European Respiratory Society
Annual Congress 2012

Abstract Number: 1289

Publication Number: P4619

Abstract Group: 11.2. Pleural and Mediastinal Malignancies

Keyword 1: Lung cancer / Oncology **Keyword 2:** No keyword **Keyword 3:** No keyword

Title: Serum thioredoxin-1 as a diagnostic marker for malignant peritoneal mesothelioma

Dr. Chiharu 9758 Tabata riepon.2828-tabataba@nike.eonet.ne.jp MD [1], Dr. Takayuki 9760 Terada ctabata@hyo-med.ac.jp MD [1], Dr. Rie 9762 Tabata rtabata@hp.pref.hyogo.jp MD [2] and Prof. Takashi 9764 Nakano riochan.rikachan.kodanuki@docomo.ne.jp MD [1]. [1] Division of Respiratory Medicine, Department of Internal Medicine, Hyogo College of Medicine, Nishinimiya, Japan and [2] Department of Internal Medicine, Hyogo Prefectural Tsukaguchi Hospital, Amagasaki, Japan .

Body: Background: Diffuse malignant peritoneal mesothelioma (DMPM) is an aggressive malignant tumor of mesothelial origin that shows a limited response to cytoreductive surgery along with intra-peritoneal chemotherapy. Therefore, diagnosing DMPM early is very important. Reactive oxygen species (ROS) play an important role in asbestos toxicity, which is associated with the pathogenesis of DMPM growing. Thioredoxin-1 (TRX) is a small redox-active protein that demonstrates anti-oxidative activity associated with tumor growth. Here, we investigated the serum levels of TRX in patients with DMPM and compared them with those of a population that had been exposed to asbestos but had not have DMPM. Study: The serum concentrations of TRX were measured in 15 DMPM patients and 34 individuals with benign asbestos-related diseases. Result: We demonstrated that the patients with DMPM had significantly higher serum levels of TRX than the population who had been exposed to asbestos but had not have DMPM.

Conclusions: Our data suggest that serum TRX concentration is a useful serum marker for DMPM.