gutflix
GI learning, personalised

Summary

IMMUNE SIGNATURES OF RECURRENCE IN POSTOPERATIVE CROHN'S DISEASE REVEAL UNIQUE BLOOD TRANSCRIPTOMIC AND CELLULAR PROFILE COMPARED TO PATIENTS IN REMISSION

Robert Battat

UEG Week Barcelona 2026 | Presentation

Mechanisms & Personalised Medicine | Immunology | IBD

October 20, 2026

Postoperative Crohn's disease recurrence is associated with a distinct peripheral blood immune signature characterised by CD8 T cell depletion, NK cell enrichment, and suppression of interferon and metabolic pathways.

KEY POINTS

- In 34 CD patients after ileocolic resection, those with endoscopic recurrence showed markedly depleted CD8 T cells (median 0.001 vs. 0.050; p=0.008) and enriched NK cells (median 0.127 vs. 0.088; p=0.0175) compared to those in remission.
- Pathway analysis revealed coordinated suppression of interferon-gamma (NES=□2.89), interferon-alpha (NES=□2.83), and TNF-alpha/NF-kappa-B signalling (NES=□2.71) in recurrence patients, alongside suppression of oxidative phosphorylation, fatty acid metabolism, and myogenesis.
- CD8 T cell abundance correlated positively with interferon-gamma (ρ=0.399; p=0.019) and TNF-alpha/NF-kappa-B transcriptional scores (ρ=0.345; p=0.046).
- CXCR2 was upregulated (logFC=+0.613; p=0.0008) while ITGA4 (logFC=□0.159; p=0.004) and STAT1 (logFC=□0.390; p=0.019) were downregulated in recurrence.
- The findings reveal dissociation between systemic and mucosal immune responses and support PBMC transcriptomic and cellular features as candidate biomarkers for postoperative monitoring in CD.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/a53b23ac-d12b-11f1-9157-daaa6dbee0a2

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.