

Eleum

Remodelling bile acids into a powerful new therapy to treat chronic disease.

In a nutshell

Chronic diseases such as ulcerative colitis (UC) and metabolic disorders like metabolic dysfunction-associated fatty liver disease (MAFLD) affect over a billion people worldwide. While these two conditions have a variety of different symptoms, they may have a root cause.

Research has shown that patients with these conditions often have disrupted bile acid metabolism and gut microbiome imbalance – pathways which regulate inflammation, repair, and metabolic function. Current treatments, whether pharmacological or lifestyle-based, mainly manage symptoms instead of tackling the disease itself. In UC, immunosuppressive drugs carry significant risk of side effects and limited response rates, while in metabolic disorders, lifestyle changes are difficult to sustain and approved drugs have limited efficacy and tolerability.

Eleum is a new class of microbiome-based therapy that directly targets and reprogrammes bile-acid signalling. They have developed a safe approach with the potential to transform the lives of those living with UC and other chronic diseases.

Why is our technology important?

Eleum has developed a Live Biotherapeutic Product (LBP) which restores the levels of the gut microbiome-derived secondary bile acids. LBPs are a new category of therapy based on specific strains of gut bacteria. Unlike probiotics, which are often used for general health, LBPs are designed to prevent, treat, or cure specific diseases by targeting known biological pathways.

In conditions like UC and metabolic disorders, levels of secondary bile acids are significantly altered, disrupting communications between the gut microbiome and the host. Eleum's therapy introduced a carefully selected microbial strains which reprogram bile acid signalling and boosts the body's own production of secondary bile acids. This has been shown to help the gut heal faster, strengthen the gut barrier by supporting the body's natural ability to regenerate the intestine lining, as well as improve host metabolic functions.

It's a fundamentally different approach – one which works with the body's own systems offering a safer, more targeted way to treat chronic disease. Eleum hopes to use this technology to transform cutting-edge microbiome science into everyday breakthroughs that help people live better, healthier lives.

The benefits of our solution

- Mechanism-based action: tailored targeting of the root cause. Uses defined bacterial strains to restore microbiome and bile acid balance, rather than just managing symptoms
- Non-immunosuppressive: stimulates the body's own repair processes and metabolic functions, reducing risks associated with current treatments
- Therapeutic platform: opens the door to new treatments beyond UC and metabolic disorders

Keywords

Gut microbiome | Live Biotherapeutic Product | Bile acid signalling | Ulcerative Colitis | Metabolic disorders | Chronic inflammation | Gut barrier | Regenerative Medicine | Precision Microbiome Therapy

Founding team

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