

Switch-a-MAB: Assessment of infliximab updosing following a biosimilar switch across eight hospitals

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Background

Updosing is a common strategy following loss of response to infliximab, particularly for Inflammatory Bowel Disease (IBD). Following a state-wide changeover to an infliximab biosimilar, anecdotal feedback was received that this had resulted in an increase in updosing practices of the biosimilar brand.

Aim

To review the change in usage of infliximab 100mg vials for intravenous use in the context of updosing practice following a biosimilar switch.

Methods

An audit of medication use was conducted at eight sites, including six tertiary hospitals and two secondary hospitals. Infliximab usage was obtained using dispensing software reports over a five-year period (financial years due to the timing of the biosimilar switch). Non-PBS usage (including compassionate use) was used as a surrogate for the practice of updosing. Analysis of descriptive statistics included: PBS usage, non-PBS usage and total usage for all sites. The % non-PBS usage for individual sites was also compared.

Results

Table 1 – Main results from the 8 sites that contributed data were combined. Usage units are in vials.

Financial Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Total Usage	12,098	15,473	17,680	19,106	20,951
PBS Usage	10,639	12,806	13,551	14,317	14,802
non-PBS Usage	1,459	2,667	4,129	4,789	6,149
% non-PBS use of total	12%	17%	23%	25%	29%

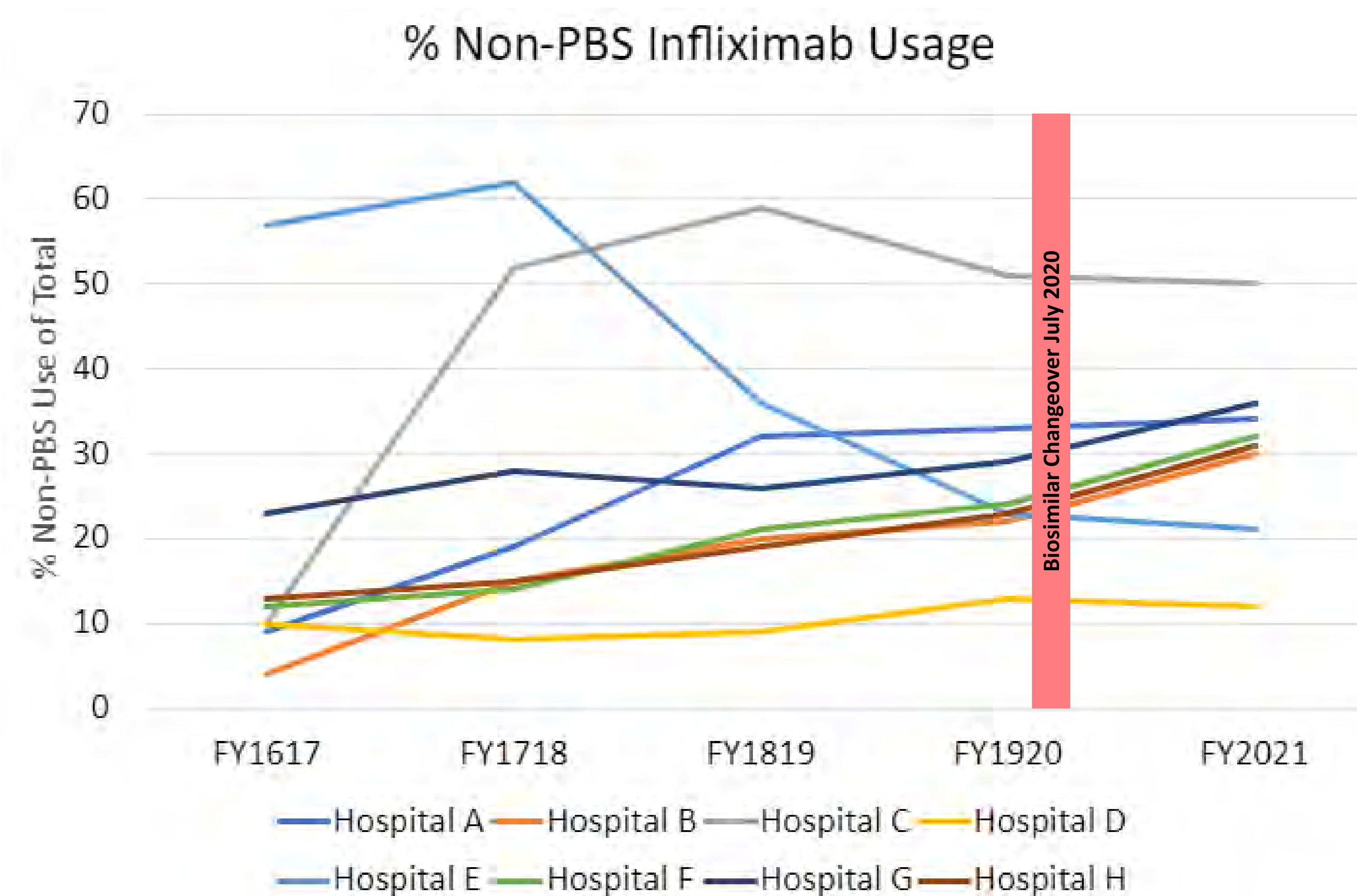


Figure 1 – % non-PBS infliximab usage for each Financial Year from 2016/2017 to 2020/2021 for individual sites that participated.

Discussion

Results from all facilities were combined in Table 3 to give an overall picture of infliximab usage and help account for local variability.

- Total infliximab usage has increased steadily since the 2016/2017 Financial Year.
- % non-PBS usage has increased each year by between 2% and 6%. The changeover to the biosimilar occurred in July 2020 and the increase between FY2019/2020 and FY2020/2021 was 5%, which is in keeping with increased between previous financial years.
- Figure 1 shows the change in % non-PBS usage of infliximab over time for individual sites. Most sites have increased over time, to approximately 30% (which is in line with combined state-wide data).
 - > Hospital C & E were lower usage sites with individual patients requiring infliximab for a non-PBS indication impacting their data.

Conclusion

Infliximab usage data from eight sites showed that the amount of infliximab used has increased annually, over the 5-year period reviewed. The % non-PBS usage also increased for each year. The assessment of non-PBS usage as a marker of infliximab updosing did not demonstrate any obvious link between the biosimilar switch and updosing.

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