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Alimentary Tract

# Accuracies of fecal calprotectin, lactoferrin, M2-pyruvate kinase, neopterin and zonulin to predict the response to infliximab in ulcerative colitis

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## Abstract

### Background

Fecal markers might predict the response to anti-TNFα in ulcerative colitis (UC).

## Aims

To compare the performance of fecal calprotectin (fCal), lactoferrin (fLact), M2-PK (fM2-PK), neopterin (fNeo), and zonulin (fZon) to predict the response to therapy in active UC patients.

## Methods

Disease activity from 31 consecutive patients with an active UC, treated with infliximab (IFX) was assessed by the Mayo score at baseline and at week 14 and by the partial Mayo score at W52 and stool samples collected for fecal marker measurements at W0, W2, and W14.

## Results

At W14, 19 patients (61%) were responders to IFX induction. The median levels of fCal, fLact and fM2-PK drop dramatically from baseline to W14 in clinical responders. At W2, fM2-PK, fLact and fCal levels predicted accurately the response to IFX induction. At W14, fLact, fCal, and fM2-PK were individually reliable markers to predict sustained response at W52. The performances of fNeo and fZon were weaker in this setting.

## Conclusions

The performance of fM2-PK at W2 to predict response to induction therapy with IFX was superior to that of fLact and fCal, whereas monitoring fLact was the best tool to predict adequately the course of the disease at one year under maintenance IFX in UC.


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## Keywords

Fecal markers; Response to infliximab; Ulcerative colitis


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[1] These authors contributed equally to the study.

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