

# IBDoc® Home Calprotectin Test Correlation with Laboratory Results



The ongoing coronavirus pandemic means many patients with inflammatory bowel disease (IBD) are identified as high-risk and need to shield. Thus, any opportunities to prevent the need for them to attend hospital, by offering an alternative for monitoring, should be adopted.

Mid and South Essex University Hospital Trust (MSENHSFT) has a catchment population of 1.5 million. The Gastroenterology Department deals with the diagnosis and on-going management of patients with IBD. Patients who are diagnosed need regular monitoring in case of relapse/flare, to ensure ongoing effectiveness of therapy and for funding or cessation of treatments.

In early Summer 2020 the department introduced the BÜHLMANN IBDoc® calprotectin home test. This enables IBD patients to test their faecal calprotectin levels in the safety and privacy of their own homes. Results are analysed using the camera and an App on their smartphone and transferred to their clinician for follow up consultation.

The team is focused on introducing new technologies to improve patient management and IBDoc filled this requirement. Not just for the immediate crisis but also as a solution that could be sustained for the future as part of an existing strategy.

The multidisciplinary clinical team worked closely with patients to introduce them to the technology. The nursing team expanded their telephone clinics and helpline to discuss results and ongoing therapies, thus avoiding the need for many patients to physically attend the hospital.

## Laboratory Comparisons

An important aspect of the implementation was analysis of the patients' IBDoc results in comparison to professional calprotectin testing in the laboratory.

Kezia Allen, Clinical Trials and Informatics, Pathology at MSENHSFT explains

*"We have always worked closely with our IBD team and this has enabled us to ensure that our assays provide them with the results they need when they need them.*

*We had begun some work looking at the IBDoc last year and the IBD team were keen for the clinical laboratory team to be involved in this.*

## Introduction to Patients

*Prior to the pandemic, the IBD team had arranged for some patients to attend a workshop, hosted at the hospital, where representatives from Alpha Labs, along with the IBD team and myself from the lab discussed the IBDoc with the patients.*

*Following a demonstration of the device I took the patients to try it for themselves. This was really interesting as it gave me a chance to see how the patients got on using the devices, observe any difficulties and be there to offer advice if needed. The patients found the App and the devices very easy to use and had very few questions (apart from 'how soon can we have these as part of our standard care!').*

*For myself from a lab point of view (we often feel a bit of disconnect between laboratory testing and how the results are utilised in the wider healthcare setting) it was so interesting to hear how keen these patients were to be able to better manage their condition themselves at home.*

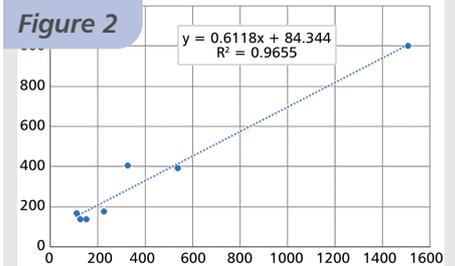
*Following a successful pilot and with the pandemic ongoing, it became clear that getting the IBDoc devices in use would be key to help keep these IBD patients well and out of hospital during this difficult time.*

## NEQAS

*We enrolled in the NEQAS faecal markers of inflammation scheme as the first user in the IBDoc group. We have been very pleased with their performance and hope that other users will enrol in the scheme as they begin using the devices for their patients. [Figure1]*

*We will continue to work with the IBD team to refine the service and our use of the IBDoc."*

This correlation is also verified by Mark Busbridge, Biochemistry, Charing Cross Hospital. He is testing samples with both IBDoc and their routine BÜHLMANN fCAL turbo assay on the Architect analyser. He says *"This is in support of a study to investigate the use of the IBDoc with Tofacitinib patients, as they require more frequent monitoring than those on other biologic therapies. The results of the IBDoc have shown excellent correlation with the BÜHLMANN fCAL turbo with a mean difference of -5.2% [Figure 2].*

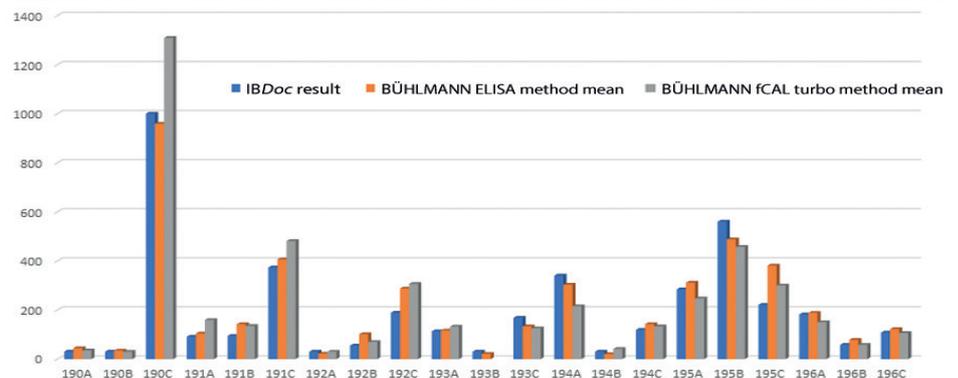


From a clinical perspective Dr Pushpakaran Munuswamy, Gastroenterology, Department Lead at MSENHSFT adds:

*"The benefit of the IBDoc is the speed with which the result comes through. There is also more engagement both with patients and within the clinical team, because you are able to follow through on a course of action quickly rather than waiting weeks in between decisions which is more frustrating. The IBDoc is very simple but with a lot of impact on patient care."*

Find out more about IBDoc at  
[www.calprotectin.co.uk/ibdoc](http://www.calprotectin.co.uk/ibdoc)

## Basildon IBDoc EQA result compared to the fCAL ELISA and turbo method mean



**Figure 1: EQA data comparing calprotectin concentrations from patient samples tested with BÜHLMANN IBDoc home test and two laboratory assays (BÜHLMANN fCAL® ELISA and BÜHLMANN fCAL® turbo assay on a clinical chemistry analyser).** [turbo mean for sample 193B excluded due to reporting error]