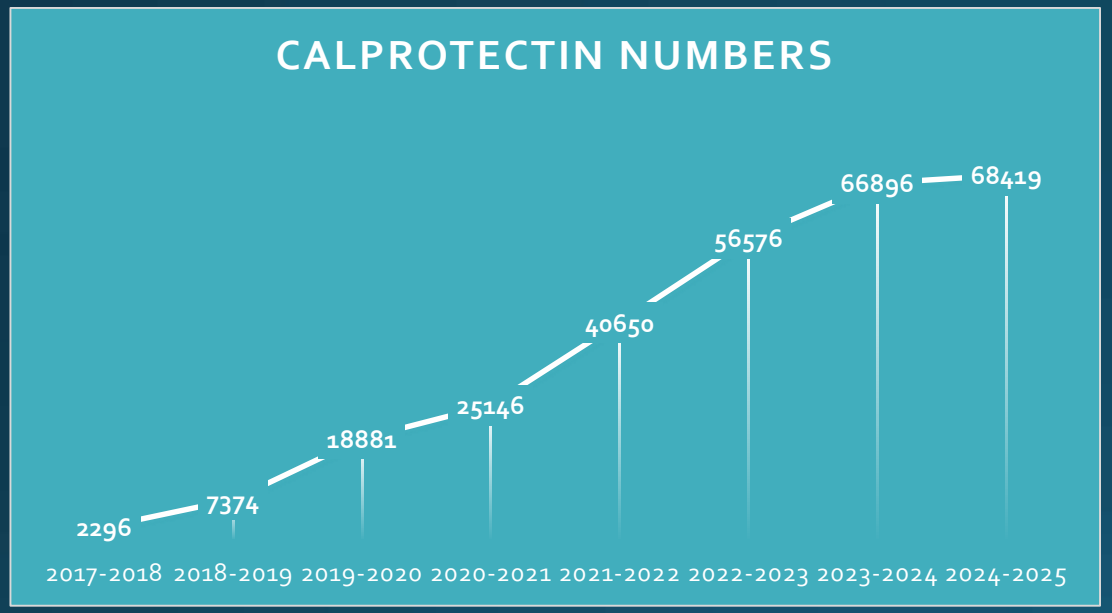
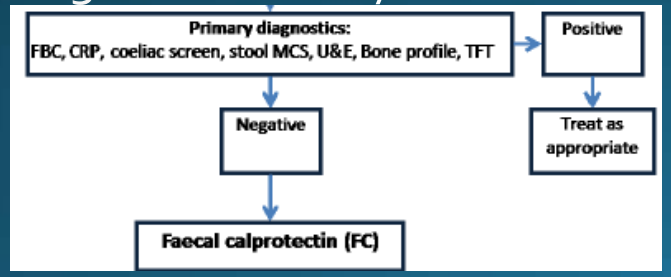
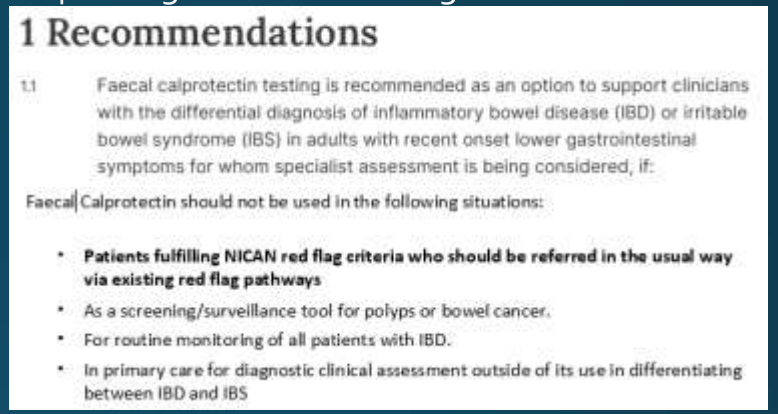
Faecal Calprotectin Assay & Action Limits



