

# European Respiratory Society Annual Congress 2012

**Abstract Number:** 1788

**Publication Number:** P3467

**Abstract Group:** 1.12. Clinical Problems - COPD

**Keyword 1:** COPD - exacerbations **Keyword 2:** Bacteria **Keyword 3:** Infections

**Title:** Microbiological screening infectious exacerbation of chronic obstructive pulmonary disease

Prof. Oleksandr 15572 Dziublyk treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Nina 15573 Nedlinska treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Oleksandr 15574 Mukhin treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Georgii 15575 Kapitan treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Yaroslav 15576 Dziublyk treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Larisa 15580 Chechel treat@pulmon.kiev.ua MD <sup>1</sup>, Dr. Vsevolod 15582 Kliagin treat@pulmon.kiev.ua MD <sup>1</sup> and Dr. Rostislav 15584 Sukhin treat@pulmon.kiev.ua MD <sup>1</sup>. <sup>1</sup> Dept. Treatment of Non-Specific Lung Disease, State Institution "National Institute of Tuberculosis and Pulmonology n. a. F. G. Yanovsky, AMS of Ukraine", Kiev, Ukraine, 03680 .

**Body:** Biological materials (sputum, swabs or swabs from the nose), obtained from 162 patients with AE of COPD. Microbiological examination of the material was carried out in accordance with the rules of GLP. Laboratory diagnosis of viral infection carried by rapid diagnosis (by enzyme immunoassay (ELISA), fluorescent antibody (IFA) and immunochromatographic assay. The majority (84,1±3,3)% of patients with AE of COPD was caused by bacterial, and (31.8±4.1)% - viral pathogens, of which (69,8±4,1)% cases - only the bacterial pathogens in the (15,9±3,3)% - only viruses and (14,3±3,1)% - a combination. The greatest significance of bacterial pathogens were H. influenzae in 49.1% of cases, S. pneumoniae - in 22,6%, K. pneumoniae - in 9,4%, M. catarrhalis - in 13,2%, E. coli - in 6,6%, S. aureus - 7.6%. Among the viral agents most frequently detected adenoviruses - in 31.6% of cases, influenza A and B - in 34.2%, parainfluenza - 26.3% and RS virus - at 7.9%. In patients with AE of COPD viral pathogens founded: the influenza viruses A and B - Feb 7 (17,5±6,1)%, Mar 5 (12,5±5,3)%, Apr 3 (7,5±4,2)%; parainfluenza - May 3 (7,5±4,2)%, Oct 7 (17,5±6,1)%; adenoviruses - Feb 6 (15, 0±5,7)%, Apr 1 (2,5±2,5)%, Oct 5 (12,5±5,3)%; RS virus - May 3 (7,5±4,2) %, which generally coincided with the seasonality of the disease to viral respiratory infections, caused by these pathogens. The frequency of detection of viral pathogens of AE COPD also depended on the duration of the examination of patients from early relapse. In the first three days of exacerbation frequency detection of viral pathogens was (77,5 ± 6,6)%; 4 - 7 day aggravation - (22,5 ± 6,6)%; 8 days later and none of the patients viral pathogen was not detected.