**Cost effective of IBDoc as a surrogate marker of mucosal healing in IBD patients post induction of biological agents**

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**Introduction:** Traditionally in our unit all IBD patients started on anti-TNF therapy are followed up at 3 months in the clinic and we aim to do a colonoscopy at 6 months to assess for mucosal healing. Recently we have started using a relatively new technology called IBDoc which is a well validated smart phone application that allows testing the faecal calprotectin at home eliminating the need to attend to hospital for performing the test, the results are automatically updated on patient phone as well as our database.

**Method:** Objective of this study was to access the cost effectiveness of using IBDoc faecal calprotectin post induction of biological agents. Retrospectively the data was collected from the IBD database, all patients commenced on biological agents and trained in using IBDoc at home were included. IBDoc was tested at 3 and 6 month post induction of biological agents.

**Results:** Total number included in the study was 131 patients. 40% had normal IBDoc calprotectin at 3 month saving 53 follow up clinic visits and 75% had a normal IBDoc at 6 months saving 40 routine colonoscopy.

78 patients had a raised IBDoc calprotectin at 3 month, of which 28% had a normal IBDoc at 6 month saving 22 follow up colonoscopy. In total 53 clinical visits and 62 colonoscopies were saved. At a cost of 25 euro per IBDoc kit, 47,084 euro was saved.

**Conclusions:** this study demonstrate a significant cost effectiveness of using IBDoc faecal calprotectin post induction of anti-TNF therapy, as well as reducing the waiting time for both clinic visits and colonoscopies.