European Respiratory Society Annual Congress 2012

Abstract Number: 2866

Publication Number: P2525

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Pneumonia Keyword 2: Biomarkers Keyword 3: Infections

Title: Biomarkers and severity in community-acquired pneumonia (CAP)

Dr. Sergio 5287 Fandos wstriskel@gmail.com MD ¹, Dr. Elisa 5288 Minchole elichilla@hotmail.com MD ¹, Ms. Ana 5289 Lasierra ablasierra@gmail.com ², Dr. Ana 5290 Simon dra.analisi@gmail.com MD ¹, Dr. Carolina 5958 Panadero Karolapa@hotmail.com MD ¹, Mr. Guillermo 5974 Hernandez ghernandezdabajo@gmail.com ², Dr. Francisco 5984 De Pablo fdepablo@salud.aragon.es MD ¹, Dr. Sandra 5989 Garcia sandragarcia1985@hotmail.com MD ¹, Dr. Carlos 5992 Lapresta Clapresta@salud.aragon.es MD ¹ and Dr. Salvador 5994 Bello sbello@salud.aragon.es MD ¹. ¹ Pulmonology, Hospital Miguel Servet, Zaragoza, Spain, 50006 and ² Biochemistry, Hospital Miguel Servet, Zaragoza, Spain, 50006 .

Body: INTRODUCTION To evaluate the prognostic value of biomarkers in community-acquired pneumonia (CAP), we studied the correlations between C-reactive protein (CRP), procalcitonin (PCT), leukocyte count (WBC) and proadrenomedulin (proADM) with the widely used PSI severity score. MATERIAL AND METHODS We prospectively studied 282 immunocompetent, adults patients hospitalized with CAP, calculated their PSI score and measured on admission the mentioned four blood biomarkers. Subsequently, we established the ROC curves to determine which of the biomarkers had a better discriminating power from mild CAP (PSI 1-3) to severe ones (PSI 4-5). RESULTS PCT and proADM significantly discriminated severe from mild CAP, although the area under curve was significantly higher for proADM (0.757 vs. 0.581). The other two biomarkers did not reach statistical significance.

CONCLUSIONS ProADM is a good predictor of CAP severity at the time of admission, and can be useful, with the clinical scores to identify severe CAP. This may help us to make decisions of patients site of care and management in the early hours.