To the Editor—We read with interest the article by Chang et al. In the diagnosis of tuberculous pleural effusion (TBPE), they established that 26.5 U/L is the optimal cut-off value for pleural fluid adenosine deaminase activity when using the Diazyme assay (Diazyme Laboratories, San Diego [CA], United States) on the UniCel DxC 800 Synchron Clinical System (Beckman Coulter, Brea [CA], United States). The Diazyme assay can be used on various analytical systems. Therefore, one can ask the question: does the cut-off value differ according to the analytical system? The following two facts can provide an answer.

First, a cut-off value between 25 and 30 U/L has been previously recommended for TBPE diagnosis (i.e., an interval including the cut-off value proposed by Chang et al1) if the Diazyme assay is used on the Cobas 6000 system (Roche Diagnostics, Meylan, France).2

Second, we have compared the results obtained from using the Diazyme assay on two analytical systems: Cobas 6000 (Roche Diagnostics) and Advia 1800 (Siemens Healthcare Diagnostics, Saint Denis, France) by parallel-testing 79 anonymous pleural fluid samples from different French hospitals. We observed a good correlation between the two analytical systems (\(r^2=0.88\); t test for correlation coefficient, \(P<0.001\)), even though bias was observed (~16%). After using the cut-off value proposed by Chang et al,1 we observed only one misclassification between the two analytical systems (Fig).

In conclusion, we consider the cut-off value proposed by Chang et al1 for TBPE diagnosis to be appropriate on whichever analytical system the Diazyme assay is used.

Declaration

The authors have no conflicts of interest to disclose.

1. Aurélie Servonnet, PharmD
2. Christine Frederic
3. Francisca Fargeau
4. Hervé Delacour *, PharmD

1 French Armed Forces Biomedical Research Institute, B.P. 73 - 91223 Brétigny-sur-Orge Cedex, France
2 Bégin Military Teaching Hospital, Fédération des Laboratoires, 69 Avenue de Paris - 94163 Saint-Mandé Cedex, France
3 Val-de-Grâce Military School, 1 Place Alphonse Laveran - 75230 Paris Cedex 05, France

* Corresponding author: herve.delacour@intradef.gouv.fr

References