

A combination of circulating microRNA-375-3p and chemokines CCL11, CXCL12, and G-CSF differentiate Crohn's Disease and Intestinal Tuberculosis

Susree Roy^{1#}, Suchandrima Ghosh^{1#}, Mallica Banerjee¹, Sayantan Laha², Dipanjan Bhattacharjee³, Rajib Sarkar⁴, Sujay Ray⁵, Arka Banerjee⁴, Ranajoy Ghosh⁶, Aniket Halder⁶, Alakendu Ghosh³, Raghunath Chatterjee², Simanti Datta¹, Gopal Krishna Dhali⁴, and Soma Banerjee^{1*}

Both the authors have contributed equally.

¹Center for Liver Research, Institute of Post Graduate Medical Education and Research, Kolkata

²Department of Human Genetics, Indian Statistical Institute, Kolkata

³Department of Rheumatology, Institute of Post Graduate Medical Education and Research, Kolkata

⁴Department of Gastroenterology, Institute of Post Graduate Medical Education and Research, Kolkata

⁵R.G. Kar Medical College and Hospital, Kolkata

⁶Department of Gastro-Pathology, Institute of Post Graduate Medical Education and Research, Kolkata

*Corresponding Author : Soma Banerjee

Professor

Center for Liver Research

School of Digestive and Liver Diseases

Institute of Post Graduate Medical Education and Research

244, Acharya Jagadish Chandra Bose Road

Kolkata-700020

West Bengal, India.

Mobile No: 9748000673

E.mail: somabanerjee70@gmail.com

Running title: Biomarker to distinguish Intestinal Tuberculosis and Crohn's Disease

Supplementary Table 1: Clinical, demographical parameters of UC and Hemorrhoids patients included in the study.

Variable	Normal (n=3)	UC (n=15)
----------	-----------------	--------------

Baseline characteristics		
Age(yr) (Mean±sd)	42±18.7	42.7±10.8
Sex (F/M)	2/1	7/8
Fever (Y/N)	2/1	5/10
Pain Abdomen (Y/N)	1/2	13/2
Weight Loss (Y/N)	0/3	6/9
Clinical characteristics		
Hemoglobin (gm/dl) (Mean±sd)	11.6±2.7	10.1±1.5
ESR (mm) (Median, Range)	40 (35-42)	35 (12-150)
CRP(mg/dl) (Median, Range)	4.3 (2-36)	6 (1.5-36)

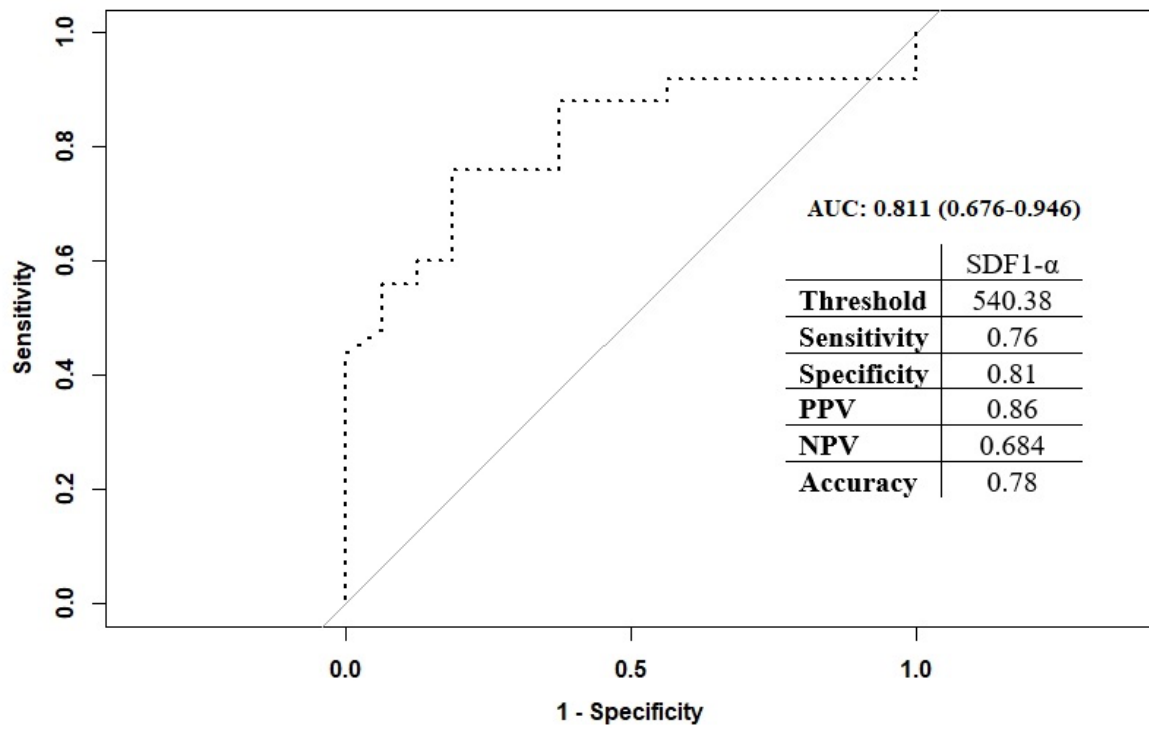
Supplementary Table 2: Extracted data from Next Generation Sequence analysis of CD, ITB and hemorrhoids (Normal) samples.

Sample	Raw Reads	Mapping to hg19 (%)	Mapping to mature miRNA (%)
CD1	33544611	98.17%	74.31%
CD2	26315327	98.50%	66.94%
CD3	23860962	98.61%	72.58%
ITB1	23922043	97.80%	71.87%
ITB2	32273807	98.45%	62.92%
ITB3	27313209	98.64%	46.05%
N1	27214031	92.13%	49.76%
N2	25868238	98.11%	59.31%
N3	27058058	97.14%	75.57%

Supplementary Table 3: Sequences of the Primers used in the study.

Name of the gene	5'- 3' direction

miR-31-5p	<u>ACACTCCAGCTGGGAGGCAAGATGCTGGCA</u>
miR-215-5p	<u>ACACTCCAGCTGGGATGACCTATGAATTGA</u>
miR-375-3p	<u>ACACTCCAGCTGGGTTTGTTCGTTTCGGCTC</u>
miR-29a-3p	<u>ACACTCCAGCTGGGTAGCACCATCTGAAAT</u>
miR-615-3p	<u>ACACTCCAGCTGGGTCCGAGCCTGGGTCTC</u>
MTB IS6110F	CCT GCG AGC GTA GGC GTC GG
MTB IS6110R	CTCGTCCAGCGCCGCTTCGG
MPB64 F	TCCGCTGCCAGTCGTCTTCC
MPB64R	GTCCTCGCGAGTCTAGGCCA



Supplementary Figure 1

Supplementary Figure 1: ROC analysis for SDF-1 α /CXCL12 in differentiating CD and UC.