

STELARA®

(ustekinumab)

IN CROHN'S DISEASE

Crohn's disease belongs to a group of conditions known as inflammatory bowel diseases (IBD) and occurs when the body's immune system malfunctions and attacks its own healthy cells.¹ It affects the gastrointestinal tract and may involve any part from the mouth to the anus, most often in the end of the small intestine (ileum) or the beginning of the large intestine (colon).¹

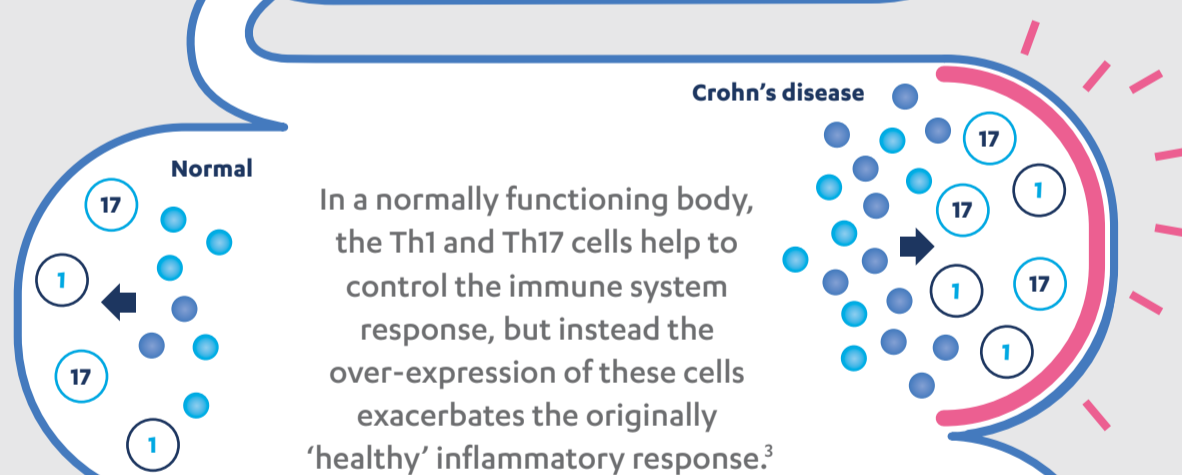
THE IMMUNE SYSTEM

The immune system is a complex network of cells, proteins, chemical messengers, tissues and organs which help to maintain a healthy body.

THE INFLAMMATORY RESPONSE

Inflammation is a vital part of the body's immune response and is the process by which the body heals itself after injury, and defends itself against foreign invaders, such as viruses and bacteria.² Cytokines are a group of proteins involved in this response, they interact with different cells of the immune system.³ Interleukins (IL) are a type of cytokine which act as chemical messengers to help mediate inflammation in response to different signals.³

In the case of Crohn's disease, the immune system over-produces cytokines **IL-12** and **IL-23**, together with other inflammatory mediators, resulting in the generation of Th1 and Th17 cells.³



This uncontrolled inflammation causes damage to the gut wall and can lead to symptoms such as diarrhoea and abdominal pain.³



Ustekinumab works by binding to a specific part of the IL-12 and IL-23 cytokine proteins, which inhibits the generation of more Th1 and Th17 cells. This helps to reduce inflammation and associated symptoms.^{3,4}

Key

- Cytokines
- Th1 and Th17 cells
- Receptor

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