

# Fecal Calprotectin (fCAL) test – performed in house starting 3/18/2021

Epic: LAB10220

fCAL level in the stool increases in patients with gastrointestinal tract inflammation, and is used as a biomarker to:

- 1) aid in the diagnosis of inflammatory bowel disease (IBD), specifically Crohn's disease (CD) and ulcerative colitis (UC) and
- 2) aid in the differentiation of IBD from irritable bowel syndrome (IBS), which is non-inflammatory in nature, in conjunction with other laboratory and clinical findings.

## When to order fCAL?

- For patients with symptoms of IBD
- To distinguish from non-inflammatory bowel syndrome
- To determine if an endoscopy procedure is necessary
- To confirm IBD and to assess its severity

## Stool specimen collection:

- A gram (a tip of spoon) of stool sample is sufficient.
- Avoid contamination by urine or water during collection
- The collected stool specimen may be shipped at room temperature or on cold packs and must be received within 3 days of collection.

## Results interpretation:

- fCAL results  $< 160 \mu\text{g/g}$  is supportive of non-active inflammation in the GI tract
- fCAL results  $> 160 \mu\text{g/g}$  is indicative of neutrophil infiltration and presence of active inflammation in the GI tract, but does not indicate location or causes, e.g., bacterial, parasites or cancer in GI tract
- Test results should be interpreted with consideration of patient clinical presentations and other diagnostic indicators, e.g., stool culture, test for ova and parasites, stool white blood cell test and /or fecal occult blood test (FCOBT), C-reactive protein (CRP) or erythrocyte sedimentation rate (ESR)
- False negative results could occur in patients who have granulocytopenia
- Some patients taking non-steroidal anti-inflammatory drugs (NSAID) can have elevated fCAL results
- Results may not be clinically applicable to children  $< 4$  year old
- Patients with IBD may fluctuate between active (inflammatory) and inactive stages of the disease. These stages must be considered when interpreting results of the fCAL
- If patient results show a moderate elevation, a repeat test may be ordered several weeks later to see a trend of the results

For questions, please contact the Chemistry Laboratory at 315-464-9175