- NHS England Pathway



- Limit requesting to differentiating between IBD and IBS



1 Recommendations

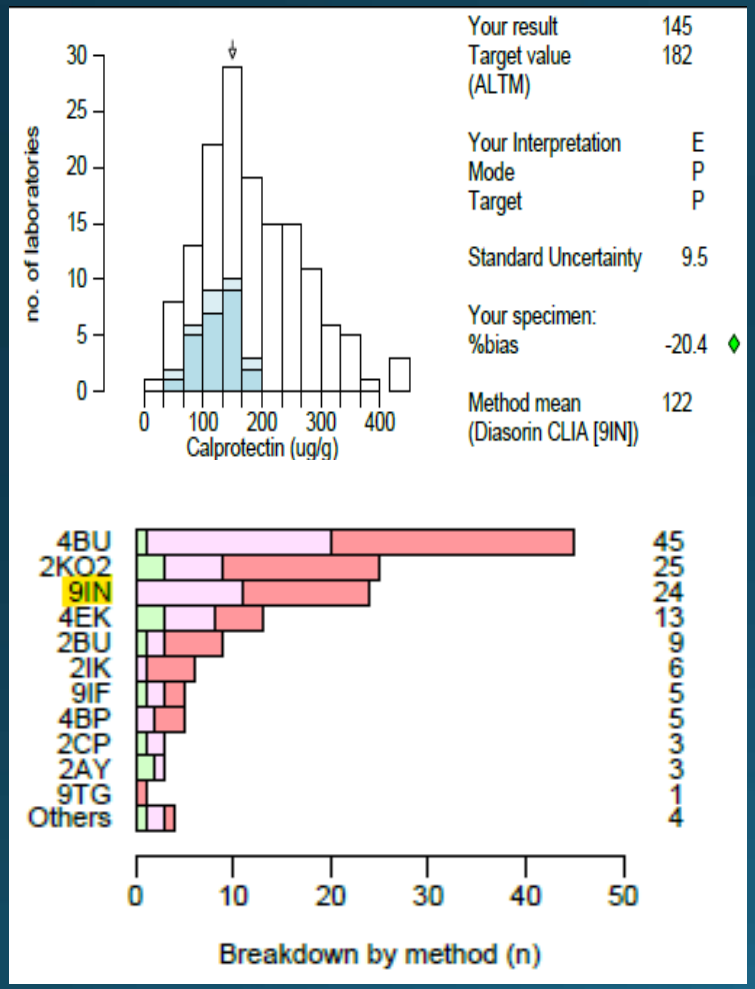
1.1 Faecal calprotectin testing is recommended as an option to support clinicians with the differential diagnosis of inflammatory bowel disease (IBD) or irritable bowel syndrome (IBS) in adults with recent onset lower gastrointestinal symptoms for whom specialist assessment is being considered, if:

Faecal Calprotectin should not be used in the following situations:

- **Patients fulfilling NICAN red flag criteria who should be referred in the usual way via existing red flag pathways**
- As a screening/surveillance tool for polyps or bowel cancer.
- For routine monitoring of all patients with IBD.
- In primary care for diagnostic clinical assessment outside of its use in differentiating between IBD and IBS

- G.I.R.F.T.
  - Exclude other cause of GI tract inflammation eg infection NSAID, PPI, Aspirin, Coeliac etc
  - Reject blood stained samples and ask for repeat collection
  - Enough faecal material to fill 1/3 of the container-walnut size
  - First bowel movement and store at room temperature
  - Please ensure accurate date of collection is recorded
  - Preferably sample should be received in lab within 3days of collection
  - Minimum retest interval (MRI) 14days

