

Detecting Potential Biomarkers for Ulcerative Colitis Using Hybrid Feature Selection

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Abstract : Inflammatory Bowel disease (IBD) is a disease of the colon with characteristic inflammation. Clinically IBD is detected using laboratory tests (blood and stool), radiology tests (imaging using CT, MRI), capsule endoscopy and endoscopy. There are two variants of IBD referred to as Ulcerative Colitis (UC) and Crohn's disease. This study employs a hybrid feature selection method that combines a correlation-based variable ranking approach with exhaustive search wrapper methods in order to find potential biomarkers for UC. The proposed biomarkers presented accurate discriminatory power thereby identifying themselves to be possible ingredients to UC therapeutics.

Keywords : ulcerative colitis, biomarker detection, feature selection, inflammatory bowel disease (IBD)

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