Mrs. Barbieru, the new calprotectin assay BÜHLMANN fCAL® turbo yields calprotectin results in random access mode within 10 minutes, on all major clinical chemistry analysers. Can you tell me why you chose to implement the BÜHLMANN fCAL turbo?

The Children’s Hospital of Zurich planned to measure calprotectin in-house. To do so, an ELISA assay had been evaluated a long time ago, however, this assay is very time-consuming, absorbing too many capacities. In contrast, the fCAL turbo from BÜHLMANN can be used with our existing laboratory equipment and gives results within a very short time, so we decided to conduct an in-house evaluation to see how it compared.

Within the scope of your thesis, you performed the validation of the application on your Beckman DxC 600 analyser. What experiences did you have? Are you satisfied with the results?

The validation was a part of my thesis so it was the first time I have conducted such a study. BÜHLMANN and Beckman Coulter developed the application itself with both companies putting a lot of time and effort into the adaption of the assay for our device. I am very pleased with the results, and the comparison to the ELISA assay shows a good correlation. Whilst the values measured with our device are lower, they are within reasonable range, thus we introduced the assay in our daily routine.

Before introducing BÜHLMANN fCAL® turbo, you sent all of your stool samples an external laboratory. How does the assay now fit into your daily routine, and what is the impact on the time you need for the reporting?

Indeed, this was a huge step for us! For years, we had wanted to run Calprotectin in-house and now finally we can offer this. The assay perfectly fits into our routine, and I believe that requests are increasing. My colleagues are also very satisfied, the assay test is really interesting and everyone likes doing it.

The reporting time has reduced significantly as the results are directly fed into our LIMS, permitting clinicians to immediately retrieve the data.

You also use the CALEX® Cap stool extraction device from BÜHLMANN. What is your impression of the handling, and what do you think about the sample processing?

The sample processing is really quite easy. There is nothing that can go wrong, and compared to the weighing method (which I know from my previous work) the CALEX® Cap is easier to use and much faster. Some samples are more difficult to extract, but my colleagues and I consider these more of an exciting challenge rather than a problem.

From a hygiene point of view, the CALEX® Cap is much more convenient compared to the weighing method. Calprotectin is our first assay in-house that is performed from stool samples, and it is nice to see that no one seems disgusted doing the extraction.

What kind of other tests are performed routinely on your system? Have you ever experienced any interferences with other clinical chemistry tests running on your Beckman DxC 600 originating from using stool extracts and the BÜHLMANN fCAL® turbo?

On our Beckman DxC 600 system we determine all common clinical chemistry parameters such as electrolytes, different enzymes, bile acids, zinc, and homocysteine. No problems or interferences have been observed so far. In our daily routine work, we also use false-bottomed vials for Calprotectin and all other assays.

To find out more about BÜHLMANN fCAL® turbo please visit www.alphalabs.co.uk/fcalturbo or contact marketing@alphalabs.co.uk.