Faecal Calprotectin Assay & Action Limits



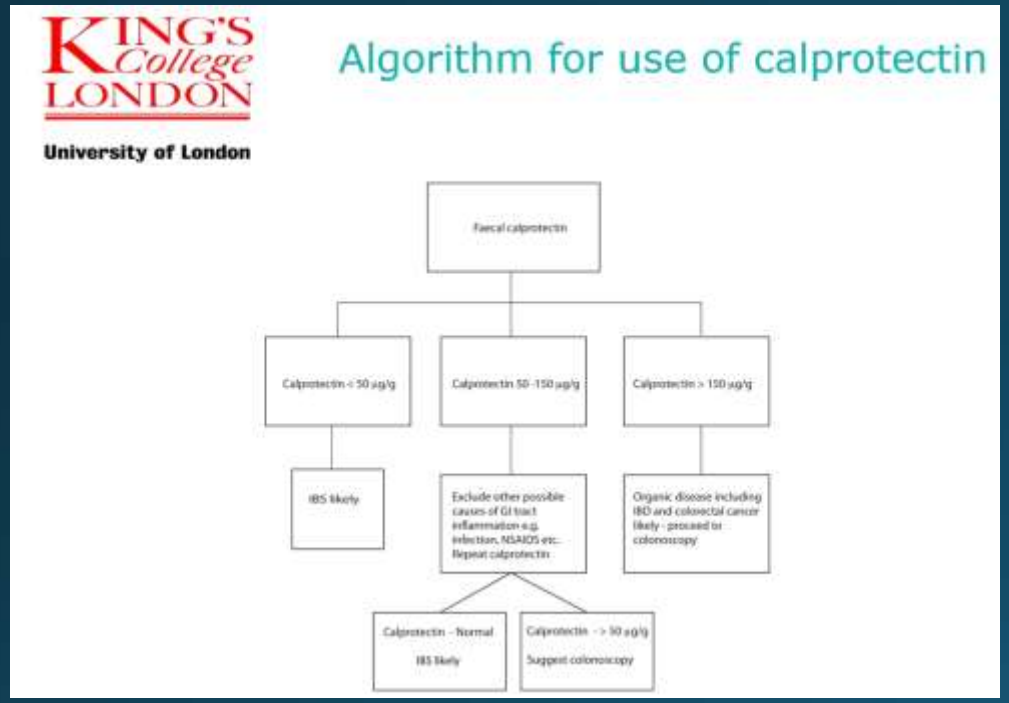
LIAISON® Calprotectin Assay Concentration
< 50 µg/g (Normal)
50 - 120 µg/g (Borderline)
> 120 µg/g (Elevated)
Total

