

PREDICTING INFLAMMATORY BOWEL DISEASE OUTCOMES

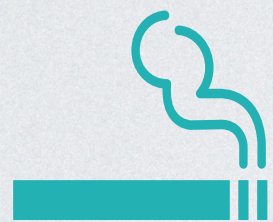
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Inflammatory bowel disease (IBD), which is an umbrella term for Crohn's disease and ulcerative colitis, affects 1 in 125 people in the UK.

Many factors are associated with poor outcomes in IBD:

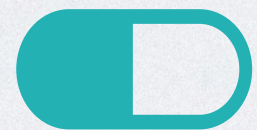
Smoking Status



Medication



Diet



Mental Health

Genetics



Gut Microbiome

However, prognostic ability remains poor.

We aim to take a holistic approach to predicting outcomes in IBD using data from the PREdiCCt study and the Lothian IBD registry.

The most common methods of time-to-event analysis, are not appropriate for biomarkers with longitudinal data collection. Two main alternatives exist:

Landmarking fits survival models at landmark times using subjects at risk at the landmark time.

Joint models models the survival process and the longitudinal process and then links these models together.

