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Shishen Xie* (xies@uhd.edu), Department of Mathematics and Statistics, University of Houston-Downtown, 1 Main Street, Houston, TX 77002. *Data Analysis to predict the effectiveness of a clinical treatment*. Preliminary report.

In this study clinical data is analyzed on the effectiveness of an anti-tuberculosis treatment, and the results at different stages of the treatment is predicted. The data is collected from monthly IFN-gamma levels of subjects who were diagnosed tuberculosis positive and participated in the treatment. Statistical methods are developed to compare the mean IFN-gamma levels on the different stages of the treatment and to seek the lowest mean IFN-gamma level in the duration of the treatment. Recommendations based on the data analysis are made to the modification and improvement of the treatment. (Received February 25, 2020)