Review comments:

We thank the editors for allowing us to resubmit this manuscript, and for relevant editorial comments that we address in the revised manuscript.

We thank the reviewer for the important and relevant comments and give our answers point for point below.

Frederik et al. describe a novel, Danish cohort of monozygotic twins with IBD as a substrate for future translational studies. The aim of the article is to describe the cohort as it relates to concordance and discordance of IBD phenotype, treatment and inflammatory markers. Merging 2 databases in Denmark (the National Patient Register and Danish Twin Register), they identified 159 monozygotic twin pairs that met inclusion criteria (one twin had IBD) of which 62 pairs consented to participate. Clinical data from these prevalent cases were obtained from patient medical records and questionnaires (patient-reported outcomes). Inter-observer variation in classifying disease phenotype via the Montreal Schema was accounted for via double abstraction by a GI specialist and senior physician. Most importantly, biological specimens including blood, stool, sputum and oral swabs were collected via a mobile lab for future analyses. This is a generally descriptive paper describing concordant and discordant clinical characteristics amongst the included twins with IBD.

While interesting, I find Tables 1 and 2 difficult to navigate. It took some time to realize that the respective numbers in each table referred to pair of twins and not single patients. This should be explicitly stated in a legend for both tables for clarification.

Thank you for this important comment, each column represents a participant type and the n row denotes the number of participants of this type. We have clarified the legend to improve readability.

Also, as these are prevalent cases at different phases of treatment and disease course with a wide range between diagnoses (94 days - 14 years, average 6 years), the clinical data and fecal calprotectin are difficult to interpret in a meaningful way. Correlating the calprotectin data with the patient-reported disease activity metrics (HBI and SCCI) at the time of sample collection would provide an added layer of clinical context and interest to these findings.

We agree with the reviewer that patient-reported disease activity metrics are of interest and have added figures denoting the results of these metrics using the same patient categories as the calprotectin data. We have briefly commented on the results of those metrics in the results section. The calprotectin snapshots are as the reviewer points out snapshots and reflect only inflammatory activity at time of sampling

As the authors realize, the real strength of this cohort is in the future translational studies, primarily as it relates to epigenetics. While they very briefly and superficially discuss these plans in the last paragraph of the conclusion, expanding on future plans for hypothesis-driven translational research would further strengthen the manuscript.

We agree, and have expanded on the possible use of data including collaborations and application in animal models.

Otherwise, this is a nice introduction to a novel cohort that hopes to generate fascinating future work.

Thankyou