Background:
Drug-induced Hepatotoxicity and biologic drugs have historically been challenging in IBD. We aim to study the prevalence of hepatotoxicity in adult patients using biologic medications.

Methods:
With the guidelines described by PRISMA-P, a detailed search strategy for each electronic database was developed based on PubMed, Medline, and Embase. We include RCTs that assessed the efficacy and hepatotoxicity of biologics in IBD patients. Hepatotoxicity was defined as AST and/or ALT >2x upper limit of normal or cholestasis. The Odds ratio (OR) was calculated with a 95% confidence interval (CI). Heterogeneity was assessed using the chi2 test and the I2 statistic.

Results:
862 records identified in total. After removing the duplicates 564 records were left for review. Four studies did not report on how participants were randomized to treatment groups or how allocation concealment was achieved, we rated these studies at unclear risk of bias for these domains. There was no presence of any heterogeneity among studies by (Chi2 = 2.21, df = 6, P = 0.90, and I2 = 0%). Our meta-analysis was conducted on the fixed effects model, with the (0.770, 95% CI [-0.630, 0.957], and P = 0.02). Hepatotoxicity was not related to any TNF-Alfa antagonist. Thiopurine-induced liver injury occurred more frequently within the first months of treatment, 50% of cases within the first 3 months (11.4% vs 2.3%, P < 0.05).

Conclusion:
When hepatotoxicity occurred, the treatment was withdrawn in thirty one percent of patients. This group of patients had a dose-dependent hepatotoxicity rather than an immunologic hepatitis.

References

Keywords: Hepatotoxicity Infliximab Azathioprine Inflammatory Bowel Disease