agent may be an effective strategy for treating patients with malignant pleural effusion. In the coming meeting, we will present both the detailed clinical course of this patient, and the pharmacokinetic data of erlotinib.