Budget impact of infliximab subcutaneous from the US healthcare perspective

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Background

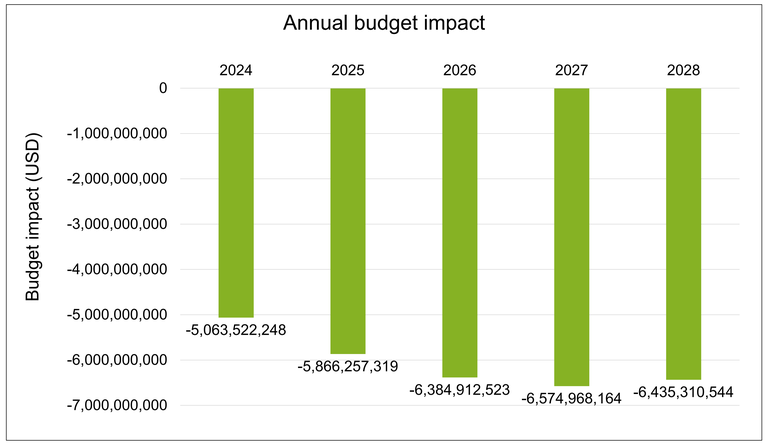
- Zymfentra, the first and only infliximab SC, was approved by the FDA in October 2023 for the use of Ulcerative Colitis and Crohn's disease.
- Biological therapies are associated with high acquisition costs which can be a barrier to access.
- While costs associated with anti-TNFα therapy are predominantly related to their acquisition, there are additional costs associated with their administration, and intravenous (IV) therapies are more expensive and time-consuming to administer compared with subcutaneous (SC) therapies.
- Upon further analysis, potential savings could arise from reduced treatment-related travel costs, reduced productivity losses for patients who do not need to travel for infusions every 8 weeks, potentially taking time off work, and reduced treatment wastage of infliximab IV.

Methods

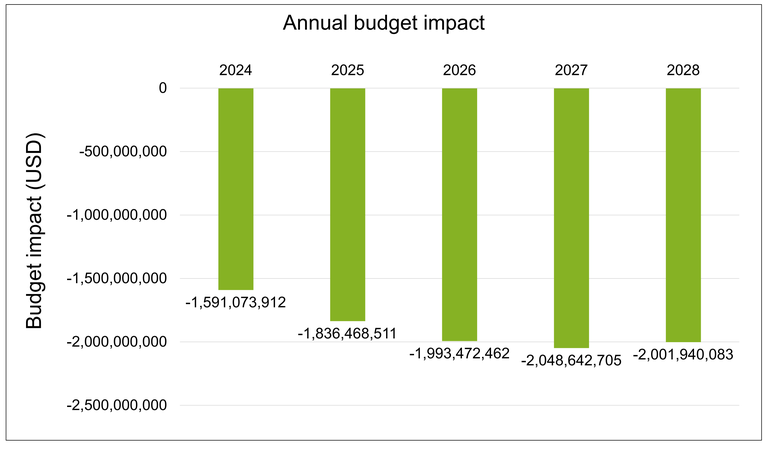
- A budget impact model(BIM) was developed to investigate the financial impact of infliximab subcutaneous(SC) from a US healthcare perspective.
- The BIM uses the costs of treatment and incorporates specific drug patient shares and the number of eligible patients in two scenarios, one current scenario without infliximab SC and a revised scenario with infliximab SC.
- The model assumed to compare the costs of the following molecules: certolizumab, golimumab, vedolizumab, ustekinumab, upadacitinib, risankizumab, tofacitinib, and natalizumab(comparators included biologics under pharmacy benefit and those without marketed biosimilars).
- The results of the base case analysis of the BIM estimated that in Year 1, of the total US population with IBD (n=1,985,298), 295,243 patients will receive biologics, and among them, 84,275 patients will receive infliximab SC in the 'world with' scenario.

Results

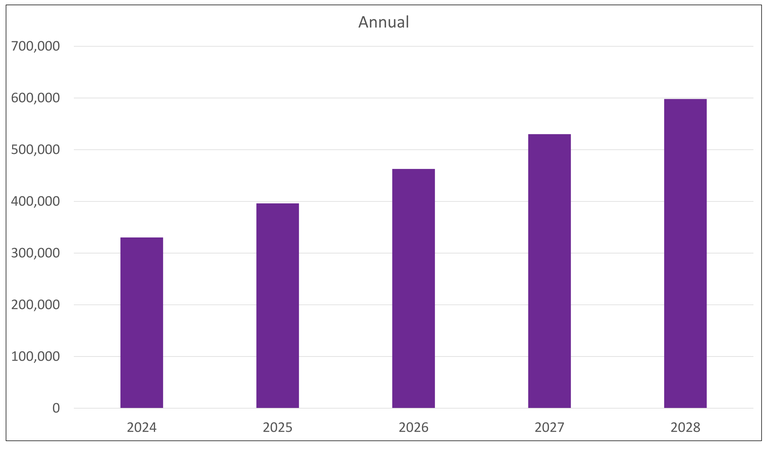
CD Savings Results



UC Savings Result



Potential Additional Patient



Results

- Taking into account the patient population eligible to receive biologic treatment and the proportion of those expected to receive infliximab SC, the total budget savings resulting from the introduction of infliximab SC to the US will be 2 billion USD in Year 1 and 39.5 billion USD over a five-year period.
- In treating CD patients, between 5 billion and 6.5 billion USD of yearly savings are expected, and in treating UC patients, between 1.5 and 2 billion USD of yearly savings are expected within the next five years. Between 300K and 600K additional patients may receive Remsima SC from the expected savings.

Conclusion

- Newer MOA is more expensive and eligible after failure on a relatively older MOA(e.g., aTNF), infliximab SC can improve patient access to biologic therapy in moderate IBD patients as a cost-effective treatment option.
- Infliximab SC is a convenient maintenance treatment and should be added at parity coverage or better lined in early-line usage for patients with IBD.
- Therefore, the availability of a SC form of infliximab would address the current limitations associated with its administration and provide patients with the safety and efficacy of an established treatment in a more convenient form.

Conflict of Interest : *The authors are full time employees of Celltrion*