

***IN-SILICO* TRANSCRIPTIONAL ANALYSIS OF INFLAMMATORY BOWEL DISEASE**

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Abstract—*Inflammatory Bowel Disease (IBD) is an idiopathic and chronic disorder instigating inflammatory conditions in the intestine. There are two major classes of IBD that is Ulcerative Colitis (UC) and Crohn's Disease (CD). The symptoms associated with IBD are abdominal pain, diarrhoea, rectal bleeding, anaemia, weight loss and tiredness. In India 65 out of one lakh people have become susceptible to IBD and the cases are rising every year. Therefore there is a need to identify putative drug targets and biomarkers for improving the diagnostic method and course of therapy of IBD. The microarray data analysis of GDS2014, GDS3119 and GDS4519 datasets containing the IBD and healthy patient samples was done in order to find the differentially expressed genes (DEGs). For GDS4519, 57 upregulated and 13 downregulated genes were obtained. For GDS3119, 793 upregulated and 1275 downregulated genes were present. GDS2014 resulted in 69 upregulated and 136 downregulated genes. These DEGs can be used as potential and putative drug targets for IBD in future.*

Keywords: *In-silico studies, Inflammatory Bowel Disease, Microarray data analysis.*