EVENT ABSTRACT

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# Granzyme A is an additional marker for tuberculosis (TB) to discriminate between patients with active disease and subjects with latent infection.

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Tuberculosis is a major global health problem, with an estimated 8.7 million cases and 1.4 million deaths in 2011. Cytotoxic molecules such as granulysin, perforin and granzymes produced by cytolytic T cells directly contributes to immune defense against tuberculosis (TB). It is still difficult to discriminate active disease, latent infection (LTBI), past TB patients subjects based on Quantiferon TB-Gold in tube (QFT-IT) response; therefore the aim of this study was to evaluate if the responses to granzyme A-could help to discriminate between the different TB stages. We compared the release of granzyme A in whole blood cells stimulated with QFT-IT. We found significant higher level of this cytototoxic molecule in LTBI and past TB subjects compared to the level found in patients with active disease (at least $p<0.001$).
These results suggest that the evaluation of the level of cytotoxic molecules such as granzyme A could be considered as a biomarker of TB to better discriminate among LTBI, active disease, past TB.

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