The main findings and conclusion of our study are summarized here:

- In our study, the prevalence of anti-TB-DIH was 14.3% in North Indian population. The clinically observed symptoms of anti-TB-DIH were vomiting, nausea, anorexia, abdominal pain and jaundice. The time interval from the initiation and the onset of hepatotoxicity was 15-50 days.

- We found that TB patients with female gender, low body mass index, extrapulmonary and positive HIV were at high risk for anti-TB-DIH. Therefore, there is a need for a regular biochemical and clinical follow-up for those patients who are at high risk.

- In our study, all the patients developing anti-TB-DIH showed significant increase in the level of MDA with altered profile of antioxidants concentration, which may be due to oxidative stress resulting from anti-TB drugs. Therefore, our data suggest a significant association between anti-TB-DIH and oxidative stress. These oxidative stress parameters may be used as a biomarker for monitoring drug induced hepatotoxicity.

- In our study, patients with anti-TB-DIH showed higher frequency of \textit{GSTM1} and \textit{GSTT1} null polymorphisms as compared to patients without anti-TB-DIH. However, only \textit{GSTT1} null polymorphism was found to be significantly associated with susceptibility to anti-TB-DIH. Therefore, regular monitoring of liver biochemical tests may be considered in patients with \textit{GSTT1} null polymorphism genotype, who are subjected to anti-TB drugs.

- We also investigated the combined effects of \textit{GSTM1} and \textit{GSTT1} polymorphisms on the risk of anti-TB-DIH. However, our results showed no significant association between the different combinations of \textit{GSTM1} and \textit{GSTT1} polymorphisms and the risk of anti-TB-DIH.
In our study, the wild type genotype \( CYP2E1 \) C1/C1 compared with mutant genotypes (C1/C2 or C2/C2) was found to be higher percentage in patients with DIH as compared to without DIH. \( CYP2E1 \) C1/C1 genotype has higher \( CYP2E1 \) activity than those with other mutant genotypes and consequently, might produce more hepatotoxins. Therefore, patients with \( CYP2E1 \) C1/C1 genotype may be at higher risk for hepatotoxicity than those with mutant genotypes. However, the association between \( CYP2E1 \) C1/C1 genotypes and anti-TB-DIH was insignificant. Further studies with more samples are needed to substantiate the role of \( CYP2E1 \) gene polymorphisms on the risk of anti-TB-DIH.

Similarly, the frequency of wild type genotype \( CYP2E1 \) C1/C1 compared with the combined mutant genotypes C1/C2 + C2/C2 was also found to be higher in patients with DIH as compared to without DIH.

The findings of our study may be imperative in screening among individuals at high risk for anti-TB-DIH and ultimately can refine DIH prevention efforts. This topic is of higher importance in the developing countries particularly India, where TB is endemic.