Novel Targets for Therapeutic Intervention in Inflammatory Bowel Disease: Research Drives Clinic

Over the past years, Inflammatory Bowel Disease (IBD), has become one of the most innovative chapters in Gastroenterology. Not only because its frequency has been exponentially rising worldwide, but mainly due to a great improvement on the knowledge about the diversity of immunologic mechanisms, leading to multiple inflammatory pathways, involved in the physiopathology of the disease, thus, making it possible to develop novel drugs targeting several steps of this “spider web”. Moreover, IBD is of great interest because of its impact on the quality of life of affected individuals, as they are mostly at a young and productive age, requiring a global approach and close monitoring, intended to improve quality of life, prevent disease progression and disability, and disease-related costs. It is with great pleasure that we conclude this special team work, with collaboration of many dedicated professionals who made the effort to provide such a complete issue on the Novel Targets For Therapeutic Intervention in Inflammatory Bowel Disease.

In this issue Argollo et al. [1] and Lakatos et al. [2], approach interesting topics on biosimilars in IBD. The first chapter describes, in a very academic manner, the equivalence in clinical efficacy of adalimumab-biosimilars questioning the importance of defining the ideal patient’s profile to receive or to be switched to a biosimilar, choosing one biosimilar vs. another, or cross-switching among biosimilars, which they considered the next challenge in IBD. The second chapter also describes available data on the efficacy and safety profile of infliximab biosimilars, and more, authors add that from a financial point of view, the use of biosimilars could lead to substantial cost savings and ultimately wider access to biological therapies.

The review of D’amico and co-workers [3] analyses the mechanism of action of anti-adhesion molecules and nicely expose results from pivotal trials on the efficacy and safety profile of this class of drugs on the management of IBD. Authors suggest that gut specificity is pivotal to reduce adverse events and increase efficacy.

An overview on interleukin (IL)-23 blockage for the treatment of CD by Argollo et al. [4] confirm the role of IL-23 as a key mediator in chronic intestinal inflammation and suggest the potential benefit of this class of drugs as promising alternatives in the treatment of Crohn’s disease and ulcerative colitis.

Panes and co-workers [5] present a clear summary of all available data on the efficacy and safety of the novel class of small molecules inhibiting the Janus Kinase pathway, as a potential alternative approach for the treatment of IBD patients, in addition to their intrinsic characteristics making them an attractive option based on their oral administration, short plasma half-life, lack of immunogenicity and predictable pharmacokinetics.

Kotze and colleagues [6] brilliantly discuss the management of complex perianal fistulas in Crohn’s with the use of mesenchymal stem cells (MSCs), as an emerging new therapeutic strategy, summarizing the evidence of MSCs in complex CD fistulas, exploring in detail the various types of cells that can be used and their modes of delivery.

The review entitled “Anti-fibrotic drugs for Crohn’s disease: Ready for prime time?” [7] is focused on intestinal fibrosis in CD and gives a complete explanation on the mechanisms involved in intestinal inflammation vs. intestinal fibrosis, suggesting this topic as the novel potential target for future research in the IBD field.

With the emergence of biologic therapies many adverse events have been detected. The article by Yzet et al. [8] review how to best assess the safety parameters of new IBD medications, from the earliest stage of development to population-based registries, with a focus on the special populations often excluded from the evaluation process.

This review by Lindholm CR and Siegel CA [9] discuss biomarkers, current prognosticating tools, and tools that determine response to therapy and question if incorporating these into clinical trials will bring real benefit for the management of IBD patients.

Last but not least, a key chapter in the IBD field is presented by Dan Turner [10] and express the importance of recruiting pediatric patients to participate in clinical trials and offers possible solutions to age-specific pitfalls in performing trials in this specific population.

As executive guest editors, we had the honor to work with a great team of experts and young promising leaders in the IBD field and would like to thank all of them for their dedication and compromise to conclude an excellent work. In addition, we would kindly thank and acknowledge the group of experts and dear colleagues who offered their substantial reviewing efforts and suggestions. Finally, we would like to express our ad- miration to the Bentham Science Publishers for recognizing and honoring the importance of high level publication in the IBD field. The nice team of professionals, especially Director Kazim Baig and Editorial Assistant Aamer M. Khan, made this experience
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REFERENCES


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