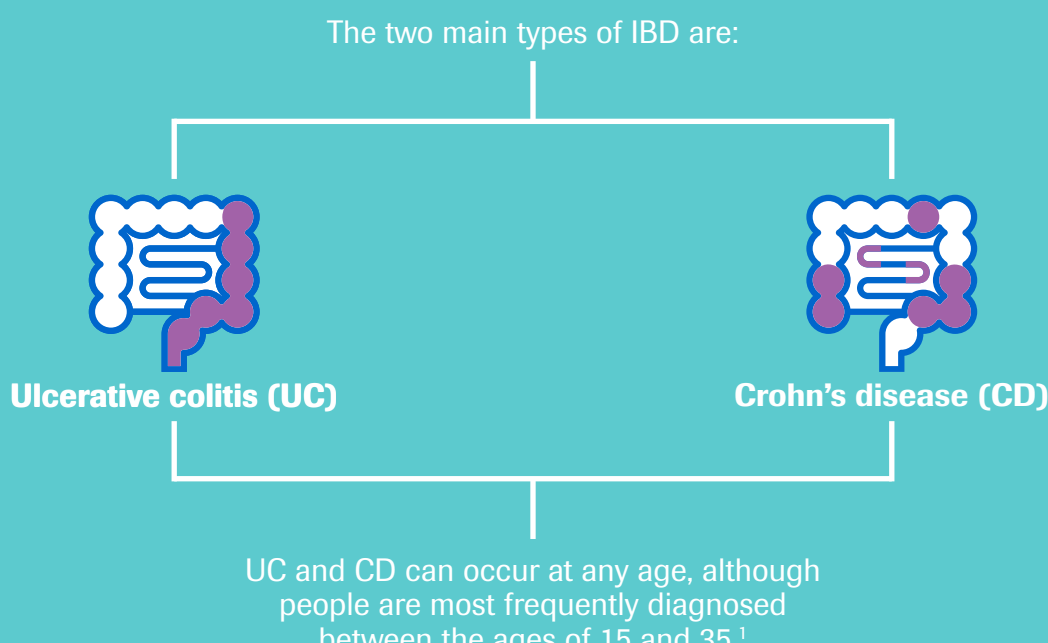


Inflammatory bowel diseases (IBD): A complex, heterogeneous group of diseases

Different diseases



Different causes

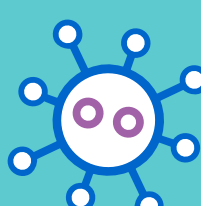
IBD is characterised by a complex set of disease-causing mechanisms that can include:



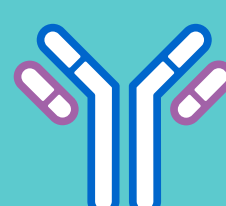
Environmental



Genetic



Gut microbiota



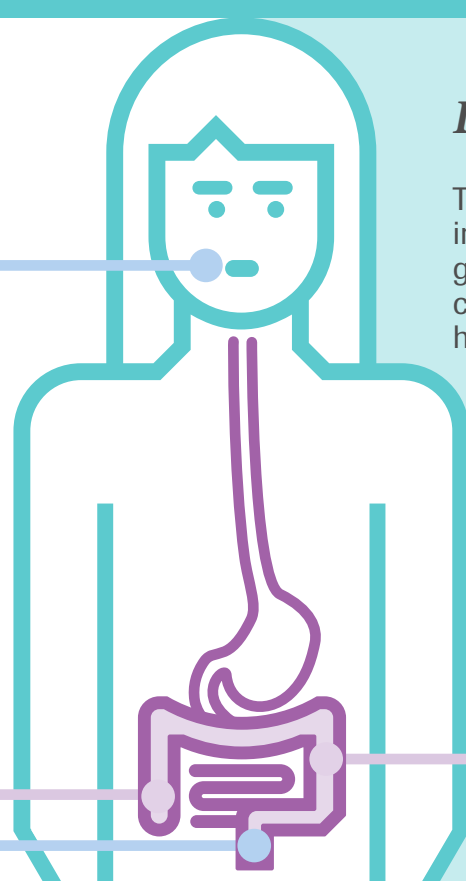
Immune-related factors

By themselves, these factors might not cause IBD. Rather, IBD is most likely triggered by complex interactions between them.^{2,3}

Different location

In UC, inflammation specifically affects the colon (i.e. large intestine).⁵

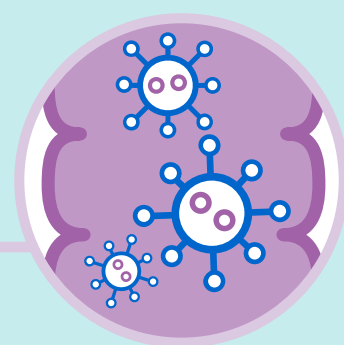
In CD, inflammation can affect any part of the gastrointestinal tract from the mouth to anus.⁴



Different gut bacteria

There are trillions of bacteria that live in the gut and interact with our own gut cells. This interaction may be critical to maintaining our health and have a key role to play in IBD.

Low diversity and altered abundance of gut bacteria have been associated with IBD.⁶



Different symptoms



Symptoms vary from person to person and can include:



Abdominal pain⁷



Cramping⁷



Rectal bleeding⁷



Energy loss⁷



Fatigue⁷

25 - 40%⁸

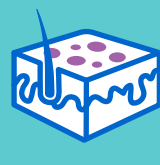
of IBD patients experience symptoms outside of the intestine, such as:



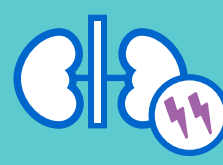
Joint pain



Hair loss



Skin rash



Kidney problems

Some patients have to urgently use the bathroom more than 20 times a day. The disease varies in intensity, with some patients having more aggressive disease than others.¹

Different response to treatment

Treatment response varies greatly from patient to patient:



Around 80% of patients do not experience sustained full remission.⁹

Inadequate treatment of IBD can lead to

permanent intestinal damage

sometimes due to excessive and continuous inflammation.¹⁰

There is an unmet need for treatment approaches that control not only the symptoms reported by patients, but also the underlying biology of the disease, to help patients achieve rapid and sustained remission and live life confidently.

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2. Rubin DC, Shaker A and Levin MS. Chronic intestinal inflammation: inflammatory bowel disease and colitis-associated colon cancer. *Front Immunol.* 2012; 3: 107.

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9. Sandborn WJ. The Present and Future of Inflammatory Bowel Disease Treatment. *Gastroenterol Hepatol (N Y).* 2016 Jul; 12(7): 438-441.

10. WebMD. Inflammatory Bowel Disease. [Internet; cited 2019 March 29]. Available from: <https://www.webmd.com/ibd-crohns-disease/inflammatory-bowel-syndrome#1>.