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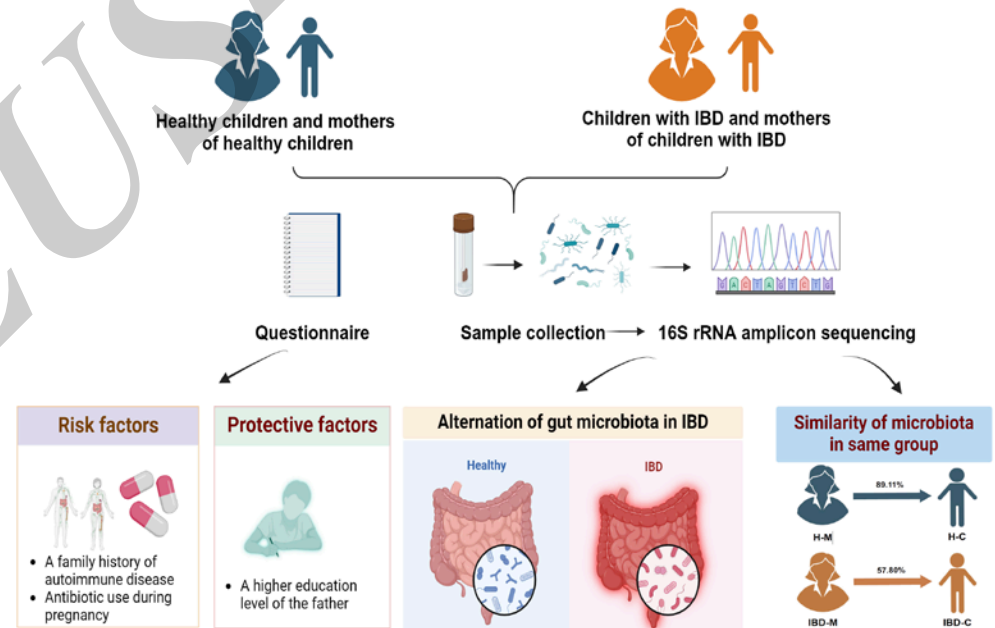
Pediatric inflammatory bowel disease in mother–child pairs: clinical risk factors and gut microbiota characteristics

Key words: Inflammatory bowel disease (IBD), Risk factors, Gut microbiota, Mother–child pairs

Research Summary

This article aimed to explore the clinical risk factors associated with PIBD, analyze the gut microbiota characteristics of children and their mothers, and examine the correlation of microbial composition in mother-child pairs.

- A case-control study was conducted including children with PIBD and their mothers as the case group, as well as healthy children and their mothers as the control group.
- Information about family illness history, as well as maternal and early-life events between two groups were analyzed.
- Fecal samples were collected for 16S rRNA sequencing, to analyze the gut microbiota composition in mother-child pairs.



Innovation points

- PIBD is influenced by maternal risk factors, such as antibiotic use during pregnancy.
- Children and mothers with IBD exhibited different gut microbiota compared to healthy children and mothers. Similarity was observed in the gut microbiota of mothers and children in the same groups.
- Some bacterial biomarkers of mothers discovered in this study had the power to predict PIBD in their offspring.

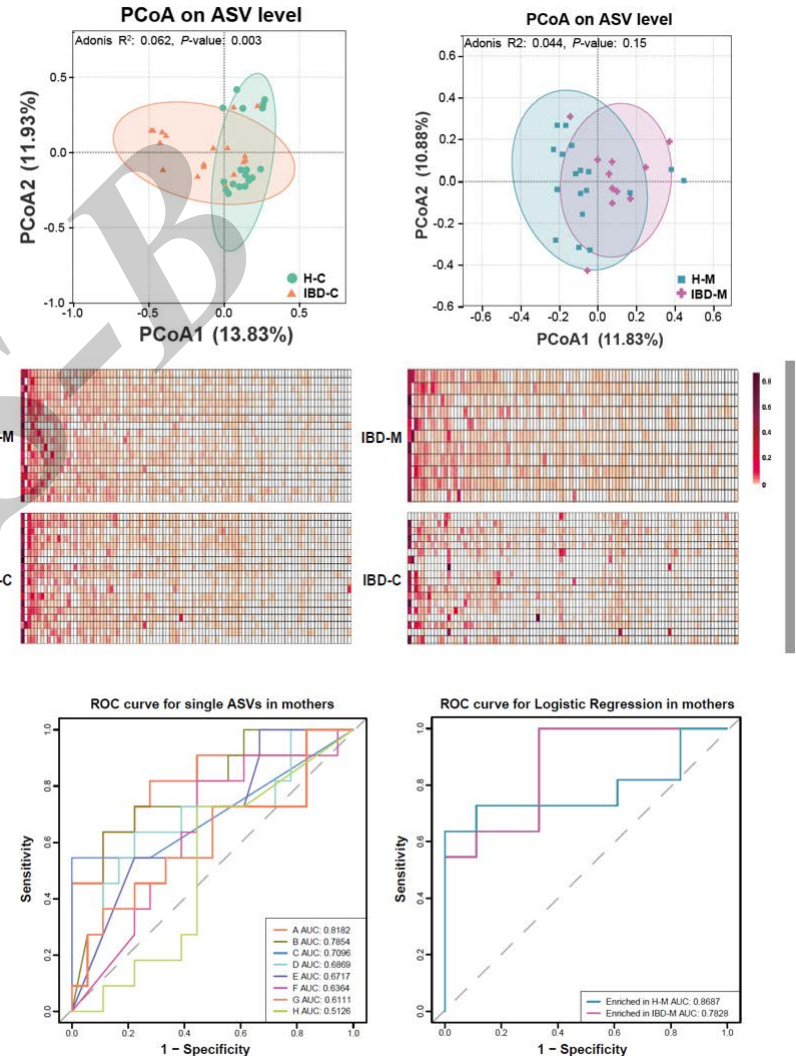


Figure 6