



The Global Burden of IBD: Trends and Future Projections

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INTRODUCTION

Inflammatory bowel diseases (IBD), comprising Crohn's disease and ulcerative colitis, are chronic disorders marked by alternating phases of activity and remission. The prevalence of IBD is becoming a significant problem in developed part of the world. Additional issue is obesity in IBD and need for effective approach and active treatment including incretins use. Comprehensive care for patients with inflammatory bowel diseases, which includes advanced therapies, generates substantial costs. Although current treatments have improved patient care considerably, a significant proportion of individuals still face inadequate disease control, loss of response over time, or treatment-related complications. These limitations continue to drive the search for new therapeutic strategies.

BIOLOGICS BEYOND ANTI-TNF THERAPIES

The introduction of monoclonal antibodies against tumor necrosis factor (TNF) was a milestone in IBD therapy. Nevertheless, many patients either fail to respond initially or experience secondary loss of efficacy. This gap has prompted the development of biologics targeting alternative immune pathways. Vedolizumab, an antibody directed against the $\alpha 4\beta 7$ integrin, restricts the migration

of lymphocytes into the intestinal mucosa and provides organ-selective immunosuppression with a favorable safety profile. Another option, ustekinumab, blocks interleukin-12 and interleukin-23 signaling and has shown lasting benefits in both ulcerative colitis and Crohn's disease, even among patients who did not respond to other biologics.

ORAL SMALL MOLECULES AS EMERGING THERAPIES

In recent years, small oral agents have gained attention for their ease of administration and rapid onset of action. Janus kinase (JAK) inhibitors such as tofacitinib, filgotinib and upadacitinib act at the level of intracellular signaling, offering effective control of inflammation, particularly in ulcerative colitis. Selective sphingosine-1-phosphate (S1P) receptor modulators, including ozanimod and etrasimod, work by preventing lymphocyte circulation into inflamed tissues, thereby reducing immune activity within the gut. These agents expand the treatment landscape and provide alternatives for patients who prefer oral over injectable medications.

INNOVATIVE APPROACHES

Research is increasingly shifting toward more precise and targeted interventions. New monoclonal antibodies that selectively inhibit interleukin-23

(mirikizumab, guselkumab, rizankizumab) are showing results which put them into the clinical praxis, particularly in Crohn's disease. Strategies aimed at modifying the intestinal microbiome, such as fecal microbiota transplantation and live microbial therapies, seek to restore microbial balance and reduce inflammation. There is a bunch new molecules under the studies investigations.

OBESITY

Over the past few decades, the situation has changed dramatically with a significant increase in the number of IBD patients who are overweight and suffer from obesity-related problems. Crohn's disease, which was previously almost synonymous with malnutrition, is now characterised by overweight and obesity as well as sarcopenic obesity as a sign of malnutrition and loss of muscle mass. Along with all of its well-known consequences, obesity in IBD patients significantly compromises the application of most of new treatment modalities. The combined use of advanced therapies and GLP-1 or GLP-1/GIP agonists is opening new horizons.

TOWARD INDIVIDUALIZED TREATMENT

A major focus in IBD care is the move toward personalized medicine. Advances in biomarker discovery, therapeutic drug monitoring, and integration of genetic and microbial profiling are helping clinicians tailor treatment decisions to individual patient characteristics.

CONCLUSION

The therapeutic landscape in IBD is rapidly expanding, with biologics, oral small molecules, microbiome-based treatments, and cell therapies all contributing new possibilities. While challenges such as cost, access, and long-term safety remain, the future points toward a more individualized and strategic use of these agents. The high prevalence of IBD in the coming decades will require additional attention.

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