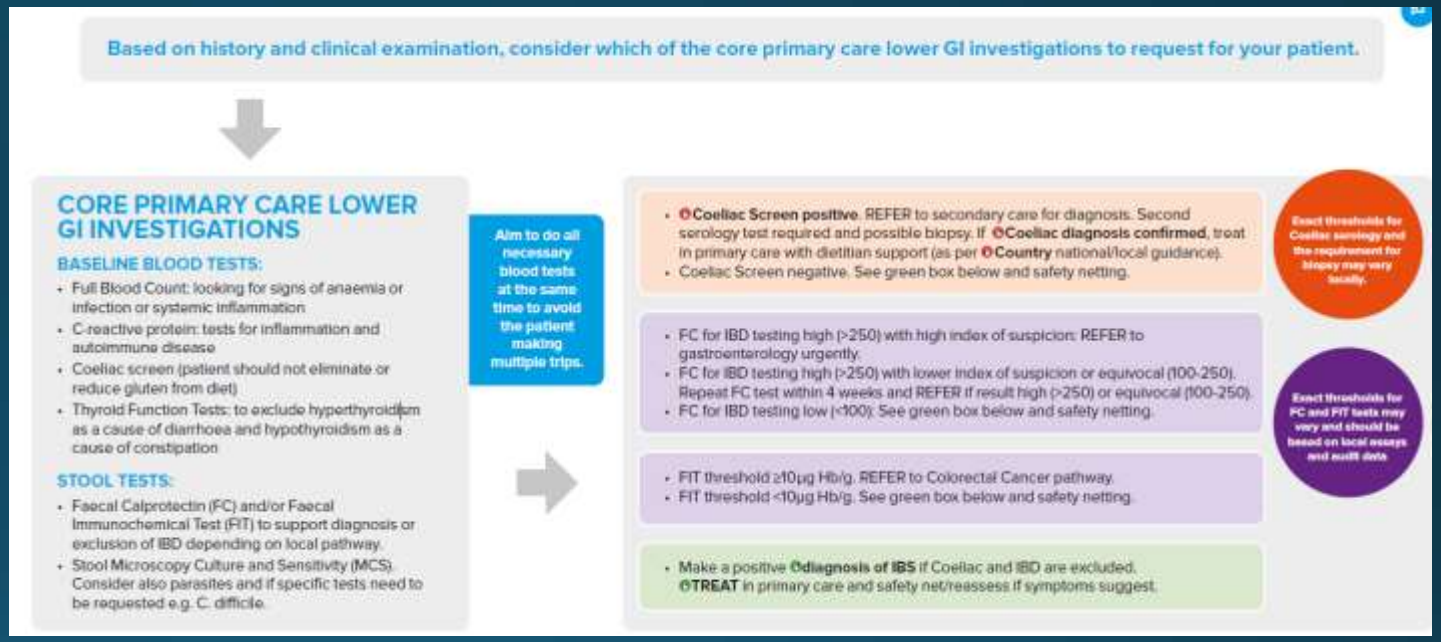
CLINICAL THRESHOLDS

Calprotectin concentration	Interpretation	Follow-up
< 80 µg/g	Normal	None
80 - 160 µg/g	Gray-zone/Borderline	Follow-up within 4 – 6 weeks
> 160 µg/g	Elevated	Repeat as needed

Table 4: BÜHLMANN fCAL® turbo diagnostic ranges.

Faecal Calprotectin Assay & Action Limits





	Cut Off (µg/g)	Sensitivity	Specificity
Diagnosis of IBD[1]	50	98.0%	69.6%
	100	92.1%	88.4%

Faecal Calprotectin Assay & Action Limits

Retrospective audit

A retrospective search of the laboratory middleware system was undertaken to identify all faecal calprotectin requests processed between July and September 2024. The search was performed by laboratory IT staff, and the resulting dataset was exported to Microsoft Excel for analysis. The dataset was filtered to include only patients with faecal calprotectin results between 50 and 250 µg/g which had been requested in primary care in a patient not previously known to have inflammatory bowel disease. Individual patient records were then reviewed using Encompass and the Electronic Care Record (ECR). The following data were collected:

Additional findings

Our results also showed 34 patients (17%) received a diagnosis of diverticulosis – a known cause for raised faecal calprotectin; and 28 patients (14%) had a finding of polyps on colonoscopy.

CONCLUSION

Ultimately, the clinical context remains paramount when assessing these patients. Decisions about whether specialist referral is warranted cannot rely on laboratory findings alone. Safety netting is essential when there is clinical uncertainty. We conclude that it would be reasonable to adhere with the CCUK lower GI primary care diagnostic pathway using the equivocal cut off for faecal calprotectin of 100-250 µg/g used alongside educational and safety netting mitigations.

Table 3. Characteristics of histologically positive cases

FCal Range (µg/g)	Clinical Details	Histological Diagnosis/Outcome	Would Alternative Referral Route Have Applied?
50-100	Initial FCal 120 µg/g, repeat 96.8 µg/g	Unusual histology suggestive of microscopic colitis; treated with budesonide	No
50-100	FCal 58.9 µg/g	Histologically positive; qFIT >400	Yes, qFIT alone would have triggered referral
150-200	Initial FCal 76 µg/g, repeat 158 µg/g four weeks later	Initially diagnosed with proctitis; Crohn's disease diagnosed 6 months later	No
150-200	FCal 183 µg/g	Distal colitis confirmed on histology	No
200-250	FCal 202 µg/g	Histologically positive; qFIT 169	Yes, raised qFIT would have triggered referral
200-250	FCal 227 µg/g	Mildly active chronic proctitis	No