Therefore, despite the utility of PADA determination in the diagnosis of TPF, our data confirm that a value lower than 43 IU/L does not permit this diagnosis to be ruled out. On the other hand, PADA values failed to rise on a second determination in most of our cases.

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REFERENCES
1 Válldes L. Diagnosis of tuberculous pleurisy using the biologic parameters adenosine deaminase, lysozyme, and interferon gamma. Chest 1993; 103:456-65
3 Van Keimpema ARJ. Adenosine deaminase activity, not diagnostic for tuberculous pleurisy. Eur J Respir Dis 1987; 71:15-8

To the Editor:

Orriols et al express doubts as to the sensitivity of adenosine deaminase concentration in pleural fluid (PADA) as a diagnostic marker of tuberculous pleurisy. They point out that since the initial work of Piras et al and Ocaña et al (Chest 1983; 84:51-9), there have been occasional reports of tuberculous pleurisy patients with a low PADA (Eur J Respir Dis 1987; 71:15-9; Chest 1985; 87:351-55; and Eur Respir J 1990; 3:586-87) and add that 19 of their own tuberculous pleurisy patients (87 in the last 10 years) also had PADA levels below 43 IU/L. They conclude that subcutoff PADA levels do not absolutely rule out a diagnosis of tuberculous pleurisy.

In the absence of any information on the methods of Orriols et al, we can best refer the reader, as we did in reply to Dr. Sahoo’s recent comments on the specificity of PADA in the metaanalytic study by Ena et al, which we regard as a more reliable evaluation of the value of PADA than any single study. Ena et al reviewed all the relevant publications included in the Index Medicus since 1980, which fulfilled the following conditions: the patient series studied were to consist of more than one case, were to be composed exclusively of pleurisy cases with no restrictions on causes, and were not to include series published elsewhere. These conditions were fulfilled by seven studies, including the study by Van Keimpema et al (Eur J Respir Dis 1987; 71:15-8) mentioned by Orriols and colleagues. In these seven studies, the PADA cutoff for diagnosis of tuberculous pleurisy ranged from 33 to 79 IU/L. Of the total of 760 pleural fluids analyzed, 185 were from tuberculous pleurisy patients, 184 of which had PADA above cutoff; there were 40 false-positives. The overall sensitivity of PADA for tuberculous pleurisy in these seven studies was therefore 99% and its specificity 94%, values which are very similar to those found in our own study (sensitivity 100%, specificity 95%) and others (sensitivity 100%, specificity 80.5 to 95%).

We certainly do not wish to claim that subcutoff PADA levels absolutely rule out a diagnosis of tuberculous pleurisy, but we are surprised at the very low sensitivity reported by Orriols et al, 78%, more especially because a study of 1,494 serous exudates carried out in the hospital of Orriols et al using the same cutoff, and presumably in the same laboratory and patients from the same population, found the sensitivity and specificity of PADA for tuberculous pleurisy to be 100% and 92% respectively.9

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REFERENCES

Biochemical Discrimination of Transudates and Exudates

To the Editor:

We believe we must comment on the recent report by Romero et al in the August 1993 issue of Chest on their interesting evaluation of various criteria for distinguishing between pleural transudates and exudates.1 Since 1972, the criteria commonly used for making this distinction have been those then established by Light et al,2 a pleural effusion is diagnosed as an exudate if the pleural fluid to serum protein ratio is >0.5, or the pleural lactate dehydrogenase (LDH) is >200 IU, or the pleura/serum LDH ratio is >0.6; and if diagnosed as a transudate, if none of these conditions are fulfilled. In series by Light et al,2 the appropriate criteria were met by all but one exudate and by all but one tran-