

DETECTION OF FIBROSIS AND DIFFERENTIATION FROM INFLAMMATION IN IBD PATIENTS USING FAPI PET/CT IMAGING: THE PIMAFI STUDY

Mark Löwenberg

UEG Week Berlin 2025

Poster

IBD

October 6, 2025

First in-human study demonstrates that 68Ga-FAPi PET/CT imaging can detect and quantify intestinal fibrosis in inflammatory bowel disease patients, with uptake patterns correlating with histological fibrosis and FAP expression in surgical specimens.

KEY POINTS

- In 19 IBD patients (15 Crohn's disease, 4 ulcerative colitis) awaiting surgery, 68Ga-FAPi PET/CT tracer uptake was markedly increased in inflamed and fibrotic bowel regions compared to reference segments, with SUV50-60 values ranging 1.0 to 11 versus 0.3 to 1.1
- Pharmacokinetic analysis of time-activity curves distinguished fibrotic from inflammatory segments: inflammatory regions showed high peak uptake followed by decline (suggesting reversible, potentially non-specific uptake), while fibrotic segments showed low peak followed by stable plateau (suggesting irreversible, higher binding affinity uptake)
- Tracer uptake aligned with histological fibrosis scoring and enhanced FAP gene and protein expression in 52 transmural surgical samples, supporting the potential of 68Ga-FAPi PET/CT to differentiate fibrosis from inflammation non-invasively
- This imaging approach addresses an unmet need in IBD, as reliable intestinal fibrosis imaging modalities are currently lacking and hamper anti-fibrotic therapy development

VIEW THIS CONTENT ON GUTFLIX

<https://gutflix.eu/search/d/676fb582-a815-11f0-8b3a-0242ac140006>



AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.