



Experience of the BÜHLMANN fCAL® turbo on Beckman Coulter AU5800

A Report of A. Suter* and Dr. C. Fuhrer** from SYNLAB

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SYNLAB Suisse SA is known for the high quality, the personal contact and fast service for clinicians.

Historically fecal calprotectin testing was performed with a fluoro-enzymatic-immunoassay (FEIA), but the method was time consuming and resource intensive. We therefore decided to review our calprotectin testing with a view to optimizing the process.

Integration into Core Lab

We decided to adapt the BÜHLMANN fCAL® turbo, turbidimetric immunoassay on our Beckman Coulter AU5800 in combination with the BÜHLMANN CALEX® Cap stool extraction device. This decision has resulted in easier and quicker handling,

which allows us to offer better service to our customers.

In the beginning, our major concern was using fecal calprotectin extracts on a clinical chemistry analyser. We questioned if larger contaminations could happen. After installation of the method on the analyser including additional wash steps we found our initial concerns were dispelled because we mainly had positive experiences. No adverse events or interferences in combination with the calprotectin analysis on our AU5800 were observed, so far.

The handling and preparation of the fCAL turbo assay on our chemistry analyser is faster and easier than before, only one step is needed and the CALEX® Cap extraction device can be put directly on the Beckman Coulter AU5800.

Performance of the assay

In contrast to the previously used calprotectin assay, the fCAL® turbo offers an extended test range from 20 to 8,000 µg/g. The precision is below 5% CV and



A. Suter (SYNLAB Suisse SA) with the BÜHLMANN fCAL® turbo in front of the Beckman Coulter AU5800 Analyser.

the calibrations are stable over several weeks.

The two methods correlate very well and despite the observed positive bias the same clinical decision can be made applying the identical cut-off at 50 µg/g calprotectin in stool.

„Handling and preparation of the fCAL® turbo assay on our chemistry analyser is faster and easier than before.“

CALEX® Cap for Extraction

In the clinical chemistry department, some training was needed to get used working with fecal samples. The introduction of the CALEX® Cap for fecal extraction simplified the procedure and led to significant time savings all over the process. The handling is much easier in contrast to the previously used method. Numerous pipetting steps were needed before, which became no longer necessary.

"CALEX® Cap for fecal extraction simplified the procedure and led to significant time savings all over the process."

"CALEX® Cap can be put directly on the Beckman Coulter AU5800."

We received excellent service and support from BÜHLMANN. During the adaptation phase, BÜHLMANN was very helpful and we were supported perfectly. In summary, the BÜHLMANN fCAL® turbo assay can be easily installed on the Beckman Coulter AU 5800 and is fast and easy to handle. The BÜHLMANN CALEX® Cap extraction device is a clean, easy and fast solution to extract fecal samples.

*This interview was shortened and edited for a better overview



BÜHLMANN fCAL® turbo and CALEX® Cap