

European Respiratory Society Annual Congress 2013

Abstract Number: 395
Publication Number: P514

Abstract Group: 10.2. Tuberculosis

Keyword 1: Tuberculosis - diagnosis **Keyword 2:** Biomarkers **Keyword 3:** No keyword

Title: Adenosine deaminase for diagnosis of pleural tuberculosis in intermediate-low prevalence scenarios

Dr. Alberto 1585 Garcia-Zamalloa Osakidetza alberto.garciazamalloa@gmail.com MD and Mr. Jorge 1586 Taboada Osakidetza jotabo@gmail.com . ¹ Internal Medicine, OSAKIDETZA, Mendaro, Gipuzkoa, Spain, 20850 and ² West Gipuzkoa Clinical Research Unit, OSAKIDETZA, Mendaro, Gipuzkoa, Spain, 20850 .

Body: **OBJECTIVE:** To assess the diagnostic value of ADA for pleural TB in intermediate-low prevalence scenarios **METHODS:** We reviewed all patients with pleural effusion from January 1998 to December 2011. ADA value and lymphocyte proportion were determined in all samples. We distinguished confirmed and probable TB following international criteria. ADA 40 U/l and LP 50% were defined as cut-off values. **RESULTS:** 607 episodes of pleural effusion were analysed, 93 cases (36 confirmed and 57 probable) were tuberculous (15%). Mean ADA value of both groups were 59 and 64 U/l respectively. On the whole period, ADA40 and LP50 showed a sensitivity, specificity, PPV and NPV of 88%, 98%, 89% and 97%. Area under the curve was 0.97 (95% IC 0.95-0.99).Corresponding values of periods 1998-2003 and 2004-2011 are contained in Table 1 and 2.

Table 1: Bayesian probabilities of test parameters used. 1998-2003

	ADA ≥ 40 U/L	ADA ≥ 40 U/L and Lymphocytes ≥ 50%
Prevalence	23.36	23.36
Sensitivity	87.72	85.96
Specificity	96.26	99.47
Positive Predictive Value	86.21	96.08
Negative Predictive Value	96.26	95.88

Table 2: Bayesian probabilities of test parameters used. 2004-2011

	ADA ≥ 40 U/L	ADA ≥ 40 U/L and Lymphocytes ≥ 50%
Prevalence	10.00	10.00
Sensitivity	94.44	91.67

Specificity	90.12	97.55
Positive Predictive Value	50.75	78.57
Negative Predictive Value	99.32	99.07

CONCLUSIONS ADA remains useful in intermediate-low prevalence scenarios.