

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 4867

**Publication Number:** P296

**Abstract Group:** 10.1. Respiratory Infections

**Keyword 1:** Infections **Keyword 2:** Pneumonia **Keyword 3:** Treatments

**Title:** Predictors of treatment failure in patients with bacteremic pneumococcal community-acquired pneumonia

Dr. Ane 32078 Uranga [ane.uranga@osakidetza.net](mailto:ane.uranga@osakidetza.net) MD <sup>1</sup>, Dr. Alberto 32079 Capelastegui [alberto.capelasteguisaiz@osakidetza.net](mailto:alberto.capelasteguisaiz@osakidetza.net) MD <sup>1</sup>, Dr. Pedro Pablo 32080 Espana [pedropablo.espanayandiola@osakidetza.net](mailto:pedropablo.espanayandiola@osakidetza.net) MD <sup>1</sup>, Ms. Rosa 32081 Díez [rosa.diezsancicent@osakidetza.net](mailto:rosa.diezsancicent@osakidetza.net) <sup>1</sup>, Dr. Rafael 32083 Zalacaín [rafael.zalacainjorge@osakidetza.net](mailto:rafael.zalacainjorge@osakidetza.net) MD <sup>2</sup>, Dr. Luis Alberto 32084 López [luisalberto.lopezdeiturriaga@osakidetza.net](mailto:luisalberto.lopezdeiturriaga@osakidetza.net) MD <sup>2</sup>, Ms. Amaia 32085 Bilbao [amaia.bilbaogonzalez@osakidetza.net](mailto:amaia.bilbaogonzalez@osakidetza.net) <sup>3</sup> and Ms. Maria Jose 32086 Lopez [mariajose.lopezdegoicoecheasanroman@osakidetza.net](mailto:mariajose.lopezdegoicoecheasanroman@osakidetza.net) <sup>1</sup>. <sup>1</sup> Pneumology, Hospital of Galdakao, Galdakao, Spain ; <sup>2</sup> Pneumology, Hospital of Galdakao, Galdakao, Spain ; <sup>3</sup> Pneumology, Hospital of Galdakao, Galdakao, Spain ; <sup>4</sup> Pneumology, Hospital of Galdakao, Galdakao, Spain ; <sup>5</sup> Pneumology, Cruces University Hospital, Bilbao, Spain ; <sup>6</sup> Pneumology, Cruces University Hospital, Bilbao, Spain ; <sup>7</sup> Epidemiology, Hospital of Basurto, Basurto, Spain and <sup>8</sup> Microbiology, Hospital of Galdakao, Galdakao, Spain .

**Body:** Background: Bacteremia has usually been associated with poor outcomes in patients with pneumococcal pneumonia. However, risk factors for a worse in-hospital course are not easily recognized. Objectives: The aim of this study was to identify predictive characteristics for treatment failure in patients with bacteremic pneumococcal pneumonia. Methods: A prospective and observational study was carried out in 2 hospitals. We analysed cases with bacteremic pneumococcal pneumonia from a cohort of hospitalized patients. Patients with meningitis and/or endocarditis were excluded. Treatment failure was defined as clinical deterioration during hospitalization with hemodynamic instability, confirmation of respiratory failure or the onset thereof, need of mechanical ventilation, demonstrated radiological progression of pneumonia or a new focus of infection, or persistent fever or the reappearance of fever if a change in treatment was needed. The predictive accuracy was measured by means of logistic regression models while the AUC was used to measure the predictive ability. Results We analyzed 399 (44.8%) patients with bacteremic pneumococcal pneumonia. Figure 1 shows predictors of treatment failure with an AUC of 0.78.

**Conclusions** The presence of pH < 7.35, respiratory rate  $\geq 30$  and serotypes 3, 6A, 6B, 8, 19F and 23F were identified as predictors for treatment failure in patients with bacteremic pneumococcal pneumonia.