

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 2633

**Publication Number:** 373

**Abstract Group:** 11.1. Lung Cancer

**Keyword 1:** Lung cancer / Oncology **Keyword 2:** Idiopathic pulmonary fibrosis **Keyword 3:** ALI (Acute Lung Injury)

**Title:** Pemetrexed in advanced non-small cell lung cancer patients with idiopathic pulmonary fibrosis

Dr. Motoyasu 22613 Kato mtkatou@juntendo.ac.jp MD<sup>1</sup>, Dr. Takehito 22614 Shukuya tshukuya@juntendo.ac.jp MD<sup>1</sup>, Dr. Fumiyuki 22615 Takahashi fumiyuki@dol.hi-ho.ne.jp MD<sup>1</sup>, Dr. Ai 22616 Inagaki gaki.gaki.gakichan0916@softbank.ne.jp MD<sup>1</sup>, Dr. Ryota 22617 Kanemaru rkanema@juntendo.ac.jp MD<sup>1</sup>, Dr. Ryo 22618 Ko rkou@juntendo.ac.jp MD<sup>1</sup>, Dr. Sigehiro 22619 Yagishita syagishi@juntendo.ac.jp MD<sup>1</sup>, Dr. Nurwidya 22620 Fariz fariz@juntendo.ac.jp MD<sup>1</sup>, Dr. Isao 22621 Kobayashi isao-k@juntendo.ac.jp MD<sup>1</sup>, Dr. Akiko 22622 Murakami amuraka@juntendo.ac.jp MD<sup>1</sup>, Dr. Yoshito 22623 Hoshika yhoshika@juntendo.ac.jp MD<sup>1</sup>, Dr. Keiko 22624 Muraki k-muraki@juntendo.ac.jp MD<sup>1</sup>, Dr. Ryo 22625 Koyama rkoyama@juntendo.ac.jp MD<sup>1</sup>, Dr. Naoko 22626 Shimada naokoh@juntendo.ac.jp MD<sup>1</sup>, Dr. Akiko 22627 Sakuraba sakura-3.kf6@ezweb.ne.jp MD<sup>1</sup> and Prof. Dr Kazuhisa 22648 Takahashi kztakaha@juntendo.ac.jp MD<sup>1</sup>. <sup>1</sup> Respiratory Medicine, Juntendo University Graduate School of Medicine, Tokyo, Japan, 113-8421, JAPAN .

**Body:** [Background] Advanced non-small cell lung cancer (NSCLC) patients with idiopathic pulmonary fibrosis (IPF), need to be carefully treated with cytotoxic chemotherapy because of high incidence of pulmonary toxicity. Pemetrexed (PEM) is one of the key cytotoxic drugs for advanced NSCLC. However, the safety, particularly the incidence of interstitial lung disease (ILD), and efficacy of PEM in NSCLC patients with IPF are unknown. [Aim] To investigate the safety and efficacy of PEM in NSCLC patients with IPF. [Patients and Method] The medical records of NSCLC patients with or without IPF and treated with PEM monotherapy (500mg/m<sup>3</sup>, every 3 weeks) were retrospectively reviewed. [Result] 106 NSCLC patients were treated with PEM monotherapy at Juntendo University Hospital between April 2009 and January 2013. Among them, 11 patients were diagnosed as having IPF before treatment (designated as IPF group), and 95 patients were not diagnosed as having IPF before treatment (non-IPF group). 2 patients in IPF group and 1 patient in non-IPF group developed ILD during the treatment (18.1% vs 2.0%, p=0.007). The 2 patients in IPF group died due to ILD and judged as treatment related death. Median progression free survival was 7.4 weeks, and 15.5 weeks (p=0.02) for IPF group and non-IPF group, respectively. The response, compliance, and toxicities excluded ILD were not significantly different between two groups. [Conclusion] Our results indicated that the incidence of PEM-related ILD was significantly higher in NSCLC patients with IPF than those with non-IPF. PEM must be carefully administered when treating NSCLC patients with IPF.